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INTELLIGENTLY?

MACHINING

ISCAR TURNING LINES

Metric Catalog





ISO TURNING | GROOVING | PARTING | FACE GROOVING | TOOL BLOCKS | THREADING | HOLDERS | GRADES

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PART 1



Quality Standard

ISCAR has been certified by the prestigious Standards Institution, as being in full compliance to ensure delivery of the finest quality goods. Quality control facilities include the metallurgical laboratory, raw metal testing, an online testing procedure and a machining center for tool performance testing and final product inspection. Only the finest products are packaged for entry into ISCAR's inventory.

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TURNING
TOOLS AND INSERTS

YOU

INTELLIGENTLY?

TURNING









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TURNING TOOLS



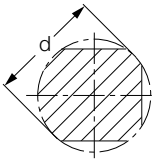
Toolholder Identification System

Toolholder				M	W	L	N	R	25	25	M	-	08	W
				4	5	6	7	8	9	10	3		11	12
Boring Bar	S	25	S	M	W	L	N	R				-	08	W
	1	2	3	4	5	6	7	8					11	12

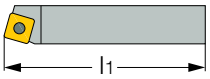
1 Boring Bar

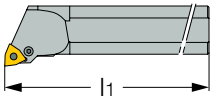
S	Steel Shank
A	Coolant Through Steel Shank
C	Solid Carbide Shank
E	Coolant Through Carbide Shank

2 Bar Diameter



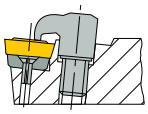
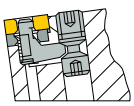
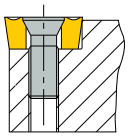
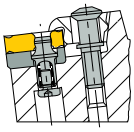
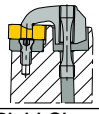
3 Tool Length



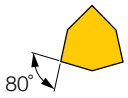
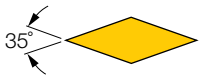
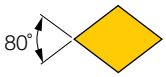
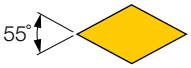
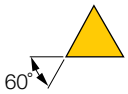
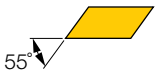


A = 32	H = 100	Q = 180
B = 40	J = 110	R = 200
C = 50	K = 125	S = 250
D = 60	L = 140	T = 300
E = 70	M = 150	U = 350
F = 80	N = 160	V = 400
G = 90	P = 170	W = 450
		Y = 500
		X = Special

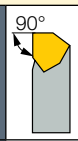
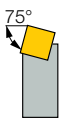
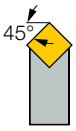
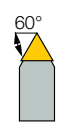
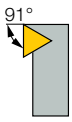
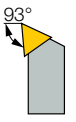
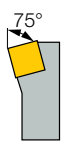
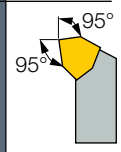
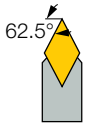
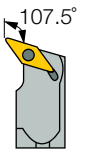
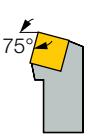
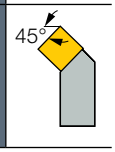
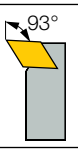
4 Clamping System

C	 Top Clamp Iscadex	P	 Lever Lock
S	 SC-Screw Clamping	M...W	 Top Wedge Lock
D	 Rigid Clamp		

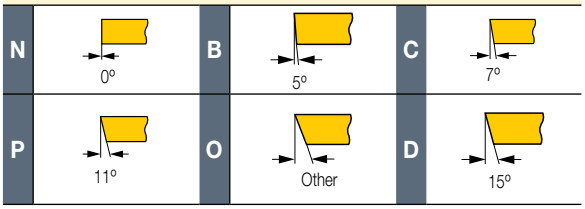
5 Insert Shape

W		V	
C		D	
T		S	
R		K	
L		Q	

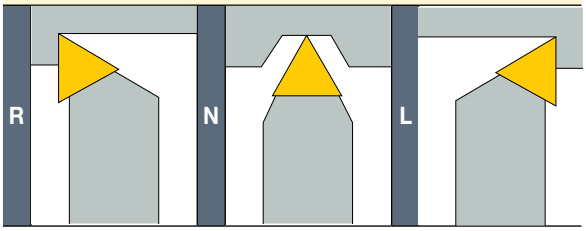
6 Approach Angle

A		B		D		E	
F		G		J		K	
L		N		Q		R	
S		U		V		X	

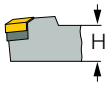
1 Insert Clearance Angle



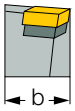
2 Hand of Tool



3 Shank Height

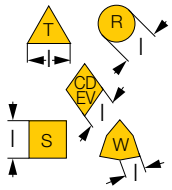


4 Shank Width

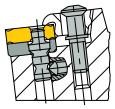
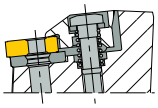


5 Insert Size

Cutting edge length

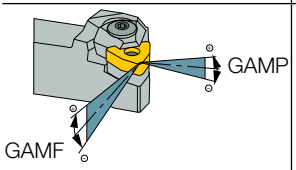
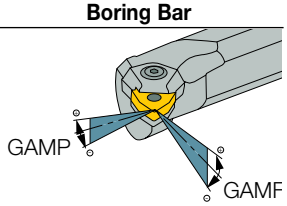


6 Wedge Lock

W-Top wedge	MW-Multi-wedge
	

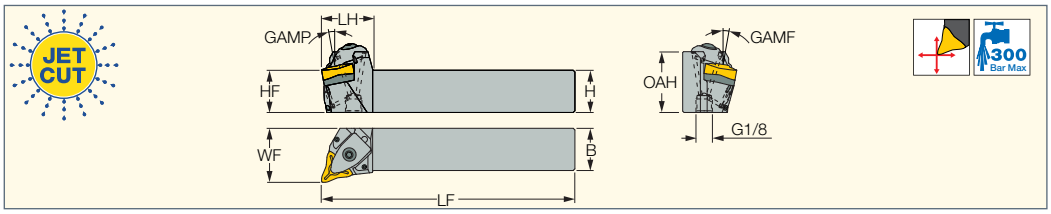
S- for Swiss-type machines

Axial GAMP and Radial GAMF Rake angles

Toolholder	Boring Bar
	

QUICKTURN

Q6-DMXNR/L-SL-JHP
Safety Lock Tools with High Feed Negative Inserts for Roughing Applications



Designation	H	OAH	HF	B	LF	LH	WF	GAMP(1)	GAMF(2)	MIID(3)
Q6-DMXNR/L 2525M-12-SL-JHP	25.0	36.00	25.0	25.0	150.00	31.0	32.00	7.8	7.8	Q6-MNMG120608-M3#-SL
Q6-DMXNR/L 3232P-12-SL-JHP	32.0	43.00	32.0	32.0	170.00	31.0	39.00	7.8	7.8	Q6-MNMG120608-M3#-SL

NEW

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

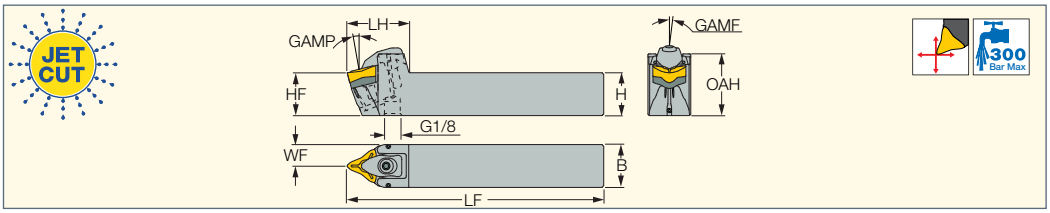
For inserts, see pages: Q6-MNMG-M3M-SL (171) • Q6-MNMG-M3P-SL (171)
For holders, see pages: C#-ASHA (830) • C#-ASHR/L (830) • HSK A-WH-ASHN-45 (836) • HSK A-WH-ASHR/L-1 (836) • HSK A63WH-ASHR/L-2 (837) • HSK A63WH-ASHR/L-3 (837) • HSK A63WH-ASHR/L-45 (836)

Spare Parts

Designation							
Q6-DMXNR/L-SL-JHP	Q6-TMN 1206-SL	SR M2.5X2.5 DIN913 TL360	HW 3.0	SR 10513105-L10.5	DSP 4	DLS 4	DLM 4

QUICKTURN

Q6-DMXNN-SL-JHP
Safety Lock Tools with High Feed Negative Inserts for Roughing Applications



Designation	H	OAH	HF	B	LF	LH	WF	GAMP(1)	GAMF(2)	MIID(3)
Q6-DMXNN 2525M-12-SL-JHP	25.0	36.00	25.0	25.0	150.00	37.0	12.50	7.8	0.0	Q6-MNMG1206#-M3#-SL
Q6-DMXNN 3232P-12-SL-JHP	32.0	43.00	32.0	32.0	170.00	37.0	16.00	7.8	0.0	Q6-MNMG1206#-M3#-SL

NEW

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

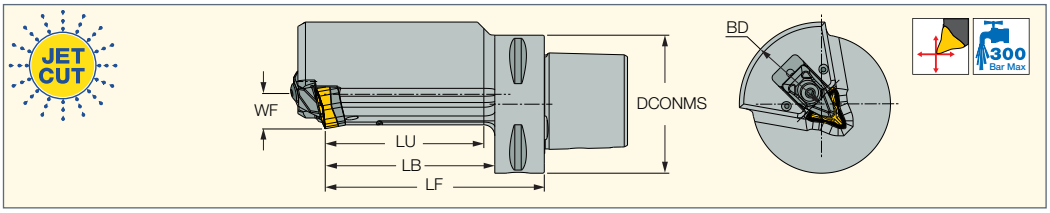
For inserts, see pages: Q6-MNMG-M3M-SL (171) • Q6-MNMG-M3P-SL (171)
For holders, see pages: C#-ASHA (830) • C#-ASHR/L (830) • HSK A-WH-ASHN-45 (836) • HSK A-WH-ASHR/L-1 (836) • HSK A63WH-ASHR/L-2 (837) • HSK A63WH-ASHR/L-3 (837) • HSK A63WH-ASHR/L-45 (836)

Spare Parts

Designation							
Q6-DMXNN-SL-JHP	SR 10513105-L10.5	Q6-TMN 1206-SL	HW 3.0	DSP 4	DLS 4	DLM 4	SR M2.5X2.5 DIN913 TL360

QUICKTURN

C#-Q6-DMXNN-SL-Y
Y-Axis Turning Tools with a Safety Lock Clamping Mechanism for Negative Inserts, Intended for Roughing and Medium Applications



Designation	BD	LF	LB	LU	WF	DCONMS	MIID(1)
C4 Q6-DMXNN-12-SL-H065-Y	40.20	65.00	44.40	34.40	11.20	40.00	Q6-MNMG1206
C5 Q6-DMXNN-12-SL-H080-Y	50.20	80.00	59.40	44.40	11.20	50.00	Q6-MNMG1206
C6 Q6-DMXNN-12-SL-H100-Y	63.20	100.00	77.40	62.40	11.20	63.00	Q6-MNMG1206
C8 Q6-DMXNN-12-SL-H100-Y	80.00	100.00	70.00	55.00	11.20	80.00	Q6-MNMG1206

NEW

(1) Master insert identification

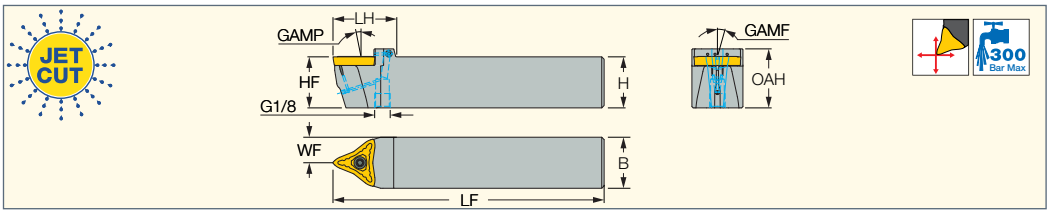
For inserts, see pages: Q6-MNMG-M3M-SL (171) • Q6-MNMG-M3P-SL (171)

Spare Parts

Designation								
C#-Q6-DMXNN-SL-Y	SR 10513105-L10.5	Q6-TMN 1206-SL	HW 3.0	DSP 4	DLS 4	DLM 4	SR M4X4 DIN913 TL360	SR M2.5X2.5 DIN913 TL360

QUICK T LOCK

Q3-SMXCN-SL-JHP
Safety Lock Tools on which High Feed Positive Inserts are Mounted for Roughing Applications



Designation	H	OAH	HF	B	LF	LH	WF	GAMP(1)	GAMF(2)	MIID(3)
Q3-SMXCN 2525M-16-SL-JHP	25.0	30.00	25.0	25.0	150.00	40.0	12.50	0.0	0.0	Q3-MCMT 1606#-R3#-SL
Q3-SMXCN 3232P-16-SL-JHP	32.0	37.00	32.0	32.0	170.00	40.0	16.00	0.0	0.0	Q3-MCMT 1606#-R3#-SL

NEW

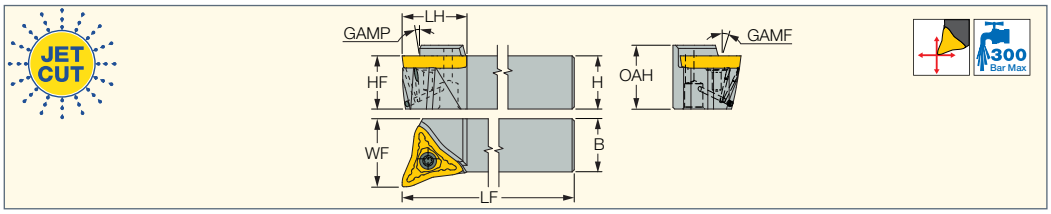
(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

Spare Parts

Designation					
Q3-SMXCN-SL-JHP	SR M5-14 IP20	BLD IP20/M7	SW6-T	SR M4X4 DIN913 TL360	SR M2.5X2.5 DIN913 TL360

QUICK T LOCK

Q3-SMXCR/L-SL-JHP
Safety Lock Tools on which High Feed Positive Inserts are Mounted for Roughing Applications



Designation	H	OAH	HF	B	LF	LH	WF	GAMP(1)	GAMF(2)	MIID(3)
Q3-SMXCR/L 2525M-16-SL-JHP	25.0	30.00	25.0	25.0	150.00	31.0	32.00	0.0	0.0	Q3-MCMT 1606#-R3#-SL
Q3-SMXCR/L 3232P-16-SL-JHP	32.0	37.00	32.0	32.0	170.00	31.0	39.00	0.0	0.0	Q3-MCMT 1606#-R3#-SL

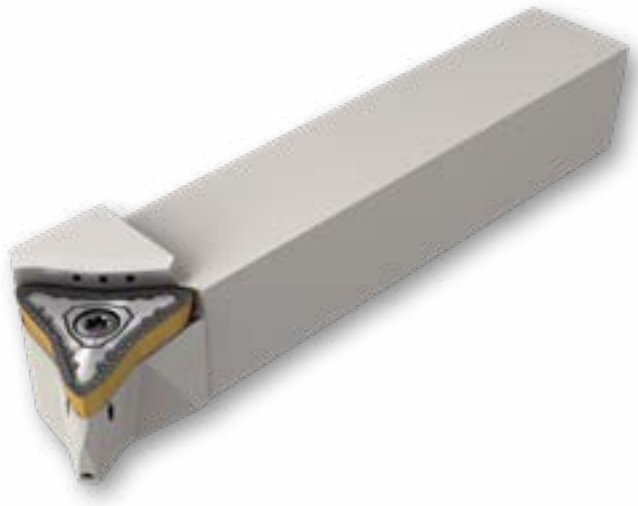
NEW

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see pages: Q3-MCMT-R3M-SL (171) • Q3-MCMT-R3P-SL (172)
For holders, see pages: C#-ASHA (830) • C#-ASHR/L (830) • HSK A-WH-ASHN-45 (836) • HSK A-WH-ASHR/L-1 (836) • HSK A63WH-ASHR/L-2 (837) • HSK A63WH-ASHR/L-3 (837) • HSK A63WH-ASHR/L-45 (836)

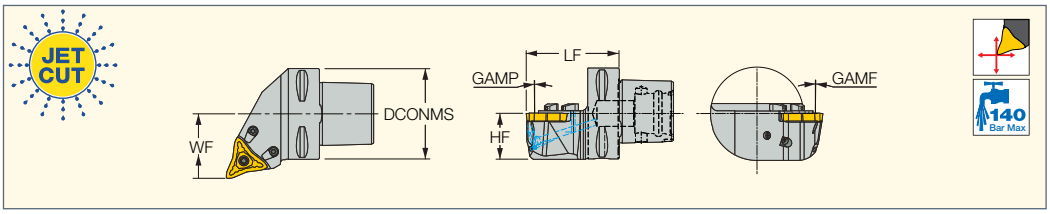
Spare Parts

Designation					
Q3-SMXCR/L-SL-JHP	SR M5-14 IP20	SW6-T	BLD IP20/M7	SR M4X4 DIN913 TL360	SR M2.5X2.5 DIN913 TL360



QUICK T LOCK

C#-Q3-SMXCR/L-SL
Safety Lock Tools with CAMFIX Shanks for High Feed Positive Inserts for Roughing Applications



Designation	LF	HF	WF	DCONMS	GAMP(1)	GAMF(2)	MIID(3)
C5 Q3-SMXCR/L-35060-16-SL	60.00	25.5	35.00	50.00	0.0	0.0	C# Q3-SMXCL/R-##-16-SL
C6 Q3-SMXCR/L-45065-16-SL	65.00	32.0	45.00	63.00	0.0	0.0	C# Q3-SMXCL/R-##-16-SL

NEW

• A cooling tube must be used with all coolant through HSK spindles (should be ordered separately). • For shank dimensions, see page 829

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

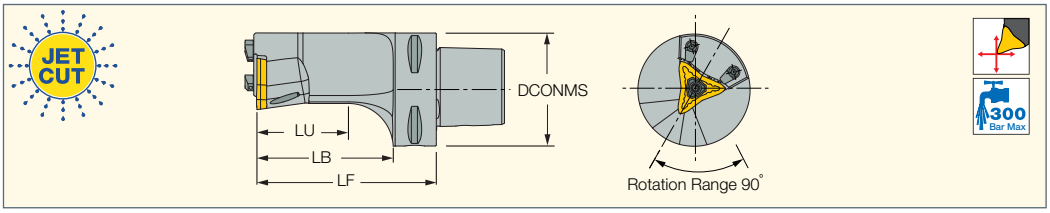
For inserts, see pages: Q3-MCMT-R3M-SL (171) • Q3-MCMT-R3P-SL (172)

Spare Parts

Designation						
C#-Q3-SMXCR/L-SL	CH-1.9D-JHP-A SET	SR M5X5 DIN913 TL360	SW6-T	BLD IP20/M7	SR M5-14 IP20	SR M2.5X2.5 DIN913 TL360

QUICK T LOCK

C#-Q3-SMXCN-SL-Y
Y-Axis Turning Tools with Safety Lock Clamping Mechanism for Positive Inserts, Intended for Roughing and Medium Applications



Designation	DCONMS	LU	LB	LF	CSP(1)	MIID(2)
C4 Q3-SMXCN-16-SL-H065-Y	40.00	38.50	43.50	65.00	1	Q3-MCMT1606
C5 Q3-SMXCN-16-SL-H080-Y	50.00	51.00	58.50	80.00	1	Q3-MCMT1606
C6 Q3-SMXCN-16-SL-H100-Y	63.00	51.00	76.00	100.00	1	Q3-MCMT1606
C8 Q3-SMXCN-16-SL-H100-Y	80.00	51.00	70.00	100.00	1	Q3-MCMT1606

NEW

• A cooling tube must be used with all coolant through HSK spindles (should be ordered separately). • For shank dimensions, see page 829

(1) 0 - Without coolant supply, 1 - With coolant supply
(2) Master insert identification

For inserts, see pages: Q3-MCMT-R3M-SL (171) • Q3-MCMT-R3P-SL (172)

Spare Parts

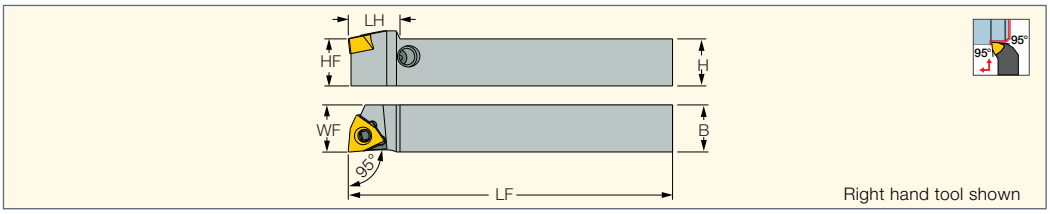
Designation					
C4 Q3-SMXCN-16-SL-H065-Y	SR M5-14 IP20	SR M3X3 DIN913 TL360	BLD IP20/M7	SW6-T	CH-1.9D-JHP-A SET
C5 Q3-SMXCN-16-SL-H080-Y	SR M5-14 IP20	SR M5X5 DIN913 TL360	BLD IP20/M7	SW6-T	CH-1.9D-JHP-A SET
C6 Q3-SMXCN-16-SL-H100-Y	SR M5-14 IP20	SR M5X5 DIN913 TL360	BLD IP20/M7	SW6-T	CH-1.9D-JHP-A SET
C8 Q3-SMXCN-16-SL-H100-Y	SR M5-14 IP20	SR M5X5 DIN913 TL360	BLD IP20/M7	SW6-T	CH-1.9D-JHP-A SET



MINIPTURN POSITIVE DOUBLE SIDED

PWLNR/L-S

Lever Lock External Turning Tools Carrying WNGP 0403.. Double-Sided Trigon Inserts



Designation	H	HF	B	LF	LH	WF	MIID[1]
PWLNR/L 1010X-04S	10.0	10.0	10.0	120.00	11.0	10.00	WNGP 04
PWLNR/L 1212F-04S	12.0	12.0	12.0	85.00	11.0	12.00	WNGP 04
PWLNR/L 1212X-04S	12.0	12.0	12.0	120.00	11.0	12.00	WNGP 04
PWLNR/L 1616X-04S	16.0	16.0	16.0	120.00	13.0	16.00	WNGP 04

- Use a left-hand insert on a right-hand tool and vice versa.

(1) Master insert identification

For inserts, see pages: WNGP-F2M (174) • WNGP-F2P (172)

For holders, see page: SBTH-JHP (421)

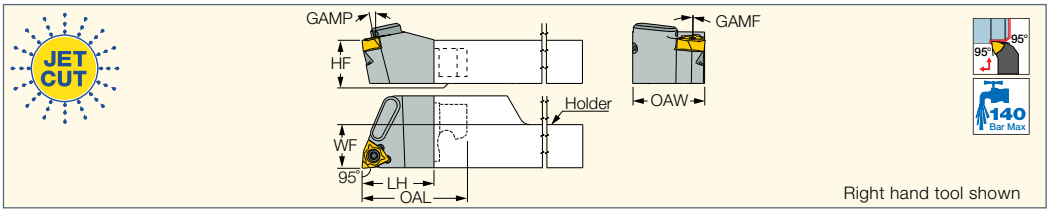
Spare Parts

Designation				
PWLNR/L-S	SR 10400611	HW 2.0/5	SL LV-2	SL PI-2 PIN

MINIPTURN POSITIVE DOUBLE SIDED

NQCH-SWLNR/L-S-JHP

Screw Lock JETCUT Modular Heads Carrying Positive Double-Sided Trigon Inserts for Swiss-Type Machines



Designation	WF	HF	LH	OAL	OAW	GAMP[1]	GAMF[2]	MIID[3]
NQCH12-SWLNR/L-04S-JHP	12.15	12.0	20.0	28.80	20.15	11.0	1.0	WNGP.. 0403
NQCH16-SWLNR/L-04S-JHP	16.15	16.0	20.0	28.80	20.15	11.0	1.0	WNGP.. 0403

- Use only RH Shank with RH Head and LH Shank with LH Head

(1) Rake angle axial

(2) Rake angle radial

(3) Master insert identification

For inserts, see pages: WNGP-F2M (174) • WNGP-F2P (172)

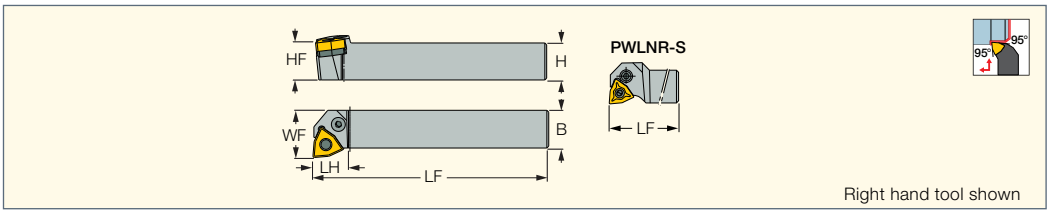
For holders, see page: NQCH-JHP (424)

Spare Parts

Designation		
NQCH-SWLNR/L-S-JHP	SR 34-514	T-7/5

ISOTURN

PWLNR/L
Lever Lock External Turning Tools Carrying 80° Negative Trigon Inserts



Designation	H	HF	B	LF	LH	WF	MIID[2]
PWLNR/L 1616H-06	16.0	16.0	16.0	100.00	16.0	20.00	WN..06T3
PWLNR/L 1616H-06S [1]	16.0	16.0	16.0	100.00	20.3	16.00	WN..06T3
PWLNR/L 2020K-06	20.0	20.0	20.0	125.00	20.0	25.00	WN..06T3
PWLNR/L 2525M-06	25.0	25.0	25.0	150.00	20.0	32.00	WN..06T3
PWLNR/L 2020K-08	20.0	20.0	20.0	125.00	19.0	25.00	WN..0804
PWLNR/L 2525M-08	25.0	25.0	25.0	150.00	20.5	32.00	WN..0804
PWLNR/L 3232P-08	32.0	32.0	32.0	170.00	19.0	40.00	WN..0804

[1] Can be used on automatics
[2] Master insert identification

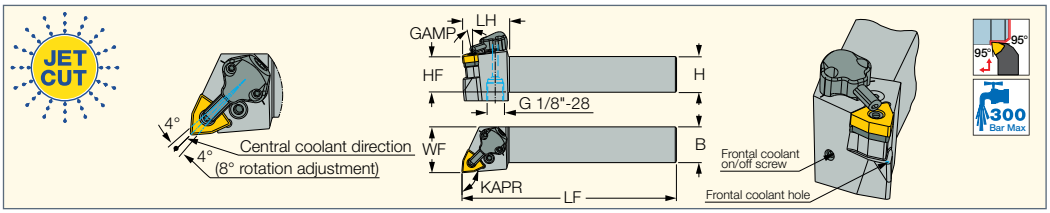
For inserts, see pages: WNMG-F3S (176) • WNMG-F3P (172) • WNMG-M3P (173) • WNMG-F3M (175) • WNMG-M3M (175) • WNMG-TF (178) • WNMG-GN (179) • WNMG-NR (179) • WNMG-PP (178) • WNMG-VL (177) • WNMG-TNM (180) • WNMG-SF (176) • WNMG-NF (176) • WNMM-NM (179) • WNMG-WF (177) • WNMA/WNMA-WG (180) • WNMG-WG (177) • WNMG-CERMET (173)

Spare Parts

Designation						
PWLNR/L 1616H-06	TWN 322	SP 3	PN 3-4	HW 2.5/5	SR 117-2014	LR 3
PWLNR/L 1616H-06S	TWN 322	SP 3	PN 3-4	HW 2.5/5	SR 117-2014	LR 3
PWLNR/L 2020K-06	TWN 322	SP 3	PN 3-4	HW 2.5/5	SR 117-2014	LR 3
PWLNR/L 2525M-06	TWN 322	SP 3	PN 3-4	HW 2.5/5	SR 117-2014	LR 3
PWLNR/L 2020K-08	TWN 423	SP 4	PN 3-4	HW 3.0	SR 117-2010	LR 4
PWLNR/L 2525M-08	TWN 423	SP 4	PN 3-4	HW 3.0	SR 117-2010	LR 4
PWLNR/L 3232P-08	TWN 423	SP 4	PN 3-4	HW 3.0	SR 117-2010	LR 4

ISOTURN

PWLNR/L-08-JHP
Lever Lock Tools with Channels for High-Pressure Coolant Carrying Trigon Inserts



Designation	H	HF	B	LF	LH	WF	GAMF[1]	MIID[2]
PWLNR/L 2525M-08-JHP	25.0	25.0	25.0	150.00	33.0	32.00	-6.0	WNMG 0804..
PWLNR/L 3232P-08-JHP	32.0	32.0	32.0	170.00	33.0	40.00	-6.0	WNMG 0804..

• For user guide, see pages 6-7,104-110
[1] Rake angle radial
[2] Master insert identification

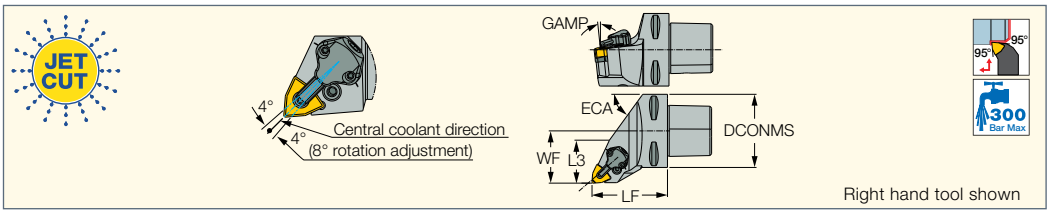
For inserts, see pages: WNMG-CERMET (173) • WNMG-F3S (176) • WNMG-F3P (172) • WNMG-M3P (173) • WNMG-F3M (175) • WNMG-M3M (175) • WNMG-TF (178) • WNMG-GN (179) • WNMG-NR (179) • WNMG-PP (178) • WNMG-VL (177) • WNMG-TNM (180) • WNMG-NF (176) • WNMM-NM (179) • WNMG-WF (177) • WNMA/WNMA-WG (180) • WNMG-WG (177)

Spare Parts

Designation										
PWLNR/L-08-JHP	TWN 423	SP 4	PN 3-4	LR 4	SR 117-2010	SR M4X4 DIN913 TL360	CU-CW-JHP	HW 2.0	HW 3.0	T-8/5

ISOTURN

C#-PWLNR/L-08-JHP
Lever Lock Tools with CAMFIX Exchangeable Shanks and Channels for High-Pressure Coolant Carrying Trigon Inserts



Designation	DCONMS	WF	LF	L3	ECA	GAMP(1)	MIID(2)	CP(3)	DCP(4)
C6 PWLNR/L-45065-08-JHP	63.00	45.00	65.00	42.70	55.0	-6.0	WNMG 08..	300	1

• For user guide, see pages 6-7,104-110
(1) Rake angle axial
(2) Master insert identification
(3) Coolant pressure (Bar)
(4) 1 - Slot for data chip, 0 - Without slot for data chip

For inserts, see pages: WNMG-CERMET (173) • WNMG-F3S (176) • WNMG-F3P (172) • WNMG-M3P (173) • WNMG-F3M (175) • WNMG-M3M (175) • WNMG-TF (178) • WNMG-GN (179) • WNMG-NR (179) • WNMG-PP (178) • WNMG-VL (177) • WNMG-TNM (180) • WNMG-NF (176) • WNMM-NM (179) • WNMG-WF (177) • WNMA/WNMA-WG (180) • WNMG-WG (177)

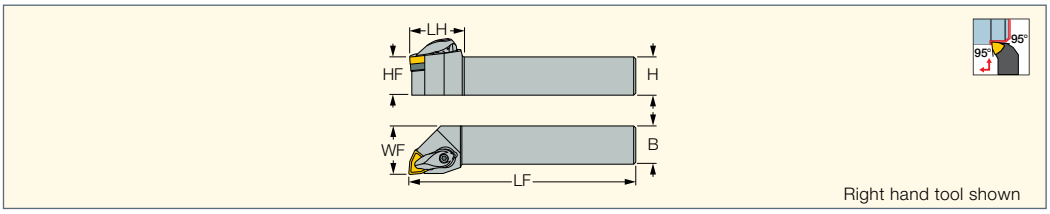
Spare Parts

Designation									
C6 PWLNR/L-45065-08-JHP	TWN 423	SP 4	LR 4	SR 117-2010	T-8/5	PN 3-4	CU-CW-JHP	HW 3.0	LR 4DHTL (MR INJ)*

* Optional, to be ordered separately

ISOTURN

DWLNR/L
External 95° Lead Tools Carrying Negative WNMG Trigon Inserts



Designation	H	HF	B	LF	LH	WF	MIID(1)
DWLNR/L 1616H-06	16.0	16.0	16.0	100.00	26.0	16.00	WNMG 0604
DWLNR/L 2020K-06	20.0	20.0	20.0	125.00	26.0	25.00	WNMG 0604
DWLNR/L 2525M-06	25.0	25.0	25.0	150.00	24.0	32.00	WNMG 0604
DWLNR/L 2020K-08	20.0	20.0	20.0	125.00	35.0	25.00	WNMG 0804
DWLNR/L 2525M-08	25.0	25.0	25.0	150.00	35.0	32.00	WNMG 0804
DWLNR/L 3232P-08	32.0	32.0	32.0	170.00	35.0	40.00	WNMG 0804

(1) Master insert identification

For inserts, see pages: WNMG-F3S (176) • WNMX-M3/4MW (181) • WNMX-M3/4PW (181) • WNMG-F3P (172) • WNMG-M3P (173) • WNMG-CERMET (173) • WNGG-F3N (266) • WNMG-F3M (175) • WNMG-M3M (175) • WNMG-TF (178) • WNMG-GN (179) • WNMG-NR (179) • WNMG-PP (178) • WNMG-VL (177) • WNMG-TNM (180) • WNMG-SF (176) • WNMG-NF (176) • WNMM-NM (179) • WNMG-WF (177) • WNMA/WNMA-WG (180) • WNMG-WG (177)

Spare Parts

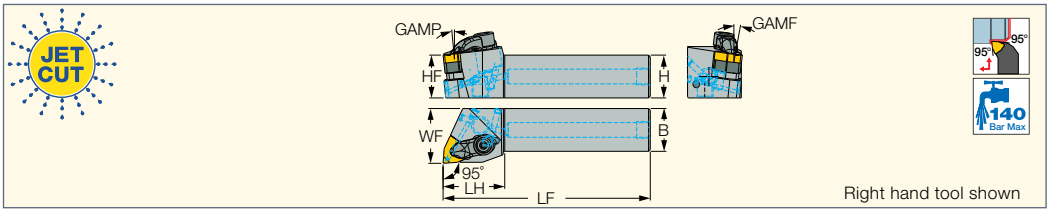
Designation									
DWLNR/L 1616H-06	RWT 322	RWT 3-2*		SR 40090I	LCGR-3	SR RC3	KSP 3		HW 2.5
DWLNR/L 2020K-06	RWT 322	RWT 3-2*		SR 40090I	LCGR-3	SR RC3	KSP 3		HW 2.5
DWLNR/L 2525M-06	RWT 322	RWT 3-2*		SR 40090I	LCGR-3	SR RC3	KSP 3		HW 2.5
DWLNR/L 2020K-08	RWT 443	RWT 443-TNM*	TWH 4*	SR 14-506 M4X0.7	LCGR-4	SR 10400270-25.5		T-15/5	
DWLNR/L 2525M-08	RWT 443	RWT 443-TNM*	TWH 4*	SR 14-506 M4X0.7	LCGR-4	SR 10400270-25.5		T-15/5	
DWLNR/L 3232P-08	RWT 443	RWT 443-TNM*	TWH 4*	SR 14-506 M4X0.7	LCGR-4	SR 10400270-25.5		T-15/5	

* Optional, to be ordered separately

JETRTURN RIGID CLAMP

DWLNR/L-JHP-MC

Rigid Clamp Tools with Channels for High-Pressure Coolant Carrying 80° Trigon Inserts



Designation	B	H	HF	LF	LH	WF	GAMP(1)	GAMF(2)	MIID(3)
DWLNR/L 2020X-08-JHP-MC	20.0	20.0	20.0	106.00	36.0	25.00	6.0	6.0	WNMG 0804
DWLNR/L 2525X-08-JHP-MC	25.0	25.0	25.0	121.00	36.0	32.00	6.0	6.0	WNMG 0804

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see pages: • WNMA/WNMA-WG (180) • WNMG-CERMET (173) • WNMG-F3M (175) • WNMG-F3P (172) • WNMG-F3S (176) • WNMG-GN (179) • WNMG-M3M (175) • WNMG-M3P (173) • WNMG-NF (176) • WNMG-NR (179) • WNMG-PP (178) • WNMG-TF (178) • WNMG-TNM (180) • WNMG-VL (177) • WNMG-WF (177) • WNMG-WG (177) • WNMM-NM (179) • WNMX-M3/4MW (181) • WNMX-M3/4PW (181)

For holders, see pages: VDI-B1/B4AK-JHPMC (841) • VDI-B2/B3A-JHPMC (841) • VDI-B2/B3AK-JHPMC (841) • VDI-C1/C4A-JHPMC (841) • VDI-C1/C4AK-JHPMC (842) • VDI-C2/C3A-JHPMC (842) • VDI-C2/C3AK-JHPMC (842)

Spare Parts

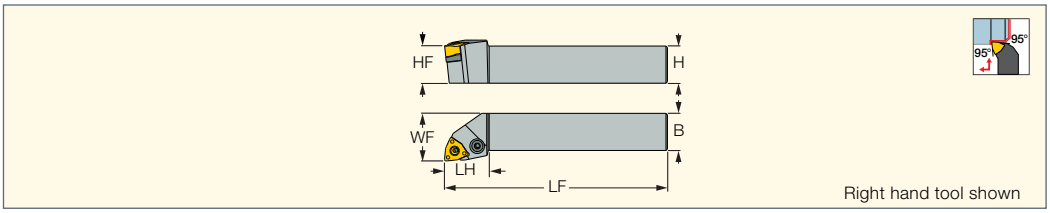
Designation							
DWLNL 2020X-08-JHP-MC	RWT 443	TWH 4*	RWT 443-TNM*	LCGR/L-4JC SET	SR 14-506 M4X0.7	PLG G1/8 TL360	
DWLNR 2020X-08-JHP-MC	RWT 443	TWH 4*	RWT 443-TNM*	LCGR/L-4JC SET	SR 14-506 M4X0.7	PLG G1/8 TL360	OR 4X3 NBR70
DWLNR/L 2525X-08-JHP-MC	RWT 443	TWH 4*	RWT 443-TNM*	LCGR/L-4JC SET	SR 14-506 M4X0.7	PLG G1/8 TL360	OR 4X3 NBR70

* Optional, to be ordered separately

HELITURN LD

PWLNR/L-X

Lever Lock External Turning Tools Carrying HELITURN LD WNMX or WNMG Trigon Inserts



Designation	H	HF	B	LF	LH	WF	MIID(3)
PWLNR/L 2020K-06X (1)	20.0	20.0	20.0	125.00	25.0	25.00	WNMX 0606, WNMG 0604
PWLNR/L 2525M-06X (1)	25.0	25.0	25.0	150.00	25.0	32.00	WNMX 0606, WNMG 0604
PWLNR/L 2020K-08X (2)	20.0	20.0	20.0	125.00	30.0	25.00	WNMX 0807, WNMG 0804
PWLNR/L 2525M-08X (2)	25.0	25.0	25.0	150.00	30.0	32.00	WNMX 0807, WNMG 0804
PWLNR 3232P-08X (2)	32.0	32.0	32.0	170.00	30.0	40.00	WNMX 0807, WNMG 0804

(1) Supplied with TWX 3 seat for WNMX 0606.. inserts and TWN 3 seat for WNMG 0604.. inserts.
(2) Supplied with TWX 4 seat for WNMX 0807.. inserts and TWN 443 seat for WNMG 0804.. inserts.
(3) Master insert identification

For inserts, see pages: WNGG-F3N (266) • WNMG-CERMET (173) • WNMG-F3S (176) • WNMG-F3P (172) • WNMG-M3P (173) • WNMX-M3/4PW (181) • WNMG-F3M (175) • WNMG-M3M (175) • WNMX-M3/4MW (181) • WNMG-TF (178) • WNMG-GN (179) • WNMG-NR (179) • WNMG-PP (178) • WNMG-VL (177) • WNMG-TNM (180) • WNMG-NF (176) • WNMM-NM (179) • WNMG-WF (177) • WNMA/WNMA-WG (180) • WNMG-WG (177)



Spare Parts

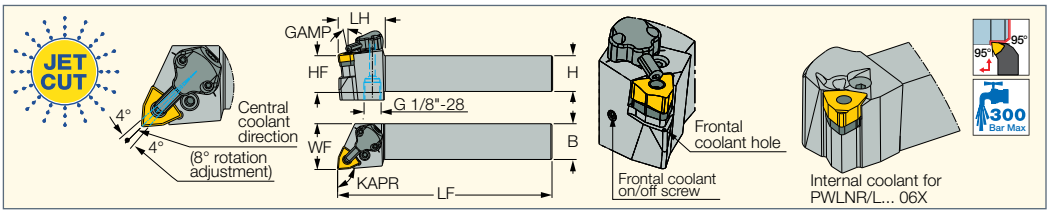
Designation								
PWLNR/L 2020K-06X	TWX 3	TWN 3	SP 3	LR 3	SR 117-2014	HW 2.5	PN 3-4	
PWLNR/L 2525M-06X	TWX 3	TWN 3	SP 3	LR 3	SR 117-2014	HW 2.5	PN 3-4	
PWLNR/L 2020K-08X	TWX 4	TWN 443	SP 4	LR 4DH	SR 117-2010	HW 3.0	PN 3-4L	LR 4DHTL (MR INJ)*
PWLNR/L 2525M-08X	TWX 4	TWN 443	SP 4	LR 4DH	SR 117-2010	HW 3.0	PN 3-4L	LR 4DHTL (MR INJ)*
PWLNR 3232P-08X	TWX 4	TWN 443	SP 4	LR 4DH	SR 117-2010	HW 3.0	PN 3-4L	LR 4DHTL (MR INJ)*

* Optional, to be ordered separately

HELITURN LD

PWLNR/L-X-JHP

Lever Lock Tools with Channels for High-Pressure Coolant Carrying HELITURN LD WNMX or WNMG Trigon Inserts



Designation	H	HF	B	LF	LH	WF	GAMP[3]	KAPR[4]	MIID[5]
PWLNR/L 2020K-06X-JHP [1]	20.0	20.0	20.0	125.00	25.0	25.00	-6.0	95.0	WNMX 0606, WNMG 0604
PWLNR/L 2525M-06X-JHP [1]	25.0	25.0	25.0	150.00	25.0	32.00	-6.0	95.0	WNMX 0606, WNMG 0604
PWLNR/L 2525M-08X-JHP [2]	25.0	25.0	25.0	150.00	33.0	32.00	-6.0	95.0	WNMX 0807, WNMG 0804
PWLNR/L 3232P-08X-JHP [2]	32.0	32.0	32.0	170.00	33.0	40.00	-6.0	95.0	WNMX 0807, WNMG 0804

- For user guide, see pages 6-7,104-110

[1] Supplied with TWX 3 seat for WNMX 0606.. inserts and TWN 3 seat for WNMG 0604.. inserts.

[2] Supplied with TWX 4 seat for WNMX 0807.. inserts and TWN 443 seat for WNMG 0804.. inserts.

[3] Rake angle axial

[4] Tool cutting edge angle

[5] Master insert identification

For inserts, see pages: WNGG-F3N (266) • WNMG-CERMET (173) • WNMG-F3S (176) • WNMG-F3P (172) • WNMG-M3P (173) • WNMX-M3/4PW (181) • WNMG-F3M (175) • WNMG-M3M (175) • WNMX-M3/4MW (181) • WNMG-TF (178) • WNMG-GN (179) • WNMG-NR (179) • WNMG-PP (178) • WNMG-VL (177) • WNMG-TNM (180) • WNMG-NF (176) • WNMM-NM (179) • WNMG-WF (177) • WNMA/WNMA-WG (180) • WNMG-WG (177)

CU-CW-JHP

Screw: SR M3





Spare Parts

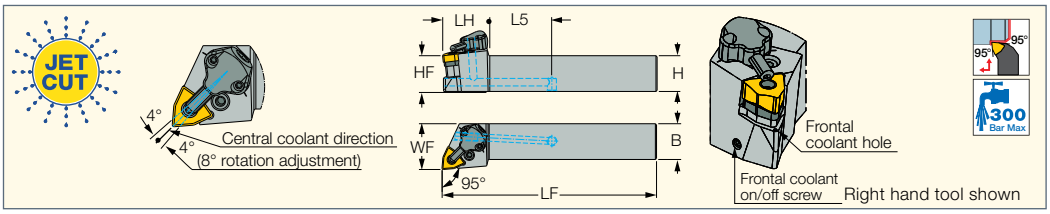
Designation												
PWLNR/L 2020K-06X-JHP	TWX 3	TWN 3	SP 3	LR 3	SR 117-2014	PN 3-4						
PWLNR/L 2525M-06X-JHP	TWX 3	TWN 3	SP 3	LR 3	SR 117-2014	PN 3-4						
PWLNR/L 2525M-08X-JHP	TWX 4	TWN 443	SP 4	LR 4DH	SR 117-2010	PN 3-4L	CU-CW-JHP	T-8/5	LR 4DHTL (MR INJ)*	HW 2.0	HW 3.0	SR M4X4 DIN913 TL360
PWLNR/L 3232P-08X-JHP	TWX 4	TWN 443	SP 4	LR 4DH	SR 117-2010	PN 3-4L	CU-CW-JHP	T-8/5	LR 4DHTL (MR INJ)*	HW 2.0	HW 3.0	SR M4X4 DIN913 TL360

* Optional, to be ordered separately

HELITURN LD

PWLNR/L-X-JHP-MC

Lever Lock Tools with Bottom Inlets for High-Pressure Coolant Channels Carrying HELITURN LD WNMX and WNMG Trigon Inserts



Designation	H	HF	B	LF	LH	L5	WF	MIID[3]
PWLNR/L 2020X-06X-JHP-MC [1]	20.0	20.0	20.0	97.00	27.0	29.00	25.00	WNMX 0606, WNMG 0604
PWLNR/L 2525X-06X-JHP-MC [1]	25.0	25.0	25.0	118.00	33.0	35.00	32.00	WNMX 0606, WNMG 0604
PWLNR/L 2020X-08X-JHP-MC [2]	20.0	20.0	20.0	97.00	27.0	29.00	25.00	WNMX 0807, WNMG 0804
PWLNR/L 2525X-08X-JHP-MC [2]	25.0	25.0	25.0	118.00	33.0	35.00	32.00	WNMX 0807, WNMG 0804

- For user guide, see pages 6-7,104-110

[1] Supplied with TWX 3 seat for WNMX 0606.. inserts and TWN 3 seat for WNMG 0604.. inserts.

[2] Supplied with TWX 4 seat for WNMX 0807.. inserts and TWN 443 seat for WNMG 0804.. inserts.

[3] Master insert identification

For inserts, see pages: WNGG-F3N (266) • WNMG-F3S (176) • WNMG-F3P (172) • WNMG-M3P (173) • WNMX-M3/4PW (181) • WNMG-F3M (175) • WNMG-M3M (175) • WNMX-M3/4MW (181) • WNMG-TF (178) • WNMG-GN (179) • WNMG-NR (179) • WNMG-PP (178) • WNMG-TNM (180) • WNMG-NF (176) • WNMM-NM (179) • WNMG-WF (177) • WNMA/WNMA-WG (180) • WNMG-WG (177)

For holders, see pages: HSK A63WH-ASHR/L-45-HPMC (838) • HSK A63WH-ASHR/L-HPMC (838) • VDI-B1/B4AK-JHPMC (841) • VDI-B2/B3A-JHPMC (841) • VDI-B2/B3AK-JHPMC (841) • VDI-C1/C4A-JHPMC (841) • VDI-C1/C4AK-JHPMC (842) • VDI-C2/C3A-JHPMC (842) • VDI-C2/C3AK-JHPMC (842)



Spare Parts

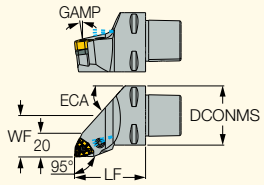
Designation													
PWLNR/L 2020X-06X-JHP-MC	TWX 3	TWN 3	SP 3	LR 3	SR 117-2014	PN 3-4	HW 2.5	CU-CW-JHP	T-8/5	SR M5X5 DIN913 TL360			
PWLNR/L 2525X-06X-JHP-MC	TWX 3	TWN 3	SP 3	LR 3	SR 117-2014	PN 3-4	HW 2.5	CU-CW-JHP	T-8/5	SR M5X5 DIN913 TL360			
PWLNR/L 2020X-08X-JHP-MC	TWX 4	TWN 443	SP 4	LR 4DH	SR 117-2010	PN 3-4L	HW 2.5	CU-CW-JHP	T-8/5	SR M5X5 DIN913 TL360	HW 3.0	LR 4DHTL (MR INJ)*	
PWLNR/L 2525X-08X-JHP-MC	TWX 4	TWN 443	SP 4	LR 4DH	SR 117-2010	PN 3-4L	HW 2.5	CU-CW-JHP	T-8/5	SR M5X5 DIN913 TL360	HW 3.0	LR 4DHTL (MR INJ)*	

* Optional, to be ordered separately

HELITURN LD

C#-PWLNR/L-X

Lever Lock Tools with CAMFIX Shanks Carrying HELITURN LD WNMX or WNMG Inserts





Right hand tool shown

Designation	DCONMS	WF	LF	ECA	GAMP[3]	MIID[4]	CP[5]	DCP[6]
C4 PWLNR/L-27050-06X [1]	40.00	27.00	50.00	45.0	-6.0	WNMX 0606, WNMG 0604	70	1
C5 PWLNL-25060-06X [1]	50.00	25.00	60.00	48.0	-6.0	WNMX 0606, WNMG 0604	70	1
C4 PWLNR/L-27050-08X [2]	40.00	27.00	50.00	45.0	-6.0	WNMX 0807, WNMG 0804	70	1
C5 PWLNR/L-35060-08X [2]	50.00	35.00	60.00	48.0	-6.0	WNMX 0807, WNMG 0804	70	1

[1] Supplied with TWX 3 seat for WNMX 0606.. inserts and TWN 3 seat for WNMG 0604.. inserts.
[2] Supplied with TWX 4 seat for WNMX 0807.. inserts and TWN 443 seat for WNMG 0804.. inserts.
[3] Rake angle axial
[4] Master insert identification
[5] Coolant pressure (Bar)
[6] 1 - Slot for data chip, 0 - Without slot for data chip

For inserts, see pages: WNMG-F3S (176) • WNMX-M3/4MW (181) • WNMX-M3/4PW (181) • WNMG-F3P (172) • WNMG-M3P (173) • WNMG-F3M (175) • WNMG-M3M (175) • WNMG-TF (178) • WNMG-GN (179) • WNMG-PP (178) • WNMG-NF (176) • WNMG-WF (177) • WNMA/WNMA-WG (180) • WNMG-WG (177)

Spare Parts

Designation									
C4 PWLNR/L-27050-06X	TWX 3	TWN 3	SP 3	LR 3	SR 117-2014	PN 3-4	EZ 62	HW 2.5/5	
C5 PWLNL-25060-06X	TWX 3	TWN 3	SP 3	LR 3	SR 117-2014	PN 3-4	EZ 83	HW 2.5/5	
C4 PWLNR/L-27050-08X	TWX 4	TWN 443	SP 4	LR 4DH	SR 117-2010	PN 3-4L	EZ 62	HW 3.0	LR 4DHTL (MR INJ)*
C5 PWLNR/L-35060-08X	TWX 4	TWN 443	SP 4	LR 4DH	SR 117-2010	PN 3-4L		HW 3.0	LR 4DHTL (MR INJ)*

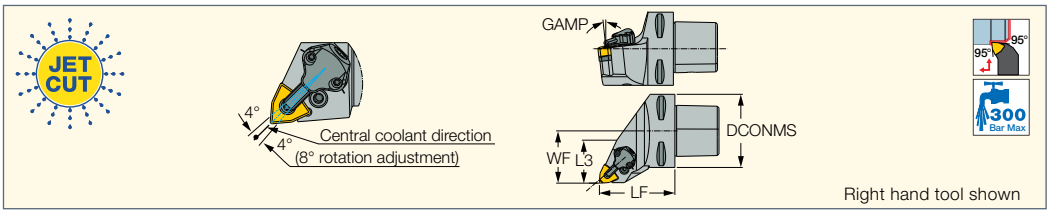
* Optional, to be ordered separately



HELITURN LD

C#-PWLNR/L-X-JHP

Lever Lock Tools with CAMFIX Shanks and Channels for High-Pressure Coolant, Carrying WNMX or WNMG Inserts



Designation	DCONMS	LF	WF	L3	GAMP[3]	MIID[4]	DCP[5]
C3 PWLNR-22045-06X-JHP [1]	32.00	45.00	22.00	26.00	-6.0	WNMX 0606, WNMG 0604	0
C3 PWLNR-22045-08X-JHP [2]	32.00	45.00	22.00	24.28	-6.0	WNMX 0807, WNMG 0804	0
C4 PWLNR/L-27050-08X-JHP [2]	40.00	50.00	27.00	32.94	-6.0	WNMX 0807, WNMG 0804	1
C5 PWLNR/L-35060-08X-JHP [2]	50.00	60.00	35.00	28.57	-6.0	WNMX 0807, WNMG 0804	1
C6 PWLNR/L-45065-08X-JHP [2]	63.00	65.00	45.00	40.00	-6.0	WNMX 0807, WNMG 0804	1

- For user guide, see pages 6-7,104-110

[1] Supplied with TWX 3 seat for WNMX 0606.. inserts and TWN 3 seat for WNMG 0604.. inserts.

[2] Supplied with TWX 4 seat for WNMX 0807.. inserts and TWN 443 seat for WNMG 0804.. inserts.

[3] Rake angle axial

[4] Master insert identification

[5] 1 - Slot for data chip, 0 - Without slot for data chip

For inserts, see pages: WNMG-F3S (176) • WNMX-M3/4MW (181) • WNMX-M3/4PW (181) • WNMG-F3P (172) • WNMG-M3P (173) • WNMG-F3M (175) • WNMG-M3M (175) • WNMG-TF (178) • WNMG-GN (179) • WNMG-PP (178) • WNMG-NF (176) • WNMG-WF (177) • WNMA/WNMA-WG (180) • WNMG-WG (177)



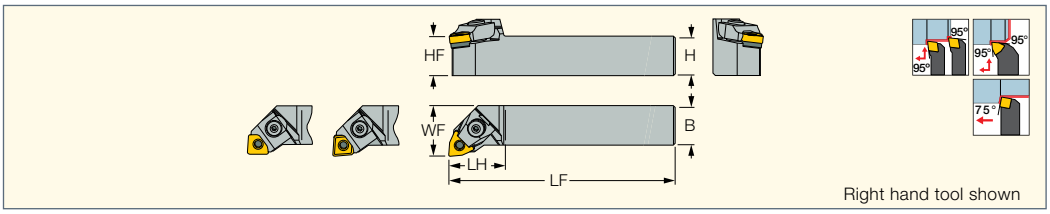
Spare Parts

Designation										
C3 PWLNR-22045-06X-JHP	TWX 3	TWN 3	SP 3	PN 3-4	LR 3	SR 117-2014	CU-CW-JHP		T-8/5	HW 2.5
C3 PWLNR-22045-08X-JHP	TWX 4	TWN 443	SP 4	PN 3-4L	LR 4DH	SR 117-2010	CU-CW-JHP	LR 4DHTL (MR INJ)*	T-8/5	HW 3.0
C4 PWLNR/L-27050-08X-JHP	TWX 4	TWN 443	SP 4	PN 3-4L	LR 4DH	SR 117-2010	CU-CW-JHP	LR 4DHTL (MR INJ)*	T-8/5	HW 3.0
C5 PWLNR/L-35060-08X-JHP	TWX 4	TWN 443	SP 4	PN 3-4L	LR 4DH	SR 117-2010	CU-CW-JHP	LR 4DHTL (MR INJ)*	T-8/5	HW 3.0
C6 PWLNR/L-45065-08X-JHP	TWX 4	TWN 443	SP 4	PN 3-4L	LR 4DH	SR 117-2010	CU-CW-JHP	LR 4DHTL (MR INJ)*	T-8/5	HW 3.0

* Optional, to be ordered separately

MULTI-WEDGE

MULNR/L-12MW
MULTI-WEDGE Lock External Tools Carrying 80° Negative Rhombic or Trigon or Square Inserts

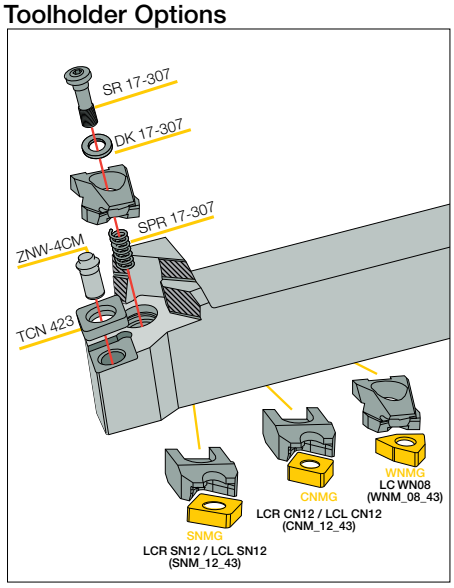


Designation	H	HF	B	LF	LH	WF
MULNR/L 2525M-12MW	25.0	25.0	25.0	150.00	35.0	32.00

- The wedge for the WNMG insert is supplied with the holder, order the others separately

For inserts, see pages: CNMG-CERMET (183) • CNMG-F3S (186) • SNMG-F3S (219) • WNMG-CERMET (173) • WNMG-F3S (176) • WNMG-F3P (172) • WNMG-M3P (173) • WNMG-F3M (175) • WNMG-M3M (175) • WNMG-TF (178) • WNMG-GN (179) • WNMG-NR (179) • WNMG-PP (178) • WNMG-VL (177) • WNMG-TNM (180) • WNMG-NF (176) • WNMM-NM (179) • WNMG-WF (177) • WNMA/WNMA-WG (180) • WNMG-WG (177) • CNMG-F3P (181) • CNMG-M3P (182) • CNMM-R3P (192) • CNMM-M4PW (192) • CNMG-F3M (185) • CNMG-M3M (185) • CNMG/CNGG-TF (189) • CNMG-GN (190) • CNMG-NR (190) • CNMG/CNGG-PP (189) • CNMG-VL (186) • CNMG/CNGG-SF (187) • CNMG-NF (187) • CNMG-WF (187) • CNMG-WG/NRW (188) • CNMA (188) • SNMG-F3P (216) • SNMG-M3P (216) • SNMM-R3P (223) • SNMG-F3M (218) • SNMG-M3M (218) • SNMG-TF (220) • SNMG-GN (221) • SNMG-NR (222) • SNMG-PP (220) • SNMG-VL (219) • SNMA (222)

Toolholder Options



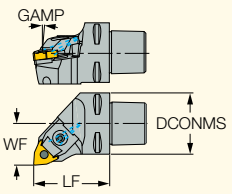
Spare Parts

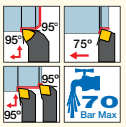
Designation	TCN 423	ZNW 4CM	LC WN08	LCR/L CN12*	LCR/L SN12*	SR 17-307	SR M4X8	HW 3.0	DK 17-307	SPR 17-307
MULNR/L 2525M-12MW	TCN 423	ZNW 4CM	LC WN08	LCR/L CN12*	LCR/L SN12*	SR 17-307	SR M4X8	HW 3.0	DK 17-307	SPR 17-307

* Optional, to be ordered separately

MULTI-WEDGE

C#-MULNR/L-MW
MULTI-WEDGE Tools with CAMFIX Exchangeable Shanks Carrying 80° Negative Rhombic or Trigon or Square Inserts





Right hand tool shown

Designation	DCONMS	WF	LF	GAMP(1)	MIID(2)	DCP(3)
C4 MULNR/L 27050-12MW	40.00	27.00	50.00	-6.0	W/C/SNMG 1204..	1
C5 MULNR/L 35060-12MW	50.00	35.00	60.00	-6.0	W/C/SNMG 1204..	1
C6 MULNR/L-45065-12MW	63.00	45.00	65.00	-6.0	W/C/SNMG 1204..	1

- R.H. wedge for R.H. tool, L.H. wedge for L.H. tool

(1) Rake angle axial
(2) Master insert identification
(3) 1 - Slot for data chip, 0 - Without slot for data chip

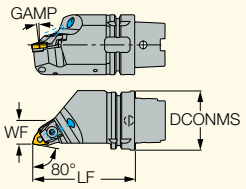
For inserts, see pages: CNMG-CERMET (183) • CNMG-F3S (186) • SNMG-F3S (219) • WNMG-CERMET (173) • WNMG-F3S (176) • WNMG-F3P (172) • WNMG-M3P (173) • WNMG-F3M (175) • WNMG-M3M (175) • WNMG-TF (178) • WNMG-GN (179) • WNMG-NR (179)• WNMG-PP (178) • WNMG-VL (177) • WNMG-TNM (180) • WNMG-NF (176) • WNMM-NM (179) • WNMG-WF (177) • WNMA/WNMA-WG (180) • WNMG-WG (177) • CNMG-F3P (181) • CNMG-M3P (182) • CNMM-R3P (192) • CNMM-M4PW (192) • CNMG-F3M (185) • CNMG-M3M (185) • CNMG/CNGG-TF (189) • CNMG-GN (190) • CNMG-NR (190) • CNMG/CNGG-PP (189) • CNMG-VL (186) • CNMG/CNGG-SF (187) • CNMG-NF (187) • CNMG-WF (187) • CNMG-WG/NRW (188) • CNMA (188) • SNMG-F3P (216) • SNMG-M3P (216) • SNMM-R3P (223) • SNMG-F3M (218) • SNMG-M3M (218) • SNMG-TF (220) • SNMG-GN (221) • SNMG-NR (222) • SNMG-PP (220) • SNMG-VL (219) • SNMA (222)

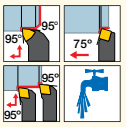
Spare Parts

Designation								
C4 MULNR/L 27050-12MW	TCN 423	ZNW 4CMI	LC WN08	HW 3.0	SR 17-307	DK 17-307	SPR 17-307	EZ 62
C5 MULNR/L 35060-12MW	TCN 423	ZNW 4CMI	LC WN08	HW 3.0	SR 17-307	DK 17-307	SPR 17-307	EZ 83
C6 MULNR/L-45065-12MW	TCN 423	ZNW 4CMI	LC WN08	HW 3.0	SR 17-307	DK 17-307	SPR 17-307	EZ 104

HSK MULTI-WEDGE

HSK A63WH-MULNR/L-MW
MULTI-WEDGE Toolholders with HSK Taper Shanks for 80° Rhombic, Trigon and Square Inserts





Right hand tool shown

Designation	DCONMS	LF	WF	GAMP(1)	MIID(2)	DCP(3)
HSK A63WH MULNR/L J12MW	63.00	110.00	25.00	-6.0	W/C/SNMG 1204	0

- Complies with ICTM standard (ISO 12164-3) • A cooling tube must be used with all coolant through HSK spindles (should be ordered separately)
- For shank dimensions, see page 835

(1) Rake angle axial
(2) Master insert identification
(3) 1 - Slot for data chip, 0 - Without slot for data chip

For inserts, see pages: CNMG-CERMET (183) • CNMG-F3S (186) • SNMG-F3S (219) • WNMG-CERMET (173) • WNMG-F3S (176) • WNMG-F3P (172) • WNMG-M3P (173) • WNMG-F3M (175) • WNMG-M3M (175) • WNMG-TF (178) • WNMG-GN (179) • WNMG-NR (179) • WNMG-PP (178) • WNMG-VL (177) • WNMG-TNM (180) • WNMG-NF (176) • WNMM-NM (179) • WNMG-WF (177) • WNMA/WNMA-WG (180) • WNMG-WG (177) • CNMG-F3P (181) • CNMG-M3P (182) • CNMM-R3P (192) • CNMM-M4PW (192) • CNMG-F3M (185) • CNMG-M3M (185) • CNMG/CNGG-TF (189) • CNMG-GN (190) • CNMG-NR (190) • CNMG/CNGG-PP (189) • CNMG-VL (186) • CNMG/CNGG-SF (187) • CNMG-NF (187) • CNMG-WF (187) • CNMG-WG/NRW (188) • CNMA (188) • SNMG-F3P (216) • SNMG-M3P (216) • SNMM-R3P (223) • SNMG-F3M (218) • SNMG-M3M (218) • SNMG-TF (220) • SNMG-GN (221) • SNMG-NR (222) • SNMG-PP (220) • SNMG-VL (219) • SNMA (222)

Spare Parts

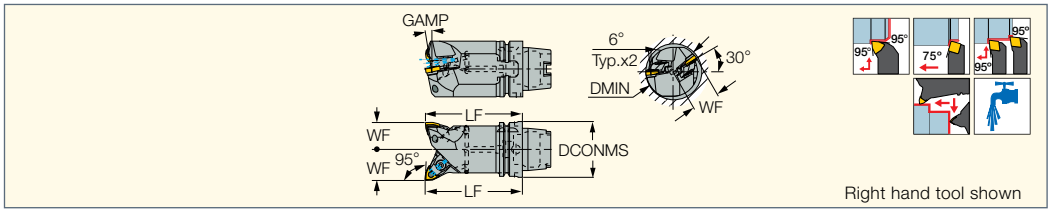
Designation											
HSK A63WH MULNR/L J12MW	TCN 423	LCR/L CN12*	LCR/L SN12*	LC WN08	ZNW 4CM	SR 17-307	HW 3.0	DK 17-307	SPR 17-307	SR M4X8	EZ 104

* Optional, to be ordered separately

MULTI-WEDGE HSK

HSK A63WH-MULNR-J12MWX2

MULTI-WEDGE Twin Toolholders with HSK Taper Shanks for 80° Rhombic, Trigon and Square Inserts



Right hand tool shown

Designation	DCONMS	LF	WF	DMIN	MIID(1)	GAMP(3)	DCP(2)
HSK A63WH-MULNR-J12MWX2	63.00	110.00	35.00	72.00	W/C/SNMG 1204	0	-10.0

- Complies with ICTM standard (ISO 12164-3)
- A cooling tube must be used with all coolant through HSK spindles (should be ordered separately).
- For shank dimensions, see page 835

(1) Master insert identification

(2) 1 - Slot for data chip, 0 - Without slot for data chip

(3) Rake angle axial

For inserts, see pages: CNMG-CERMET (183) • CNMG-F3S (186) • SNMG-F3S (219) • WNMG-CERMET (173) • WNMG-F3S (176) • WNMG-F3P (172) • WNMG-M3P (173) • WNMG-F3M (175) • WNMG-M3M (175) • WNMG-TF (178) • WNMG-GN (179) • WNMG-NR (179) • WNMG-PP (178) • WNMG-VL (177) • WNMG-TNM (180) • WNMG-NF (176) • WNMM-NM (179) • WNMG-WF (177) • WNMA/WNMA-WG (180) • WNMG-WG (177) • CNMG-F3P (181) • CNMG-M3P (182) • CNMM-R3P (192) • CNMM-M4PW (192) • CNMG-F3M (185) • CNMG-M3M (185) • CNMG/CNGG-TF (189) • CNMG-GN (190) • CNMG-NR (190) • CNMG/CNGG-PP (189) • CNMG-VL (186) • CNMG/CNGG-SF (187) • CNMG-NF (187) • CNMG-WF (187) • CNMG-WG/NRW (188) • CNMA (188) • SNMG-F3P (216) • SNMG-M3P (216) • SNMM-R3P (223) • SNMG-F3M (218) • SNMG-M3M (218) • SNMG-TF (220) • SNMG-GN (221) • SNMG-NR (222) • SNMG-PP (220) • SNMG-VL (219) • SNMA (222)

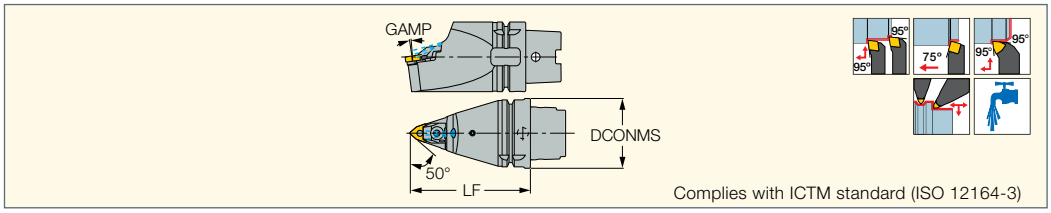
Spare Parts

Designation							
HSK A63WH-MULNR-J12MWX2	TCN 423	LC WN08	ZNW 4CMI	DK 17-307	SPR 17-307	SR 17-307	HW 3.0

HSK MULTI-WEDGE

HSK A63WH-MUMNN-MW

MULTI-WEDGE Tools with HSK Exchangeable Shanks Carrying 80° Negative Rhombic with Trigon or Square Inserts



Complies with ICTM standard (ISO 12164-3)

Designation	DCONMS	LF	MIID(1)	DCP(3)	GAMP(2)
HSK A63WH MUMNN J12MW	63.00	110.00	W/C/SNMG 1204	-7.0	0

- A cooling tube must be used with all coolant through HSK spindles (should be ordered separately).
- For shank dimensions, see page 835

(1) Master insert identification

(2) Rake angle axial

(3) 1 - Slot for data chip, 0 - Without slot for data chip

For inserts, see pages: CNMG-CERMET (183) • CNMG-F3S (186) • SNMG-F3S (219) • WNMG-CERMET (173) • WNMG-F3S (176) • WNMG-F3P (172) • WNMG-M3P (173) • WNMG-F3M (175) • WNMG-M3M (175) • WNMG-TF (178) • WNMG-GN (179) • WNMG-NR (179) • WNMG-PP (178) • WNMG-VL (177) • WNMG-TNM (180) • WNMG-NF (176) • WNMM-NM (179) • WNMG-WF (177) • WNMA/WNMA-WG (180) • WNMG-WG (177) • CNMG-F3P (181) • CNMG-M3P (182) • CNMM-R3P (192) • CNMM-M4PW (192) • CNMG-F3M (185) • CNMG-M3M (185) • CNMG/CNGG-TF (189) • CNMG-GN (190) • CNMG-NR (190) • CNMG/CNGG-PP (189) • CNMG-VL (186) • CNMG/CNGG-SF (187) • CNMG-NF (187) • CNMG-WF (187) • CNMG-WG/NRW (188) • CNMA (188) • SNMG-F3P (216) • SNMG-M3P (216) • SNMM-R3P (223) • SNMG-F3M (218) • SNMG-M3M (218) • SNMG-TF (220) • SNMG-GN (221) • SNMG-NR (222) • SNMG-PP (220) • SNMG-VL (219) • SNMA (222)

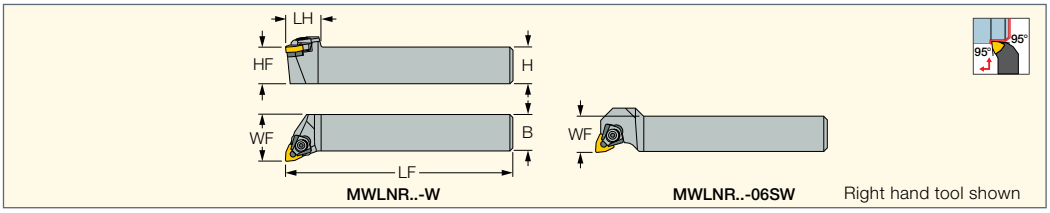
Spare Parts

Designation											
HSK A63WH MUMNN J12MW	LC WN08	LCR CN12*	LCR SN12*	TCN 423	ZNW 4CM	SR 17-307	HW 3.0	DK 17-307	SPR 17-307	EZ 83	SR M4X8

* Optional, to be ordered separately

ISOTURN

MWLNR/L-W
Top Wedge Lock External
Tools Carrying Trigon Inserts



Designation	H	HF	B	LF	LH	WF	MIID[1]
MWLNR/L 1616H-06SW	16.0	16.0	16.0	100.00	23.0	16.00	WNMG 06T3
MWLNR/L 2020K-06W	20.0	20.0	20.0	125.00	25.0	25.00	WNMG 06T3
MWLNR/L 2525M-06W	25.0	25.0	25.0	150.00	25.0	32.00	WNMG 06T3
MWLNR/L 2020K-08W	20.0	20.0	20.0	125.00	30.0	25.00	WNMG 0804
MWLNR/L 2525M-08W	25.0	25.0	25.0	150.00	30.0	32.00	WNMG 0804
MWLNR/L 3232P-08W	32.0	32.0	32.0	170.00	35.0	40.00	WNMG 0804

[1] Master insert identification

For inserts, see pages: WNGG-F3N (266) • WNMG-CERMET (173) • WNMG-F3S (176) • WNMG-F3P (172) • WNMG-M3P (173) • WNMG-F3M (175) • WNMG-M3M (175) • WNMG-TF (178) • WNMG-GN (179) • WNMG-NR (179) • WNMG-PP (178) • WNMG-VL (177) • WNMG-TNM (180) • WNMG-SF (176) • WNMG-NF (176) • WNMM-NM (179) • WNMG-WF (177) • WNMA/WNMA-WG (180) • WNMG-WG (177)

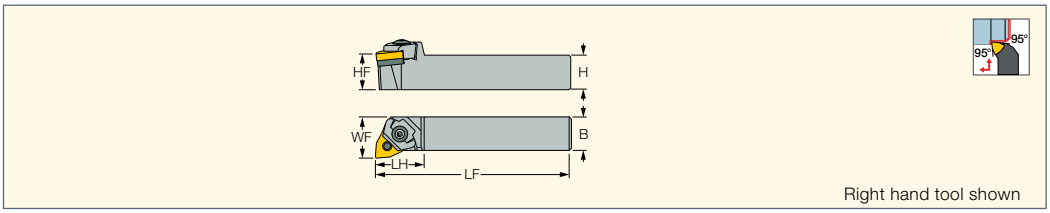
Spare Parts

Designation						
MWLNR/L 1616H-06SW	IWSN 322W	IWSN 3-2W*	ZNW 3W	SR 14-564	LC 250 SET 1	HW 2.5
MWLNR/L 2020K-06W	IWSN 322W	IWSN 3-2W*	ZNW 3W	SR 14-564	LC 250 SET 1	HW 2.5
MWLNR/L 2525M-06W	IWSN 322W	IWSN 3-2W*	ZNW 3W	SR 14-564	LC 250 SET 1	HW 2.5
MWLNR/L 2020K-08W	IWSN 433	IWSN 433M*	ZNW 4W	SR M4X8	LC 252 SET 1	HW 3.0
MWLNR/L 2525M-08W	IWSN 433	IWSN 433M*	ZNW 4W	SR M4X8	LC 252 SET 1	HW 3.0
MWLNR/L 3232P-08W	IWSN 433	IWSN 433M*	ZNW 4W	SR M4X8	LC 252 SET 1	HW 3.0

* Optional, to be ordered separately

ISOTURN

MWLNR/L-13W
Top Wedge Lock External
Toolholders for Large
Trigon Inserts



Designation	H	B	HF	LF	LH	WF	MIID[1]
MWLNR/L 3232P-13W	32.0	32.0	32.0	170.00	45.0	40.00	WNMG 1306
MWLNR/L 4040R-13W	40.0	40.0	40.0	200.00	45.0	50.00	WNMG 1306

[1] Master insert identification

For inserts, see pages: WNMA/WNMA-WG (180) • WNMG-TNM (180)

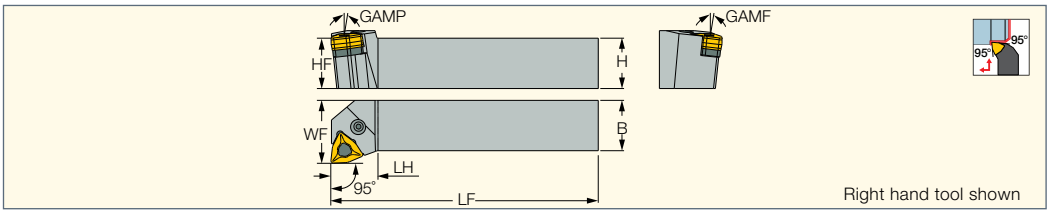
Spare Parts

Designation								
MWLNR/L-13W	IWSN 635	ZNW 6W	SR 14-570	LC 253	HW 4P	SPR 17-362	SR 17-362	WA M8

DOVEIQTURN HEAVY DUTY LINE

PWLOR/L-IQ

Lever Lock and Dovetail Pocket Rigid Clamping Tools Carrying Unique Double-Sided Trigon Inserts

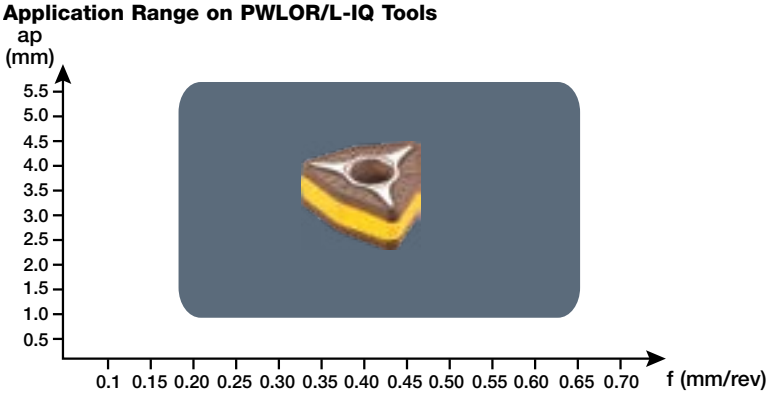


Designation	H	HF	B	LF	LH	WF	GAMP(1)	GAMF(2)	MIID(3)
PWLOR/L 2525M-10-IQ	25.0	25.0	25.0	150.00	25.0	32.00	-6.0	-6.0	WOMG 1007-IQ
PWLOR/L 3232P-10-IQ	32.0	32.0	32.0	170.00	30.0	40.00	-6.0	-6.0	WOMG 1007-IQ
PWLOR/L 3232P-13-IQ	32.0	32.0	32.0	170.00	30.0	40.00	-6.5	-6.5	WOMG 1306-IQ
PWLOR/L 4040S-13-IQ	40.0	40.0	40.0	250.00	30.0	48.00	-6.5	-6.5	WOMG 1306-IQ

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see pages: WOMG-10-T3P-IQ (174) • WOMG-13-R3P-IQ (174)

Application Range on PWLOR/L-IQ Tools



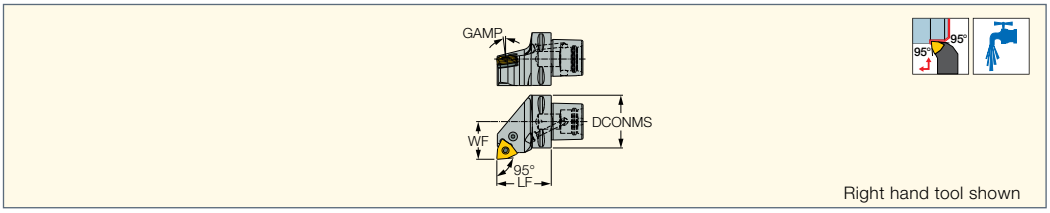
Spare Parts

Designation					
PWLOR/L 2525M-10-IQ	TWN 5-4-IQ	SP D1.5-L10	SR LCS 5	LR 5	HW 3.0
PWLOR/L 3232P-10-IQ	TWN 5-4-IQ	SP D1.5-L10	SR LCS 5	LR 5	HW 3.0
PWLOR/L 3232P-13-IQ	TWX 6-IQ	SP 5	SR 10402352	LCL 20C-NX	HW 4.0
PWLOR/L 4040S-13-IQ	TWX 6-IQ	SP 5	SR 10402352	LCL 20C-NX	HW 4.0

DOVEIQTURN HEAVY DUTY LINE

C#-PWLOR/L-IQ

Lever Lock and Dovetail Rigid Clamping Pocket with CAMFIX Shank Tools Carrying Unique Double-Sided Trigon Inserts



Designation	DCONMS	WF	LF	GAMP(1)	MIID(2)
C6 PWLOR/L-45065-13-IQ	63.00	45.00	65.00	-6.5	WOMG 1306-IQ

(1) Rake angle axial
(2) Master insert identification

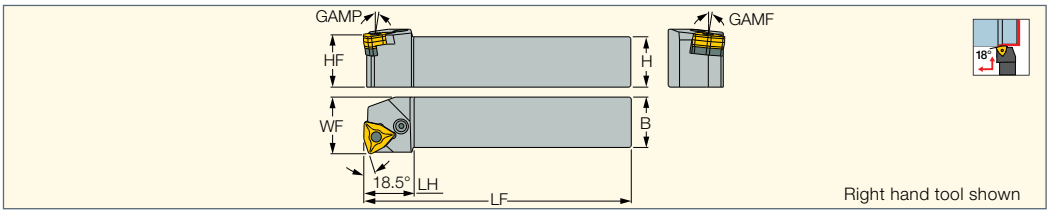
For inserts, see page: WOMG-13-R3P-IQ (174)

Spare Parts

Designation						
C#-PWLOR/L-IQ	TWX 6-IQ	LCL 20C-NX	SR 10402352	HW 4.0	SP 5	SATZ-M10X1-M5

DOVEIQTURN HEAVY DUTY LINE

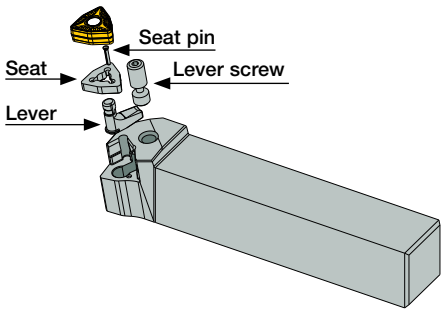
PWXOR/L-TF-IQ
Lever Lock Tools for Fast Feed Longitudinal Turning



Designation	H	HF	B	LF	LH	WF	GAMP(1)	GAMF(2)	MIID(3)					
PWXOR/L 2525M-10-TF-IQ	25.0	25.0	25.0	150.00	31.0	29.00	-6.0	-6.0	WOMG 1007-IQ	TWN 5-4-IQ	SP D1.5-L10	SR LCS 5	LR 5	HW 3.0
PWXOR/L 3232P-10-TF-IQ	32.0	32.0	32.0	170.00	31.0	36.00	-6.0	-6.0	WOMG 1007-IQ	TWN 5-4-IQ	SP D1.5-L10	SR LCS 5	LR 5	HW 3.0
PWXOR/L 4040S-10-TF-IQ	40.0	40.0	40.0	250.00	31.0	44.00	-6.0	-6.0	WOMG 1007-IQ	TWN 5-4-IQ	SP D1.5-L10	SR LCS 5	LR 5	HW 3.0

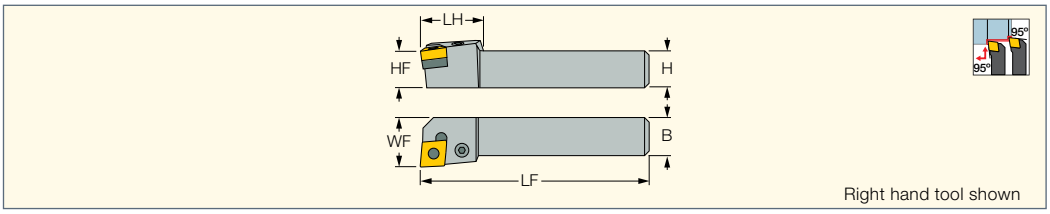
(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see pages: WOMG-10-T3P-IQ (174)



ISOTURN

PCLNR/L
Lever Lock Tools Carrying 80° Negative Rhombic Inserts



Designation	H	HF	B	LF	LH	WF	MIID(1)
PCLNR/L 2020K-12	20.0	20.0	20.0	125.00	27.5	25.00	CNMG 1204..
PCLNR/L 2525M-12	25.0	25.0	25.0	150.00	27.8	32.00	CNMG 1204..
PCLNR/L 3232P-12	32.0	32.0	32.0	170.00	27.6	40.00	CNMG 1204..
PCLNR/L 3232P-19	32.0	32.0	32.0	170.00	38.0	40.00	CNMG 1906..
PCLNR/L 4040S-25	40.0	40.0	40.0	250.00	47.0	50.00	CNMG 2509..
PCLNR 5050T-25	50.0	50.0	50.0	300.00	47.0	60.00	CNMG 2509..

(1) Master insert identification

For inserts, see pages: CNMG-F3S (186) • CNMG-R3P (182) • CNMG-F3P (181) • CNMG-M3P (182) • CNMM-R3P (192) • CNMM-M4PW (192) • CNMG-CERMET (183) • CNMG-F3M (185) • CNMG-M3M (185) • CNMG-R3M (186) • CNMG/CNGG-TF (189) • CNMG-GN (190) • CNMG-NR (190) • CNMM-NR (194) • CNMG/CNGG-PP (189) • CNMG-VL (186) • CNMG-MR (191) • CNMG/CNGG-SF (187) • CNMG-NF (187) • CNMG-WF (187) • CNMG-WG/NRW (188) • CNMS-12 (272) • CNMM-H3P (193) • CNMM-H4P (193) • CNMM-H5P (193) • CNMA (188)

Spare Parts

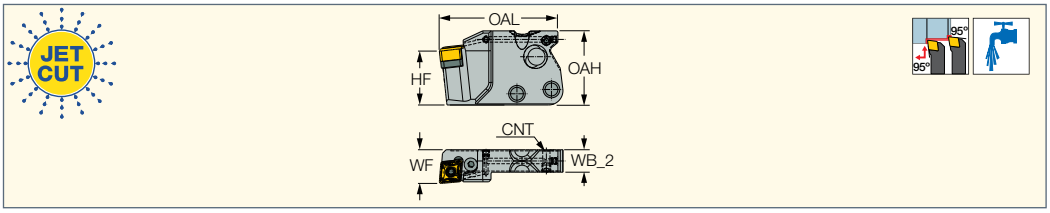
Designation							
PCLNR/L 2020K-12	TCN 423		SP 4	LR 4	SR 117-2010	HW 3.0	PN 3-4
PCLNR/L 2525M-12	TCN 423		SP 4	LR 4	SR 117-2010	HW 3.0	PN 3-4
PCLNR/L 3232P-12	TCN 423		SP 4	LR 4	SR 117-2010	HW 3.0	PN 3-4
PCLNR/L 3232P-19	TCN 63		SP 66	LR 6	SR 10402352	HW 4.0	
PCLNR/L 4040S-25	TCN 84N	TCN 85N*	SP 8	LR 8	SR 10402264	HW 5.0	
PCLNR 5050T-25	TCN 84N	TCN 85N*	SP 8	LR 8	SR 10402264	HW 5.0	

* Optional, to be ordered separately

ISOTURN

PCLNR/L-PAD-JHP

Lever Lock Adapter with
High-Pressure Coolant Mounts
80° Diamond Inserts



Designation	HF	OAL	OAH	WF	WB_2	GAMP(1)	GAMF(2)	MIID(3)	CNT
PCLNR/L-09-PAD-JHP	24.0	52.80	33.00	15.00	10.0	6.0	6.0	CNG/CNM 0904/0906	M4

New

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see pages: CNGG-F3N (266) • CNMG-F3M (185) • CNMG-F3P (181) • CNMG-F3S (186) • CNMG-M3M (185) • CNMG-M3P (182) • CNMG/CNGG-TF (189)
For holders, see pages: ABC MAHDR-#-XL-JHP (884) • C#-MAHD-JHP (697) • C#-MAHPD-JHP (698) • DT##/2 MAHD#-#-XL-JHP (860) • MAHPR/L-JHP (308) • MS##-##-MG-JHP (859) • MS-ES#####-GWS-MG-JHP (861) • TR TNK36 MAHDL-R-XL-JHP (884) • TR45 MAHDR-#-XL-JHP (883) • TR45TNL MAHDN-R-XL-JHP (883) • V## MAHD#-#-XL-##-JHP (880) • V## MAHD-XL-JHP (881)

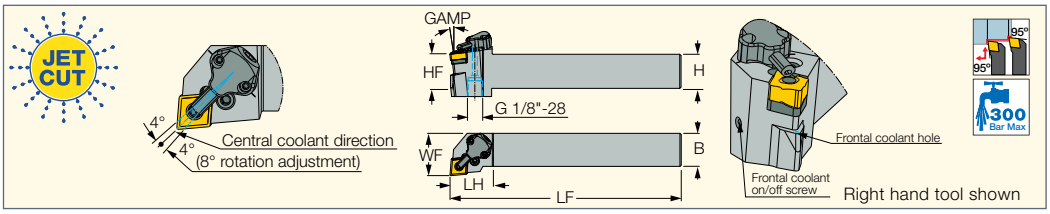
Spare Parts

Designation									
PCLNR/L-09-PAD-JHP	TCN 323	TCX 3	SR 117-2014	HW 2.5	LR 3	PN 3-4	SP 3	SR M4X4 DIN913 TL360	SR M3X3 DIN913 TL360

ISOTURN

PCLNR/L-12-JHP

Lever Lock Tools with
Channels for High-Pressure
Coolant Carrying 80°
Negative Rhombic Inserts



Designation	H	HF	B	LF	LH	WF	GAMP(1)	MIID(2)
PCLNR/L 2525M-12-JHP	25.0	25.0	25.0	150.00	33.0	32.00	-6.0	CNMG 1204
PCLNR/L 3232P-12-JHP	32.0	32.0	32.0	170.00	33.0	40.00	-6.0	CNMG 1204

• For user guide, see pages 6-7,104-110
(1) Rake angle axial
(2) Master insert identification

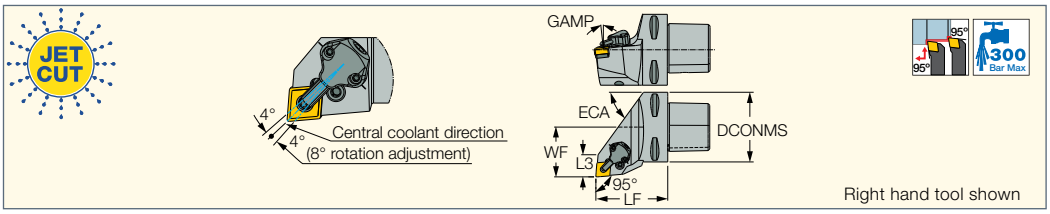
For inserts, see pages: CNMG-CERMET (183) • CNMG-F3S (186) • CNMG-F3P (181) • CNMG-M3P (182) • CNMM-R3P (192) • CNMM-M4PW (192) • CNMG-F3M (185) • CNMG-M3M (185) • CNMG/CNGG-TF (189) • CNMG-GN (190) • CNMG-NR (190) • CNMG/CNGG-PP (189) • CNMG-VL (186) • CNMG/CNGG-SF (187) • CNMG-NF (187) • CNMG-WF (187) • CNMG-WG/NRW (188) • CNMS-12 (272) • CNMA (188)

Spare Parts

Designation										
PCLNR/L-12-JHP	TCN 423	SP 4	LR 4	SR 117-2010	PN 3-4	CU-CW-JHP	SR M4X4 DIN913 TL360	HW 2.0	HW 3.0	T-8/5

ISOTURN

C#-PCLNR/L-12-JHP
Lever Lock Tools with Channels for High-Pressure Coolant and CAMFIX Shanks Carrying 80° Negative Rhombic Inserts



Designation	DCONMS	WF	LF	L3	ECA	GAMP[1]	MIID[2]	CP[4]	DCP[3]
C6 PCLNR/L-45065-12-JHP	63.00	45.00	65.00	20.00	54.0	-6.0	CNMG 1204	300	1

- For user guide, see pages 6-7,104-110

[1] Rake angle axial
[2] Master insert identification
[3] 1 - Slot for data chip, 0 - Without slot for data chip
[4] Coolant pressure (Bar)

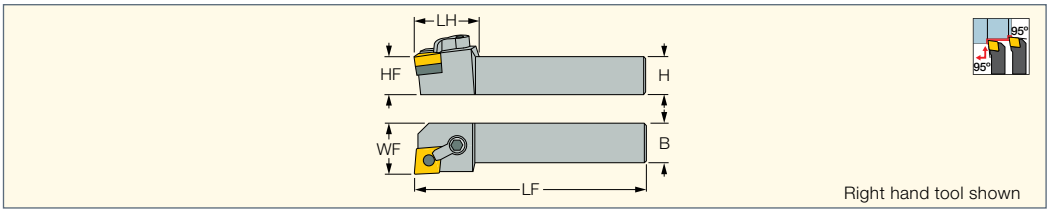
For inserts, see pages: CNMG-CERMET (183) • CNMG-F3S (186) • CNMG-F3P (181) • CNMG-M3P (182) • CNMM-R3P (192) • CNMM-M4PW (192) • CNMG-F3M (185) • CNMG-M3M (185) • CNMG/CNGG-TF (189) • CNMG-GN (190) • CNMG-NR (190) • CNMG/CNGG-PP (189) • CNMG-VL (186) • CNMG/CNGG-SF (187) • CNMG-NF (187) • CNMG-WF (187) • CNMG-WG/NRW (188) • CNMS-12 (272) • CNMA (188)

Spare Parts

Designation								
C6 PCLNR/L-45065-12-JHP	TCN 423	SP 4	LR 4	SR 117-2010	PN 3-4	CU-CW-JHP	HW 3.0	T-8/5

ISOTURN

MCLNR/L
Pin and Clamp Tools Carrying 80° Negative Rhombic Inserts



Designation	H	HF	B	LF	LH	WF	MIID[1]
MCLNR 2525M-16	25.0	25.0	25.0	150.00	30.0	32.00	CNMG 1606..
MCLNR 3232P-16	32.0	32.0	32.0	170.00	30.0	40.00	CNMG 1606..
MCLNL 3232P-19	32.0	32.0	32.0	170.00	35.0	40.00	CNMG 1906..

[1] Master insert identification

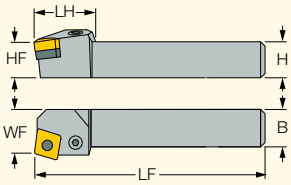
For inserts, see pages: CNMG-R3P (182) • CNMG-M3P (182) • CNMM-R3P (192) • CNMG-M3M (185) • CNMG-R3M (186) • CNMG/CNGG-TF (189) • CNMG-GN (190) • CNMG-NR (190) • CNMM-NR (194) • CNMG/CNGG-PP (189) • CNMG-MR (191) • CNMM-H3P (193) • CNMM-H4P (193) • CNMA (188)

Spare Parts

Designation				
MCLNR 2525M-16	TCT 533	LC 30 SET 1	ZN 54M	HW 3.0
MCLNR 3232P-16	TCT 533	LC 30 SET 1	ZN 54M	HW 3.0
MCLNL 3232P-19	TCT 634	LC80 SET-1	ZN 64	HW 4.0

ISOTURN

PCBNR/L
Lever Lock Tools using the 100° Corner of CNMG Inserts



Right hand tool shown

Designation	H	HF	B	LF	LH	WF	MIID[1]
PCBNR/L 2525M-12	25.0	25.0	25.0	150.00	27.7	22.00	CNMG 1204..
PCBNR/L 3232P-19	32.0	32.0	32.0	170.00	37.0	27.00	CNMG 1906..
PCBNR 4040S-19	40.0	40.0	40.0	250.00	37.0	37.00	CNMG 1906..

[1] Master insert identification

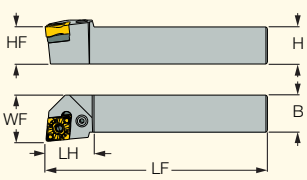
For inserts, see pages: CNMG-CERMET (183) • CNMG-F3S (186) • CNMG-R3P (182) • CNMG-F3P (181) • CNMG-M3P (182) • CNMM-R3P (192) • CNMM-M4PW (192) • CNMG-F3M (185) • CNMG-M3M (185) • CNMG-R3M (186) • CNMG/CNGG-TF (189) • CNMG-GN (190) • CNMG-NR (190) • CNMM-NR (194) • CNMG/CNGG-PP (189) • CNMG-VL (186) • CNMG-MR (191) • CNMG/CNGG-SF (187) • CNMG-NF (187) • CNMG-WF (187) • CNMG-WG/NRW (188) • CNMS-12 (272) • CNMM-H3P (193) • CNMM-H4P (193)

Spare Parts

Designation						
PCBNR/L 2525M-12	TCN 423	SP 4	PN 3-4	LR 4	SR 117-2010	HW 3.0
PCBNR/L 3232P-19	TCN 63	SP 66		LR 6	SR 10402352	HW 4.0
PCBNR 4040S-19	TCN 63	SP 66		LR 6	SR 10402352	HW 4.0

HELITURN LD

PCLNR/L-X
Lever Lock Tools Carrying CNMX/CNMG 80° Rhombic Inserts



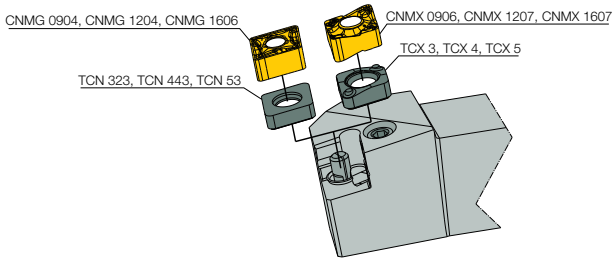
Right hand tool shown

Designation	B	H	LF	LH	WF	MIID[1]
PCLNR/L 2020K-09X	20.0	20.0	125.00	25.0	25.00	CNMX 0906 CNMG 0904
PCLNR/L 2525M-09X	25.0	25.0	150.00	25.0	32.00	CNMX 0906 CNMG 0904
PCLNR/L 2020K-12X	20.0	20.0	125.00	31.0	25.00	CNMX 1207 CNMG 1204
PCLNR/L 2525M-12X	25.0	25.0	150.00	31.0	32.00	CNMX 1207 CNMG 1204
PCLNR/L 3232P-12X	32.0	32.0	170.00	32.0	40.00	CNMX 1207 CNMG 1204
PCLNR/L 3232P-16X	32.0	32.0	170.00	32.0	40.00	CNMX 1607 CNMG 1606

• Supplied with TCX 3 seat for CNMX 0906.. inserts and TCN 323 seat for CNMG 0904.. inserts, TCX 4 seat for CNMX 1207.. inserts and TCN 443 seat for CNMG 1204.. inserts, TCX 5 seat for CNMX 1607.. inserts and TCN 53 seat for CNMG 1606.. inserts.

[1] Master insert identification

For inserts, see pages: CNGG-F3N (266) • CNGX-M3N (267) • CNMG-CERMET (183) • CNMG-F3S (186) • CNMG-R3P (182) • CNMG-F3P (181) • CNMG-M3P (182) • CNMM-R3P (192) • CNMX-M3/4PW (191) • CNMM-M4PW (192) • CNMG-F3M (185) • CNMG-M3M (185) • CNMG-R3M (186) • CNMX-M3/4MW (191) • CNMG/CNGG-TF (189) • CNMG-GN (190) • CNMG-NR (190) • CNMM-NR (194) • CNMG/CNGG-PP (189) • CNMG-VL (186) • CNMG-MR (191) • CNMG/CNGG-SF (187) • CNMG-NF (187) • CNMG-WF (187) • CNMG-WG/NRW (188) • CNMS-12 (272) • CNMM-H3P (193) • CNMM-H4P (193) • CNMM-H5P (193) • CNMA (188)



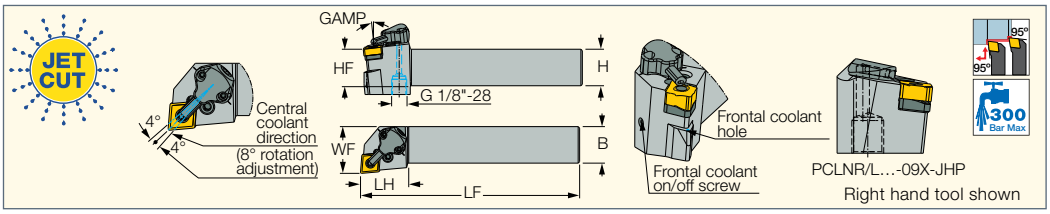
Spare Parts

Designation								
PCLNR/L 2020K-09X	TCX 3	TCN 323	SP 3	LR 3	SR 117-2014	HW 2.5	PN 3-4	
PCLNR/L 2525M-09X	TCX 3	TCN 323	SP 3	LR 3	SR 117-2014	HW 2.5	PN 3-4	
PCLNR/L 2020K-12X	TCX 4	TCN 443	SP 4	LR 4DH	SR 117-2010	HW 3.0	PN 3-4L	LR 4DHTL (MR INJ)*
PCLNR/L 2525M-12X	TCX 4	TCN 443	SP 4	LR 4DH	SR 117-2010	HW 3.0	PN 3-4L	LR 4DHTL (MR INJ)*
PCLNR/L 3232P-12X	TCX 4	TCN 443	SP 4	LR 4DH	SR 117-2010	HW 3.0	PN 3-4L	LR 4DHTL (MR INJ)*
PCLNR/L 3232P-16X	TCX 5	TCN 53	SP 5	LR 5	SR LCS 5	HW 3.0	SPP 5-6	

* Optional, to be ordered separately

HELITURN LD

PCLNR/L-X-JHP
Lever Lock Tools with Channels for High-Pressure Coolant Carrying CNMX/CNMG 80° Rhombic Inserts



Designation	B	H	HF	LF	LH	WF	GAMP[1]	MIID[2]
PCLNR/L 1616H-09X-JHP	16.0	16.0	16.0	100.00	20.0	20.00	-6.0	CNMX 0906, CNMG 0904
PCLNR/L 2020K-09X-JHP	20.0	20.0	20.0	125.00	25.0	25.00	-6.0	CNMX 0906, CNMG 0904
PCLNR/L 2525M-09X-JHP	25.0	25.0	25.0	150.00	25.0	32.00	-6.0	CNMX 0906, CNMG 0904
PCLNR/L 2525M-12X-JHP	25.0	25.0	25.0	150.00	25.0	32.00	-6.0	CNMX 1207, CNMG 1204
PCLNR/L 3232P-12X-JHP	32.0	32.0	32.0	170.00	33.0	40.00	-6.0	CNMX 1207, CNMG 1204

• Supplied with TCX 3 seat for CNMX 0906.. inserts and TCN 323 seat for CNMG 0904.. inserts. TCX 4 seat for CNMX 1207.. inserts and TCN 443 seat for CNMG 1204.. inserts. • For user guide, see pages 6-7,104-110

(1) Rake angle axial

(2) Master insert identification

For inserts, see pages: CNGX-M3N (267) • CNMG-F3S (186) • CNMG-F3P (181) • CNMG-M3P (182) • CNMM-R3P (192) • CNMX-M3/4PW (191) • CNMM-M4PW (192) • CNGG-F3N (266) • CNMG-CERMET (183) • CNMG-F3M (185) • CNMG-M3M (185) • CNMX-M3/4MW (191) • CNMG/CNGG-TF (189) • CNMG-GN (190) • CNMG-NR (190) • CNMG/CNGG-PP (189) • CNMG-VL (186) • CNMG/CNGG-SF (187) • CNMG-NF (187) • CNMG-WF (187) • CNMG-WG/NRW (188) • CNMS-12 (272) • CNMA (188)

Spare Parts

Designation													
PCLNR/L 1616H-09X-JHP	TCX 3	TCN 323	SP 3	LR 3	SR 117-2014	PN 3-4				HW 2.5		
PCLNR/L 2020K-09X-JHP	TCX 3	TCN 323	SP 3	LR 3	SR 117-2014	PN 3-4				HW 2.5		
PCLNR/L 2525M-09X-JHP	TCX 3	TCN 323	SP 3	LR 3	SR 117-2014	PN 3-4				HW 2.5		
PCLNR/L 2525M-12X-JHP	TCX 4	TCN 443	SP 4	LR 4DH	SR 117-2010	PN 3-4L	CU-CW-JHP	T-8/5	LR 4DHTL (MR INJ)*	HW 2.0	HW 3.0	SR M4X4 DIN913 TL360
PCLNR/L 3232P-12X-JHP	TCX 4	TCN 443	SP 4	LR 4DH	SR 117-2010	PN 3-4L	CU-CW-JHP	T-8/5	LR 4DHTL (MR INJ)*	HW 2.0	HW 3.0	SR M4X4 DIN913 TL360

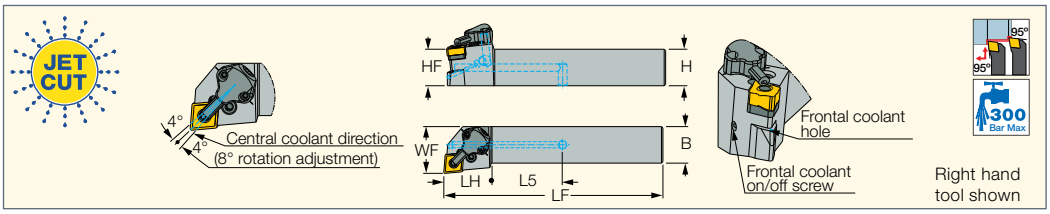
* Optional, to be ordered separately



HELITURN LD

PCLNR/L-X-JHP-MC

Lever Lock Tools with Bottom Inlets for High-Pressure Coolant Channels Carrying CNMX/ CNMG 80° Rhombic Inserts



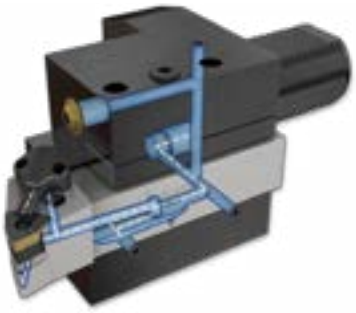
Designation	B	H	HF	LF	LH	L5	WF	MIID[1]
PCLNR/L 2020X-09X-JHP-MC	20.0	20.0	20.0	97.00	27.0	29.00	25.00	CNMX 0906, CNMG 0904
PCLNR/L 2525X-09X-JHP-MC	25.0	25.0	25.0	118.00	33.0	35.00	32.00	CNMX 0906, CNMG 0904
PCLNR/L 2020X-12X-JHP-MC	20.0	20.0	20.0	97.00	27.0	29.00	25.00	CNMX 1207, CNMG 1204
PCLNR/L 2525X-12X-JHP-MC	25.0	25.0	25.0	118.00	33.0	35.00	32.00	CNMX 1207, CNMG 1204

• Supplied with TCX 3 seat for CNMX 0906.. inserts and TCN 323 seat for CNMG 0904.. inserts. TCX 4 seat for CNMX 1207.. inserts and TCN 443 seat for CNMG 1204.. inserts. • For user guide, see pages 6-7,104-110

(1) Master insert identification

For inserts, see pages: CNMG-F3S (186) • CNMG-F3P (181) • CNMG-M3P (182) • CNMM-R3P (192) • CNMG-CERMET (183) • CNGG-F3N (266) • CNMX-M3/4PW (191) • CNMM-M4PW (192) • CNGX-M3N (267) • CNMG-F3M (185) • CNMG-M3M (185) • CNMX-M3/4MW (191) • CNMG/CNGG-TF (189) • CNMG-GN (190) • CNMG-NR (190) • CNMG/CNGG-PP (189) • CNMG-VL (186) • CNMG/CNGG-SF (187) • CNMG-NF (187) • CNMG-WF (187) • CNMG-WG/NRW (188) • CNMS-12 (272) • CNMA (188)

For holders, see pages: VDI-B1/B4AK-JHPMC (841) • VDI-B2/B3A-JHPMC (841) • VDI-B2/B3AK-JHPMC (841) • VDI-C1/C4A-JHPMC (841) • VDI-C1/C4AK-JHPMC (842) • VDI-C2/C3A-JHPMC (842) • VDI-C2/C3AK-JHPMC (842)



Spare Parts

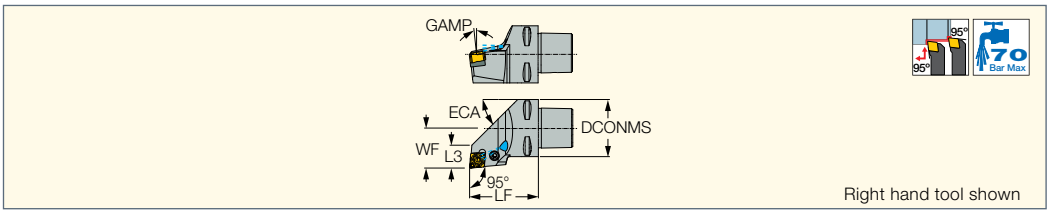
Designation													
PCLNR/L 2020X-09X-JHP-MC	TCX 3	TCN 323	SP 3	LR 3	SR 117-2014	PN 3-4	HW 2.5	CU-CW-JHP	SR M5X5 DIN913 TL360		T-8/5	
PCLNR/L 2525X-09X-JHP-MC	TCX 3	TCN 323	SP 3	LR 3	SR 117-2014	PN 3-4	HW 2.5	CU-CW-JHP	SR M5X5 DIN913 TL360		T-8/5	
PCLNR/L 2020X-12X-JHP-MC	TCX 4	TCN 443	SP 4	LR 4DH	SR 117-2010	PN 3-4L	HW 2.5	CU-CW-JHP	SR M5X5 DIN913 TL360	HW 3.0	T-8/5	LR 4DHTL (MR INJ)*
PCLNR/L 2525X-12X-JHP-MC	TCX 4	TCN 443	SP 4	LR 4DH	SR 117-2010	PN 3-4L	HW 2.5	CU-CW-JHP	SR M5X5 DIN913 TL360	HW 3.0	T-8/5	LR 4DHTL (MR INJ)*

* Optional, to be ordered separately

HELITURN LD

C#-PCLNR/L-X

Lever Lock Tools with CAMFIX Exchangeable Shanks Carrying CNMX and CNMG Rhombic Inserts



Right hand tool shown

Designation	DCONMS	WF	LF	GAMP(2)	L3	ECA	MIID(3)	CP(4)	DCP(5)
C4 PCLNR/L-27050-12X (1)	40.00	27.00	50.00	-6.0	20.00	40.0	CNMX 1207, CNMG 1204	70	1
C5 PCLNR/L-35060-12X (1)	50.00	35.00	60.00	-6.0	20.00	45.0	CNMX 1207, CNMG 1204	70	1
C6 PCLNR/L-45065-12X (1)	63.00	45.00	65.00	-6.0	20.00	54.0	CNMX 1207, CNMG 1204	70	1
C4 PCLNR/L-27050-16X	40.00	27.00	50.00	-6.0	21.00	40.0	CNMX 1607, CNMG 1606	70	1
C5 PCLNR/L-35060-16X	50.00	35.00	60.00	-6.0	21.00	45.0	CNMX 1607, CNMG 1606	70	1
C6 PCLNR/L-45065-16X	63.00	45.00	65.00	-6.0	21.00	54.0	CNMX 1607, CNMG 1606	70	1

(1) Supplied with TCX 4 seat for CNMX 1207.. inserts and TCN 443 seat for CNMG 1204.. inserts.
(2) Rake angle axial
(3) Master insert identification
(4) Coolant pressure (Bar)
(5) 1 - Slot for data chip, 0 - Without slot for data chip

For inserts, see pages: CNMG-CERMET (183) • CNMG-F3S (186) • CNMG-R3P (182) • CNMX-M3/4PW (191) • CNMX-M3/4MW (191) • CNMG-F3P (181) • CNMG-M3P (182) • CNMM-R3P (192) • CNMM-M4PW (192) • CNMG-F3M (185) • CNMG-M3M (185) • CNMG-R3M (186) • CNMG/CNGG-TF (189) • CNMG-GN (190) • CNMG-NR (190) • CNMG/CNGG-PP (189) • CNMG-VL (186) • CNMG-MR (191) • CNMG/CNGG-SF (187) • CNMG-NF (187) • CNMG-WF (187) • CNMG-WG/NRW (188) • CNMS-12 (272)

Spare Parts

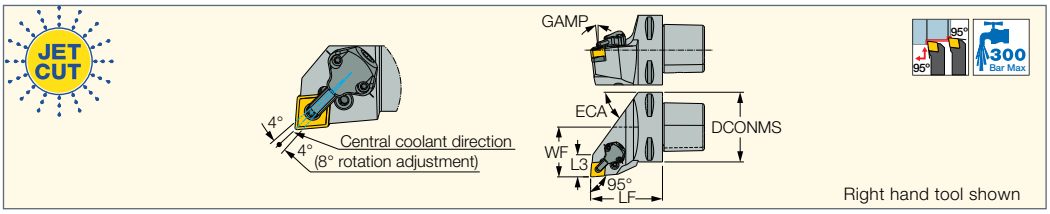
Designation									
C4 PCLNR/L-27050-12X	TCX 4	TCN 443	SP 4	PN 3-4L	LR 4DH	SR 117-2010	HW 3.0	EZ 62	LR 4DHTL (MR INJ)*
C5 PCLNR/L-35060-12X	TCX 4	TCN 443	SP 4	PN 3-4L	LR 4DH	SR 117-2010	HW 3.0	EZ 83	LR 4DHTL (MR INJ)*
C6 PCLNR/L-45065-12X	TCX 4	TCN 443	SP 4	PN 3-4L	LR 4DH	SR 117-2010	HW 3.0	EZ 83	LR 4DHTL (MR INJ)*
C4 PCLNR/L-27050-16X	TCX 5	TCN 53	SP 5		LR 5	SR LCS 5	HW 3.0	EZ 104	
C5 PCLNR/L-35060-16X	TCX 5	TCN 53	SP 5	SPP 5-6	LR 5	SR LCS 5	HW 3.0	EZ 125	
C6 PCLNR/L-45065-16X	TCX 5	TCN 53	SP 5	SPP 5-6	LR 5	SR LCS 5	HW 3.0	EZ 125	

* Optional, to be ordered separately

HELITURN LD

C#-PCLNR/L-X-JHP

Lever Lock Tools with CAMFIX Shanks and Channels for High-Pressure Coolant Carrying CNMX or CNMG Inserts



Designation	DCONMS	WF	LF	L3	ECA	GAMP[3]	MIID[4]	CP[5]	DCP[6]
C3 PCLNR-22045-09X-JHP [1]	32.00	22.00	45.00	22.00	45.0	-6.0	CNMX 0906, CNMG 0904	300	0
C4 PCLNR/L-27050-09X-JHP [1]	40.00	27.00	50.00	24.00	45.0	-6.0	CNMX 0906, CNMG 0904	300	1
C5 PCLNR/L-35060-09X-JHP [1]	50.00	35.00	60.00	26.00	45.0	-6.0	CNMX 0906, CNMG 0904	300	1
C4 PCLNR/L-27050-12X-JHP [2]	40.00	27.00	50.00	18.00	54.0	-6.0	CNMX 1207, CNMG 1204	300	1
C5 PCLNL-35060-12X-JHP [2]	50.00	35.00	60.00	30.00	50.0	-6.0	CNMX 1207, CNMG 1204	300	1
C5 PCLNR-35060-12X-JHP [2]	50.00	35.00	60.00	20.00	50.0	-6.0	CNMX 1207, CNMG 1204	300	1
C6 PCLNR/L-45065-12X-JHP [2]	63.00	45.00	65.00	20.00	54.0	-6.0	CNMX 1207, CNMG 1204	300	1

- For user guide, see pages 6-7,104-110

[1] Supplied with TCX 3 seat for CNMX 0906.. inserts and TCN 323 seat for CNMG 0904.. inserts.

[2] Supplied with TCX 4 seat for CNMX 1207.. inserts and TCN 443 seat for CNMG 1204.. inserts.

[3] Rake angle axial

[4] Master insert identification

[5] Coolant pressure (Bar)

[6] 1 - Slot for data chip, 0 - Without slot for data chip

For inserts, see pages: CNGG-F3N (266) • CNGX-M3N (267) • CNMG-CERMET (183) • CNMG-F3S (186) • CNMX-M3/4MW (191) • CNMX-M3/4PW (191) • CNMG-F3P (181) • CNMG-M3P (182) • CNMM-R3P (192) • CNMM-M4PW (192) • CNMG-F3M (185) • CNMG-M3M (185) • CNMG/CNGG-TF (189) • CNMG-GN (190) • CNMG-NR (190) • CNMG/CNGG-PP (189) • CNMG-VL (186) • CNMG/CNGG-SF (187) • CNMG-NF (187) • CNMG-WF (187) • CNMG-WG/NRW (188) • CNMS-12 (272) • CNMA (188)

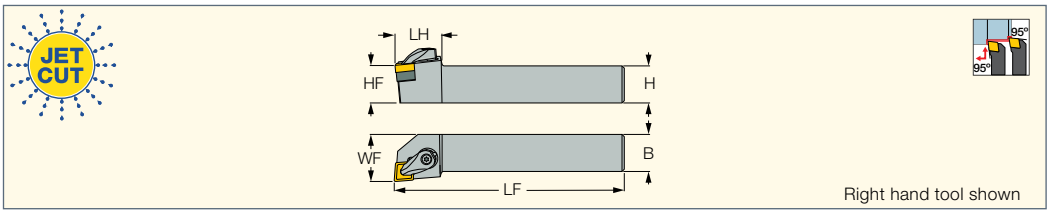
Spare Parts

Designation										
C3 PCLNR-22045-09X-JHP	TCX 3	TCN 323	SP 3	LR 3	SR 117-2014	PN 3-4	CU-CW-JHP		T-8/5	HW 2.5
C4 PCLNR/L-27050-09X-JHP	TCX 3	TCN 323	SP 3	LR 3	SR 117-2014	PN 3-4	CU-CW-JHP		T-8/5	HW 2.5
C5 PCLNR/L-35060-09X-JHP	TCX 3	TCN 323	SP 3	LR 3	SR 117-2014	PN 3-4	CU-CW-JHP		T-8/5	HW 2.5
C4 PCLNR/L-27050-12X-JHP	TCX 4	TCN 443	SP 4	LR 4DH	SR 117-2010	PN 3-4L	CU-CW-JHP	LR 4DHTL (MR INJ)*	T-8/5	HW 3.0
C5 PCLNR/L-35060-12X-JHP	TCX 4	TCN 443	SP 4	LR 4DH	SR 117-2010	PN 3-4L	CU-CW-JHP	LR 4DHTL (MR INJ)*	T-8/5	HW 3.0
C6 PCLNR/L-45065-12X-JHP	TCX 4	TCN 443	SP 4	LR 4DH	SR 117-2010	PN 3-4L	CU-CW-JHP	LR 4DHTL (MR INJ)*	T-8/5	HW 3.0

* Optional, to be ordered separately

ISOTURN

DCLNR/L
R-Clamp Tools with 95° Lead Angle Carrying 80° Negative Rhombic Inserts



Designation	H	HF	B	LF	LH	WF	MIID[2]
DCLNR/L 2020K-12 [1]	20.0	20.0	20.0	125.00	35.0	25.00	CNMG 1204 CNMX 1207
DCLNR/L 2525M-12 [1]	25.0	25.0	25.0	150.00	35.0	32.00	CNMG 1204 CNMX 1207
DCLNR/L 3232P-12 [1]	32.0	32.0	32.0	170.00	35.0	40.00	CNMG 1204 CNMX 1207
DCLNR/L 2525M-16	25.0	25.0	25.0	150.00	36.0	32.00	CNMG 1606..
DCLNR/L 3232P-16	32.0	32.0	32.0	170.00	36.0	40.00	CNMG 1606..
DCLNR/L 3232P-19	32.0	32.0	32.0	170.00	42.0	40.00	CNMG 1906..
DCLNR/L 4040S-19	40.0	40.0	40.0	250.00	42.0	50.00	CNMG 1906..

[1] Use TCH 4 seat (optional) for CNMX 1207... insert.
[2] Master insert identification

For inserts, see pages: CNMG-R3P (182) • CNMG-F3P (181) • CNMG-M3P (182) • CNMM-R3P (192) • CNMM-M4PW (192) • CNMX-M3/4PW (191) • CNMG-F3M (185) • CNMG-M3M (185) • CNMG-R3M (186) • CNMX-M3/4MW (191) • CNMG-CERMET (183) • CNMG/CNGG-TF (189) • CNMG-GN (190) • CNMG-NR (190) • CNMM-NR (194) • CNMG/CNGG-PP (189) • CNMG-VL (186) • CNMG-MR (191) • CNMG/CNGG-SF (187) • CNMG-NF (187) • CNMG-WF (187) • CNMG-WG/NRW (188) • CNMM-H3P (193) • CNMM-H4P (193) • CNMA (188) • CNMG-F3S (186)

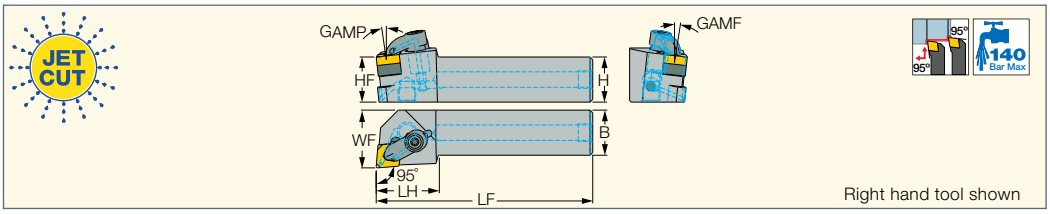
Spare Parts

Designation								
DCLNR/L 2020K-12	RCT 443	TCH 4*		SR 14-506 M4X0.7	LCGR-4		SR 10400270-25.5	T-15/5
DCLNR/L 2525M-12	RCT 443	TCH 4*		SR 14-506 M4X0.7	LCGR-4		SR 10400270-25.5	T-15/5
DCLNR/L 3232P-12	RCT 443	TCH 4*		SR 14-506 M4X0.7	LCGR-4		SR 10400270-25.5	T-15/5
DCLNR/L 2525M-16	RCT 544		HW 4.0	SR 10402265	LCGR-5	KSP 5	SR 10402267	
DCLNR/L 3232P-16	RCT 544		HW 4.0	SR 10402265	LCGR-5	KSP 5	SR 10402267	
DCLNR/L 3232P-19	TCN 63		HW 4.0	SR 10402266	LCGR-6	KSP 5	SR 10402267	
DCLNR/L 4040S-19	TCN 63		HW 4.0	SR 10402266	LCGR-6	KSP 5	SR 10402267	

* Optional, to be ordered separately

JETRTURN RIGID CLAMP

DCLNR/L-JHP-MC
Rigid Clamp Tools with Channels for High-Pressure Coolant Carrying 80° Rhombic Inserts



Designation	B	H	HF	LF	LH	WF	GAMP[1]	GAMF[2]	MIID[3]
DCLNR/L 2020X-12-JHP-MC	20.0	20.0	20.0	105.00	35.0	25.00	-6.0	-6.0	CNMG 1204
DCLNR/L 2525X-12-JHP-MC	25.0	25.0	25.0	120.00	35.0	32.00	-6.0	-6.0	CNMG 1204

[1] Rake angle axial
[2] Rake angle radial
[3] Master insert identification

For inserts, see pages: CNMA (188) • CNMG-CERMET (183) • CNMG-F3M (185) • CNMG-F3P (181) • CNMG-F3S (186) • CNMG-GN (190) • CNMG-M3M (185) • CNMG-M3P (182) • CNMG-NF (187) • CNMG-NR (190) • CNMG-VL (186) • CNMG-WF (187) • CNMG-WG/NRW (188) • CNMG/CNGG-PP (189) • CNMG/CNGG-SF (187) • CNMG/CNGG-TF (189) • CNMM-M4PW (192) • CNMM-R3P (192) • CNMX-M3/4MW (191) • CNMX-M3/4PW (191)
For holders, see pages: VDI-B1/B4AK-JHPMC (841) • VDI-B2/B3A-JHPMC (841) • VDI-B2/B3AK-JHPMC (841) • VDI-C1/C4A-JHPMC (841) • VDI-C1/C4AK-JHPMC (842) • VDI-C2/C3A-JHPMC (842) • VDI-C2/C3AK-JHPMC (842)

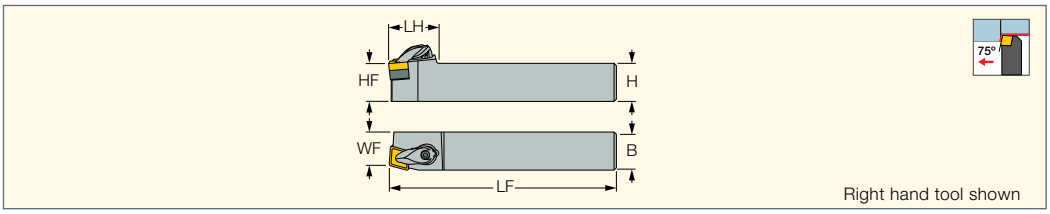
Spare Parts

Designation						
DCLNR/L 2020X-12-JHP-MC	RCT 443	TCH 4*	PLG G1/8 TL360	OR 4X3 NBR70	SR 14-506 M4X0.7	LCGR/L-C-4JC SET
DCLNL 2525X-12-JHP-MC	RCT 443	TCH 4*	PLG G1/8 TL360	OR 4X3 NBR70	SR 14-506 M4X0.7	LCGR/L-C-4JC SET
DCLNR 2525X-12-JHP-MC	RCT 443		PLG G1/8 TL360		SR 14-506 M4X0.7	LCGR/L-C-4JC SET

* Optional, to be ordered separately

ISOTURN

DCBNR/L
R-Clamp Tools with 75° Lead Angle Using the 100° Corner of CNMG Inserts



Designation	H	HF	B	LF	LH	WF	MIID[1]
DCBNR/L 2525M-12	25.0	25.0	25.0	150.00	36.0	22.00	CNMG 1204
DCBNR/L 3232P-19	32.0	32.0	32.0	170.00	42.0	27.00	CNMG 1906

[1] Master insert identification

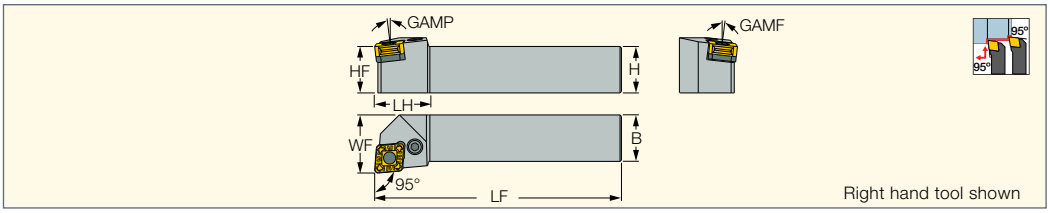
For inserts, see pages: CNMG-CERMET (183) • CNMG-F3S (186) • CNMG-R3P (182) • CNMG-F3P (181) • CNMG-M3P (182) • CNMM-R3P (192) • CNMM-M4PW (192) • CNMG-F3M (185) • CNMG-M3M (185) • CNMG-R3M (186) • CNMG/CNGG-TF (189) • CNMG-GN (190) • CNMG-NR (190) • CNMM-NR (194) • CNMG/CNGG-PP (189) • CNMG-VL (186) • CNMG-MR (191) • CNMG/CNGG-SF (187) • CNMG-NF (187) • CNMG-WF (187) • CNMG-WG/NRW (188) • CNMM-H3P (193) • CNMM-H4P (193) • CNMA (188)

Spare Parts

Designation								
DCBNR/L 2525M-12	RCT 443	SR 14-506 M4X0.7	LCGR-4	SR 10400270-25.5				T-15/5
DCBNR/L 3232P-19	TCN 63	SR 10402266	LCGR-6		KSP 5	SR 10402267	HW 4.0	

DOVEIQTURN HEAVY DUTY LINE

PCLOR/L-IQ
Lever Lock and Dovetail Pocket Rigid Clamping Toolholders for Unique Double-Sided 80° Rhombic Inserts

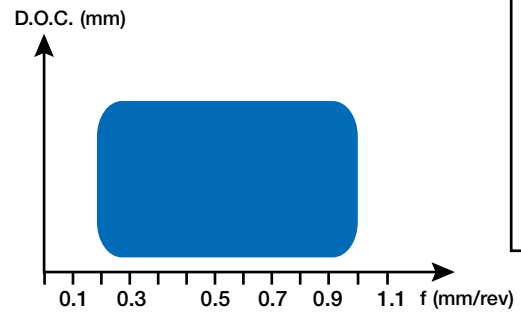


Designation	H	HF	B	LF	LH	WF	GAMP[2]	GAMF[3]	MIID[4]
PCLOR/L 3232P-16-IQ	32.0	32.0	32.0	170.00	33.0	40.00	-6.0	-6.0	COMG 1606
PCLOR/L 3232P-19-IQ [1]	32.0	32.0	32.0	170.00	38.0	40.00	-6.0	-6.0	COMG 1906
PCLOR/L 4040S-19-IQ [1]	40.0	40.0	40.0	250.00	38.0	50.00	-6.0	-6.0	COMG 1906
PCLOR/L 4040S-25-IQ	40.0	40.0	40.0	250.00	50.0	50.00	-6.0	-6.0	COMG 2509
PCLOR/L 5050T-25-IQ	50.0	50.0	50.0	300.00	50.0	60.00	-6.0	-6.0	COMG 2509

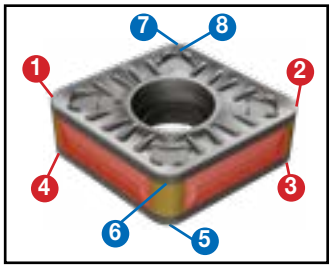
[1] Supplied with TCX 6-IQ seat for COMG inserts, optional TCN 6-IQ seat should be ordered separately for COMM inserts
[2] Rake angle axial
[3] Rake angle radial
[4] Master insert identification

For inserts, see pages: COMG-R3P-IQ (184) • COMM-R3P-IQ (184)

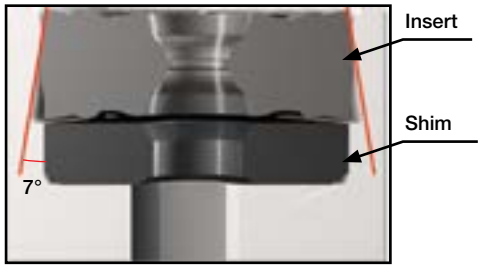
New Dovetail OMG-R3P-IQ Inserts



4 Cutting Edges for 80° and 4 Cutting Edges for 100°



DOVETAIL Clamping



Spare Parts

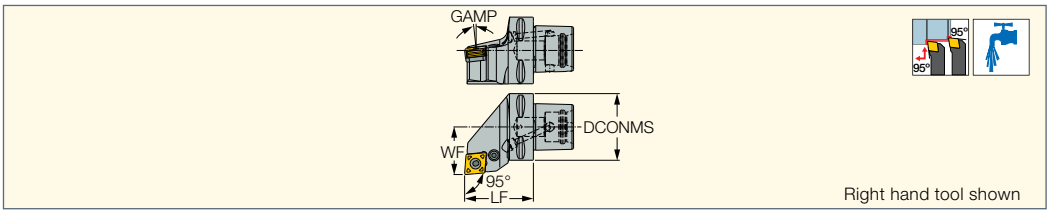
Designation						
PCLOR/L 3232P-16-IQ	TCX 5-IQ		SR LCS 5-L25.5	LCL 16-NX	SP 5	HW 3.0
PCLOR/L 3232P-19-IQ	TCX 6-IQ	TCN 6-IQ*	SR 10402352	LCL 20C-NX	SP 5	HW 4.0
PCLOR/L 4040S-19-IQ	TCX 6-IQ	TCN 6-IQ*	SR 10402352	LCL 20C-NX	SP 5	HW 4.0
PCLOR/L 4040S-25-IQ	TCX 8-IQ		SR LCS 8-L39	LCL 32-NX	SP 8	HW 5.0
PCLOR/L 5050T-25-IQ	TCX 8-IQ		SR LCS 8-L39	LCL 32-NX	SP 8	HW 5.0

* Optional, to be ordered separately

DOVEIQTURN HEAVY DUTY LINE

C#-PCLOR/L-IQ

Lever Lock and Dovetail Pocket Tools with CAMFIX Shanks Carrying Unique Double-Sided 80° Rhombic Inserts



Designation	DCONMS	WF	LF	GAMP(1)	MIID(2)
C6 PCLOR/L-45065-16-IQ	63.00	45.00	65.00	-6.0	COMG 1606
C6 PCLOR/L-45065-19-IQ	63.00	45.00	65.00	-6.0	COMG 1906
C8 PCLOR-55080-19-IQ	80.00	55.00	80.00	-6.0	COMG 1906
C8 PCLOR/L-55080-25-IQ	80.00	55.00	80.00	-6.0	COMG 2509

(1) Rake angle axial

(2) Master insert identification

For inserts, see pages: COMG-R3P-IQ (184) • COMM-R3P-IQ (184)

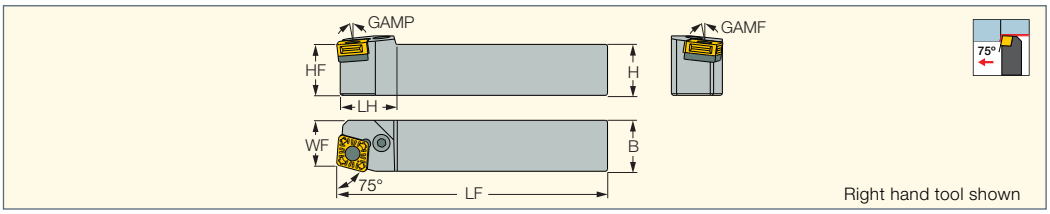
Spare Parts

Designation							
C6 PCLOR/L-45065-16-IQ	TCX 5-IQ	LCL 16-NX	SP 5	SATZ-M10X1-M5	HW 3.0	SR LCS 5-L25.5	SPP 5-6
C6 PCLOR/L-45065-19-IQ	TCX 6-IQ	LCL 20C-NX	SP 5	SATZ-M10X1-M5	HW 4.0	SR 10402352	
C8 PCLOR-55080-19-IQ	TCX 6-IQ	LCL 20C-NX	SP 5	SATZ-M10X1-M5	HW 4.0	SR 10402352	SPP 5-6
C8 PCLOR/L-55080-25-IQ	TCX 8-IQ	LCL 32-NX	SP 8	SATZ-M12X1-M6	HW 5.0	SR LCS 8-L39	

DOVEIQTURN HEAVY DUTY LINE

PCBOR/L-IQ

Lever Lock and Dovetail Pocket Rigid Clamping Tools Carrying Unique Double-Sided 80° Rhombic Inserts



Designation	H	HF	B	LF	LH	WF	GAMP(1)	GAMF(2)	MIID(3)
PCBOR/L 3232P-16-IQ	32.0	32.0	32.0	170.00	32.0	27.00	-6.0	-6.0	COMG 160608-R3P-IQ
PCBOR/L 3232P-19-IQ	32.0	32.0	32.0	170.00	38.0	28.00	-6.0	-6.0	COMG 190612-R3P-IQ
PCBOR/L 4040S-19-IQ	40.0	40.0	40.0	250.00	38.0	37.00	-6.0	-6.0	COMG 190612-R3P-IQ
PCBOR/L 4040S-25-IQ	40.0	40.0	40.0	250.00	50.0	35.00	-6.0	-6.0	COMG 250924-R3P-IQ

(1) Rake angle axial

(2) Rake angle radial

(3) Master insert identification

For inserts, see pages: COMG-R3P-IQ (184) • COMM-R3P-IQ (184)

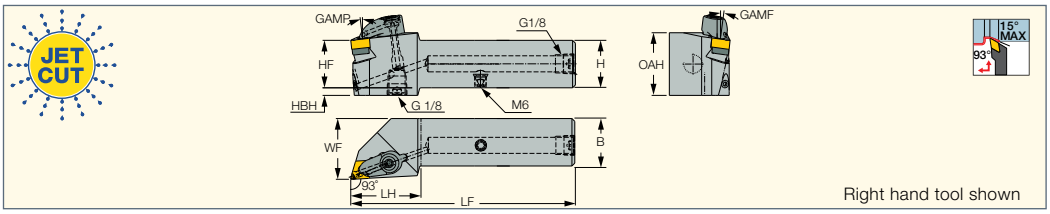
Spare Parts

Designation					
PCBOR/L 3232P-16-IQ	TCX 5-IQ	SP 5	SR LCS 5-L25.5	LCL 16-NX	HW 3.0
PCBOR/L 3232P-19-IQ	TCX 6-IQ	SP 5	SR 10402352	LCL 20C-NX	HW 4.0
PCBOR/L 4040S-19-IQ	TCX 6-IQ	SP 5	SR 10402352	LCL 20C-NX	HW 4.0
PCBOR/L 4040S-25-IQ	TCX 8-IQ	SP 8	SR LCS 8-L39	LCL 32-NX	HW 5.0

NEOTURN ISOTURNING

DXJNR/L-X-JHP-MC

Rigid Clamp Tools with Channels for High-Pressure Coolant Carrying 70° Rhombic Inserts



Designation	B	H	HF	LF	LH	WF	HBH	OAH	GAMP(1)	GAMF(2)	MIID(3)
DXJNR/L 2020X-09-JHP-MC	20.0	20.0	20.0	107.00	37.0	25.00	4.0	33.00	6.0	6.0	XNMG 0904
DXJNR/L 2525X-09-JHP-MC	25.0	25.0	25.0	122.00	37.0	32.00	9.0	33.00	6.0	6.0	XNMG 0904
DXJNR/L 2020X-12-JHP-MC	20.0	20.0	20.0	107.00	37.0	25.00	4.0	33.00	6.0	6.0	XNMG 1204
DXJNR/L 2525X-12-JHP-MC	25.0	25.0	25.0	122.00	37.0	32.00	4.0	33.00	6.0	6.0	XNMG 1204
DXJNR/L 3232X-12-JHP-MC	32.0	32.0	32.0	137.00	37.0	40.00	0.0	33.00	6.0	6.0	XNMG 1204

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see pages: XNMG-F3M (195) • XNMG-F3P (194) • XNMG-M3M (195) • XNMG-M3P (194)
For holders, see pages: C#-ADE (831) • C#-ADES (832) • C#-ASHA (830) • C#-ASHR/L (830) • HSK A-WH-ASHN-45 (836) • HSK A-WH-ASHR/L-1 (836) • HSK A63WH-ASHR/L-2 (837) • HSK A63WH-ASHR/L-3 (837) • HSK A63WH-ASHR/L-45 (836) • VDI-B1/B4AK-JHPMC (841) • VDI-B2/B3A-JHPMC (841) • VDI-B2/B3AK-JHPMC (841) • VDI-C1/C4A-JHPMC (841) • VDI-C1/C4AK-JHPMC (842) • VDI-C2/C3A-JHPMC (842) • VDI-C2/C3AK-JHPMC (842)

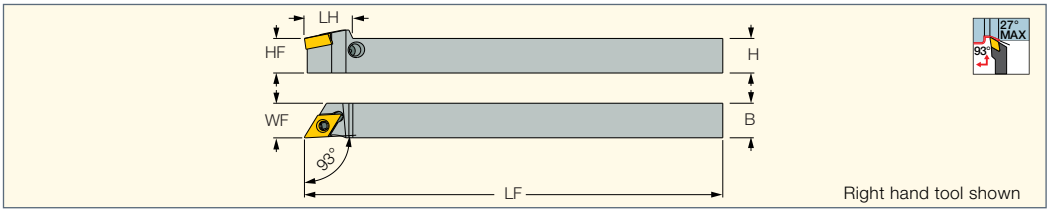
Spare Parts

Designation					
DXJNL 2020X-09-JHP-MC	SR 40085I	LCGL-3JC-C-SET	SR M6X6 DIN913 TL360	TSX 2.73	PLG G1/8 TL360
DXJNR 2020X-09-JHP-MC	SR 40085I	LCGR-3JC-C-SET	SR M6X6 DIN913 TL360	TSX 2.73	PLG G1/8 TL360
DXJNL 2525X-09-JHP-MC	SR 40085I	LCGR-3JC-C-SET	SR M6X6 DIN913 TL360	TSX 2.73	PLG G1/8 TL360
DXJNR 2525X-09-JHP-MC	SR 40085I	LCGL-3JC-C-SET	SR M6X6 DIN913 TL360	TSX 2.73	PLG G1/8 TL360
DXJNL 2020X-12-JHP-MC	SR 10402265	LCGL-4JC SET	SR M6X6 DIN913 TL360	TSX 3.53	PLG G1/8 TL360
DXJNR 2020X-12-JHP-MC	SR 10402265	LCGL-4JC SET	SR M6X6 DIN913 TL360	TSX 3.53	PLG G1/8 TL360
DXJNL 2525X-12-JHP-MC	SR 10402265	LCGL-4JC SET	SR M6X6 DIN913 TL360	TSX 3.53	PLG G1/8 TL360
DXJNR 2525X-12-JHP-MC	SR 10402265	LCGL-4JC SET	SR M6X6 DIN913 TL360	TSX 3.53	PLG G1/8 TL360
DXJNL 3232X-12-JHP-MC	SR 10402265	LCGR-4JC SET	SR M6X6 DIN913 TL360	TSX 3.53	PLG G1/8 TL360
DXJNR 3232X-12-JHP-MC	SR 10402265	LCGL-4JC SET	SR M6X6 DIN913 TL360	TSX 3.53	PLG G1/8 TL360

MINIPTURN POSITIVE DOUBLE SIDED

PDJNR/L-S

Lever Lock Tools Carrying DNGP 0703.. Double-Sided 55° Rhombic Inserts



Designation	H	HF	B	LF	LH	WF	MIID(1)				
PDJNR/L 1010X-07S	10.0	10.0	10.0	120.00	14.0	10.00	DNGP 07	SR 10400611	HW 2.0/5	SL LV-2	SL PI-2 PIN
PDJNR/L 1212F-07S	12.0	12.0	12.0	85.00	14.0	12.00	DNGP 07	SR 10400611	HW 2.0/5	SL LV-2	SL PI-2 PIN
PDJNR/L 1212X-07S	12.0	12.0	12.0	120.00	14.0	12.00	DNGP 07	SR 10400611	HW 2.0/5	SL LV-2	SL PI-2 PIN
PDJNR/L 1616X-07S	16.0	16.0	16.0	120.00	18.0	16.00	DNGP 07	SR 10400611	HW 2.0/5	SL LV-2	SL PI-2 PIN

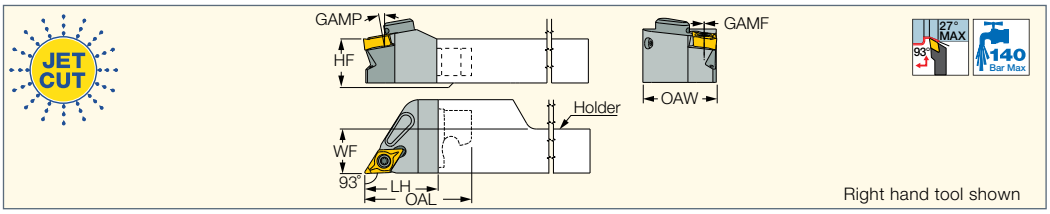
• Use a left-hand insert on a right-hand tool and vice versa.
(1) Master insert identification

For inserts, see pages: DNGP-F2M (197) • DNGP-F2P (195)
For holders, see page: SBTH-JHP (421)

MINIPTURN POSITIVE DOUBLE SIDED

NQCH-SDJNR/L-S-JHP

Screw Lock JETCUT Modular Heads Carrying Positive Double-Sided 55° Rhombic Inserts for Swiss-Type Machines



Designation	WF	HF	LH	OAL	OAW	GAMP(1)	GAMF(2)	MIID(3)		
NQCH12-SDJNR/L-07S-JHP	12.15	12.0	20.0	28.80	20.15	10.0	0.0	DNGP.. 0703..	SR 34-514	T-7/5
NQCH12R-SDJNL-07S-JHP	12.15	12.0	20.0	28.80	20.15	10.0	0.0	DNGP.. 0703..	SR 34-514	T-7/5
NQCH16-SDJNR/L-07S-JHP	16.15	16.0	20.0	28.80	20.15	10.0	0.0	DNGP.. 0703..	SR 34-514	T-7/5
NQCH16R-SDJNL-07S-JHP	16.15	16.0	20.0	28.80	20.15	10.0	0.0	DNGP.. 0703..	SR 34-514	T-7/5

- Use only RH Shank with RH Head and LH Shank with LH Head

(1) Rake angle axial

(2) Rake angle radial

(3) Master insert identification

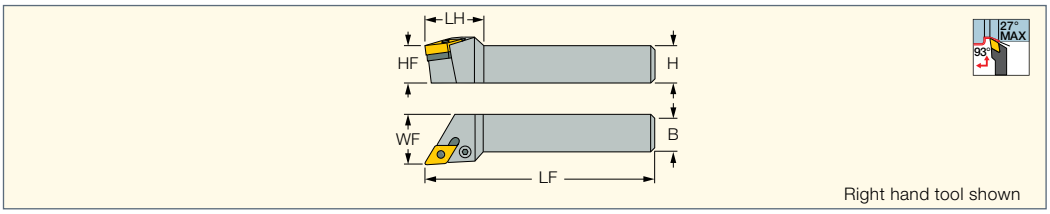
For inserts, see pages: DNGP-F2M (197) • DNGP-F2P (195)

For holders, see page: NQCH-JHP (424)

ISOTURN

PDJNR/L

Lever Lock Tools Carrying 55° Negative Rhombic Inserts



Designation	H	HF	B	LF	LH	WF	MIID(1)
PDJNR/L 1616H-11	16.0	16.0	16.0	100.00	30.0	20.00	DNMG 1104
PDJNR/L 2020K-11	20.0	20.0	20.0	125.00	30.0	25.00	DNMG 1104
PDJNR/L 2525M-11	25.0	25.0	25.0	150.00	30.0	32.00	DNMG 1104
PDJNR/L 2020K-15	20.0	20.0	20.0	125.00	34.0	25.00	DNMG 1506
PDJNR/L 2525M-15	25.0	25.0	25.0	150.00	34.0	32.00	DNMG 1506
PDJNR/L 3232P-15	32.0	32.0	32.0	170.00	34.0	40.00	DNMG 1506

(1) Master insert identification

For inserts, see pages: DNGG-M3N (267) • DNMG-CERMET (199) • DNMG-F3S (198) • DNMG-F3P (196) • DNMG-M3P (196) • DNMX-M3P (204) • DNMM-R3P (203) • DNMG-F3M (197) • DNMG-M3M (198) • DNMG/DNGG-TF (202) • DNMG-GN (202) • DNMG-NR (202) • DNMG/DNGG-PP (201) • DNMG-VL (201) • DNMG-PF (200) • DNMG/DNGG-SF (199) • DNMG-NF (200) • DNMM-NM (203) • DNMG-WG (200) • DNMS-12 (272) • DNMA (203)

Spare Parts

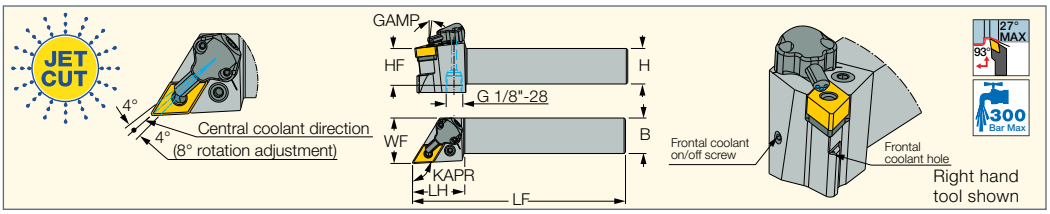
Designation							
PDJNR/L 1616H-11	TDN 322		SP 3	PN 3-4	LR 3D	SR 117-2014	HW 2.5/5
PDJNR/L 2020K-11	TDN 322		SP 3	PN 3-4	LR 3D	SR 117-2014	HW 2.5/5
PDJNR/L 2525M-11	TDN 322		SP 3	PN 3-4	LR 3D	SR 117-2014	HW 2.5/5
PDJNR/L 2020K-15	TDN 422	TDN 432*	SP 4	PN 3-4	LR 4D	SR 117-2010	HW 3.0
PDJNR/L 2525M-15	TDN 422	TDN 432*	SP 4	PN 3-4	LR 4D	SR 117-2010	HW 3.0
PDJNR/L 3232P-15	TDN 422	TDN 432*	SP 4	PN 3-4	LR 4D	SR 117-2010	HW 3.0

* Optional, to be ordered separately

ISOTURN

PDJNR/L-JHP

Lever Lock Tools with Channels for High-Pressure Coolant Carrying 55° Negative Rhombic Inserts



Designation	B	H	HF	LF	LH	WF	GAMP(1)	KAPR(2)	MIID(3)
PDJNR/L 2525M-11-JHP	25.0	25.0	25.0	150.00	36.0	32.00	-6.0	93.0	DNMG 1104
PDJNR/L 2525M-15-JHP	25.0	25.0	25.0	150.00	36.0	32.00	-6.0	93.0	DNMG 1506

- For user guide, see pages 6-7,104-110

(1) Rake angle axial

(2) Tool cutting edge angle

(3) Master insert identification

For inserts, see pages: DNGG-M3N (267) • DNMG-CERMET (199) • DNMG-F3S (198) • DNMG-F3P (196) • DNMG-M3P (196) • DNMX-M3P (204) • DNMM-R3P (203) • DNMG-F3M (197) • DNMG-M3M (198) • DNMG/DNGG-TF (202) • DNMG-GN (202) • DNMG-NR (202) • DNMG/DNGG-PP (201) • DNMG-VL (201) • DNMG-PF (200) • DNMG/DNGG-SF (199) • DNMG-NF (200) • DNMM-NM (203) • DNMG-WG (200) • DNMS-12 (272) • DNMA (203)

Spare Parts

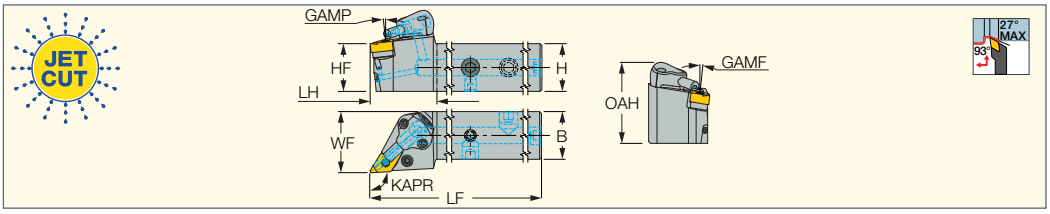
Designation												
PDJNR/L 2525M-11-JHP	TDN 322		PN 3-4	LR 3D	SR 117-2014	SP 3	CU-D-JHP	SR M4X4 DIN913 TL360	T-8/5	HW 2.0	HW 2.5/5
PDJNR/L 2525M-15-JHP	TDN 422	TDN 432*	PN 3-4	LR 4D	SR 117-2010	SP 4	CU-D-JHP	SR M4X4 DIN913 TL360	T-8/5	HW 2.0	HW 3.0

* Optional, to be ordered separately

ISOTURN

PDJNR/L-JHP-MC

Lever Lock Tools with High-Pressure Coolant Channels Carrying 55° Negative Rhombic Inserts



Designation	B	H	HF	LF	LH	WF	GAMP(1)	GAMF(2)	KAPR(3)	MIID(4)
PDJNR/L 2020X-11-JHP-MC	20.0	20.0	20.0	105.00	35.0	25.00	6.0	6.0	93.0	DNMG 110408
PDJNR/L 2525X-11-JHP-MC	25.0	25.0	25.0	120.00	35.0	32.00	6.0	6.0	93.0	DNMG 110408
PDJNR 2020X-15-JHP-MC	20.0	20.0	20.0	108.00	38.0	25.00	6.0	6.0	93.0	DNMG 150608

- For user guide, see pages 6-7,104-110

(1) Rake angle axial

(2) Rake angle radial

(3) Tool cutting edge angle

(4) Master insert identification

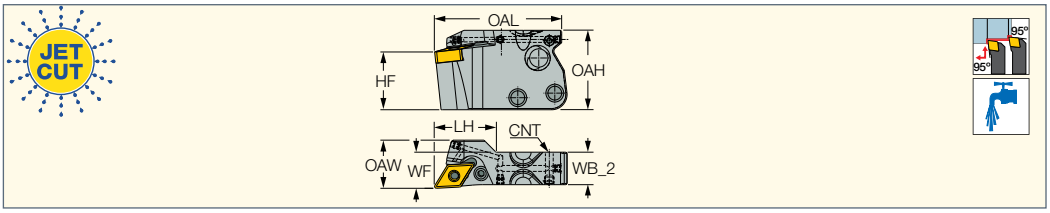
For inserts, see pages: DNGG-M3N (267) • DNMG-CERMET (199) • DNMG-F3S (198) • DNMG-F3P (196) • DNMG-M3P (196) • DNMX-M3P (204) • DNMM-R3P (203) • DNMG-F3M (197) • DNMG-M3M (198) • DNMG/DNGG-TF (202) • DNMG-GN (202) • DNMG-NR (202) • DNMG/DNGG-PP (201) • DNMG-VL (201) • DNMG-PF (200) • DNMG/DNGG-SF (199) • DNMG-NF (200) • DNMM-NM (203) • DNMG-WG (200) • DNMS-12 (272) • DNMA (203)

Spare Parts

Designation											
PDJNR/L 2020X-11-JHP-MC	TDN 322	SR 117-2014	T-8/5	CU-D-JHP	HW 2.5/5	LR 3D	PN 3-4	SP 3	SR M6X6 DIN913 TL360	PLG G1/8 TL360	SR M3X3 DIN913 TL360
PDJNR/L 2525X-11-JHP-MC	TDN 322	SR 117-2014	T-8/5	CU-CW-JHP	HW 2.5/5	LR 3D	PN 3-4	SP 3	SR M6X6 DIN913 TL360	PLG G1/8 TL360	SR M3X3 DIN913 TL360
PDJNR 2020X-15-JHP-MC	TDN 422	SR 117-2010	T-8/5	CU-R-JHP	HW 2.0	LR 4D	PN 3-4	SP 4	SR M6X6 DIN913 TL360	PLG G1/8 TL360	SR M3X3 DIN913 TL360

ISOTURN

PDJNR/L-PAD-JHP
Lever Lock Adapter with
High-Pressure Coolant Mounts
55° Diamond Inserts



Designation	HF	OAL	OAH	WF	OAW	WB_2	LH	GAMP(1)	GAMF(2)	MIID(3)	CNT
PDJNR/L-11-PAD-JHP	24.0	52.80	33.00	15.00	20.00	10.0	23.0	6.0	6.0	DNMG/DNGG 11..	M4

NEW

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

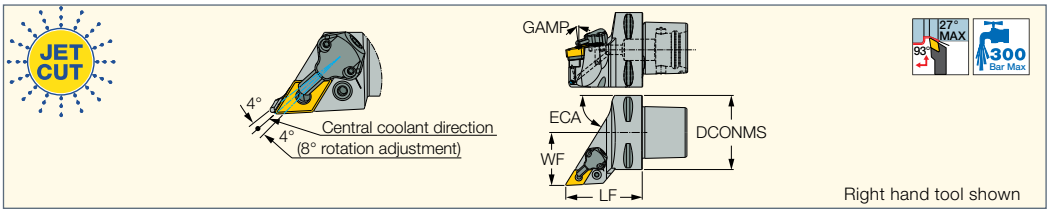
For inserts, see pages: DNGG-M3N (267) • DNMG-CERMET (199) • DNMG-F3M (197) • DNMG-F3P (196) • DNMG-F3S (198) • DNMG-GN (202) • DNMG-M3M (198) • DNMG-M3P (196) • DNMG-NF (200) • DNMG-PF (200) • DNMG-VL (201) • DNMG/DNGG-PP (201) • DNMG/DNGG-SF (199) • DNMG/DNGG-TF (202)
For holders, see pages: ABC MAHDR-#-XL-JHP (884) • C#-MAHPD-JHP (698) • DT##/2 MAHD#-#-XL-JHP (860) • MAHPR/L-JHP (308) • MS##-##-MG-JHP (859) • MS-ES#####-GWS-MG-JHP (861) • TR TNK36 MAHDL-R-XL-JHP (884) • TR45 MAHDR-#-XL-JHP (883) • TR45TNL MAHDN-R-XL-JHP (883) • V## MAHD#-#-XL-##-JHP (880) • V## MAHD-XL-JHP (881)

Spare Parts

Designation						
PDJNR/L-11-PAD-JHP	LR 3DS	SR 117-2011	SR M4X4 DIN913 TL360	HW 2.5/5	SR M3X3DIN913	HW 2.0

ISOTURN

C#-PDJNR/L-JHP
Lever Lock Tools with CAMFIX
Exchangeable Shanks and
Channels for High-Pressure
Coolant Carrying
Negative 55° Insert



Designation	DCONMS	WF	LF	GAMP(1)	ECA	MIID(2)	CP(3)	DCP(4)
C3 PDJNR-22045-11-JHP	32.00	22.00	45.00	-6.0	58.0	DN.. 11..	300	0
C4 PDJNR/L 27050-11-JHP	40.00	27.00	50.00	-6.0	58.0	DN.. 11..	300	1
C5 PDJNR/L 35060-11-JHP	50.00	35.00	60.00	-6.0	58.0	DN.. 11..	300	1
C4 PDJNR/L 27055-15-JHP	40.00	27.00	55.00	-6.0	58.0	DN.. 15..	300	1
C5 PDJNR/L 35060-15-JHP	50.00	35.00	60.00	-6.0	58.0	DN.. 15..	300	1
C6 PDJNR/L 45065-15-JHP	63.00	45.00	65.00	-6.0	58.0	DN.. 15..	300	1

• For user guide, see pages 6-7,104-110
(1) Rake angle axial
(2) Master insert identification
(3) Coolant pressure (Bar)
(4) 1 - Slot for data chip, 0 - Without slot for data chip

For inserts, see pages: DNMG-F3S (198) • DNMG-F3P (196) • DNMG-M3P (196) • DNMX-M3P (204) • DNMM-R3P (203) • DNMG-F3M (197) • DNMG-M3M (198) • DNMG/DNGG-TF (202) • DNMG-GN (202) • DNMG-NR (202) • DNMG/DNGG-PP (201) • DNMG-VL (201) • DNMG-PF (200) • DNMG/DNGG-SF (199) • DNMG-NF (200) • DNMM-NM (203) • DNMG-WG (200) • DNMS-12 (272) • DNMA (203) • DNGG-M3N (267) • DNMG-CERMET (199)

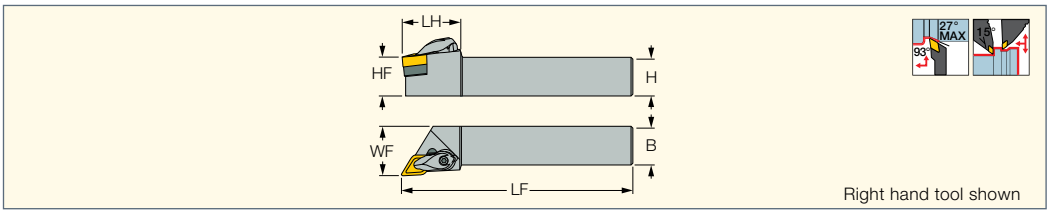
Spare Parts

Designation									
C3 PDJNR-22045-11-JHP	TDN 322		LR 3D	SR 117-2014	SP 3	PN 3-4	CU-D-JHP	T-8/5	HW 2.5/5
C4 PDJNR/L 27050-11-JHP	TDN 322		LR 3D	SR 117-2014	SP 3	PN 3-4	CU-D-JHP	T-8/5	HW 2.5/5
C5 PDJNR/L 35060-11-JHP	TDN 322		LR 3D	SR 117-2014	SP 3	PN 3-4	CU-D-JHP	T-8/5	HW 2.5/5
C4 PDJNR/L 27055-15-JHP	TDN 422	TDN 432*	LR 4D	SR 117-2010	SP 4	PN 3-4	CU-D-JHP	T-8/5	HW 3.0
C5 PDJNR/L 35060-15-JHP	TDN 422	TDN 432*	LR 4D	SR 117-2010	SP 4	PN 3-4	CU-D-JHP	T-8/5	HW 3.0
C6 PDJNR/L 45065-15-JHP	TDN 422	TDN 432*	LR 4D	SR 117-2010	SP 4	PN 3-4	CU-D-JHP	T-8/5	HW 3.0

* Optional, to be ordered separately

ISOTURN

DDJNR/L
R-Clamp Tools with 93° Lead Angle Carrying 55° Negative Rhombic Inserts



Designation	H	HF	B	LF	LH	WF	MIID[1]
DDJNR/L 1616H-11	16.0	16.0	16.0	100.00	30.0	20.00	DNMG 1104
DDJNR/L 2020K-11	20.0	20.0	20.0	125.00	30.0	25.00	DNMG 1104
DDJNR/L 2525M-11	25.0	25.0	25.0	150.00	30.0	32.00	DNMG 1104
DDJNR/L 2020K-15	20.0	20.0	20.0	125.00	39.0	25.00	DNMG 1506
DDJNR/L 2525M-15	25.0	25.0	25.0	150.00	40.0	32.00	DNMG 1506
DDJNR/L 3232P-15	32.0	32.0	32.0	170.00	41.0	40.00	DNMG 1506

[1] Master insert identification

For inserts, see pages: DNMG-F3S (198) • DNMG-F3P (196) • DNMG-M3P (196) • DNMX-M3P (204) • DNMM-R3P (203) • DNMG-CERMET (199) • DNGG-M3N (267) • DNMG-F3M (197) • DNMG-M3M (198) • DNMG/DNGG-TF (202) • DNMG-GN (202) • DNMG-NR (202) • DNMG/DNGG-PP (201) • DNMG-VL (201) • DNMG-PF (200) • DNMG/DNGG-SF (199) • DNMG-NF (200) • DNMM-NM (203) • DNMG-WG (200) • DNMA (203)

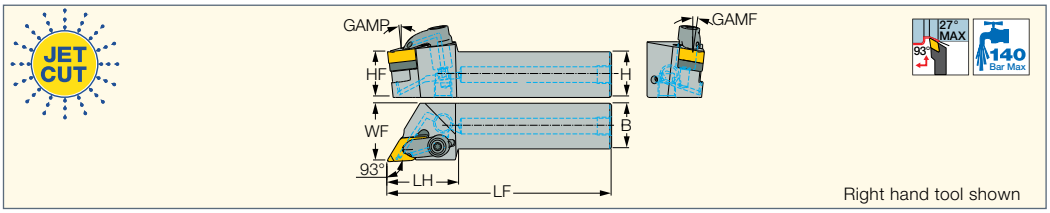
Spare Parts

Designation								
DDJNR/L 1616H-11	RDT 3-2		SR 40085I	LCGR-3	SR RC3	HW 2.5	KSP 3	
DDJNR/L 2020K-11	RDT 3-2		SR 40085I	LCGR-3	SR RC3	HW 2.5	KSP 3	
DDJNR/L 2525M-11	RDT 3-2		SR 40085I	LCGR-3	SR RC3	HW 2.5	KSP 3	
DDJNR/L 2020K-15	RDT 433	RDT 443*	SR 14-506 M4X0.7	LCGR-4	SR 10400270-25.5			T-15/5
DDJNR/L 2525M-15	RDT 433	RDT 443*	SR 14-506 M4X0.7	LCGR-4	SR 10400270-25.5			T-15/5
DDJNR/L 3232P-15	RDT 433	RDT 443*	SR 14-506 M4X0.7	LCGR-4	SR 10400270-25.5			T-15/5

* Optional, to be ordered separately

JETRTURN RIGID CLAMP

DDJNR/L-JHP-MC
Rigid Clamp Tools with Channels for High-Pressure Coolant Carrying 55° Rhombic Inserts



Designation	B	H	HF	LF	LH	WF	GAMP[1]	GAMF[2]	MIID[3]
DDJNR/L 2020X-15-JHP-MC	20.0	20.0	20.0	110.00	40.0	25.00	6.0	6.0	DNMG/X 1506
DDJNR/L 2525X-15-JHP-MC	25.0	25.0	25.0	125.00	40.0	32.00	6.0	6.0	DNMG/X 1506

[1] Rake angle axial
[2] Rake angle radial
[3] Master insert identification

For inserts, see pages: DNMA (203) • DNMG-CERMET (199) • DNMG-F3M (197) • DNMG-F3P (196) • DNMG-F3S (198) • DNMG-GN (202) • DNMG-M3M (198) • DNMG-M3P (196) • DNMG-NF (200) • DNMG-NR (202) • DNMG-PF (200) • DNMG-VL (201) • DNMG-WG (200) • DNMG/DNGG-PP (201) • DNMG/DNGG-SF (199) • DNMG/DNGG-TF (202) • DNMM-NM (203) • DNMM-R3P (203) • DNMX-M3P (204)
For holders, see pages: VDI-B1/B4AK-JHPMC (841) • VDI-B2/B3A-JHPMC (841) • VDI-B2/B3AK-JHPMC (841) • VDI-C1/C4A-JHPMC (841) • VDI-C1/C4AK-JHPMC (842) • VDI-C2/C3A-JHPMC (842) • VDI-C2/C3AK-JHPMC (842)

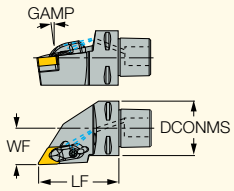
Spare Parts

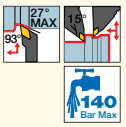
Designation						
DDJNL 2020X-15-JHP-MC	RDT 433	RDT 443*	LCGR/L-4JC SET	PLG G1/8 TL360	SR 14-506 M4X0.7	OR 4X3 NBR70
DDJNR 2020X-15-JHP-MC	RDT 433	RDT 443*	LCGR/L-4JC SET	PLG G1/8 TL360	SR 14-506 M4X0.7	
DDJNR/L 2525X-15-JHP-MC	RDT 433	RDT 443*	LCGR/L-4JC SET	PLG G1/8 TL360	SR 14-506 M4X0.7	

* Optional, to be ordered separately

ISOTURN

C#-DDJNR/L
Tools with CAMFIX Exchangeable Tapered Shanks Carrying Negative 55° Rhombic Inserts





Right hand tool shown

Designation	DCONMS	WF	LF	MIID(1)	GAMP(2)	CP(3)	DCP(4)
C4 DDJNR/L-27060-15	40.00	27.00	60.00	DN..15	-6.0	140	1
C5 DDJNR/L-35060-15	50.00	35.00	60.00	DN..15	-6.0	140	1
C6 DDJNR/L-45065-15	63.00	45.00	65.00	DN..15	-6.0	140	1

- Use RDT 443 seat for DN.. 1504.. inserts

(1) Master insert identification
(2) Rake angle axial
(3) Coolant pressure (Bar)
(4) 1 - Slot for data chip, 0 - Without slot for data chip

For inserts, see pages: DNMG-F3S (198) • DNMG-F3P (196) • DNMG-M3P (196) • DNMX-M3P (204) • DNMM-R3P (203) • DNMG-F3M (197) • DNMG-M3M (198) • DNMG/DNGG-TF (202) • DNMG-GN (202) • DNMG-NR (202) • DNMG/DNGG-PP (201) • DNMG-VL (201) • DNMG-PF (200) • DNMG/DNGG-SF (199) • DNMG-NF (200) • DNMM-NM (203) • DNMG-WG (200) • DNMA (203) • DNMG-CERMET (199)

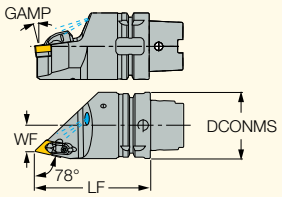
Spare Parts

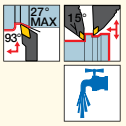
Designation							
C4 DDJNL-27060-15	RDT 433	RDT 443*	T-15/5	LCGR-4	SR 10400270-25.5	SR 14-506 M4X0.7	EZ 62
C4 DDJNR-27060-15	RDT 433		T-15/5	LCGR-4	SR 10400270-25.5	SR 14-506 M4X0.7	EZ 62
C5 DDJNL-35060-15	RDT 433		T-15/5	LCGR-4	SR 10400270-25.5	SR 14-506 M4X0.7	EZ 83
C5 DDJNR-35060-15	RDT 433	RDT 443*	T-15/5	LCGR-4	SR 10400270-25.5	SR 14-506 M4X0.7	EZ 83
C6 DDJNR/L-45065-15	RDT 433	RDT 443*	T-15/5	LCGR-4	SR 10400270-25.5	SR 14-506 M4X0.7	EZ 104

* Optional, to be ordered separately

ISOTURN

HSK A63WH-DDJNR/L
R-Clamp Turning Tools with HSK Taper Shank Carrying Negative DNMG Inserts for 15° Mounting on Turn-Mill Machines





Right hand tool shown

Designation	DCONMS	LF	WF	MIID(2)	GAMP(3)	DCP(4)							
HSK A63WH DDJNR/L J15 (1)	63.00	110.00	25.00	DN..4..	4.5	0	RDT 433	RDT 443*	SR 14-506 M4X0.7	LCGR-4	SR 10400270-25.5	T-15/5	EZ 104

- Complies with ICTM standard (ISO 12164-3). • A cooling tube must be used with all coolant through HSK spindles (should be ordered separately).
- For shank dimensions, see page 835

(1) RDT 443 for DN__ 1504.. insert.
(2) Master insert identification
(3) Rake angle axial
(4) 1 - Slot for data chip, 0 - Without slot for data chip

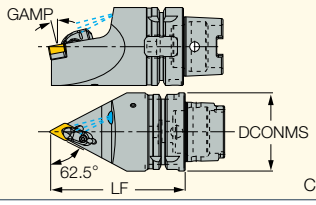
* Optional, to be ordered separately

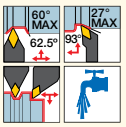
For inserts, see pages: DNMG-CERMET (199) • DNMG-F3S (198) • DNMG-F3P (196) • DNMG-M3P (196) • DNMX-M3P (204) • DNMM-R3P (203) • DNMG-F3M (197) • DNMG-M3M (198) • DNMG/DNGG-TF (202) • DNMG-GN (202) • DNMG-NR (202) • DNMG/DNGG-PP (201) • DNMG-VL (201) • DNMG-PF (200) • DNMG/DNGG-SF (199) • DNMG-NF (200) • DNMM-NM (203) • DNMA (203)

ISOTURN

HSK A63WH-DDNNN

R-Clamp Turning Tools with HSK Taper Shank Carrying Negative DNMG Inserts





Complies with ICTM standard (ISO 12164-3)

Designation	LF	MIID[2]	GAMP[3]	DCP[4]	DCONMS							
HSK A63WH DDNNN J15 [1]	110.00	DN.. 15	-10.0	0	63.00	RDT 433	RDT 443*	SR 14-506 M4X0.7	LCGR-4	SR 10400270-25.5	T-15/5	EZ 104

• A cooling tube must be used with all coolant through HSK spindles (should be ordered separately). • For user guide, see pages 6-7,104-110

[1] RDT 443 for DN__ 1504.. insert.

[2] Master insert identification

[3] Rake angle axial

[4] 1 - Slot for data chip, 0 - Without slot for data chip

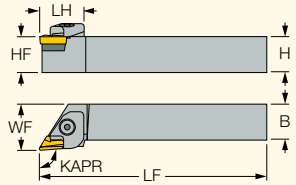
* Optional, to be ordered separately

For inserts, see pages: DNMG-CERMET (199) • DNMG-F3S (198) • DNMG-F3P (196) • DNMG-M3P (196) • DNMX-M3P (204) • DNMM-R3P (203) • DNMG-F3M (197) • DNMG-M3M (198) • DNMG/DNGG-TF (202) • DNMG-GN (202) • DNMG-NR (202) • DNMG/DNGG-PP (201) • DNMG-VL (201) • DNMG-PF (200) • DNMG/DNGG-SF (199) • DNMG-NF (200) • DNMM-NM (203) • DNMG-WG (200) • DNMA (203)

ISOTURN

CKJNR/L

Top Clamp Tools with 93° Lead Angle Carrying 55° Negative Parallelogram Inserts





Right hand tool shown

Designation	H	HF	B	LF	LH	WF	KAPR[1]	MIID[2]
CKJNR/L 2020K-16	20.0	20.0	20.0	125.00	32.0	25.00	93.0	KNMX/KNUX 1604
CKJNR/L 2525M-16	25.0	25.0	25.0	150.00	32.0	32.00	93.0	KNMX/KNUX 1604
CKJNR/L 3232P-16	32.0	32.0	32.0	170.00	32.0	40.00	93.0	KNMX/KNUX 1604

[1] Tool cutting edge angle

[2] Master insert identification

For inserts, see pages: KNMX (204) • KNUX (204)

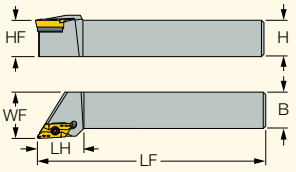
Spare Parts

Designation								
CKJNR/L	CSK 1604 R/L	SR M3X0.5X10DIN7991 10.9	KSP 90	KSP 48	KSP 48S	CL 16KR/L	CLS 16K	HW 4.0

ISOTURN

SKJNR/L

Screw Clamp Tools with 93° Lead Angle Carrying 55° Negative Parallelogram Inserts





Right hand tool shown

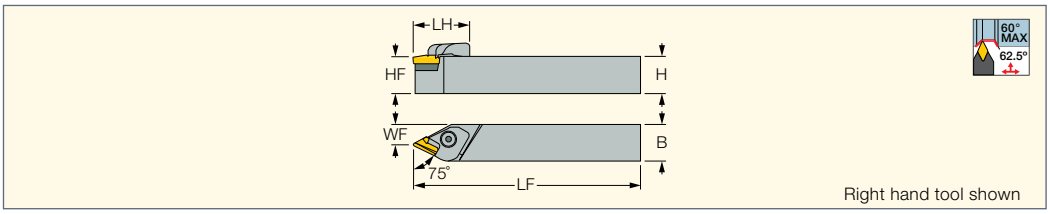
Designation	H	HF	B	LF	LH	WF	MIID[1]					
SKJNR/L 2525M-16	25.0	25.0	25.0	150.00	32.0	32.00	KNMX 1604	TKX 160310R/L	SR TC-3	HW 2.5	SR 16-236 P	T-15/5
SKJNL 3232P-16	32.0	32.0	32.0	170.00	32.0	40.00	KNMX 1604	TKX 160310L	SR TC-3	HW 2.5	SR 16-236 P	T-15/5

[1] Master insert identification

For inserts, see page: KNMX (204)

ISOTURN

CKNNR/L
Top Clamp Tools with 63° Lead Angle Carrying 55° Negative Parallelogram Inserts



Designation	H	HF	B	LF	LH	WF	MIID(1)
CKNNR 2525M-16	25.0	25.0	25.0	150.00	33.0	14.40	KNUX/KNMX 1604

(1) Master insert identification

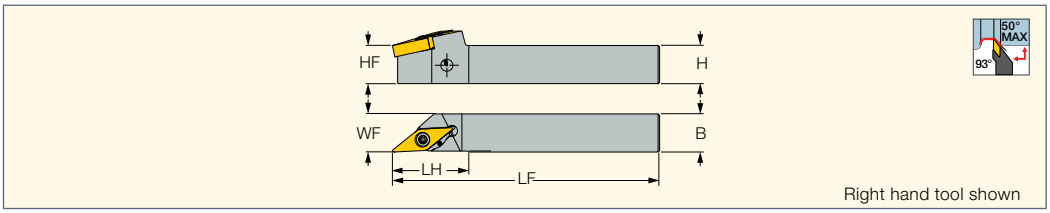
For inserts, see pages: KNMX (204) • KNUX (204)

Spare Parts

Designation								
CKNNR 2525M-16	CSK 1604 R	CL 16KR	CLS 16K	KSP 90	KSP 48	KSP 48S	SR M3X0.5X10DIN7991 10.9	HW 4.0

ISOTURN

SVANR/L-FS
Screw Lock Holders for Negative, 35° Inserts with a Wedge for High Rigidity in Profiling Applications



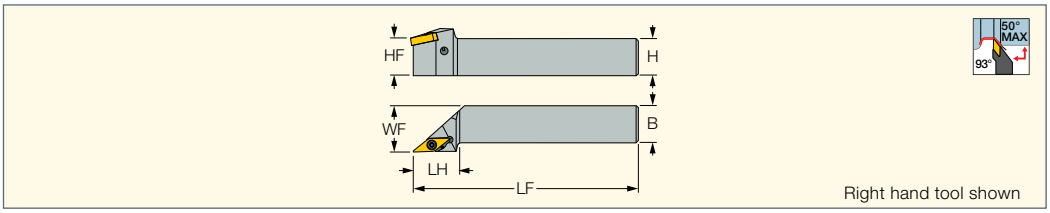
Designation	H	HF	B	LF	LH	WF	MIID(1)				
SVANR/L 1212K-12FS	12.0	12.0	12.0	125.00	25.4	12.20	VN.. 12T..	AV 12	PA 12	SR 14-551	T-9/5
SVANR/L 1616K-12FS	16.0	16.0	16.0	125.00	25.4	16.20	VN.. 12T..	AV 12	PA 12	SR 14-551	T-9/5

(1) Master insert identification

For inserts, see pages: VNMG-F3M (205) • VNMG-F3P (205) • VNMG-F3S (206) • VNMG-FNF-CERMET (206) • VNMG-M3M (205) • VNMG-SF (206) • VNMG/VNGG-NF (207) • VNMM-PP (207)
For holders, see pages: SBTH-JHP (421)

ISOTURN

SVJNR/L-F
Screw Lock Tools with a Wedge for High Rigidity Carrying 35° Negative Inserts for Profiling Applications



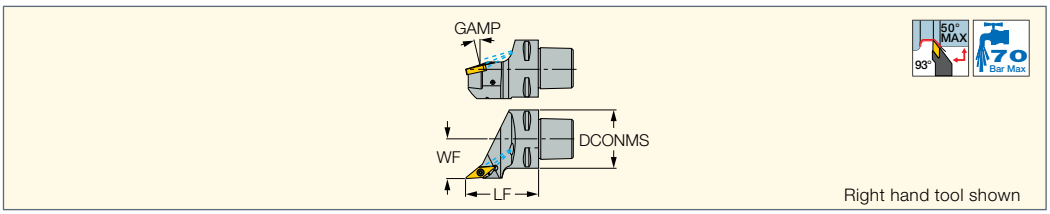
Designation	H	HF	B	LF	LH	WF	MIID(1)				
SVJNR/L 1616H-12F	16.0	16.0	16.0	100.00	25.0	20.00	VNMG 12T3	SR 14-551	T-9/5	AV 12	PA 12
SVJNR/L 2020K-12F	20.0	20.0	20.0	125.00	25.0	25.00	VNMG 12T3	SR 14-551	T-9/5	AV 12	PA 12
SVJNR/L 2525M-12F	25.0	25.0	25.0	150.00	25.0	32.00	VNMG 12T3	SR 14-551	T-9/5	AV 12	PA 12

• Repeatability: for VNMG is ±0.06 mm, for VNGG is ±0.02 mm
(1) Master insert identification

For inserts, see pages: VNMG-F3M (205) • VNMG-F3P (205) • VNMG-F3S (206) • VNMG-FNF-CERMET (206) • VNMG-M3M (205) • VNMG-SF (206) • VNMG/VNGG-NF (207) • VNMM-PP (207)

ISOTURN

C#-SVJNR/L-F
Screw Lock Tools with CAMFIX Exchangeable Shanks Carrying 35° Negative Rhombic Inserts



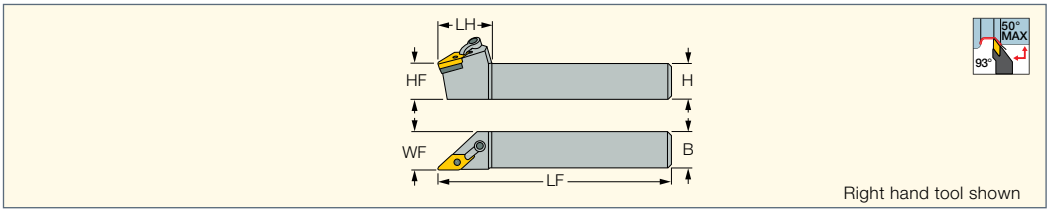
Designation	DCONMS	WF	LF	CP(1)	DCP(2)	GAMP(3)					
C4 SVJNR/L-27050-12F	40.00	27.00	50.00	70	1	-6.0	AV 12	PA 12	SR 14-551	T-9/5	EZ 83

(1) Coolant pressure (Bar)
(2) 1 - Slot for data chip, 0 - Without slot for data chip
(3) Rake angle axial

For inserts, see pages: VNMG-F3M (205) • VNMG-F3P (205) • VNMG-F3S (206) • VNMG-FNF-CERMET (206) • VNMG-M3M (205) • VNMG-SF (206) • VNMG/VNGG-NF (207) • VNMM-PP (207)

ISOTURN

MVJNR/L
Pin and Clamp Tools Carrying 35° Negative Rhombic Inserts



Designation	H	HF	B	LF	LH	WF	MIID[1]
MVJNR/L 2020K-16	20.0	20.0	20.0	125.00	41.0	25.00	VNMG 1604
MVJNR/L 2525M-16	25.0	25.0	25.0	150.00	41.0	32.00	VNMG 1604

[1] Master insert identification

For inserts, see pages: VNGG-M3N (268) • VNMG-F3M (205) • VNMG-F3P (205) • VNMG-M3M (205) • VNMG-TF (207) • YNMG-F3P (208) • VNMG/VNGG-NF (207) • VNMS-12 (272)

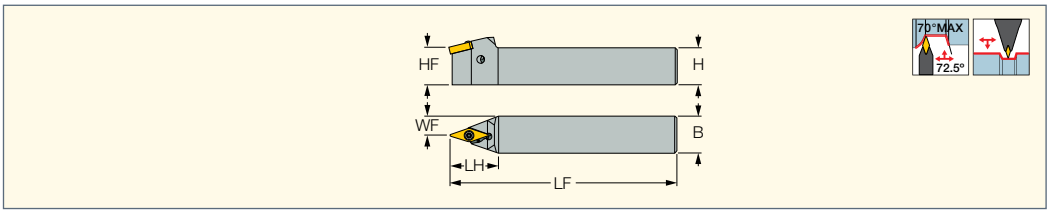
Spare Parts

Designation								
MVJNR/L	IVSN 322	IVSN 323*	IYSN 322*	NL 34-L	HW 5/32"	CL 30-INJ	XNS 510	HW 5/64"

* Optional, to be ordered separately

ISOTURN

SVVNN-F
Screw Lock Tools with a Wedge for High Rigidity in Profiling Applications Carrying 35° Negative Inserts



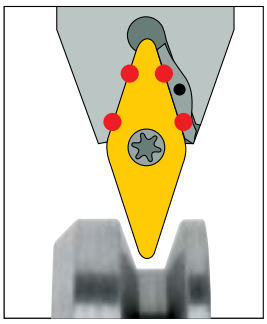
Designation	H	HF	B	LF	LH	WF	MIID[1]				
SVVNN 1616H-12F	16.0	16.0	16.0	100.00	26.0	8.00	VNMG 12T3	SR 14-551	T-9/5	PA 12	AV 12
SVVNN 2020K-12F	20.0	20.0	20.0	125.00	26.0	10.00	VNMG 12T3	SR 14-551	T-9/5	PA 12	AV 12
SVVNN 2525M-12F	25.0	25.0	25.0	150.00	26.0	12.50	VNMG 12T3	SR 14-551	T-9/5	PA 12	AV 12

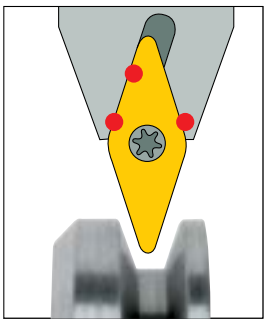
• Repeatability: for VNMG is ±0.06 mm, for VNGG is ± 0.02 mm

[1] Master insert identification

For inserts, see pages: VNMG-F3M (205) • VNMG-F3P (205) • VNMG-F3S (206) • VNMG-FNF-CERMET (206) • VNMG-M3M (205) • VNMG-SF (206) • VNMG/VNGG-NF (207) • VNMM-PP (207)

4 contact points ensure secure and precise clamping

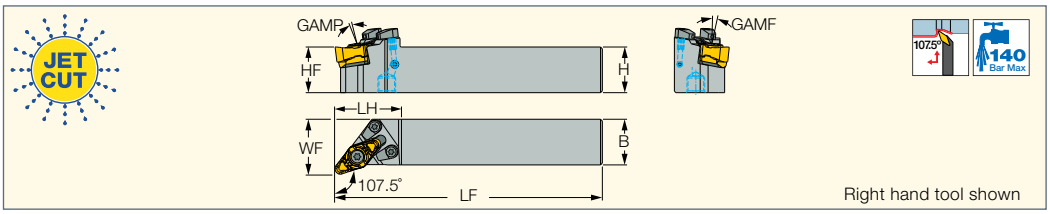




Conventional clamping

ISOTURN

SVHNR/L-AL-JHP
Screw Lock Tools with Channels for High-Pressure Coolant Carrying 35° Rhombic Inserts



Designation	H	B	HF	LF	LH	WF	GAMP(1)	GAMF(2)	MIID(3)
SVHNR/L 2525M-22-AL-JHP	25.0	25.0	25.0	146.34	36.3	30.03	7.0	6.0	VNGU 22..

- For user guide, see pages 6-7,104-110

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see page: VNGU-R3N (268)

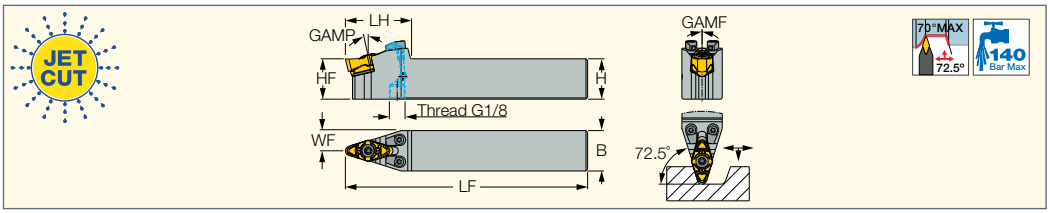
Spare Parts

Designation									
SVHNR/L 2525M-22-AL-JHP	TVX 2230	SR 14-591/L-SN	SW6-T-SH	BLD T20/S7	HW 3.0	SR TC-4	CH-1.9D-JHP-A SET	TVX 2212*	TVX 2216*

* Optional, to be ordered separately

ISOTURN

SVVNN-AL-JHP
Screw Lock Tools with Channels for High-Pressure Coolant Carrying 35° Rhombic Inserts



Designation	H	HF	B	LF	LH	WF	GAMP(1)	GAMF(2)	MIID(3)
SVVNN 2525M-22-AL-JHP	25.0	25.0	25.0	150.00	41.0	12.50	-13.5	0.0	VNGU 220630-R3N

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see page: VNGU-R3N (268)

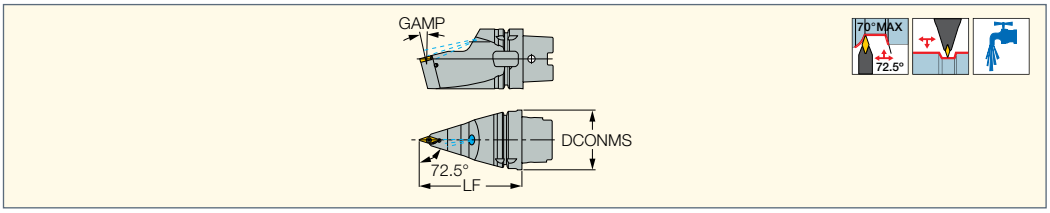
Spare Parts

Designation									
SVVNN 2525M-22-AL-JHP	TVX 2230	HW 3.0	BLD T20/S7	SW6-T-SH	SR TC-4	SR 14-591/L-SN	CH-1.9D-JHP-A SET	TVX 2212*	TVX 2216*

* Optional, to be ordered separately

ISOTURN HSK

HSK A63WH-SVVNN-F
72.5° Lead Angle Tools with HSK Exchangeable Tapered Shanks Carrying 35° Negative Inserts



Designation	DCONMS	LF	GAMP(1)	MIID(2)	DCP(3)					
HSK A63WH-SVVNN-J12F	63.00	110.00	-14.0	VNM. 12T3	0	SR 14-551	T-9/5	AV 12	PA 12	EZ 104

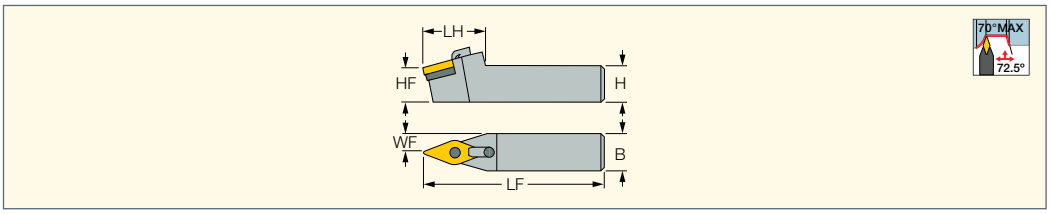
- Complies with ICTM standard (ISO 12164-3)
- A cooling tube must be used with all coolant through HSK spindles (should be ordered separately)
- For shank dimensions, see page 835

(1) Rake angle axial
(2) Master insert identification
(3) 1 - Slot for data chip, 0 - Without slot for data chip

For inserts, see pages: VNMG-F3M (205) • VNMG-F3P (205) • VNMG-F3S (206) • VNMG-FNF-CERMET (206) • VNMG-M3M (205) • VNMG-SF (206) • VNMG/VNGG-NF (207) • VNMM-PP (207)

ISOTURN

MVVNN
Pin and Clamp Tools Carrying
35° Negative Rhombic Inserts



Designation	H	HF	B	LF	LH	WF	MIID[1]
MVVNN 2020K-16	20.0	20.0	20.0	125.00	48.0	10.00	VNMG 1604..
MVVNN 2525M-16	25.0	25.0	25.0	150.00	48.0	12.50	VNMG 1604..

[1] Master insert identification

For inserts, see pages: VNGG-M3N (268) • VNMG-F3M (205) • VNMG-F3P (205) • VNMG-M3M (205) • VNMG-TF (207) • YNMG-F3P (208) • VNMG/VNGG-NF (207) • VNMS-12 (272)

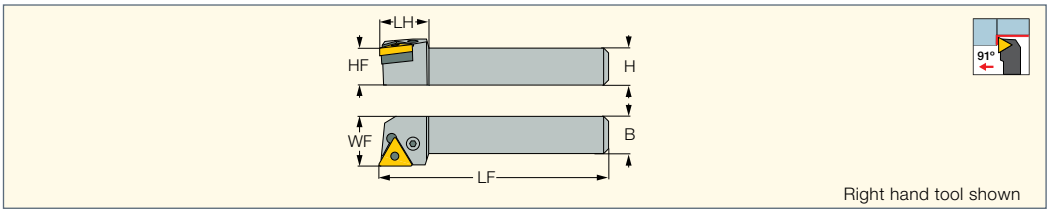
Spare Parts

Designation								
MVVNN	IVSN 322	IVSN 323*	IYSN 322*	NL 34-L	CL 30-INJ	XNS 510	HW 5/32"	HW 5/64"

* Optional, to be ordered separately

ISOTURN

PTGNR/L
91° Lead Angle Lever Lock
External Turning Tools Carrying
Negative Triangular Inserts



Right hand tool shown

Designation	H	HF	B	LF	LH	WF	MIID[1]
PTGNR/L 2020K-16	20.0	20.0	20.0	125.00	22.0	25.00	TNMG 16..
PTGNR/L 2525M-16	25.0	25.0	25.0	150.00	22.0	32.00	TNMG 16..
PTGNR/L 2525M-22	25.0	25.0	25.0	150.00	32.0	32.00	TNMG 2204
PTGNR 3232P-22	32.0	32.0	32.0	170.00	32.0	40.00	TNMG 2204

[1] Master insert identification

For inserts, see pages: D6NMG-F3P (209) • D6NMG-M3M (209) • D6NMG-M3P (209) • TNGG-M3N (267) • TNMG-F3S (212) • TNMG-FFG-CERMET (212) • TNMG-F3P (210) • TNMG-M3P (210) • TNMG-F3M (211) • TNMG-M3M (211) • TNMG-TF (213) • TNMG-GN (215) • TNMM-NR (215) • TNMG/TNGG-PP (214) • TNMG-VL (214) • TNMG-PF (213) • TNMG-SF (213) • TNMG-NF (214) • TNMS-12 (271) • TNMA (215)

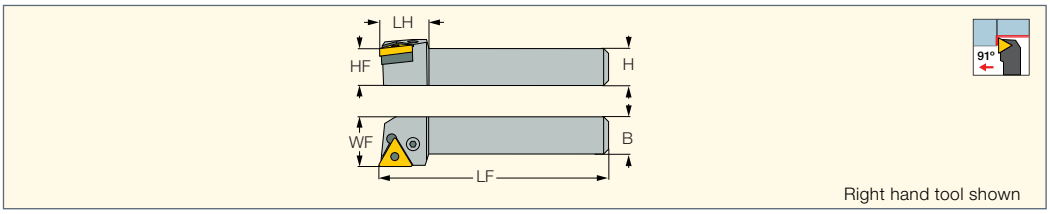
Spare Parts

Designation							
PTGNR/L 2020K-16	TTN 322	TTN 332*	SP 3	LR 3	SR 117-2014	HW 2.5/5	PN 3-4
PTGNR/L 2525M-16	TTN 322	TTN 332*	SP 3	LR 3	SR 117-2014	HW 2.5/5	PN 3-4
PTGNR/L 2525M-22	TTN 422		SP 4	LR 4	SR 117-2010	HW 3.0	PN 3-4
PTGNR 3232P-22	TTN 422		SP 4	LR 4	SR 117-2010	HW 3.0	PN 3-4

* Optional, to be ordered separately

HELITURN LD

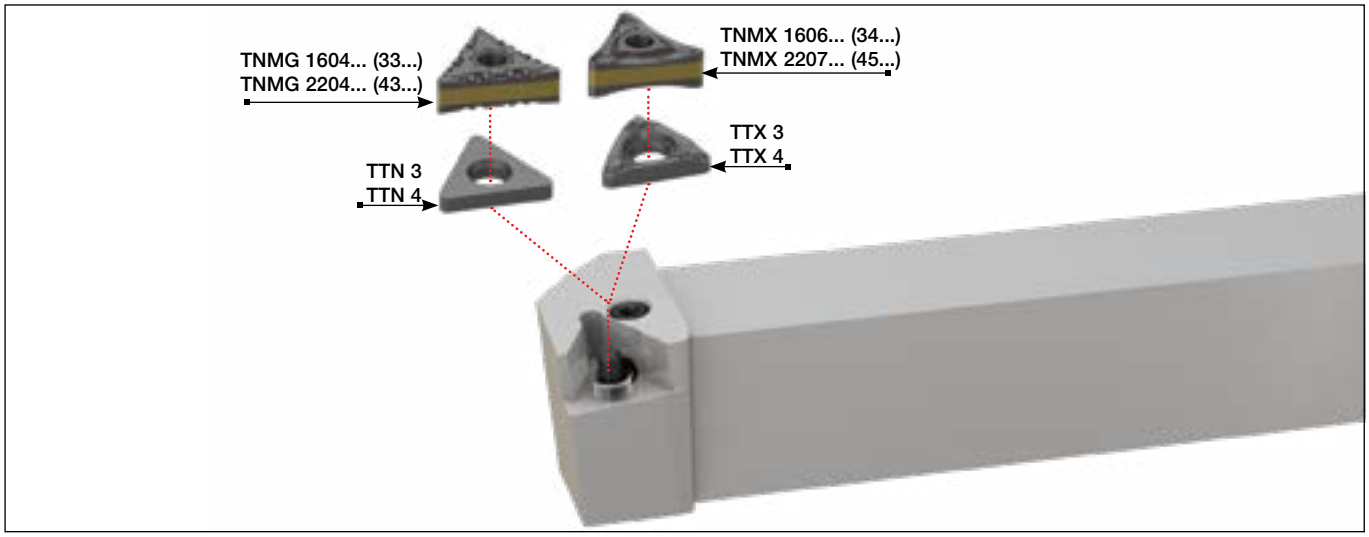
PTGNR/L-X
91° Lead Angle Lever Lock
External Turning Tools Carrying
Negative Triangular Inserts



Designation	H	HF	B	LF	LH	WF	MIID[1]
PTGNR/L 2020K-16X	20.0	20.0	20.0	125.00	20.0	25.00	TNMX 1606, TNMG 1604
PTGNR/L 2525M-16X	25.0	25.0	25.0	150.00	20.0	32.00	TNMX 1606, TNMG 1604
PTGNR/L 2525M-22X	25.0	25.0	25.0	150.00	32.0	32.00	TNMX 2207, TNMG 2204
PTGNR/L 3232P-22X	32.0	32.0	32.0	170.00	32.0	40.00	TNMX 2207, TNMG 2204

• Use TTX 3 seat for TNMX 1606.. inserts and TTN 3 seat for TNMG 1604.. inserts
[1] Master insert identification

For inserts, see pages: D6NMG-F3P (209) • D6NMG-M3M (209) • D6NMG-M3P (209) • TNGG-M3N (267) • TNMG-F3S (212) • TNMG-FFG-CERMET (212) • TNMG-F3P (210) • TNMG-M3P (210) • TNMX-M3/4PW (210) • TNMG-F3M (211) • TNMG-M3M (211) • TNMX-M3/4MW (212) • TNMG-TF (213) • TNMG-GN (215) • TNMM-NR (215) • TNMG/TNGG-PP (214) • TNMG-VL (214) • TNMG-PF (213) • TNMG-SF (213) • TNMG-NF (214) • TNMS-12 (271) • TNMA (215)



Spare Parts

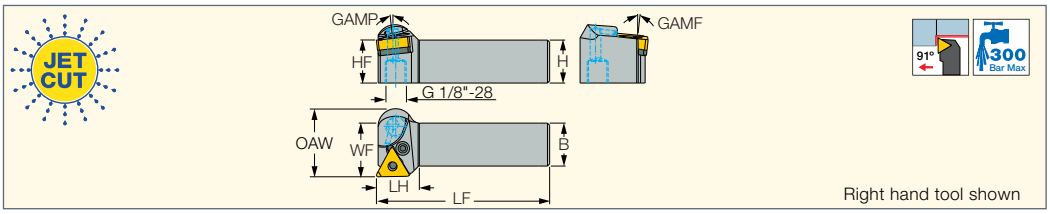
Designation							
PTGNR/L 2020K-16X	TTX 3	TTN 3	SP 3	LR 3	SR 117-2014	HW 2.5	PN 3-4
PTGNR/L 2525M-16X	TTX 3	TTN 3	SP 3	LR 3	SR 117-2014	HW 2.5	PN 3-4
PTGNR/L 2525M-22X	TTX-4	TTN-4	SP 4	LR 4DH	SR 117-2010	HW 3.0	PN 3-4L
PTGNR/L 3232P-22X	TTX-4	TTN-4	SP 4	LR 4DH	SR 117-2010	HW 3.0	PN 3-4L



HELITURN LD

PTGNR/L-X-JHP

91° Lead Lever Lock Tools with Channels for High-Pressure Coolant Carrying Negative Triangular Inserts



Designation	H	HF	B	LF	LH	WF	OAW	GAMP(1)	GAMF(2)	MIID(3)
PTGNR/L 2020K-16X-JHP	20.0	20.0	20.0	125.00	20.0	25.00	31.70	-6.0	-6.0	TNMX 1606, TNMG 1604
PTGNR/L 2525M-16X-JHP	25.0	25.0	25.0	150.00	20.0	32.00	-	-6.0	-6.0	TNMX 1606, TNMG 1604

• Supplied with TTX 3 seat for TNMX 1606.. inserts and TTN 3 seat for TNMG 1604.. inserts • For user guide, see pages 6-7,104-110

(1) Rake angle axial

(2) Rake angle radial

(3) Master insert identification

For inserts, see pages: D6NMG-F3P (209) • D6NMG-M3M (209) • D6NMG-M3P (209) • TNGG-M3N (267) • TNMG-F3S (212) • TNMG-FFG-CERMET (212) • TNMG-F3P (210) • TNMG-M3P (210) • TNMX-M3/4PW (210) • TNMG-F3M (211) • TNMG-M3M (211) • TNMG-TF (213) • TNMG-GN (215) • TNMG/TNGG-PP (214) • TNMG-VL (214) • TNMG-PF (213) • TNMG-SF (213) • TNMG-NF (214) • TNMS-12 (271) • TNMA (215)

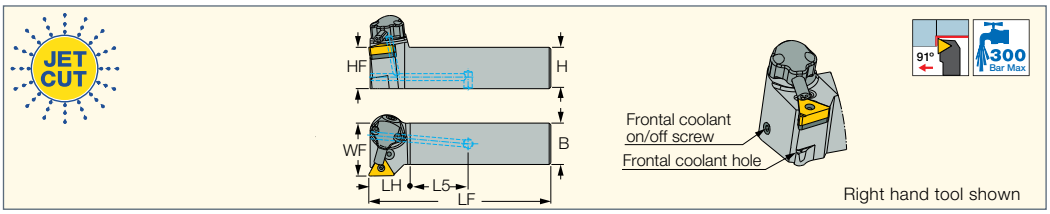
Spare Parts

Designation							
PTGNR/L-X-JHP	TTX 3	TTN 3	SP 3	LR 3	SR 117-2014	HW 2.5	PN 3-4

HELITURN LD

PTGNR/L-X-JHP-MC

Tools with Bottom Inlets for High-Pressure Coolant Carrying TNMX and TNMG Triangular Inserts



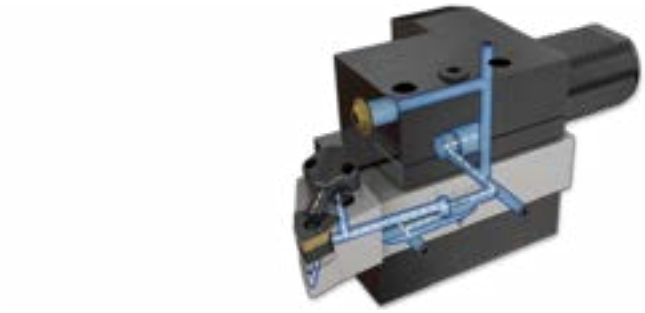
Designation	H	HF	B	LF	LH	L5	WF	MIID(1)
PTGNR/L 2020X-16X-JHP-MC	20.0	20.0	20.0	95.00	25.0	29.00	25.00	TNMX 1606, TNMG 1604
PTGNR/L 2525X-16X-JHP-MC	25.0	25.0	25.0	110.00	25.0	35.00	32.00	TNMX 1606, TNMG 1604

• Supplied with TTX 3 seat for TNMX 1606.. inserts and TTN 3 seat for TNMG 1604.. inserts. • For user guide, see pages 6-7,104-110

(1) Master insert identification

For inserts, see pages: D6NMG-F3P (209) • D6NMG-M3M (209) • D6NMG-M3P (209) • TNGG-M3N (267) • TNMG-F3S (212) • TNMG-FFG-CERMET (212) • TNMG-F3P (210) • TNMG-M3P (210) • TNMX-M3/4PW (210) • TNMG-F3M (211) • TNMG-M3M (211) • TNMG-TF (213) • TNMG-GN (215) • TNMG/TNGG-PP (214) • TNMG-VL (214) • TNMG-PF (213) • TNMG-SF (213) • TNMG-NF (214) • TNMS-12 (271) • TNMA (215)

For holders, see pages: HSK A63WH-ASHR/L-45-HPMC (838) • HSK A63WH-ASHR/L-HPMC (838) • VDI-B1/B4AK-JHPMC (841) • VDI-B2/B3A-JHPMC (841) • VDI-B2/B3AK-JHPMC (841) • VDI-C1/C4A-JHPMC (841) • VDI-C1/C4AK-JHPMC (842) • VDI-C2/C3A-JHPMC (842) • VDI-C2/C3AK-JHPMC (842)

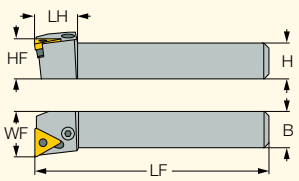


Spare Parts

Designation										
PTGNR/L-X-JHP-MC	TTX 3	TTN 3	SP 3	LR 3	SR 117-2014	T-8/5	SR M5X5 DIN913 TL360	PN 3-4	HW 2.5	CU-S-JHP

ISOTURN

PTFNR/L
91° Lead Angle Lever Lock Face Turning Tools Carrying Negative Triangular Inserts





Right hand tool shown

Designation	H	HF	B	LF	LH	WF	MIID[1]
PTFNR/L 2020K-16	20.0	20.0	20.0	125.00	20.0	25.00	TNMG 16..
PTFNR/L 2525M-16	25.0	25.0	25.0	150.00	20.0	32.00	TNMG 16..
PTFNR/L 2525M-22	25.0	25.0	25.0	150.00	26.0	32.00	TNMG 2204

[1] Master insert identification

For inserts, see pages: D6NMG-F3P (209) • D6NMG-M3M (209) • D6NMG-M3P (209) • TNGG-M3N (267) • TNMG-F3S (212) • TNMG-FFG-CERMET (212) • TNMG-F3P (210) • TNMG-M3P (210) • TNMG-F3M (211) • TNMG-M3M (211) • TNMG-TF (213) • TNMG-GN (215) • TNMM-NR (215) • TNMG/TNGG-PP (214) • TNMG-VL (214) • TNMG-PF (213) • TNMG-SF (213) • TNMG-NF (214) • TNMS-12 (271) • TNMA (215)

Spare Parts

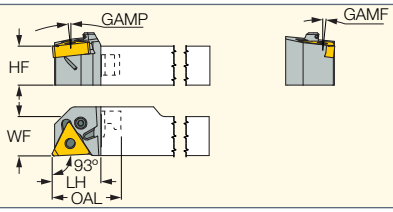
Designation							
PTFNR/L 2020K-16	TTN 322	TTN 332*	LR 3	SR 117-2014	HW 2.5/5	SP 3	PN 3-4
PTFNR/L 2525M-16	TTN 322	TTN 332*	LR 3	SR 117-2014	HW 2.5/5	SP 3	PN 3-4
PTFNR/L 2525M-22	TTN 422		LR 4	SR 117-2010	HW 3.0	SP 4	PN 3-4

* Optional, to be ordered separately

NEOSWISS

NQCH-PTJNR/L-S-JHP
Lever Lock JETCUT Modular Heads Carrying Negative Double-Sided Triangular Inserts for Swiss-Type Machines







Designation	HF	WF	LH	OAL	GAMP[1]	GAMF[2]	MIID[3]
NQCH16-PTJNR/L-16S-JHP	16.0	16.15	20.0	28.80	6.0	6.0	TNM..1604..

New

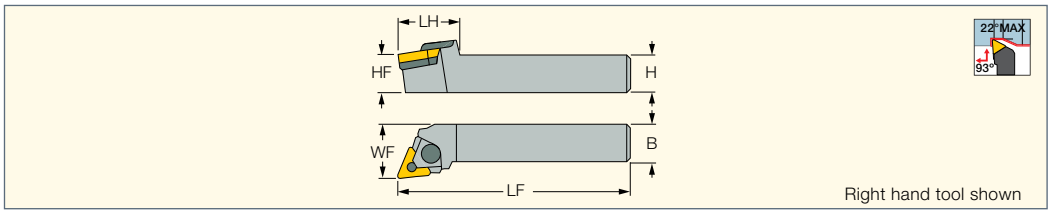
• Use only RH Shank with RH Head and LH Shank with LH Head exept NQCH12R/16R... heads.
[1] Rake angle axial
[2] Rake angle radial
[3] Master insert identification

For inserts, see pages: TNMG-F3S (212) • TNMG-FFG-CERMET (212) • TNMG-F3P (210) • TNMG-M3P (210) • TNMG-F3M (211) • TNMG-M3M (211) • TNMG-TF (213) • TNMG-GN (215) • TNMM-NR (215) • TNMG-VL (214) • TNMG-PF (213) • TNMG-SF (213) • TNMG-NF (214) • TNMS-12 (271) • TNMA (215)
For holders, see page: NQCH-JHP (424)



ISOTURN

MTJNR/L-W
93° Lead Angle Wedge Lock Turning Tools Carrying Negative Triangular Inserts



Designation	H	HF	B	LF	LH	WF	MIID[1]
MTJNR/L 1616H-16W-M	16.0	16.0	16.0	100.00	32.0	20.00	TNMG 1604
MTJNR/L 2020K-16W-M	20.0	20.0	20.0	125.00	32.0	25.00	TNMG 1604
MTJNR/L 2525M-16W-M	25.0	25.0	25.0	150.00	32.0	32.00	TNMG 1604
MTJNR/L 2525M-22W	25.0	25.0	25.0	150.00	38.0	32.00	TNMG 2204
MTJNR/L 3225P-22W	32.0	32.0	25.0	170.00	38.0	32.00	TNMG 2204

[1] Master insert identification

For inserts, see pages: D6NMG-F3P (209) • D6NMG-M3M (209) • D6NMG-M3P (209) • TNGG-M3N (267) • TNMG-F3S (212) • TNMG-FFG-CERMET (212) • TNMG-F3P (210) • TNMG-M3P (210) • TNMG-F3M (211) • TNMG-M3M (211) • TNMG-TF (213) • TNMG-GN (215) • TNMM-NR (215) • TNMG/TNGG-PP (214) • TNMG-VL (214) • TNMG-PF (213) • TNMG-SF (213) • TNMG-NF (214) • TNMA (215)

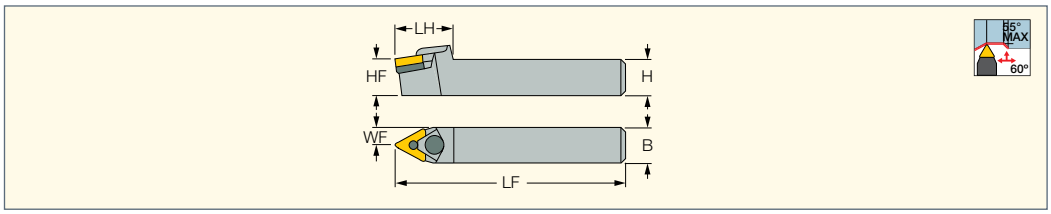
Spare Parts

Designation										
MTJNR/L 1616H-16W-M	TTT 322N	TTT 332N*	ZNW 3WNS			LC 291N CLAMP		E RING N	SR 17-317NS	HW 3.0
MTJNR/L 2020K-16W-M	TTT 322N	TTT 332N*	ZNW 3WN	HW 2.5		LC 291N CLAMP		E RING N	SR 17-317N	HW 3.0
MTJNR/L 2525M-16W-M	TTT 322N	TTT 332N*	ZNW 3WN			LC 291N CLAMP		E RING N	SR 17-317N	HW 3.0
MTJNR/L 2525M-22W	TTT 434		ZNW 4	HW 2.5	LC 281 SET 1		SR 17-295			HW 3.0
MTJNR/L 3225P-22W	TTT 434		ZNW 4	HW 2.5	LC 281 SET 1		SR 17-295			HW 3.0

* Optional, to be ordered separately

ISOTURN

MTENN-W
Neutral Wedge Lock Turning Tools Carrying Negative Triangular Inserts



Designation	H	HF	B	LF	LH	WF	MIID[1]
MTENN 1618H-16W-M	16.0	16.0	18.0	100.00	32.0	9.00	TNMG 1604
MTENN 2020K-16W-M	20.0	20.0	20.0	125.00	35.0	10.00	TNMG 1604
MTENN 2525M-16W-M	25.0	25.0	25.0	150.00	32.0	12.50	TNMG 1604
MTENN 2525M-22W	25.0	25.0	25.0	150.00	40.0	12.50	TNMG 2204
MTENN 3232P-22W	32.0	32.0	32.0	170.00	40.0	16.00	TNMG 2204

[1] Master insert identification

For inserts, see pages: D6NMG-F3P (209) • D6NMG-M3M (209) • D6NMG-M3P (209) • TNGG-M3N (267) • TNMG-F3S (212) • TNMG-FFG-CERMET (212) • TNMG-F3P (210) • TNMG-M3P (210) • TNMG-F3M (211) • TNMG-M3M (211) • TNMG-TF (213) • TNMG-GN (215) • TNMM-NR (215) • TNMG/TNGG-PP (214) • TNMG-VL (214) • TNMG-PF (213) • TNMG-SF (213) • TNMG-NF (214) • TNMA (215)

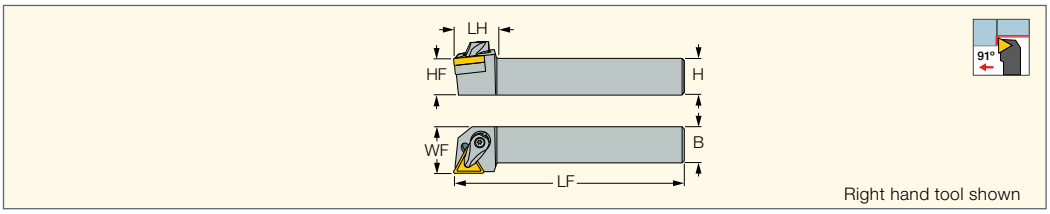
Spare Parts

Designation										
MTENN 1618H-16W-M	TTT 322N	TTT 332N*	ZNW 3WNS			LC 291N CLAMP		E RING N	SR 17-317NS	HW 3.0
MTENN 2020K-16W-M	TTT 322N	TTT 332N*	ZNW 3WN			LC 291N CLAMP		E RING N	SR 17-317N	HW 3.0
MTENN 2525M-16W-M	TTT 322N	TTT 332N*	ZNW 3WN			LC 291N CLAMP		E RING N	SR 17-317N	HW 3.0
MTENN 2525M-22W	TTT 434		ZNW 4	HW 2.5	LC 281 SET 1		SR 17-295			HW 3.0
MTENN 3232P-22W	TTT 434		ZNW 4	HW 2.5	LC 281 SET 1		SR 17-295			HW 3.0

* Optional, to be ordered separately

ISOTURN

DTGNR/L
91° Lead Angle R-Clamp External Turning Tools Carrying Negative Triangular Inserts



Designation	H	HF	B	LF	LH	WF	MIID[1]
DTGNR/L 2020K-16	20.0	20.0	20.0	125.00	25.0	25.00	TNMG 1604
DTGNR/L 2525M-16	25.0	25.0	25.0	150.00	25.0	32.00	TNMG 1604
DTGNR 2525M-22	25.0	25.0	25.0	150.00	32.0	32.00	TNMG 2204

[1] Master insert identification

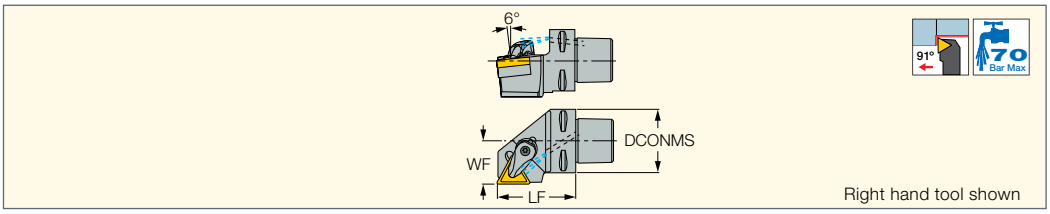
For inserts, see pages: D6NMG-F3P (209) • D6NMG-M3M (209) • D6NMG-M3P (209) • TNGG-M3N (267) • TNMG-F3S (212) • TNMG-FFG-CERMET (212) • TNMG-F3P (210) • TNMG-M3P (210) • TNMG-F3M (211) • TNMG-M3M (211) • TNMG-TF (213) • TNMG-GN (215) • TNMM-NR (215) • TNMG/TNGG-PP (214) • TNMG-VL (214) • TNMG-PF (213) • TNMG-SF (213) • TNMG-NF (214) • TNMA (215)

Spare Parts

Designation								
DTGNR/L 2020K-16	RTT 322	SR 35080I	LCGR-3		SR RC3	KSP 3	HW 2.5	
DTGNR/L 2525M-16	RTT 322	SR 35080I	LCGR-3		SR RC3	KSP 3	HW 2.5	
DTGNR 2525M-22	RTT 443	SR 14-506 M4X0.7	LCGR-4	SR 10400270-25.5				T-15/5

ISOTURN

C#-DTGNR/L
91° Lead R-Clamp External Turning Tools with CAMFIX Exchangeable Shanks Carrying Negative Triangular Inserts



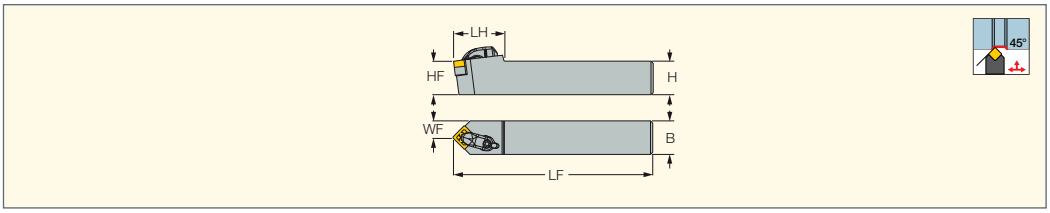
Designation	DCONMS	WF	LF	MIID[1]	CP[2]	DCP[3]							
C6 DTGNR/L-45065-22	63.00	45.00	65.00	TN.. 22	70	1	RTT 443	SR 14-506 M4X0.7	LCGR-4	SR 10400270-25.5	SR M5X5 DIN916	T-15/5	EZ 104

[1] Master insert identification
[2] Coolant pressure (Bar)
[3] 1 - Slot for data chip, 0 - Without slot for data chip

For inserts, see pages: TNMG-F3S (212) • TNMG-F3P (210) • TNMG-M3P (210) • TNMG-F3M (211) • TNMG-M3M (211) • TNMG-TF (213) • TNMG-GN (215) • TNMM-NR (215) • TNMG/TNGG-PP (214) • TNMA (215)

ISOTURN

DSDNN
45° Lead Angle R-Clamp External Turning Tools Carrying ISO Negative SNMG Inserts



Designation	H	HF	B	LF	LH	WF	MIID[1]
DSDNN 2525M-12	25.0	25.0	25.0	150.00	38.0	12.80	SNMG 1204
DSDNN 2525M-15	25.0	25.0	25.0	150.00	42.0	12.50	SNMG 1506
DSDNN 3232P-19	32.0	32.0	32.0	170.00	44.0	16.00	SNMG 1906

[1] Master insert identification

For inserts, see pages: SNMG-F3S (219) • SNMG-R3M (219) • SNMG-R3P (217) • SNMG-F3P (216) • SNMG-M3P (216) • SNMM-R3P (223) • SNMG-F3M (218) • SNMG-M3M (218) • SNMG-TF (220) • SNMG-GN (221) • SNMG-NR (222) • SNMM-NR (225) • SNMG-PP (220) • SNMG-VL (219) • SNMG-EM-M/R (221) • SNMM-NM (224) • SNMM-H3P (223) • SNMM-H4P (224) • SNMA (222)

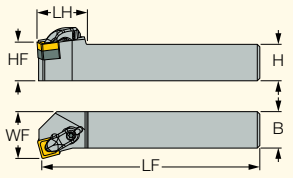
Spare Parts

Designation									
DSDNN 2525M-12	RST 443	RST 443R SET*	SR 14-506 M4X0.7	LCGR-4	SR 10400270-25.5				T-15/5
DSDNN 2525M-15	RST 54		SR 10402265	LCGR-5		SR 10402267	KSP 5	HW 4.0	
DSDNN 3232P-19	RST 634		SR 10402266	LCGR-6		SR 10402267	KSP 5	HW 4.0	

* Optional, to be ordered separately

ISOTURN

DSKNR/L
75° Lead Angle R-Clamp Face Turning Tools Carrying ISO Negative SNMG Inserts





Right hand tool shown

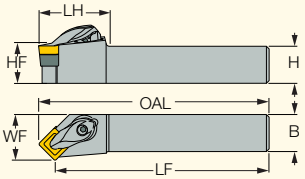
Designation	H	HF	B	LF	LH	WF	MIID[1]					
												
DSKNR/L 2525M-12	25.0	25.0	25.0	150.00	31.0	32.00	SNMG 1204	RST 443	T-15/5	SR 10400270-25.5	LCGR-4	SR 14-506 M4X0.7

[1] Master insert identification

For inserts, see pages: SNMG-F3S (219) • SNMG-F3P (216) • SNMG-M3P (216) • SNMM-R3P (223) • SNMG-F3M (218) • SNMG-M3M (218) • SNMG-TF (220) • SNMG-GN (221) • SNMG-NR (222) • SNMG-PP (220) • SNMG-VL (219) • SNMA (222)

ISOTURN

DSSNR/L
45° Lead Angle R-Clamp Tools Carrying Negative Square Inserts for Longitudinal and Facing Applications





Right hand tool shown

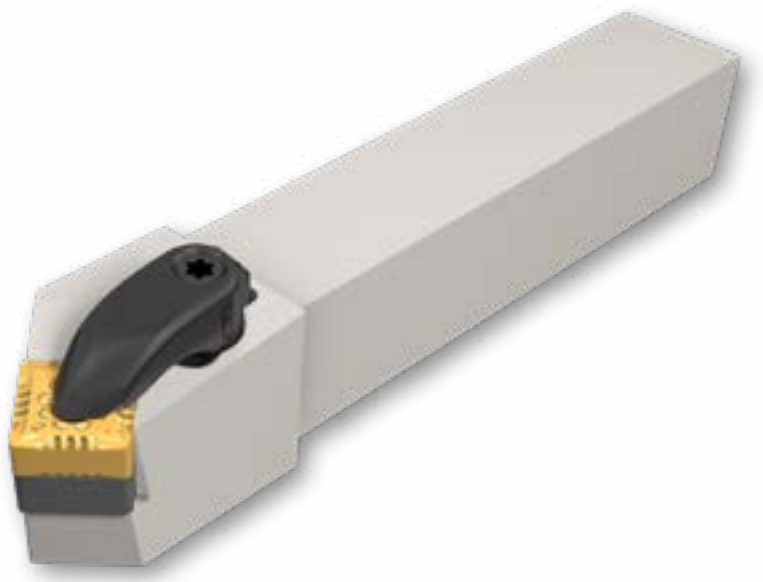
Designation	H	HF	B	LF	LH	WF	OAL	MIID[2]
DSSNR/L 2020K-12 [1]	20.0	20.0	20.0	125.00	38.0	25.00	133.30	SNMG 1204
DSSNR/L 2525M-12 [1]	25.0	25.0	25.0	150.00	39.0	32.00	158.30	SNMG 1204
DSSNR/L 3232P-15	32.0	32.0	32.0	170.00	34.0	40.00	170.00	SNMG 1506
DSSNR/L 3232P-19	32.0	32.0	32.0	170.00	38.0	40.00	170.00	SNMG 1906

[1] Using SNMG.....-EM-M/R inserts requires the use of RST 443R/L SET.
[2] Master insert identification

For inserts, see pages: SNMG-F3S (219) • SNMG-R3P (217) • SNMG-F3P (216) • SNMG-M3P (216) • SNMM-R3P (223) • SNMG-F3M (218) • SNMG-M3M (218) • SNMG-TF (220) • SNMG-GN (221) • SNMG-NR (222) • SNMM-NR (225) • SNMG-PP (220) • SNMG-R3M (219) • SNMG-VL (219) • SNMG-EM-M/R (221) • SNMM-NM (224) • SNMM-H3P (223) • SNMM-H4P (224) • SNMA (222)

Spare Parts

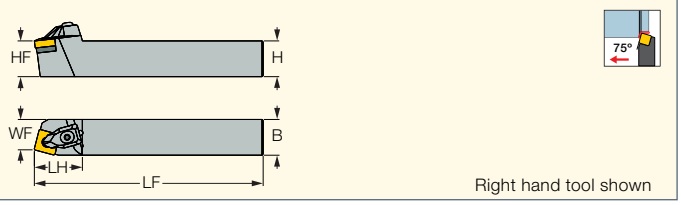
Designation								
								
DSSNR/L 2020K-12	RST 443	SR 14-506 M4X0.7	LCGR-4	SR 10400270-25.5				T-15/5
DSSNR/L 2525M-12	RST 443	SR 14-506 M4X0.7	LCGR-4	SR 10400270-25.5				T-15/5
DSSNR/L 3232P-15	RST 54	SR 10402265	LCGR-5		SR 10402267	KSP 5	HW 4.0	
DSSNR/L 3232P-19	RST 634	SR 10402266	LCGR-6		SR 10402267	KSP 5	HW 4.0	



ISOTURN

DSBNR/L

75° Lead Angle R-Clamp Tools
Carrying Negative Square Inserts



Designation	H	HF	B	LF	LH	WF	MIID[1]
DSBNR/L 2525M-12	25.0	25.0	25.0	150.00	38.0	22.00	SNMG 1204
DSBNL 3232P-12	32.0	32.0	32.0	170.00	38.0	27.00	SNMG 1204
DSBNR/L 2525M-15	25.0	25.0	25.0	150.00	40.0	22.00	SNMG 1506
DSBNR/L 3232P-19	32.0	32.0	32.0	170.00	43.0	27.00	SNMG 1906
DSBNR/L 4040S-19	40.0	40.0	40.0	250.00	43.0	37.00	SNMG 1906

[1] Master insert identification

For inserts, see pages: SNMG-F3S (219) • SNMG-R3M (219) • SNMG-R3P (217) • SNMG-F3P (216) • SNMG-M3P (216) • SNMM-R3P (223) • SNMG-F3M (218) • SNMG-M3M (218) • SNMG-TF (220) • SNMG-GN (221) • SNMG-NR (222) • SNMM-NR (225) • SNMG-PP (220) • SNMG-VL (219) • SNMM-NM (224) • SNMM-H3P (223) • SNMM-H4P (224) • SNMA (222)

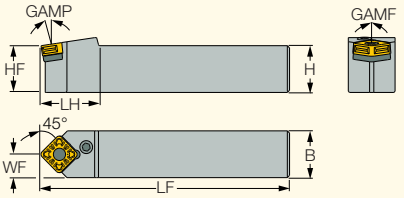
Spare Parts

Designation								
DSBNR/L 2525M-12	RST 443	SR 14-506 M4X0.7	LCGR-4	SR 10400270-25.5				T-15/5
DSBNL 3232P-12	RST 443	SR 14-506 M4X0.7	LCGR-4	SR 10400270-25.5				T-15/5
DSBNR/L 2525M-15	RST 54	SR 10402265	LCGR-5		SR 10402267	KSP 5	HW 4.0	
DSBNR/L 3232P-19	RST 634	SR 10402266	LCGR-6		SR 10402267	KSP 5	HW 4.0	
DSBNR/L 4040S-19	RST 634	SR 10402266	LCGR-6		SR 10402267	KSP 5	HW 4.0	

DOVEIQTURN HEAVY DUTY LINE

PSDON-IQ

Lever Lock and Dovetail
Pocket Rigid Clamping Tools
Carrying Unique Double-
Sided Square Inserts



Designation	H	HF	B	LF	LH	WF	GAMP[1]	GAMF[2]	MIID[3]
PSDON 3232P-15-IQ	32.0	32.0	32.0	170.00	35.0	17.00	-8.5	0.0	SOMG 150612-R3P-IQ
PSDON 3232P-19-IQ	32.0	32.0	32.0	170.00	39.5	17.00	-8.5	0.0	SOMG 190612-R3P-IQ
PSDON 4040S-19-IQ	40.0	40.0	40.0	250.00	39.5	21.00	-8.5	0.0	SOMG 190612-R3P-IQ

[1] Rake angle axial
[2] Rake angle radial
[3] Master insert identification

For inserts, see page: SOMG-R3P-IQ (217)

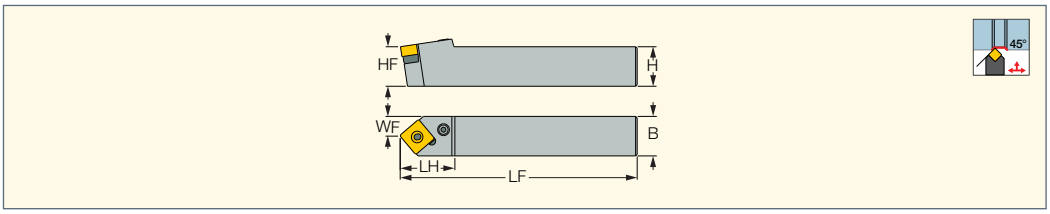
Spare Parts

Designation					
PSDON 3232P-15-IQ	TSX 5-IQ	SP 5	SR LCS 5-L25.5	LCL 16-NX	HW 3.0
PSDON 3232P-19-IQ	TSX 6-IQ	SP 5	SR 10402352	LCL 20C-NX	HW 4.0
PSDON 4040S-19-IQ	TSX 6-IQ	SP 5	SR 10402352	LCL 20C-NX	HW 4.0

ISOTURN

PSDNN

45° Lead Angle Lever Lock External Turning Tools Carrying ISO Negative SNMG Inserts



Designation	H	HF	B	LF	LH	WF	MIID[2]
PSDNN 2020K-12	20.0	20.0	20.0	125.00	27.0	10.00	SNMG 1204/SNGA 1204
PSDNN 2525M-12	25.0	25.0	25.0	150.00	27.0	12.50	SNMG 1204/SNGA 1204
PSDNN 3232P-19	32.0	32.0	32.0	170.00	41.0	16.00	SNMG 1906
PSDNN 4040S-25 [1]	40.0	40.0	40.0	250.00	49.0	20.00	SNMG 2507

[1] For SN.. 2509... inserts, use TSN 84 seat

[2] Master insert identification

For inserts, see pages: SNMG-F3S (219) • SNMG-R3P (217) • SNMM-R4P (223) • SNMG-F3P (216) • SNMG-M3P (216) • SNMM-R3P (223) • SNMG-F3M (218) • SNMG-M3M (218) • SNMG-TF (220) • SNMG-GN (221) • SNMG-NR (222) • SNMM-NR (225) • SNMG-EM-M/R (221) • SNMG-PP (220) • SNMG-R3M (219) • SNMG-VL (219) • SNMM-NM (224) • SNMM-H3P (223) • SNMM-H4P (224) • SNMM-H5P (224) • SNMA (222)

Spare Parts

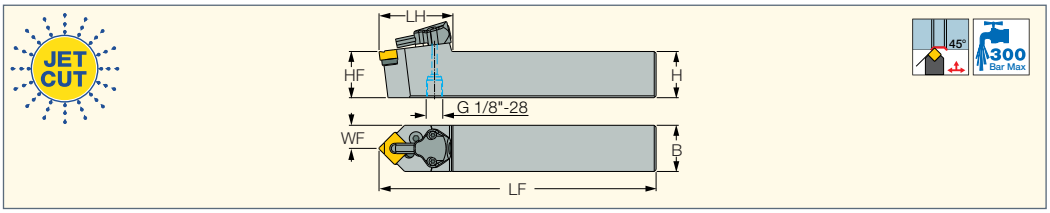
Designation							
PSDNN 2020K-12	TSN 423		SP 4	PN 3-4	LR 4	SR 117-2010	HW 3.0
PSDNN 2525M-12	TSN 423		SP 4	PN 3-4	LR 4	SR 117-2010	HW 3.0
PSDNN 3232P-19	RST 634		SP 66		LR 6	SR 10402352	HW 4.0
PSDNN 4040S-25	TSN 84N	TSN 85N*	SP 8		LR 8	SR 10402264	

* Optional, to be ordered separately

ISOTURN

PSDNN-JHP

45° Lead Angle Lever Lock Tools with Channels for High-Pressure Coolant Carrying ISO Negative SNMG Inserts



Designation	H	HF	B	LF	LH	WF	MIID[1]
PSDNN 2525M-12-JHP	25.0	25.0	25.0	150.00	40.0	12.50	SNMG 1204

• For user guide, see pages 6-7,104-110

[1] Master insert identification

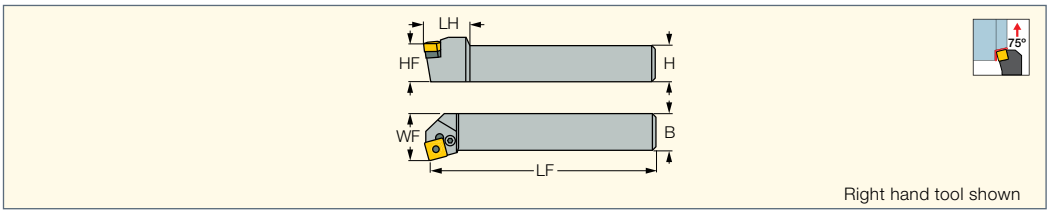
For inserts, see pages: SNMG-F3S (219) • SNMG-F3P (216) • SNMG-M3P (216) • SNMM-R3P (223) • SNMG-F3M (218) • SNMG-M3M (218) • SNMG-TF (220) • SNMG-GN (221) • SNMG-NR (222) • SNMG-EM-M/R (221) • SNMG-PP (220) • SNMG-VL (219) • SNMA (222)

Spare Parts

Designation								
PSDNN 2525M-12-JHP	TSN 423	SP 4	PN 3-4	LR 4	SR 117-2010	CU-CW-JHP	HW 3.0	T-8/5

ISOTURN

PSKNR/L
75° Lead Angle Lever Lock Tools Carrying ISO Negative Square Inserts for Face Turning



Designation	H	HF	B	LF	LH	WF	MIID[1]
PSKNR/L 2525M-12	25.0	25.0	25.0	150.00	23.5	32.00	SNMG 1204/SNGA 1204

(1) Master insert identification

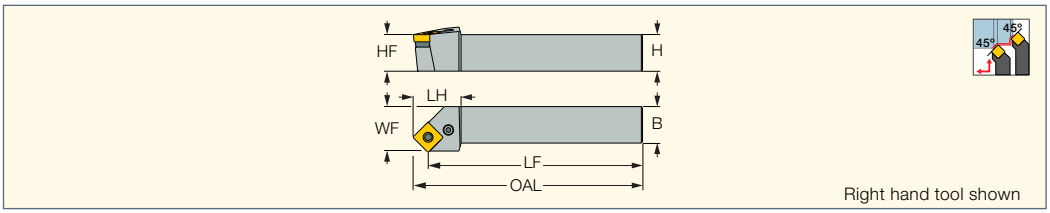
For inserts, see pages: SNMG-F3S (219) • SNMG-F3P (216) • SNMG-M3P (216) • SNMM-R3P (223) • SNMG-F3M (218) • SNMG-M3M (218) • SNMG-TF (220) • SNMG-GN (221) • SNMG-NR (222) • SNMG-PP (220) • SNMG-VL (219) • SNMA (222)

Spare Parts

Designation						
PSKNR/L	TSN 423	LR 4	SR 117-2010	HW 3.0	SP 4	PN 3-4

ISOTURN

PSSNR/L
45° Lead Angle Lever Lock Tools Carrying Negative Square Inserts for Longitudinal and Facing Applications



Designation	H	HF	B	LF	LH	OAL	WF	MIID[2]
PSSNR/L 2020K-09	20.0	20.0	20.0	125.00	25.0	131.40	25.00	SNMG 0904
PSSNR/L 2525M-09	25.0	25.0	25.0	150.00	25.0	156.40	32.00	SNMG 0904
PSSNR/L 2020K-12	20.0	20.0	20.0	125.00	29.0	133.30	25.00	SNMG 1204
PSSNR/L 2525M-12	25.0	25.0	25.0	150.00	29.0	158.30	32.00	SNMG 1204
PSSNR/L 3232P-19	32.0	32.0	32.0	157.50	42.0	170.00	40.00	SNMG 1906
PSSNR/L 4040S-19	40.0	40.0	40.0	237.50	42.0	250.00	50.00	SNMG 1906
PSSNR/L 4040S-2507 (1)	40.0	40.0	40.0	234.00	53.0	250.00	50.00	SNMG 2507

(1) For SN.. 2509... inserts, use TSN 84 seat
(2) Master insert identification

For inserts, see pages: SNMG-F3S (219) • SNMG-R3P (217) • SNMM-R4P (223) • SNMG-F3P (216) • SNMG-M3P (216) • SNMM-R3P (223) • SNMG-F3M (218) • SNMG-M3M (218) • SNMG-TF (220) • SNMG-GN (221) • SNMG-NR (222) • SNMM-NR (225) • SNMG-EM-M/R (221) • SNMG-PP (220) • SNMG-R3M (219) • SNMG-VL (219) • SNMM-NM (224) • SNMM-H3P (223) • SNMM-H4P (224) • SNMM-H5P (224) • SNMA (222)

Spare Parts

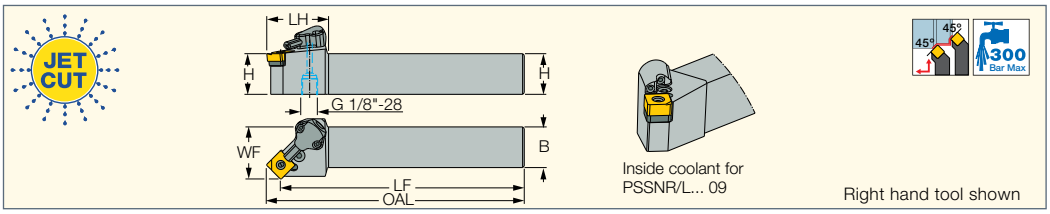
Designation							
PSSNR/L 2020K-09	TSN 323	TSN 333	SP 3	LR 3	SR 117-2014	HW 2.5	PN 3-3L
PSSNR/L 2525M-09	TSN 323	TSN 333	SP 3	LR 3	SR 117-2014	HW 2.5	PN 3-3L
PSSNR/L 2020K-12	TSN 423		SP 4	LR 4	SR 117-2010	HW 3.0	PN 3-4
PSSNR/L 2525M-12	TSN 423		SP 4	LR 4	SR 117-2010	HW 3.0	PN 3-4
PSSNR/L 3232P-19	RST 634		SP 66	LR 6	SR 10402352	HW 4.0	
PSSNR/L 4040S-19	RST 634		SP 66	LR 6	SR 10402352	HW 4.0	
PSSNR/L 4040S-2507	TSN 85	TSN 84*	SP 8	LR 8	SR 10402264	HW 5.0	

* Optional, to be ordered separately

ISOTURN

PSSNR/L-JHP

45° Tools with Channels for High-Pressure Coolant Carrying Negative Square Inserts for Longitudinal and Facing Turning



Designation	H	B	LF	LH	WF	OAL	MIID[1]
PSSNR/L 2020K-09-JHP	20.0	20.0	125.00	35.0	25.00	131.40	SNMG 09..
PSSNR/L 2525M-12-JHP	25.0	25.0	150.00	38.0	32.00	158.40	SNMG 1204

- For user guide, see pages 6-7,104-110

(1) Master insert identification

For inserts, see pages: SNMG-F3S (219) • SNMG-F3P (216) • SNMG-M3P (216) • SNMM-R3P (223) • SNMG-F3M (218) • SNMG-M3M (218) • SNMG-TF (220) • SNMG-GN (221) • SNMG-NR (222) • SNMG-EM-M/R (221) • SNMG-PP (220) • SNMG-VL (219) • SNMA (222)





Spare Parts

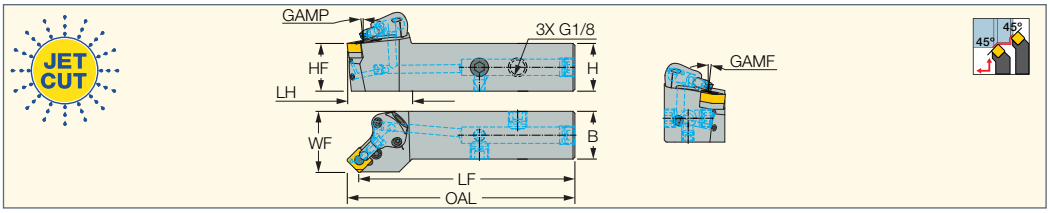
Designation										
PSSNR/L 2020K-09-JHP	TSN 323	TSN 333	SP 3	PN 3-3L	LR 3	SR 117-2014			HW 2.5	
PSSNR/L 2525M-12-JHP	TSN 423	TSN 423M SET*	SP 4	PN 3-4	LR 4	SR 117-2010	OR 6.4X0.9N	CU-S-JHP	HW 3.0	T-8/5

* Optional, to be ordered separately

ISOTURN

PSSNR/L-JHP-MC

45° Tools with High-Pressure Coolant Channels Carrying Negative Square Inserts for Longitudinal and Face Turning



Designation	H	HF	B	LF	LH	WF	GAMP[1]	GAMF[2]	OAL	MIID[3]
PSSNR/L 2020X-09-JHP-MC	20.0	20.0	20.0	94.80	30.9	25.00	5.5	5.5	100.90	SNMG 090408
PSSNR/L 2525X-09-JHP-MC	25.0	25.0	25.0	113.20	34.3	32.00	5.5	5.5	119.30	SNMG 090408
PSSNR/L 2020X-12-JHP-MC	20.0	20.0	20.0	100.00	38.3	25.00	5.5	5.5	108.30	SNMG 120408
PSSNR/L 2525X-12-JHP-MC	25.0	25.0	25.0	115.00	38.3	32.00	5.5	5.5	123.30	SNMG 120408

- For user guide, see pages 6-7,104-110

(1) Rake angle axial

(2) Rake angle radial

(3) Master insert identification

For inserts, see pages: SNMG-F3S (175) • SNMG-F3P (173) • SNMG-M3P (173) • SNMM-R3P (178) • SNMG-F3M (174) • SNMG-M3M (174) • SNMG-TF (176) • SNMG-GN (177) • SNMG-NR (177) • SNMG-EM-M/R (176) • SNMG-PP (175) • SNMG-VL (175) • SNMA (177) • SNGA (CER) (218) • SNMA (CBN) (235)

Spare Parts

Designation							
PSSNR/L 2020X-09-JHP-MC	TSN 323	TSN 333	SR 117-2014	HW 2.5	CU-S-JHP	LR 3	PN 3-3L
PSSNR/L 2525X-09-JHP-MC	TSN 323	TSN 333	SR 117-2014	HW 2.5	CU-R-JHP	LR 3	PN 3-3L
PSSNR/L 2020X-12-JHP-MC	TSN 423		SR 117-2010	HW 3.0	CU-S-JHP	LR 4	PN 3-4
PSSNR/L 2525X-12-JHP-MC	TSN 423		SR 117-2010	HW 3.0	CU-S-JHP	LR 4	PN 3-4

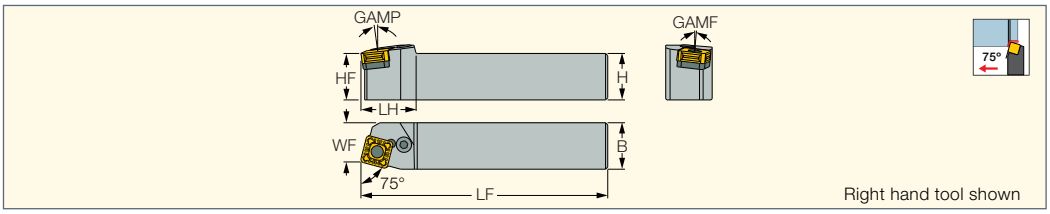
Spare Parts

Designation						
PSSNR/L 2020X-09-JHP-MC	SP 3	SR M6X6 DIN913 TL360	T-8/5	SR M3X3 DIN913 TL360	SR M5X5 DIN913 TL360	PLG G1/8 TL360
PSSNR/L 2525X-09-JHP-MC	SP 3	SR M6X6 DIN913 TL360	T-8/5	SR M3X3 DIN913 TL360	SR M5X5 DIN913 TL360	PLG G1/8 TL360
PSSNR/L 2020X-12-JHP-MC	SP 4	SR M6X6 DIN913 TL360	T-8/5	SR M3X3 DIN913 TL360		
PSSNR/L 2525X-12-JHP-MC	SP 4	SR M6X6 DIN913 TL360	T-8/5	SR M3X3 DIN913 TL360		

DOVEIQTURN HEAVY DUTY LINE

PSBOR/L-IQ

Lever Lock and Dovetail Pocket Rigid Clamping Tools Carrying Unique SOMG Double-Sided Square Inserts



Designation	H	HF	B	LF	LH	WF	GAMP(1)	GAMF(2)	MIID(3)
PSBOR/L 3232P-15-IQ	32.0	32.0	32.0	170.00	35.0	27.00	-7.5	-4.7	SOMG 150612-R3P-IQ
PSBOR/L 3232P-19-IQ	32.0	32.0	32.0	170.00	38.0	27.00	-7.5	-4.7	SOMG 190612-R3P-IQ
PSBOR/L 4040S-19-IQ	40.0	40.0	40.0	250.00	38.0	35.00	-7.5	-4.7	SOMG 190612-R3P-IQ
PSBOR/L 4040S-25-IQ	40.0	40.0	40.0	250.00	50.0	35.00	-7.5	-4.7	SOMG 250924-R3P-IQ
PSBOR/L 5050T-25-IQ	50.0	50.0	50.0	300.00	50.0	45.00	-7.5	-4.7	SOMG 250924-R3P-IQ

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see page: SOMG-R3P-IQ (217)

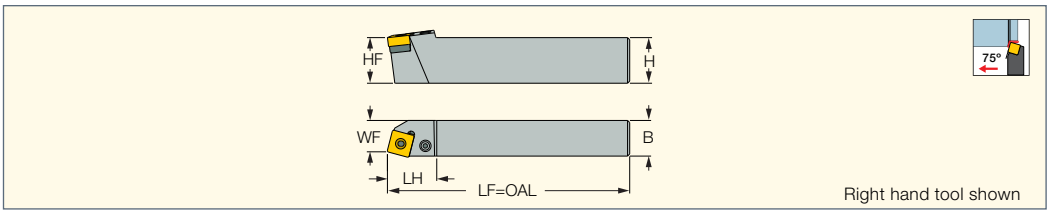
Spare Parts

Designation					
PSBOR/L 3232P-15-IQ	TSX 5-IQ	SP 5	SR LCS 5-L25.5	LCL 16-NX	HW 3.0
PSBOR/L 3232P-19-IQ	TSX 6-IQ	SP 5	SR 10402352	LCL 20C-NX	HW 4.0
PSBOR/L 4040S-19-IQ	TSX 6-IQ	SP 5	SR 10402352	LCL 20C-NX	HW 4.0
PSBOR/L 4040S-25-IQ	TSX 8-IQ	SP 8	SR LCS 8-L39	LCL 32-NX	HW 5.0
PSBOR/L 5050T-25-IQ	TSX 8-IQ	SP 8	SR LCS 8-L39	LCL 32-NX	HW 5.0

ISOTURN

PSBNR/L

Lever Lock 75° Lead Angle Turning Tools Carrying ISO Negative Square Inserts



Designation	H	HF	B	LF	LH	WF	MIID(2)
PSBNR/L 2020K-09	20.0	20.0	20.0	125.00	20.0	17.00	SNMG 0904
PSBNR/L 2525M-09	25.0	25.0	25.0	150.00	20.0	22.00	SNMG 0904
PSBNR 2525M-12	25.0	25.0	25.0	150.00	26.8	22.00	SNMG 1204
PSBNR/L 3232P-19	32.0	32.0	32.0	170.00	39.0	27.00	SNMG 1906
PSBNR/L 4040S-25 (1)	40.0	40.0	40.0	250.00	48.0	35.00	SNMG 2507

(1) For SN.. 2509... inserts, use TSN 84 seat
(2) Master insert identification

For inserts, see pages: SNMG-F3S (219) • SNMG-R3M (219) • SNMG-R3P (217) • SNMM-R4P (223) • SNMG-F3P (216) • SNMG-M3P (216) • SNMM-R3P (223) • SNMG-F3M (218) • SNMG-M3M (218) • SNMG-TF (220) • SNMG-GN (221) • SNMG-NR (222) • SNMM-NR (225) • SNMG-PP (220) • SNMG-VL (219) • SNMM-NM (224) • SNMM-H3P (223) • SNMM-H4P (224) • SNMM-H5P (224) • SNMA (222)

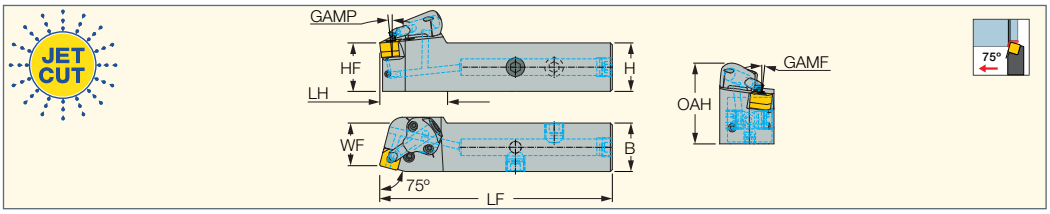
Spare Parts

Designation							
PSBNR/L 2020K-09	TSN 323	TSN 333	SP 3	PN 3-3L	LR 3	SR 117-2014	HW 2.5
PSBNR/L 2525M-09	TSN 323	TSN 333	SP 3	PN 3-3L	LR 3	SR 117-2014	HW 2.5
PSBNR 2525M-12	TSN 423		SP 4	PN 3-4	LR 4	SR 117-2010	HW 3.0
PSBNR/L 3232P-19	RST 634		SP 66		LR 6	SR 10402352	HW 4.0
PSBNR/L 4040S-25	TSN 84N	TSN 85N*	SP 8		LR 8	SR 10402264	HW 5.0

* Optional, to be ordered separately

ISOTURN

PSBNR/L-JHP-MC
Lever Lock 75° Lead Angle Turning Tools with High-Pressure Coolant Channels Carrying Negative Square Inserts



Designation	H	HF	B	LF	LH	WF	GAMP(1)	GAMF(2)	MIID(3)
PSBNR/L 2020X-09-JHP-MC	20.0	20.0	20.0	105.00	35.0	17.00	6.0	6.0	SNMG 090408
PSBNR/L 2525X-09-JHP-MC	25.0	25.0	25.0	120.00	35.0	22.00	6.0	6.0	SNMG 090408

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see pages: SNMG-F3S (219) • SNMG-F3P (216) • SNMG-M3P (216) • SNMG-F3M (218) • SNMG-M3M (218) • SNMG-TF (220)

Spare Parts

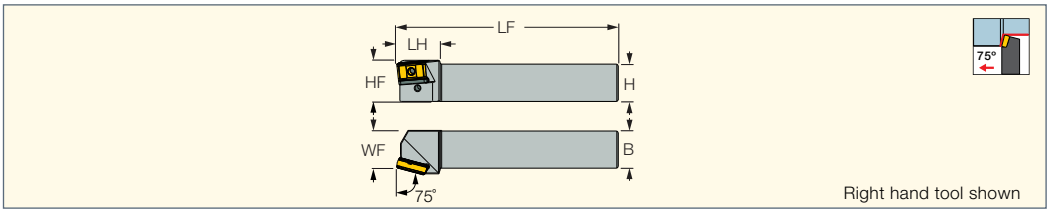
Designation							
PSBNR/L 2020X-09-JHP-MC	TSN 323	TSN 333	SR 117-2014	HW 2.5	CU-R-JHP	PN 3-3L	LR 3
PSBNR/L 2525X-09-JHP-MC	TSN 323	TSN 333	SR 117-2014	HW 2.5	CU-R-JHP	PN 3-3L	LR 3

Spare Parts

Designation						
PSBNR/L 2020X-09-JHP-MC	SR M6X6 DIN913 TL360	SP 3	T-8/5	SR M3X3 DIN913 TL360	PLG G1/8 TL360	SR M5X5 DIN913 TL360
PSBNR/L 2525X-09-JHP-MC	SR M6X6 DIN913 TL360	SP 3	T-8/5	SR M3X3 DIN913 TL360	PLG G1/8 TL360	SR M4X4 DIN913 TL360

HEAVY SUPER TURN

PLBOR/L
Lever Lock Tools Carrying LOMX Tangentially Clamped Super Heavy Turning Inserts



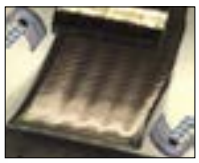
Designation	H	HF	B	LF	LH	WF	MIID(1)
PLBOR/L 5050T-40	50.0	50.0	50.0	300.00	60.0	50.00	LOMX 4022

(1) Master insert identification

For inserts, see page: LOMX-H6P (225)

ISCAR's tangential LOMX 402224-H6P insert for very heavy turning applications.

This tangentially clamped insert with 4 cutting edges is made from the tough grade IC8250. It can machine at up to 35 mm depth of cut and up to 2 mm/rev feed. The insert is clamped on a very rigid lever lock pocket equipped with a protective seat.

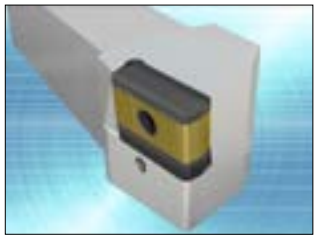






Double-sided with 4 cutting edges

Tangentially Clamped Insert



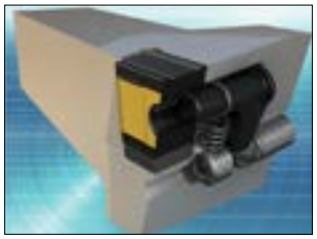
Clamping Surfaces



Protective Seat



Lever Lock Accessible from Both Tool Sides

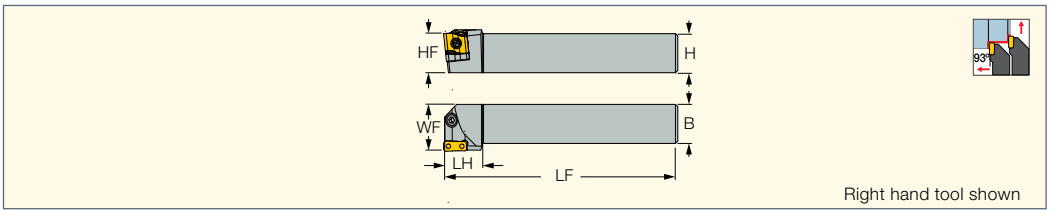


Spare Parts

Designation							
PLBOR/L 5050T-40	TLN 40	SR 10402265	LR 8	SR 10643960	SP D7.5XL23	T-20/5	HW 6.0

HELITURN TANGENTIAL LINE

PLANR/L-TANG
Lever Lock Tools Carrying LNMX.. Tangentially Clamped Inserts



Right hand tool shown

Designation	H	HF	B	LF	LH	WF	MIID[1]
PLANR/L 2525M-15 TANG	25.0	25.0	25.0	150.00	25.0	30.00	LNMX 1506..R/L
PLANR/L 3232P-15 TANG	32.0	32.0	32.0	170.00	32.0	37.00	LNMX 1506..R/L
PLANR/L 3232P-22 TANG	32.0	32.0	32.0	170.00	32.0	37.00	LNMX 2210..R/L
PLANR/L 4040R-22 TANG	40.0	40.0	40.0	200.00	40.0	47.00	LNMX 2210..R/L

(1) Master insert identification

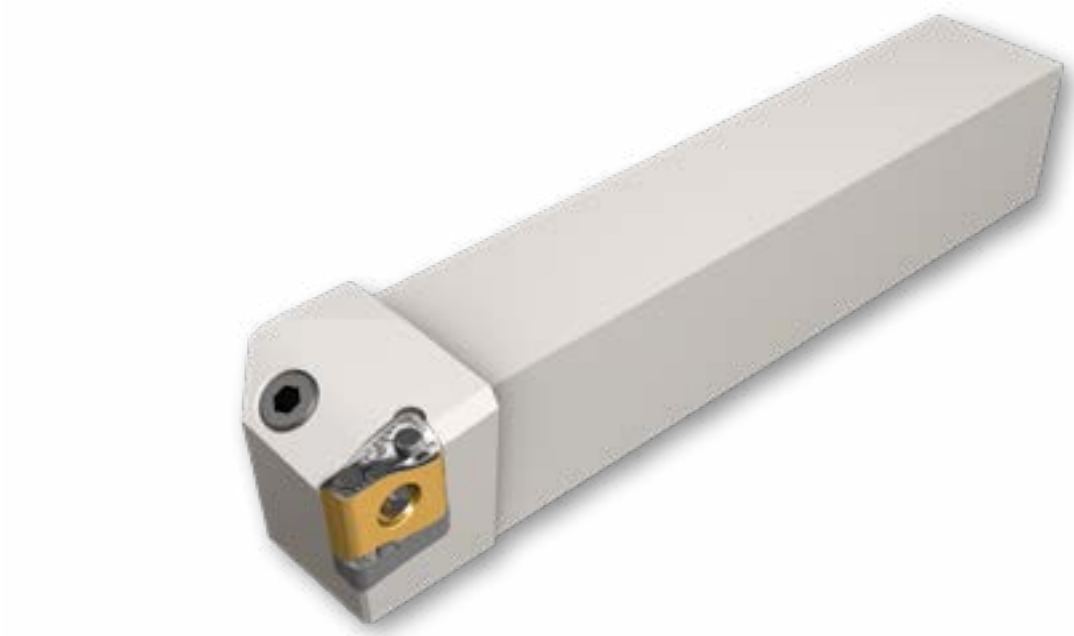
For inserts, see pages: LNMX-HM (226) • LNMX-HT (226) • LNMX-WG (227)





Spare Parts

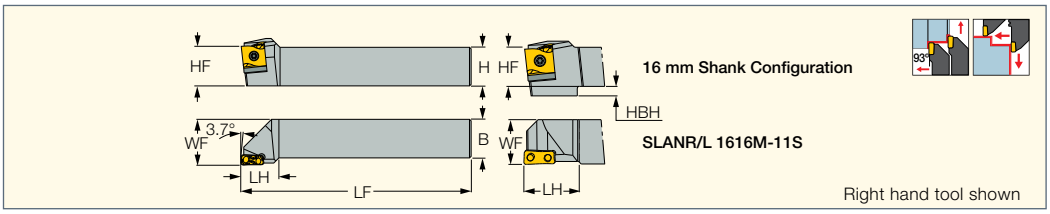
Designation						
PLANR/L 2525M-15 TANG	TLN 15R/L-HT	SR RS4	T-6/5	LR T15	SR TL-15	HW 3.5
PLANR/L 3232P-15 TANG	TLN 15R/L-HT	SR RS4	T-6/5	LR T15	SR TL-15	HW 3.5
PLANR/L 3232P-22 TANG	TLN 22R/L-HT	SR 10500401	T-7/5	LR T22	SR TL22	HW 5.0
PLANR/L 4040R-22 TANG	TLN 22R/L-HT	SR 10500401	T-7/5	LR T22	SR TL22	HW 5.0



HELITURN TANGENTIAL LINE

SLANR/L-TANG

Screw-Lock Tools Carrying the LNMX.. Tangentially Clamped Inserts



Designation	H	HF	B	LF	LH	WF	MIID[1]	HBH
SLANR/L 1616H-11 TANG	16.0	16.0	16.0	100.00	20.0	20.00	LNMX 1104..	4.0
SLANR/L 1616M-11S TANG	16.0	16.0	16.0	150.00	20.0	16.20	LNMX 1104..	4.0
SLANR/L 2020K-11 TANG	20.0	20.0	20.0	125.00	20.0	25.00	LNMX 1104..	4.0
SLANR/L 2525M-11 TANG	25.0	25.0	25.0	150.00	25.0	30.00	LNMX 1104..	4.0
SLANR/L 2020K-15 TANG	20.0	20.0	20.0	125.00	25.0	25.00	LNMX 1506..	4.0
SLANR/L 2525M-15 TANG	25.0	25.0	25.0	150.00	25.0	30.00	LNMX 1506..	4.0
SLANR/L 3232P-15 TANG	32.0	32.0	32.0	170.00	35.0	37.00	LNMX 1506..	4.0
SLANR/L 4040R-15 TANG	40.0	40.0	40.0	200.00	35.0	45.00	LNMX 1506..	4.0
SLANR/L 3232P-22 TANG	32.0	32.0	32.0	170.00	35.0	38.00	LNMX 2210..	4.0
SLANR/L 4040R-22 TANG	40.0	40.0	40.0	200.00	40.0	47.00	LNMX 2210..	4.0

• a_p max for facing: LNMX 11-2.8 mm, LNMX 15-3.8 mm, LNMX 22-5.8 mm

(1) Master insert identification

For inserts, see pages: LNMX-HM (226) • LNMX-HT (226) • LNMX-WG (227)

The **HELITURN** system features a unique, double-sided insert with 4 cutting edges for Fast Metal Removal (FMR) turning.
HELITURN is a tangentially clamped insert with a unique helical shaped cutting edge, useful for large depths of cut and higher than normal feed rates.
The LNMX...-HT **HELITURN** insert is a screw clamped into the SLANR toolholder and supported by the TLN ..-HT carbide seat. This seat has ground surfaces on the top and bottom to ensure perfect contact of the insert with the toolholder.
The upper rake face of this insert is mounted level with the top of the toolholder to enable chips to flow across the insert without being disturbed by clamps or the toolholder body.
The 4 curved helical cutting edges ensure positive radial rake angles and soft penetration into the material being cut.
The lower forces and smaller loads ensure better tool life, higher stability and the ability to use very large depths of cut and higher feeds.
The chipformer (with small bumps), deforms and breaks the chip into rib type curved segments which can easily be removed from the cutting area.
The insert has a frontal clearance angle of 3.7° with a 6° side clearance angle to enable machining at a 90° shoulder.
Depths of cut up to 8 mm and facing depths up to 3.2 mm and up to 1.2 mm/rev are achievable with **HELITURN**.
The high positive rake angle of these tools allows 10-15% less power usage than conventional tools with the same parameters.
By using **HELITURN** tools, huge cost savings and profitability in lathe operations are guaranteed.

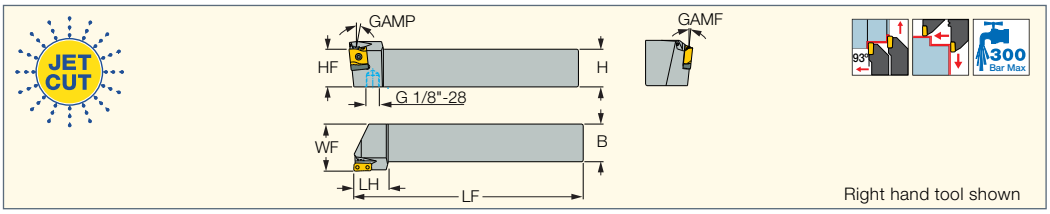
Spare Parts

Designation							
SLANR/L 1616H-11 TANG	TLN 11R/L-HT	SR RS4	T-6/5	SR 34-550-C	BLD T10/S7		SW6-SD
SLANR/L 1616M-11S TANG	TLN 11R/L-HT	SR RS4	T-6/5	SR 34-550-C	BLD T10/S7		SW6-SD
SLANR/L 2020K-11 TANG	TLN 11R/L-HT	SR RS4	T-6/5	SR 34-550-C	BLD T10/S7		SW6-SD
SLANR/L 2525M-11 TANG	TLN 11R/L-HT	SR RS4	T-6/5	SR 34-550-C	BLD T10/S7		SW6-SD
SLANR/L 2020K-15 TANG	TLN 15R/L-HT	SR RS4	T-6/5	SR 34-535-SN	BLD T15/S7	SW6-T-SH	
SLANR/L 2525M-15 TANG	TLN 15R/L-HT	SR RS4	T-6/5	SR 34-535-SN	BLD T15/S7	SW6-T-SH	
SLANR/L 3232P-15 TANG	TLN 15R/L-HT	SR RS4	T-6/5	SR 34-535-SN	BLD T15/S7	SW6-T-SH	
SLANR/L 4040R-15 TANG	TLN 15R/L-HT	SR RS4	T-6/5	SR 34-535-SN	BLD T15/S7	SW6-T-SH	
SLANR/L 3232P-22 TANG	TLN 22R/L-HT	SR 10500401	T-7/5	SR 14-591/L-SN	BLD T20/S7	SW6-T-SH	
SLANR/L 4040R-22 TANG	TLN 22R/L-HT	SR 10500401	T-7/5	SR 14-591/L-SN	BLD T20/S7	SW6-T-SH	

HELITURN TANGENTIAL LINE

SLANR/L-15-TANG-JHP

Screw-Lock Tools with Channels for High-Pressure Coolant Carrying LNMX Tangentially Clamped Inserts



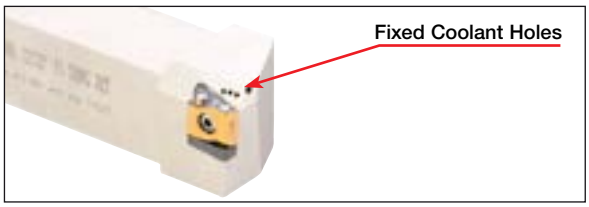
Designation	H	HF	B	LF	LH	WF	GAMP(1)	GAMF(2)	MIID(3)
SLANR/L 3232P-15 TANG-JHP	32.0	32.0	32.0	170.00	30.0	40.00	-6.0	-6.0	LNMX 1506

- a_p max for facing 3.8 mm
- For user guide, see pages 6-7,104-110

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see pages: LNMX-HM (226) • LNMX-HT (226) • LNMX-WG (227)

The tools with LNMX 1506... inserts feature fixed coolant holes.





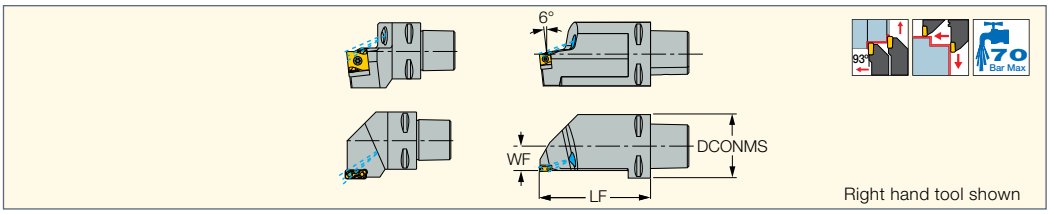
Spare Parts

Designation						
SLANR/L 3232P-15 TANG-JHP	TLN 15R/L-HT	SR RS4	SR 34-535-SN	BLD T15/S7	SW6-T-SH	T-6/5

HELITURN TANGENTIAL LINE

C#-SLANR/L-TANG

Tools with CAMFIX Shanks Carrying the LNMX-HT Tangentially Screw Clamped Inserts for High Production Cutting



Designation	DCONMS	LF	WF	MIID(2)	CP(3)	DCP(4)
C4 SLANR-27050-11 TANG	40.00	50.00	27.00	LNMX 1104..	70	1
C4 SLANR/L-27050-15 TANG	40.00	50.00	27.00	LNMX 1506..	70	1
C5 SLANR/L-35060-15 TANG	50.00	60.00	35.00	LNMX 1506..	70	1
C6 SLANR 25110-15 TANG (1)	63.00	110.00	25.00	LNMX 1506..	70	1
C6 SLANR/L-45065-15 TANG	63.00	65.00	45.00	LNMX 1506..	70	1
C6 SLANR/L-45065-22 TANG	63.00	65.00	45.00	LNMX 2210..	70	1

- a_p max for facing: LNMX 11-2.8 mm, LNMX 15-3.8 mm

(1) Designed for mill-turn machines
(2) Master insert identification
(3) Coolant pressure (Bar)
(4) 1 - Slot for data chip, 0 - Without slot for data chip

For inserts, see pages: LNMX-HM (226) • LNMX-HT (226) • LNMX-WG (227)

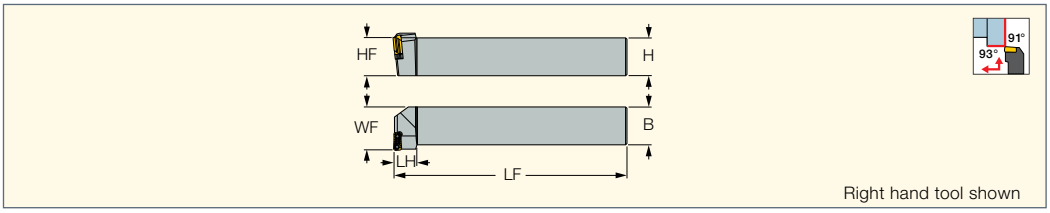
Spare Parts

Designation								
C4 SLANR-27050-11 TANG	TLN 11R-HT	SR RS4	T-6/5	SR 34-550-C	BLD T10/S7		SW6-SD	EZ 83
C4 SLANR/L-27050-15 TANG	TLN 15R/L-HT	SR RS4	T-6/5	SR 34-535-SN	BLD T15/S7	SW6-T-SH		EZ 104
C5 SLANR/L-35060-15 TANG	TLN 15R/L-HT	SR RS4	T-6/5	SR 34-535-SN	BLD T15/S7	SW6-T-SH		EZ 104
C6 SLANR 25110-15 TANG	TLN 15R/L-HT	SR RS4	T-6/5	SR 34-535-SN	BLD T15/S7	SW6-T-SH		EZ 146
C6 SLANR/L-45065-15 TANG	TLN 15R/L-HT	SR RS4	T-6/5	SR 34-535-SN	BLD T15/S7	SW6-T-SH		EZ 104
C6 SLANR/L-45065-22 TANG	TLN 22R/L-HT	SR 10500401	T-7/5	SR 14-591/L-SN	BLD T20/S7	SW6-T-SH		EZ 104

HELITURN TANGENTIAL LINE

SLFNR/L-TANG

Tools Carrying LNMX
Tangentially Clamped Inserts



Designation	H	HF	B	LF	LH	WF	MIID[1]
SLFNR/L 2525M-15 TANG	25.0	25.0	25.0	150.00	20.0	30.00	LNMX 1506..L/R
SLFNR/L 3232P-15 TANG	32.0	32.0	32.0	170.00	20.0	37.00	LNMX 1506..L/R

- a_p max for longitudinal turning is 5.8 mm

(1) Right-hand insert for left-hand holder, left-hand insert for right-hand holder

For inserts, see pages: LNMX-HM (226) • LNMX-HT (226) • LNMX-WG (227)

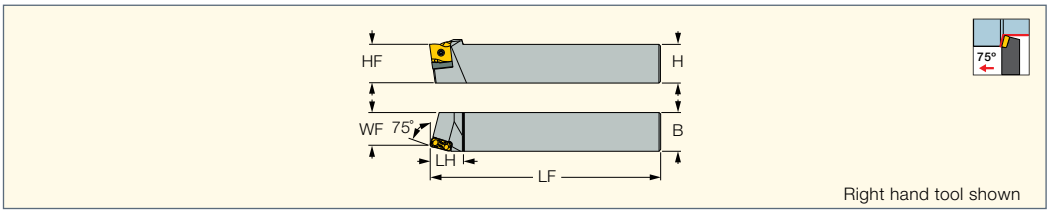
Spare Parts

Designation						
SLFNR/L-TANG	TLN 15R/L-HT	SR RS4	T-6/5	SR 34-535-SN	BLD T15/S7	SW6-T-SH

HELITURN TANGENTIAL LINE

SLBNR/L-TANG

External 75° Lead Tools
Carrying Tangentially
Screw Clamped Inserts



Designation	H	HF	B	LF	LH	WF	MIID[1]
SLBNR/L 4040R-22 TANG	40.0	40.0	40.0	200.00	35.0	35.00	LNMX 2210..R/L

(1) Master insert identification

For inserts, see page: LNMX-HT (226)

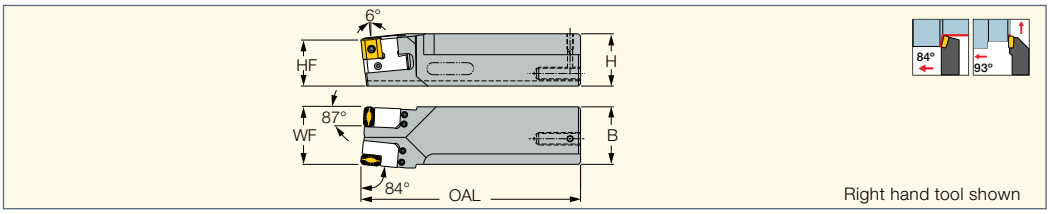
Spare Parts

Designation						
SLBNR/L 4040R-22 TANG	TLN 22R/L-HT	SR 10500401	T-7/5	SR 14-591/L-SN	BLD T20/S7	SW6-T-SH



ISOTURN

PRWR/L
Toolholders with Cartridges for Under Floor Railroad Wheel Re-Turning Lathes (Model 106 Thread Profile Machine)



Designation	H	HF	B	OAL	MIID(1)	WF		
PRWR/L 50-55	50.0	44.0	55.0	210.00	LNMX 19/30	55.00	SR M6X1X16	HW 3.0

- Cartridges should be ordered separately

(1) Master insert identification

For inserts, see page: LNMX 19/30 (227)

Cutting Data

Speed	P	Grade Recommendation
High ↑ ↓ Low	IC8150	A very hard substrate with a cobalt enriched layer, improved MTCVD TiCN and a thick alpha Al_2O_3 CVD coating. Features excellent thermal stability, resistance to chipping and plastic deformation. Recommended for high speed machining of steel at stable or slightly unstable conditions.
	IC8250	A tough substrate with a cobalt enriched layer combined with improved MTCVD TiCN and a thick alpha Al_2O_3 CVD coating. Recommended for general use machining of steel in a wide range of conditions, featuring high toughness and resistance to chipping and plastic deformation.

Cutting Data Recommendations



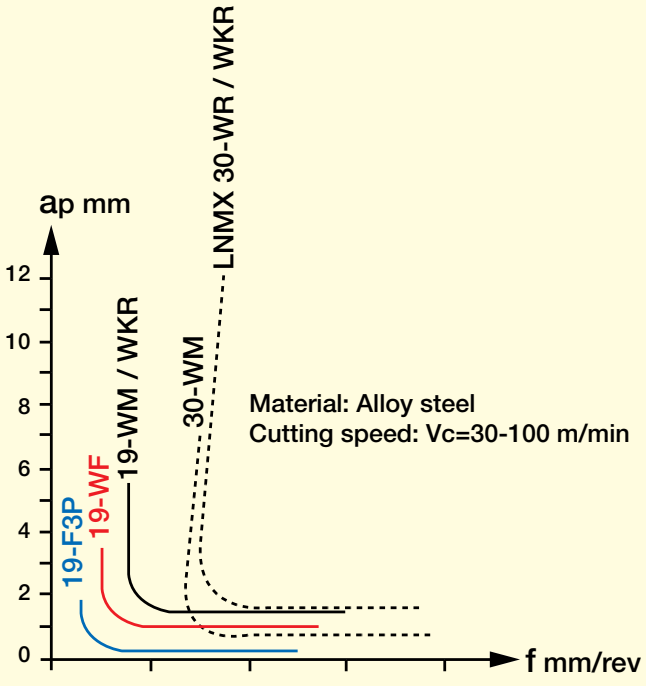
Cutting Data by Area:

Area	V_c	F
A	30 - 70 m/min	0.3 - 1.8 Mm/rev
B	50 - 100 m/min	0.5 - 2.0 Mm/rev
C	50 - 100 m/min	0.5 - 2.0 Mm/rev

Depth of Cut According to Chipbreaker Geometry:

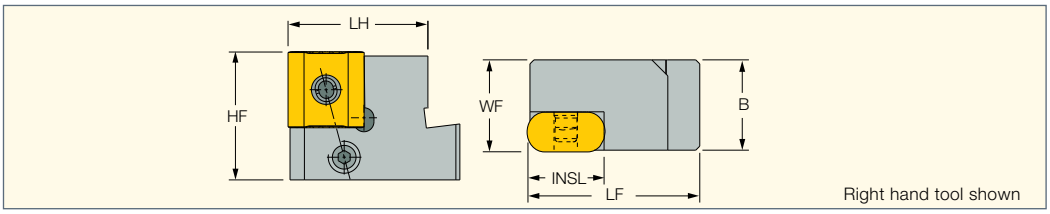
F3P	0.20-1.50
WF	1.00-3.50
WM (19)	1.50-5.00
WKR (19)	3.00-6.00
WKR/WR (30)	3.00-12.00

In case of worn wheels with skid flats, built-up and shelled tread or thermal cracks, reduce the cutting speed to **ISCAR**'s recommended minimum speed.
High carbon wheels should be machined at **ISCAR**'s recommended low range cutting speed. Feeds should be optimized within the recommended range per chipformer and actual chip formation.



ISOTURN

PRWR/L 175-CA
Cartridges for PRWR/L 50-55
Railroad Wheel Re-Turning Tools

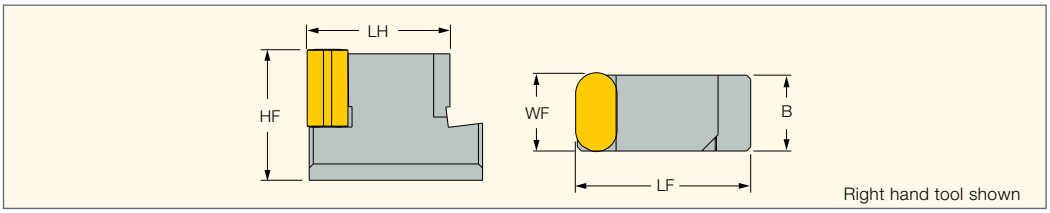


Designation	HF	B	LF	LH	WF	INSL	MIID(1)			
PRWR/L 175-CA-19	32.0	22.6	43.00	35.0	23.00	19.00	LNMX 191940	SR LCS 5	LR 5	HW 3.0
PRWR/L 175-CA-30	32.0	22.6	43.00	35.0	23.00	30.00	LNMX 301940	SR LCS 5	LR 5	HW 3.0

(1) Master insert identification

ISOTURN

PRWR/L 177-CA
Cartridges for PRWR/L 50-55
Railroad Wheel Re-Turning Tools

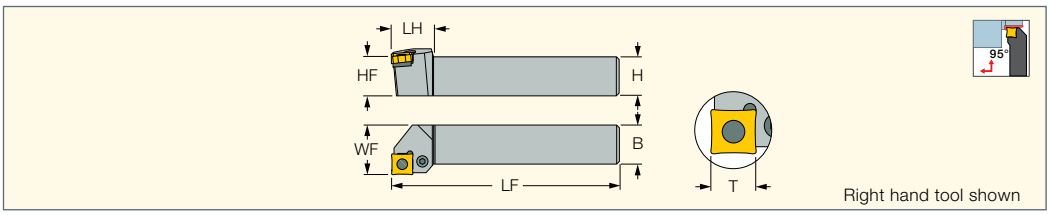


Designation	HF	B	LF	LH	WF	MIID(1)			
PRWR/L 177-CA-19	32.0	18.6	43.00	35.0	19.10	LNMX 191940	SR LCS 5	LR 5	HW 3.0

(1) Master insert identification

ISOTURN

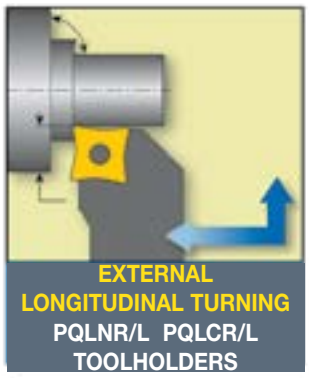
PQLNR/L
Lever Lock Tools Carrying
Negative Inserts with
Four 80° Corners



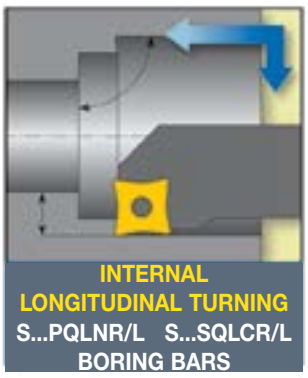
Designation	H	HF	B	LF	LH	WF	T(1)	MIID(2)
PQLNR/L 1616H-09	16.0	16.0	16.0	100.00	21.0	20.00	8	QNMG 0904
PQLNR/L 2020K-09	20.0	20.0	20.0	125.00	26.6	25.00	8	QNMG 0904
PQLNR/L 2525M-09	25.0	25.0	25.0	150.00	26.6	32.00	8	QNMG 0904
PQLNR/L 2020K-12	20.0	20.0	20.0	125.00	26.6	25.00	10	QNMG 1204
PQLNR/L 2525M-12	25.0	25.0	25.0	150.00	26.6	32.00	10	QNMG 1204

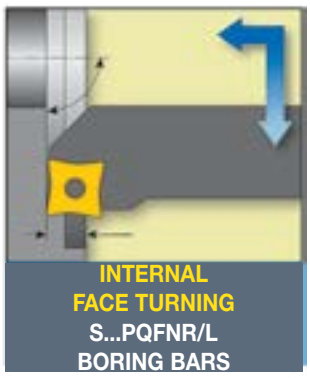
(1) T for r 0.8
(2) Master insert identification

For inserts, see pages: QNMG-GN (229) • QNMG-NF (228) • QNMG-PP (228) • QNMG-TF (228)









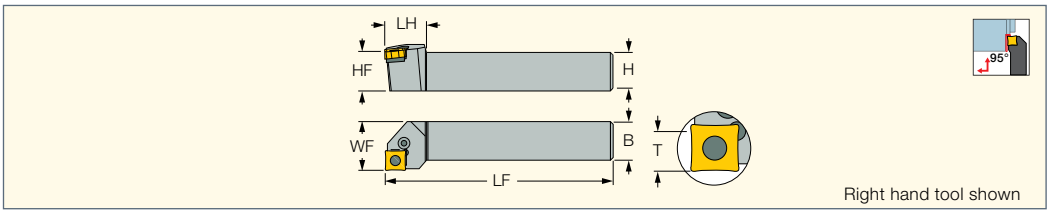
Depth of shoulder T with angles over 92° is unlimited in both directions.

Spare Parts

Designation						
PQLNR/L 1616H-09	TXC 322	SP 3	PN 3-4	LR 3	SR 117-2014	HW 2.5
PQLNR/L 2020K-09	TXC 322	SP 3	PN 3-4	LR 3	SR 117-2014	HW 2.5
PQLNR/L 2525M-09	TXC 322	SP 3	PN 3-4	LR 3	SR 117-2014	HW 2.5
PQLNR/L 2020K-12	TSN 423	SP 4	PN 3-4	LR 4	SR 117-2010	HW 3.0
PQLNR/L 2525M-12	TSN 423	SP 4	PN 3-4	LR 4	SR 117-2010	HW 3.0

ISOTURN

PQFNR/L
Lever Lock Face Turning Tools Carrying Negative Inserts with Four 80° Corners



Designation	H	HF	B	LF	LH	WF	T(1)	MIID(2)
PQFNR/L 2020K-09	20.0	20.0	20.0	125.00	26.0	25.00	8	QNMG 0904
PQFNR/L 2020K-12	20.0	20.0	20.0	125.00	26.0	25.00	10	QNMG 1204
PQFNR/L 2525M-12	25.0	25.0	25.0	150.00	26.0	25.00	10	QNMG 1204

(1) T for r 0.8
(2) Master insert identification

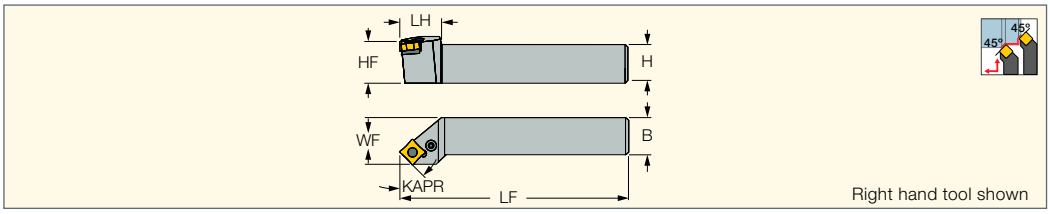
For inserts, see pages: QNMG-GN (229) • QNMG-NF (228) • QNMG-PP (228) • QNMG-TF (228)

Spare Parts

Designation						
PQFNR/L 2020K-09	TXC 322	SP 3	PN 3-4	LR 3	SR 117-2014	HW 2.5
PQFNR/L 2020K-12	TSN 423	SP 4	PN 3-4	LR 4	SR 117-2010	HW 3.0
PQFNR/L 2525M-12	TSN 423	SP 4	PN 3-4	LR 4	SR 117-2010	HW 3.0

ISOTURN

PQSNR/L
External 45° Lead Tools Carrying Negative Inserts with Four 80° Corners



Designation	H	HF	B	LF	LH	WF	MIID(1)	KAPR(2)
PQSNR/L 2525M-12	25.0	25.0	25.0	150.00	30.0	32.00	QNMG 1204	45.0

(1) Master insert identification
(2) Tool cutting edge angle

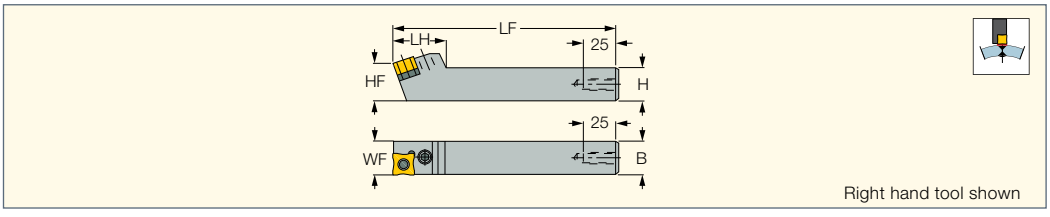
For inserts, see pages: QNMG-GN (229) • QNMG-NF (228) • QNMG-PP (228) • QNMG-TF (228)

Spare Parts

Designation						
PQSNR/L	TSN 423	SP 4	PN 3-4	LR 4	SR 117-2010	HW 3.0

ISOTURN

PSANR/L
Lever Lock Tools Carrying Negative Square Pipe Skiving Inserts



Designation	H	B	HF	LF	LH	WF	MIID(2)
PSANR/L 2525M-15 (1)	25.0	25.0	26.0	150.00	38.0	25.00	SNMX 1507

(1) TXN 5-2 for SNMX 150608R-.. inserts without chipbreaker for hard materials.
(2) Master insert identification

For inserts, see pages: SNMX 150608R-.. (273) • SNMX 150708R-.. (273)

Spare Parts

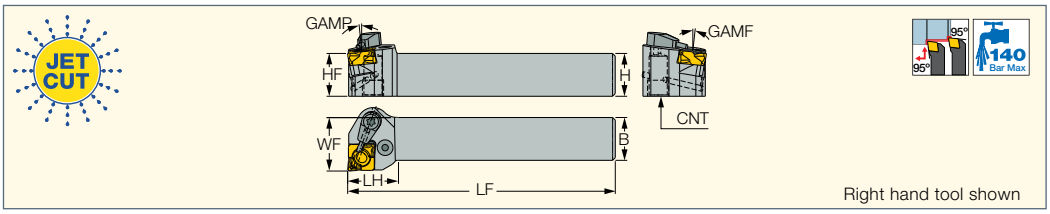
Designation					
PSANR/L 2525M-15	TXN 532	TXN 5-2*	SR 117-2020	LR 5S	HW 3.0

* Optional, to be ordered separately

LOGIQ4TURN

PCLXR/L-JHP

Lever Lock Tools with Channels for High-Pressure Coolant Carrying CXMG 80° Rhombic Inserts



Designation	B	H	HF	LF	LH	WF	GAMP(1)	GAMF(2)	MIID(3)	CNT
PCLXR/L 1212F-09X-JHP	12.0	12.0	12.0	80.00	20.0	16.00	6.0	6.0	CXMG 09...	UNF 5/16-24
PCLXR/L 1616H-09X-JHP	16.0	16.0	16.0	100.00	20.0	20.00	6.0	6.0	CXMG 09...	UNF 5/16-24
PCLXR/L 2020K-12X-JHP	20.0	20.0	20.0	125.00	25.0	25.00	6.0	6.0	CXMG 12...	G1/8
PCLXR/L 2525M-12X-JHP	25.0	25.0	25.0	150.00	25.0	32.00	6.0	6.0	CXMG 12...	G1/8
PCLXR/L 3232P-12X-JHP	32.0	32.0	32.0	175.00	25.0	40.00	6.0	6.0	CXMG 12...	G1/8

- For user guide, see pages 6-7,104-110

(1) Rake angle axial

(2) Rake angle radial

(3) Master insert identification

For inserts, see pages: CXGG-M3N-P (230) • CXMG-F3M (230) • CXMG-F3P (229) • CXMG-M3M (230) • CXMG-M3P (229)

For holders, see page: SBTH-JHP (421)

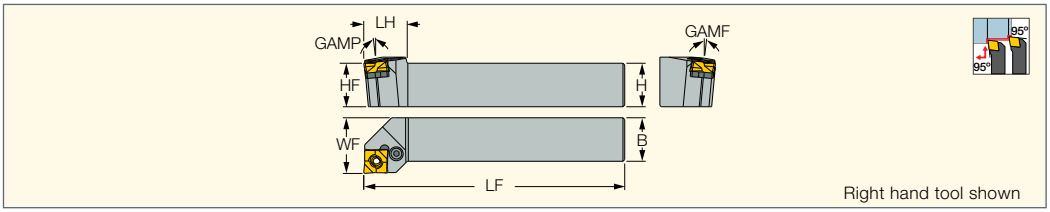
Spare Parts

Designation								
PCLXR/L 1212F-09X-JHP		LR 3X SET	SR M6XL11.5V			T-8/5		S-CU-JHP-A SET
PCLXR/L 1616H-09X-JHP		LR 3X SET	SR M6XL11.5V			T-8/5		S-CU-JHP-A SET
PCLXR/L 2020K-12X-JHP	TCNX 423	LR 4X-CA	SR LCS 5	HW 3.0	PN 3-4		SP 4	CH-1.9D-JHP-A SET
PCLXR/L 2525M-12X-JHP	TCNX 423	LR 4X-CA	SR LCS 5	HW 3.0	PN 3-4		SP 4	CH-1.9D-JHP-A SET
PCLXR/L 3232P-12X-JHP	TCNX 423	LR 4X-CA	SR LCS 5	HW 3.0	PN 3-4		SP 4	CH-1.9D-JHP-A SET

LOGIQ4TURN

PCLXR/L

Lever Lock Tools Carrying CXMG 80° Rhombic Inserts



Designation	B	H	HF	LF	LH	WF	GAMP(1)	GAMF(2)	MIID(3)
PCLXR/L 1212F-09X	12.0	12.0	12.0	80.00	19.0	16.00	6.0	6.0	CXMG 09...
PCLXR/L 1616H-09X	16.0	16.0	16.0	100.00	19.0	20.00	6.0	6.0	CXMG 09...
PCLXR/L 2020K-12X	20.0	20.0	20.0	125.00	25.0	25.00	6.0	6.0	CXMG 12...
PCLXR/L 2525M-12X	25.0	25.0	25.0	150.00	25.0	32.00	6.0	6.0	CXMG 12...
PCLXR/L 3232P-12X	32.0	32.0	32.0	170.00	25.0	40.00	6.0	6.0	CXMG 12...

(1) Rake angle axial

(2) Rake angle radial

(3) Master insert identification

For inserts, see pages: CXGG-M3N-P (230) • CXMG-F3M (230) • CXMG-F3P (229) • CXMG-M3M (230) • CXMG-M3P (229)

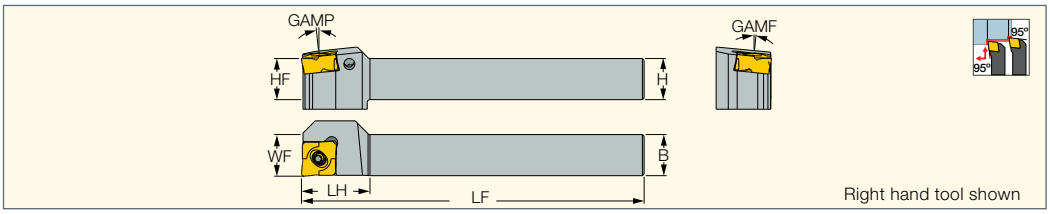
For holders, see page: SBTH-JHP (421)

Spare Parts

Designation							
PCLXR/L 1212F-09X		LR 3X SET	SR M6XL11.5V				T-8/5
PCLXR/L 1616H-09X		LR 3X SET	SR M6XL11.5V				T-8/5
PCLXR/L 2020K-12X	TCNX 423	LR 4X-CA	SR LCS 5	HW 3.0	PN 3-4	SP 4	
PCLXR/L 2525M-12X	TCNX 423	LR 4X-CA	SR LCS 5	HW 3.0	PN 3-4	SP 4	
PCLXR/L 3232P-12X	TCNX 423	LR 4X-CA	SR LCS 5	HW 3.0	PN 3-4	SP 4	

LOGIQ4TURN

PCLXR/L-S
Lever Lock Tools Carrying CXMG 80° Rhombic Inserts for Swiss-Type Automatic Lathes



Designation	B	H	HF	LF	LH	WF	GAMP(1)	GAMF(2)	MIID(3)
PCLXR/L 1212H-09XS	12.0	12.0	12.0	100.00	20.0	12.15	6.0	6.0	CXMG 090402-F3P
PCLXR/L 1616K-09XS	16.0	16.0	16.0	125.00	20.0	16.15	6.0	6.0	CXMG 090402-F3P

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

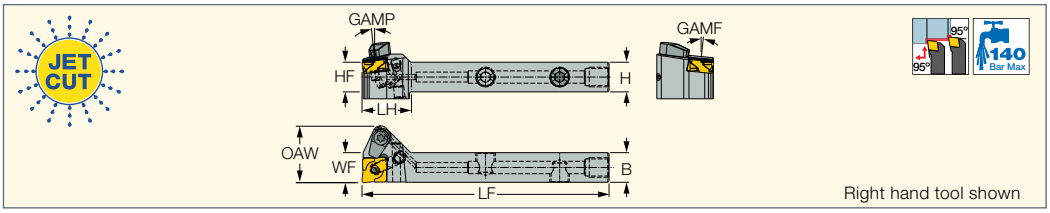
For inserts, see pages: CXGG-M3N-P (230) • CXMG-F3M (230) • CXMG-F3P (229) • CXMG-M3M (230) • CXMG-M3P (229)
For holders, see pages: SBTH-JHP (421) • VDI-B1/B4A-JHPMC (840) • VDI-B2/B3A-JHPMC (841) • VDI-C1/C4A-JHPMC (841) • VDI-C2/C3A-JHPMC (842)

Spare Parts

Designation				
PCLXR/L-S	LR 3X SET	SR-SW-M4X0.7	T-8/5	PIN-SW LR-3X-D4.15

LOGIQ4TURN

PCLXR/L-S-JHP
Lever Lock Tools with JETCUT Coolant System Carrying CXMG 80° Rhombic Inserts for Swiss-Type Automatic Lathes



Designation	B	H	HF	LF	LH	WF	OAW	GAMP(1)	GAMF(2)	MIID(3)
PCLXR/L 1212H-09XS-JHP	12.0	12.0	12.0	100.00	20.0	12.15	23.00	6.0	6.0	CXMG 090402-F3P
PCLXR/L 1616K-09XS-JHP	16.0	16.0	16.0	125.00	20.0	16.15	23.00	6.0	6.0	CXMG 090402-F3P

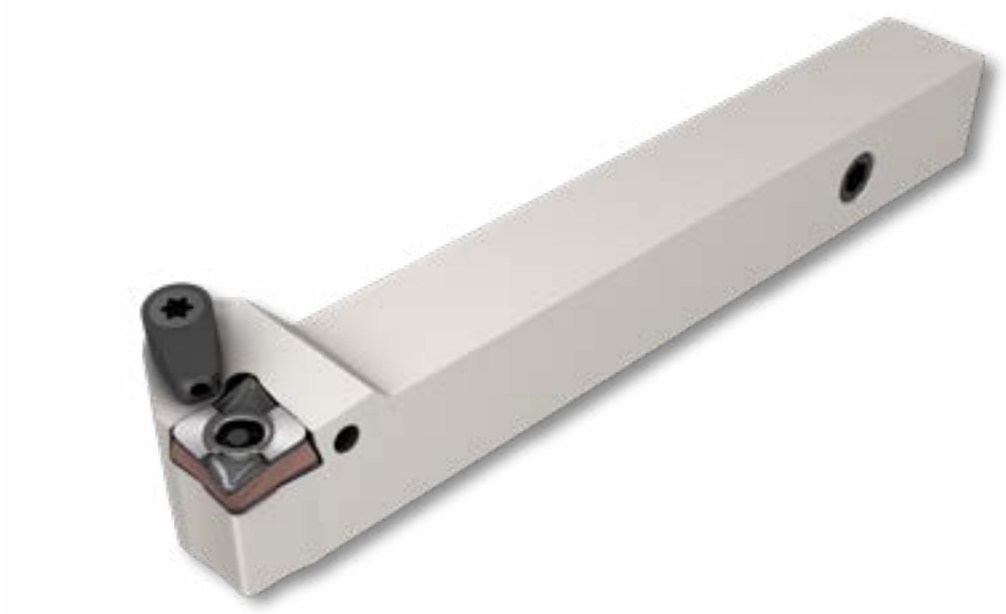
• For user guide, see pages 6-7,104-110
(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see pages: CXGG-M3N-P (230) • CXMG-F3M (230) • CXMG-F3P (229) • CXMG-M3M (230) • CXMG-M3P (229)
For holders, see page: SBTH-JHP (421)

Spare Parts

Designation									
PCLXR/L-S-JHP	LR 3X SET	SR-SW-M4X0.7	SR M5X5 SPR*	SR 5/16UNF TL360	T-8/5	SPRING-.55X2.9X6X6.8*	CH-1.9D-JHP-A SET	SR M3X3 DIN913 TL360	PIN-SW LR-3X-D4.15

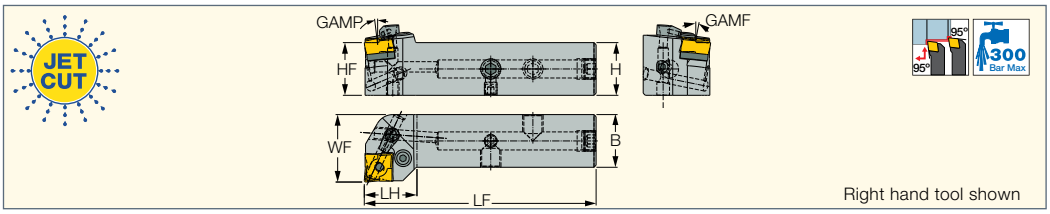
* Optional, to be ordered separately



LOGIQ4TURN

PCLXR/L-JHP-MC

Lever Lock Tools with Channels for High-Pressure Coolant Carrying CXMG 80° Rhombic Inserts



Designation	B	H	HF	LF	LH	WF	GAMP(1)	GAMF(2)	MIID(3)
PCLXR/L 2020X-09X-JHP-MC	20.0	20.0	20.0	90.00	20.0	25.00	6.0	6.0	CXMG 09...
PCLXR/L 2525X-09X-JHP-MC	25.0	25.0	25.0	105.00	20.0	32.00	6.0	6.0	CXMG 09...
PCLXR/L 2020X-12X-JHP-MC	20.0	20.0	20.0	95.00	25.0	25.00	6.0	6.0	CXMG 12...
PCLXR/L 2525X-12X-JHP-MC	25.0	25.0	25.0	110.00	25.0	32.00	6.0	6.0	CXMG 12...

- For user guide, see pages 6-7,104-110

(1) Rake angle axial

(2) Rake angle radial

(3) Master insert identification

For inserts, see pages: CXGG-M3N-P (230) • CXMG-F3M (230) • CXMG-F3P (229) • CXMG-M3M (230) • CXMG-M3P (229)

For holders, see pages: VDI-B1/B4AK-JHPMC (841) • VDI-B2/B3A-JHPMC (841) • VDI-B2/B3AK-JHPMC (841) • VDI-C1/C4A-JHPMC (841) • VDI-C1/C4AK-JHPMC (842) • VDI-C2/C3A-JHPMC (842) • VDI-C2/C3AK-JHPMC (842)

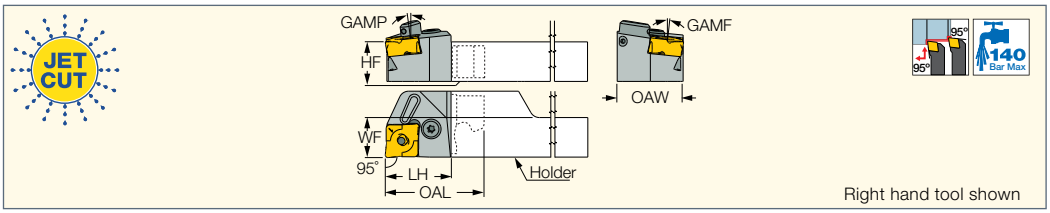
Spare Parts

Designation										
PCLXL 2020X-09X-JHP-MC	TSN 323	S-CU-JHP-A SET	SR M5X5 DIN913 TL360	SR M6X6 DIN913 TL360	PLG G1/8 TL360	SR 117-2014	LR 3W	PN 3-4	SP 3	HW 2.5/5
PCLXR 2020X-09X-JHP-MC	TSN 323	S-CU-JHP-A SET	SR M5X5 DIN913 TL360	SR M6X6 DIN913 TL360	PLG G1/8 TL360	SR 117-2014	LR 3XL	PN 3-4	SP 3	HW 2.5/5
PCLXR/L 2525X-09X-JHP-MC	TSN 323	S-CU-JHP-A SET	SR M5X5 DIN913 TL360	SR M6X6 DIN913 TL360	PLG G1/8 TL360	SR 117-2014	LR 3XL	PN 3-4	SP 3	HW 2.5/5
PCLXR/L 2020X-12X-JHP-MC	TCNX 423	CH-1.9D-JHP-A SET	SR M5X5 DIN913 TL360	SR M6X6 DIN913 TL360	PLG G1/8 TL360	SR LCS 5	LR 4X-CA	PN 3-4	SP 4	HW 3.0
PCLXR/L 2525X-12X-JHP-MC	TCNX 423	CH-1.9D-JHP-A SET	SR M5X5 DIN913 TL360	SR M6X6 DIN913 TL360	PLG G1/8 TL360	SR LCS 5	LR 4X-CA	PN 3-4	SP 4	HW 3.0

LOGIQ4TURN

NQCH-PCLXR/L-S-JHP

Lever Lock JETCUT Modular Heads Carrying Positive Double-Sided 80° Rhombic Inserts for Swiss-Type Machines



Designation	WF	HF	LH	OAL	OAW	GAMP(1)	GAMF(2)	MIID(3)
NQCH12-PCLXR/L-09XS-JHP	12.15	12.0	20.0	28.80	20.15	6.0	6.0	CXMG.. 0904
NQCH16-PCLXR/L-09XS-JHP	16.15	16.0	20.0	28.80	20.15	6.0	6.0	CXMG.. 0904

- Use only RH Shank with RH Head and LH Shank with LH Head

(1) Rake angle axial

(2) Rake angle radial

(3) Master insert identification

For inserts, see pages: CXGG-M3N-P (230) • CXMG-F3M (230) • CXMG-F3P (229) • CXMG-M3M (230) • CXMG-M3P (229)

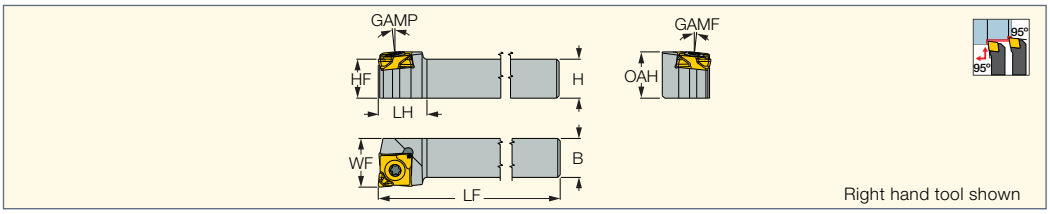
For holders, see page: NQCH-JHP (424)

Spare Parts

Designation			
NQCH-PCLXR/L-S-JHP	LR 3X SET	SR M6XL11.5V	T-8/5

LOGIQ4TURN

SCLXR/L 06X
Screw Lock Carrying CXMU
80° Rhombic Inserts



Designation	B	H	HF	LF	LH	WF	OAH	GAMP(1)	GAMF(2)	MIID(3)
SCLXR/L 0808F-06X	8.0	8.0	8.0	80.00	10.0	10.00	9.50	6.0	6.0	CXMU 060204

New

- For user guide, see pages 6-7,104-110

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

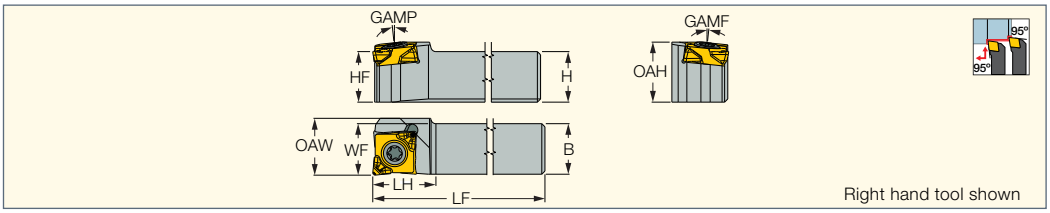
For inserts, see pages: CXMU-F3M (231) • CXMU-F3P (231)

Spare Parts

Designation		
SCLXR/L 06X	SR M2.5-T8-MT	T-8/5

LOGIQ4TURN

SCLXR/L 06XS
Screw Lock Carrying CXMU
80° Rhombic Inserts for
Swiss-Type Automatic Lathes



Designation	B	H	HF	LF	LH	WF	OAW	OAH	GAMP(1)	GAMF(2)	MIID(3)
SCLXR/L 0808K-06XS	8.0	8.0	8.0	125.00	10.0	8.15	9.00	9.50	6.0	6.0	CXMU 060204

New

- For user guide, see pages 6-7,104-110

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

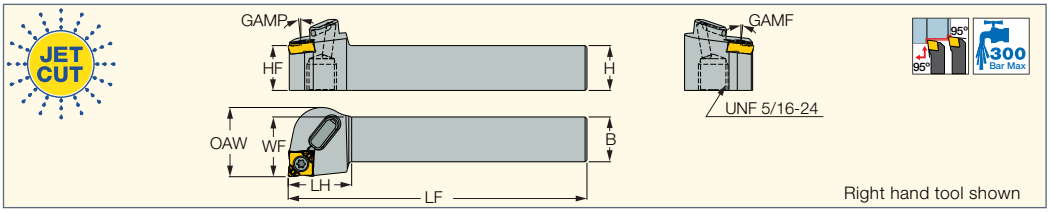
For inserts, see pages: CXMU-F3M (231) • CXMU-F3P (231)

Spare Parts

Designation		
SCLXR/L 06XS	SR M2.5-T8-MT	T-8/5

LOGIQ4TURN

SCLXR/L 06X-JHP
Screw Lock Tools with
Channel for High-Pressure
Coolant Carrying CXMU
80° Rhombic Inserts



Designation	B	H	HF	LF	LH	WF	OAW	GAMP(1)	GAMF(2)	MIID(3)
SCLXR/L 1010F-06X-JHP	10.0	10.0	10.0	80.00	17.0	12.00	18.50	6.0	6.0	CXMU 060208
SCLXR/L 1212F-06X-JHP	12.0	12.0	12.0	80.00	17.0	16.00	18.50	6.0	6.0	CXMU 060208
SCLXR/L 1616H-06X-JHP	16.0	16.0	16.0	100.00	17.0	20.00	20.00	6.0	6.0	CXMU 060208

New

- For user guide, see pages 6-7,104-110

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see pages: CXMU-F3M (231) • CXMU-F3P (231)

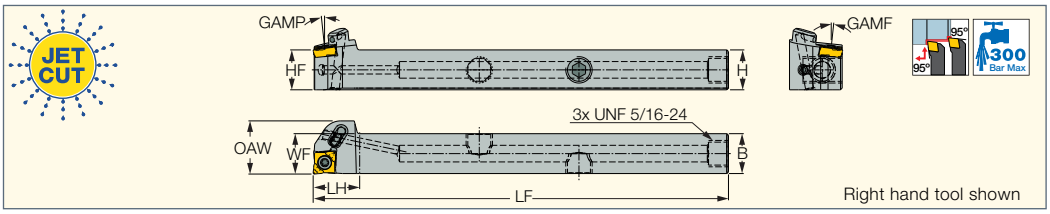
Spare Parts

Designation		
SCLXR/L 06X-JHP	SR M2.5-T8-MT	T-8/5

LOGIQ4TURN

SCLXR/L 06XS-JHP-MC

Screw Lock Tools with JETCUT Coolant System Carrying CXMU 80° Rhombic Inserts for Swiss-Type Automatic Lathes



Designation	B	H	HF	LF	LH	WF	OAW	GAMP(1)	GAMF(2)	MIID(3)
SCLXR/L 1010K-06XS-JHP-MC	10.0	10.0	10.0	125.00	14.0	10.15	16.00	6.0	6.0	CXMU 060208
SCLXR/L 1212K-06XS-JHP-MC	12.0	12.0	12.0	125.00	14.0	12.15	16.00	6.0	6.0	CXMU 060208
SCLXR/L 1616K-06XS-JHP-MC	16.0	16.0	16.0	125.00	14.0	16.15	16.15	6.0	6.0	CXMU 060208

- For user guide, see pages 6-7,104-110

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see pages: CXMU-F3M (231) • CXMU-F3P (231)

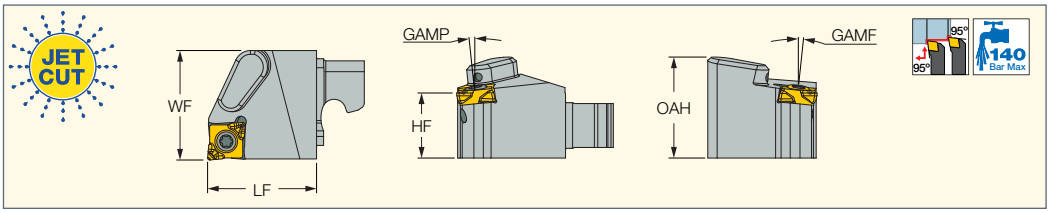
Spare Parts

Designation				
SCLXR/L 06XS-JHP-MC	SR M2.5-T8-MT	T-8/5	SR 5/16UNF TL360	SR M3X3 DIN913 TL360

LOGIQ4TURN

NQCH-SCLXR/L-JHP

Screw Lock JETCUT Modular Heads Carrying Positive Double-Sided 80° Rhombic Inserts for Swiss-Type Machines



Designation	WF	HF	LF	OAH	GAMP(1)	GAMF(2)	MIID(3)
NQCH10-SCLXR/L-06X-JHP	10.20	10.0	20.00	14.20	6.0	6.0	CXMU 060208
NQCH12-SCLXR/L-06X-JHP	12.20	12.0	20.00	18.60	6.0	6.0	CXMU 060208

New

- For user guide, see pages 6-7,104-110

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

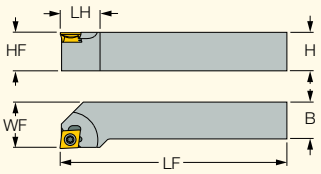
For inserts, see pages: CXMU-F3M (231) • CXMU-F3P (231)

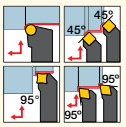
Spare Parts

Designation		
NQCH-SCLXR/L-JHP	SR M2.5-T8-MT	T-8/5

CHAMTURN

SUXCR/L-CM
Screw Lock Tools
Carrying Four Different 7°
Clearance Geometries





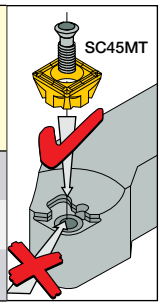
Right hand tool shown

Designation	H	HF	B	LF	LH	WF	MIID[1]
SUXCR/L 1616H-10 CM	16.0	16.0	16.0	100.00	24.0	20.00	CC95MT 10..
SUXCR/L 2020K-10 CM	20.0	20.0	20.0	125.00	25.0	25.00	CC95MT 10..
SUXCR/L 2525M-10 CM	25.0	25.0	25.0	150.00	25.0	32.00	CC95MT 10..

(1) Master insert identification

For inserts, see pages: CC95MT-SM (265) • SC45MT-SM (266)

Designation	H	HF	LF	LH	WF	MIID
SUXCR/L 1616H-10 CM	16.0	16.0	100.00	24.0	20 21.2	CC95MT... SC45MT...
SUXCR/L 2020K-10 CM	20.0	20.0	125.00	25.0	25 26.2	CC95MT... SC45MT...
SUXCR/L 2525M-10 CM	25.0	25.0	150.00	25.0	32 33.2	CC95MT... SC45MT...



Clamping direction for SC45MT...

Multifunction Tool Can Carry Two Different Inserts

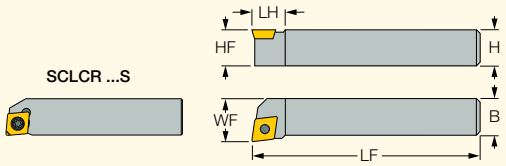
- Unique, versatile **ISCAR** pocket
- For external applications
- Covers most common operations
- Simplifies tool selection
- Simple screw clamping
- Minimum spare parts

Spare Parts

Designation		
SUXCR/L-CM	SR 14-544/S	T-15/5

ISOTURN

SCLCR/L
Screw Lock Tools Carrying
80° Diamond Inserts with
7° Clearance Angle





Right hand tool shown

Designation	H	HF	B	LF	LH	WF	MIID[2]					
SCLCR/L 0808F-06	8.0	8.0	8.0	80.00	10.0	10.00	CC.. 0602	SR 14-548	T-7/5			
SCLCR/L 1010F-06	10.0	10.0	10.0	80.00	10.0	12.00	CC.. 0602	SR 14-548	T-7/5			
SCLCR/L 1212F-09	12.0	12.0	12.0	80.00	14.0	16.00	CC.. 09T3	SR 16-236	T-15/5			
SCLCR 1212M-09S (1)	12.0	12.0	12.0	150.00	11.5	12.15	CC.. 09T3	SR 16-236	T-15/5			
SCLCR/L 1616H-09	16.0	16.0	16.0	100.00	14.0	20.00	CC.. 09T3	SR 16-236	T-15/5			
SCLCR 1616M-09S (1)	16.0	16.0	16.0	150.00	11.5	16.15	CC.. 09T3	SR 16-236	T-15/5			
SCLCR/L 2020K-12	20.0	20.0	20.0	125.00	18.0	25.00	CC.. 1204	SR 16-212	T-20/5			
SCLCR/L 2525M-12	25.0	25.0	25.0	150.00	20.0	32.00	CC.. 1204	SR 16-212	T-20/5	TCC 4-2	SR TC-4	HW 3.0

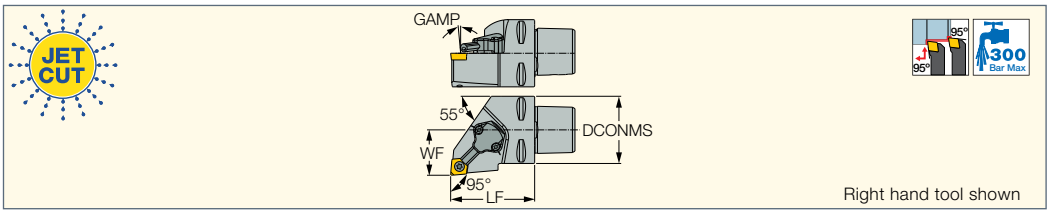
(1) For Swiss-type machines
(2) Master insert identification

For inserts, see pages: CCET-WF (238) • CCGT-AF (270) • CCGT-AS (270) • CCGT-F1M-12P (232) • CCGT-F1M-20P (233) • CCMT-14 (237) • CCMT-CERMET (235) • CCMT-F3M (234) • CCMT-F3P (233) • CCMT-M3M (235) • CCMT-M3P (234) • CCMT-PF (236) • CCMT-WG (238) • CCMT/CCGT (237) • CCMT/CCGT-SM (236)

ISOTURN

C#-SCLCR/L-JHP

Screw Clamp Tools with CAMFIX Shanks and Channels for High-Pressure Coolant Carrying Positive 80° Rhombic Inserts



Designation	DCONMS	WF	LF	GAMP(1)	MIID(2)	CP(3)	DCP(4)
C3 SCLCR-22045-09-JHP	32.00	22.00	45.00	0.0	CC.. 09T3	300	0
C4 SCLCR/L 27050-09-JHP	40.00	27.00	50.00	0.0	CC.. 09T3	300	1
C5 SCLCR/L 35060-09-JHP	50.00	35.00	60.00	0.0	CC.. 09T3	300	1

- For user guide, see pages 6-7,104-110

(1) Rake angle axial

(2) Master insert identification

(3) Coolant pressure (Bar)

(4) 1 - Slot for data chip, 0 - Without slot for data chip

For inserts, see pages: CCGT-F1M-12P (232) • CCGT-F1M-20P (233) • CCMT-CERMET (235) • CCMT-F3P (233) • CCMT-M3P (234) • CCMT-F3M (234) • CCMT-M3M (235) • CCMT-PF (236) • CCMT/CCGT-SM (236) • CCET-WF (238) • CCMT-WG (238) • CCGT-AS (270) • CCGT-AF (270) • CCMT-14 (237) • CCMT/CCGT (237)

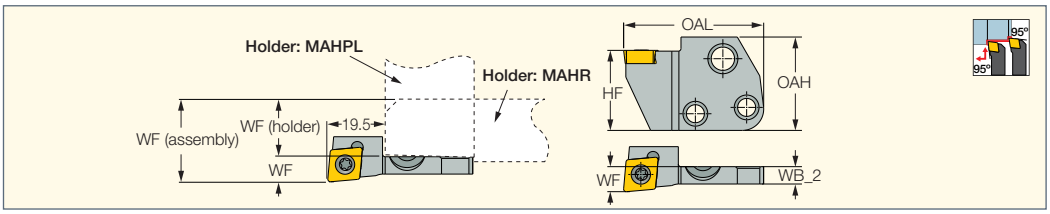
Spare Parts

Designation					
C3 SCLCR-22045-09-JHP	SR 16-236	T-15/5	CU-CW-JHP		T-8/5
C4 SCLCR/L 27050-09-JHP	SR 16-236	T-15/5	CU-CW-JHP	SR M5X5 DIN913 TL360	T-8/5
C5 SCLCR/L 35060-09-JHP	SR 16-236	T-15/5	CU-CW-JHP	SR M5X5 DIN913 TL360	T-8/5

ISOTURN

SCLCR-PAD

Screw Lock Adapter Carrying 80° Diamond Inserts with 7° Clearance Angle



Designation	HF	OAL	OAH	WF	WB_2(1)	MIID(2)		
SCLCR-09-PAD	24.0	42.00	28.00	7.50	5.2	CCGT/CCMT 09T3	SR 16-236	T-15/5

- WF(assembly) = WF(holder) + WF

(1) Rake angle axial

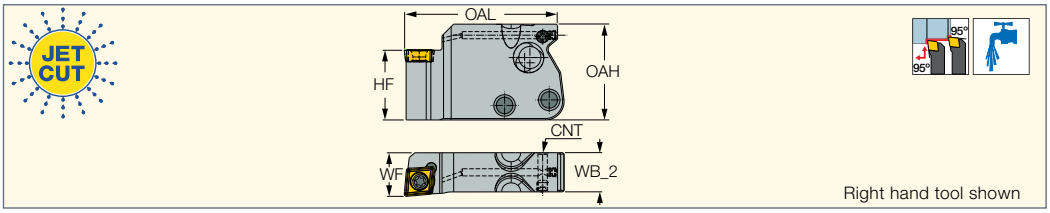
(2) Master insert identification

For inserts, see pages: CCGT-F1M-12P (232) • CCGT-F1M-20P (233) • CCMT-CERMET (235) • CCMT-F3P (233) • CCMT-M3P (234) • CCMT-F3M (234) • CCMT-M3M (235) • CCMT-PF (236) • CCMT/CCGT-SM (236) • CCET-WF (238) • CCMT-WG (238) • CCGT-AS (270) • CCGT-AF (270) • CCMT-14 (237) • CCMT/CCGT (237)
For holders, see pages: C#-MAHD (697) • C#-MAHDR-45 (696) • C#-MAHPD (698) • C#-MAHPD-JHP (698) • HMSN-New Britain (537) • HSK A63WH-MAHDOR (705) • HSK A63WH-MAHDR-45 (705) • HSK A63WH-MAHUR/L (706) • IM-MAHPD (707) • MAHPR/L (307) • MAHPR/L-JHP (308) • MAHR/L (306)

ISOTURN

SCLCR/L-PAD-JHP

Screw Lock Adapter with High-Pressure Coolant Mounts 80° Diamond Inserts with 7° Clearance Angle



Designation	HF	OAL	OAH	WF	WB_2	MIID(1)	CNT				
SCLCR/L-09-PAD-JHP	24.0	52.80	33.00	15.00	10.0	CCGT/CCMT 09T3	M4	SR 16-236	T-15/5	SR M4X4 DIN913 TL360	SR M3X3 DIN913 TL360

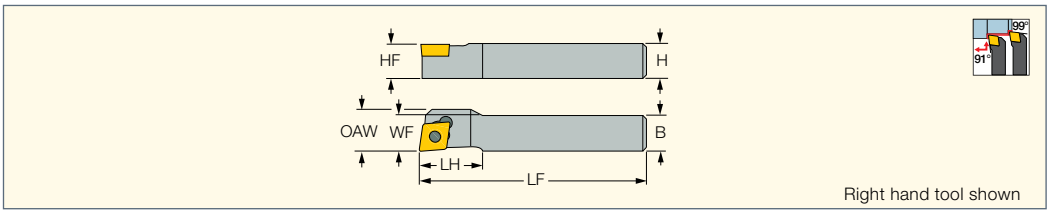
New

(1) Master insert identification

For inserts, see pages: CCET-WF (238) • CCGT-AF (270) • CCGT-AS (270) • CCGT-F1M-12P (232) • CCGT-F1M-20P (233) • CCMT-14 (237) • CCMT-CERMET (235) • CCMT-F3M (234) • CCMT-F3P (233) • CCMT-M3M (235) • CCMT-M3P (234) • CCMT-PF (236) • CCMT-WG (238) • CCMT/CCGT (237) • CCMT/CCGT-SM (236)
For holders, see pages: ABC MAHDR-#-XL-JHP (884) • C#-MAHPD-JHP (698) • DT##/2 MAHD#-#-XL-JHP (860) • MAHPR/L-JHP (308) • MAHR/L-JHP-MC (307) • MS##-##-MG-JHP (859) • MS-ES#####-GWS-MG-JHP (861) • TR TNK36 MAHDL-R-XL-JHP (884) • TR45 MAHDR-#-XL-JHP (883) • TR45TNL MAHDN-R-XL-JHP (883) • V## MAHD#-#-XL-##-JHP (880) • V## MAHD-XL-JHP (881)

ISOTURN

SCACR/L-S
Screw Lock Tools Carrying 80° Diamond Inserts with 7° Clearance Angle for Swiss-Type Machines



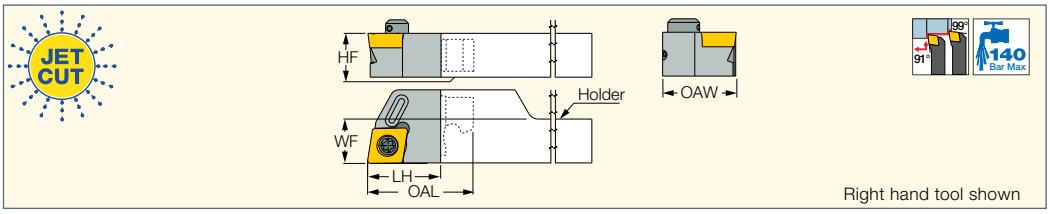
Designation	H	HF	B	LF	LH	WF	OAW	MIID(1)		
SCACR/L 0808K-06S	8.0	8.0	8.0	125.00	8.0	8.20	-	CCMT 060204-14	SR 14-548	T-7/5
SCACR 1010K-06S	10.0	10.0	10.0	150.00	-	10.00	-	CCMT 060204-14	SR 14-548	T-7/5
SCACR/L 1616K-06S	16.0	16.0	16.0	125.00	-	16.20	-	CCMT 060204-14	SR 14-548	T-7/5
SCACR/L 1010K-09S	10.0	10.0	10.0	125.00	15.2	10.20	-	CCMT 09T304-14	SR 16-236	T-15/5
SCACR 1212K-09S	12.0	12.0	12.0	125.00	14.0	12.15	12.50	CCMT 09T304-14	SR 16-236	T-15/5
SCACR/L 1616K-09S	16.0	16.0	16.0	125.00	-	16.20	-	CCMT 09T304-14	SR 16-236	T-15/5

(1) Master insert identification

For inserts, see pages: CCET-WF (238) • CCGT-AS (270) • CCGT-F1M-12P (232) • CCGT-F1M-20P (233) • CCMT-14 (237) • CCMT-CERMET (235) • CCMT-F3M (234) • CCMT-F3P (233) • CCMT-M3M (235) • CCMT-M3P (234) • CCMT-PF (236) • CCMT/CCGT (237) • CCMT/CCGT-SM (236)

NEOSWISS

NQCH-SCACR/L-S-JHP
Screw Lock JETCUT Modular Heads Carrying 7° Clearance 80° Rhombic Inserts for Swiss-Type Machines



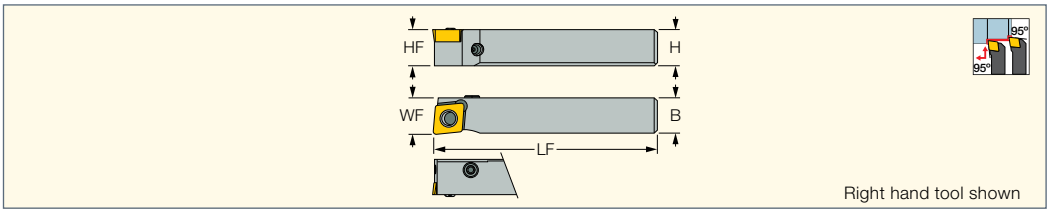
Designation	WF	HF	LH	OAL	OAW	MIID(1)		
NQCH12-SCACR/L-09S-JHP	12.15	12.0	20.0	28.80	20.15	CC.. 09T3	SR 16-236	T-15/5
NQCH16-SCACR/L-09S-JHP	16.15	16.0	20.0	28.80	20.15	CC.. 09T3	SR 16-236	T-15/5

• Use only RH Shank with RH Head and LH Shank with LH Head
(1) Master insert identification

For inserts, see pages: CCET-WF (238) • CCGT-AS (270) • CCGT-F1M-12P (232) • CCGT-F1M-20P (233) • CCMT-14 (237) • CCMT-CERMET (235) • CCMT-F3M (234) • CCMT-F3P (233) • CCMT-M3M (235) • CCMT-M3P (234) • CCMT-PF (236) • CCMT/CCGT (237) • CCMT/CCGT-SM (236)
For holders, see page: NQCH-JHP (424)

ISOTURN

PCLCR/L-S
Side Lever Lock Tools Carrying 80° Positive Rhombic Inserts for Swiss Automatic Machines



Designation	H	HF	B	LF	WF	MIID(1)				
PCLCR 0808M-06S	8.0	8.0	8.0	150.00	8.00	CC.. 0602	SL LV-2	SL PI-2 PIN	SR 10400611	HW 2.0/5
PCLCR/L 1010M-06S	10.0	10.0	10.0	150.00	10.20	CC.. 0602	SL LV-2	SL PI-2 PIN	SR 10400611	HW 2.0/5
PCLCR/L 1212M-06S	12.0	12.0	12.0	150.00	12.20	CC.. 0602	SL LV-2	SL PI-2 PIN	SR 10400611	HW 2.0/5
PCLCR/L 1616M-06S	16.0	16.0	16.0	150.00	16.20	CC.. 0602	SL LV-2	SL PI-2 PIN	SR 10400611	HW 2.0/5
PCLCR/L 1012M-09S	10.0	10.0	12.0	150.00	12.20	CC.. 09T3	SL LV-3	SL PI-3	SR 10400150	HW 2.5/5
PCLCR/L 1212M-09S	12.0	12.0	12.0	150.00	12.20	CC.. 09T3	SL LV-3	SL PI-3	SR 10400150	HW 2.5/5
PCLCR/L 1616M-09S	16.0	16.0	16.0	150.00	16.20	CC.. 09T3	SL LV-3	SL PI-3	SR 10400150	HW 2.5/5
PCLCR/L 2020K-09S	20.0	20.0	20.0	125.00	20.20	CC.. 09T3	SL LV-3	SL PI-3	SR 10400150	HW 2.5/5

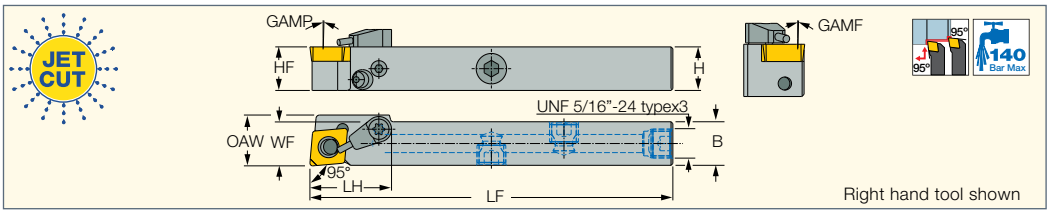
• The clamping screw may by transferred to the opposite side if needed
(1) Master insert identification

For inserts, see pages: CCGT-F1M-12P (232) • CCGT-F1M-20P (233) • CCMT-CERMET (235) • CCMT-F3P (233) • CCMT-M3P (234) • CCMT-F3M (234) • CCMT-M3M (235) • CCMT-PF (236) • CCMT/CCGT-SM (236) • CCET-WF (238) • CCMT-WG (238) • CCGT-AS (270) • CCGT-AF (270) • CCMT-14 (237) • CCMT/CCGT (237)

ISOTURN

PCLCR/L-S-JHP

Tools with Channels for High Pressure Coolant Carrying 80° Positive Rhombic Inserts for Swiss Automatic Machines



Designation	H	HF	B	LF	LH	WF	OAW	GAMP(1)	GAMF(2)	MIID(3)
PCLCR/L 1010H-06S-JHP	10.0	10.0	10.0	100.00	22.3	10.20	-	0.0	0.0	CC.. 0602
PCLCR/L 1212H-09S-JHP	12.0	12.0	12.0	100.00	22.3	12.20	14.00	0.0	0.0	CC.. 09T3
PCLCR/L 1616K-09S-JHP	16.0	16.0	16.0	125.00	22.3	16.20	-	0.0	0.0	CC.. 09T3
PCLCR/L 2020K-09S-JHP	20.0	20.0	20.0	125.00	22.3	20.20	-	0.0	0.0	CC.. 09T3

- For user guide, see pages 6-7,104-110

(1) Rake angle axial

(2) Rake angle radial

(3) Master insert identification

For inserts, see pages: CCGT-AF (270) • CCGT-F1M-12P (232) • CCGT-F1M-20P (233) • CCMT-CERMET (235) • CCMT-M3M (235) • CCMT-M3P (234) • CCMT-WG (238) • CCMT/CCGT (237) • CCMT/CCGT-SM (236) • CCGT-AS (270) • CCMT-14 (237) • CCMT-F3M (234) • CCMT-F3P (233) • CCET-WF (238) • CCMT-PF (236)

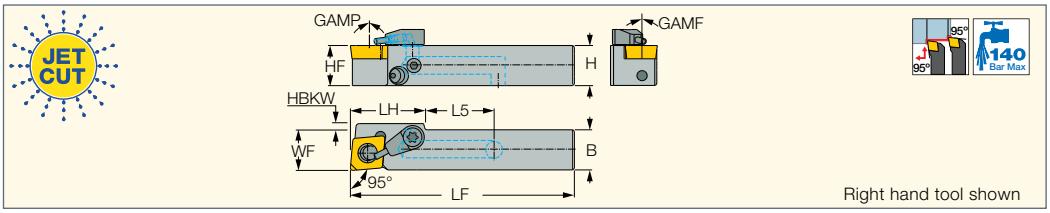
Spare Parts

Designation						
PCLCR/L 1010H-06S-JHP	SL LV-2	SL PI-2 PIN	SR 10400611	HW 2.0/5	SR 5/16XUNF-TL-S	S-CU-JHP-A SET
PCLCR/L 1212H-09S-JHP	SL LV-3	SL PI-3	SR 10400150	HW 2.5/5	SR 5/16UNF TL360	S-CU-JHP-A SET
PCLCR/L 1616K-09S-JHP	SL LV-3	SL PI-3	SR 10400150	HW 2.5/5	SR 5/16UNF TL360	S-CU-JHP-A SET
PCLCR/L 2020K-09S-JHP	SL LV-3	SL PI-3	SR 10400150	HW 2.5/5	SR 5/16UNF TL360	S-CU-JHP-A SET

ISOTURN

PCLCR/L-S-JHP-MC

Tools with Channels for High-Pressure Coolant Carrying 80° Positive Rhombic Inserts for Swiss Automatic Machines



Designation	H	HF	B	LF	LH	L5	WF	HBKW	GAMP(1)	GAMF(2)	MIID(3)
PCLCR/L 1212X-09S-JHP-MC	12.0	12.0	12.0	67.00	23.0	20.00	12.20	1.80	0.0	0.0	CC.. 09T3
PCLCR/L 1616X-09S-JHP-MC	16.0	16.0	16.0	71.00	23.0	17.00	16.20	-	0.0	0.0	CC.. 09T3

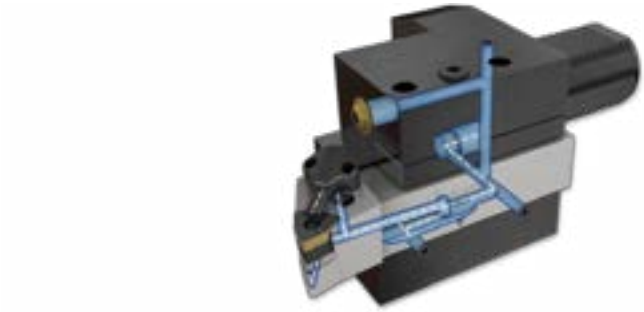
- For user guide, see pages 6-7,104-110

(1) Rake angle axial

(2) Rake angle radial

(3) Master insert identification

For inserts, see pages: CCET-WF (238) • CCGT-AF (270) • CCGT-AS (270) • CCGT-F1M-12P (232) • CCGT-F1M-20P (233) • CCMT-14 (237) • CCMT-CERMET (235) • CCMT-F3M (234) • CCMT-F3P (233) • CCMT-M3M (235) • CCMT-M3P (234) • CCMT-PF (236) • CCMT-WG (238) • CCMT/CCGT (237) • CCMT/CCGT-SM (236)

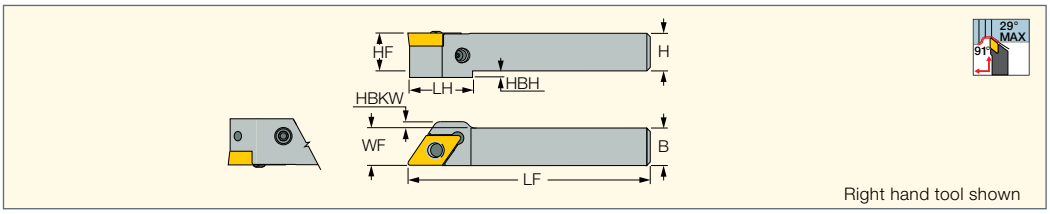


Spare Parts

Designation						
PCLCR/L-S-JHP-MC	SL LV-3	SL PI-3	SR 10400150	HW 2.5/5	SR 5/16UNF TL360	S-CU-JHP-A SET

ISOTURN

PDACR/L-S
Side Lever Lock Tools Carrying 55° Positive Rhombic Inserts for Swiss Automatic Machines



Designation	H	HF	LH	HBH	B	LF	WF	HBKW	MIID(1)				
PDACR/L 0808M-07S	8.0	8.0	16.0	2.0	8.0	150.00	8.00	-	DC..0702	SL LV-2	SL PI-2 PIN	SR 10400611	HW 2.0/5
PDACR/L 1010M-07S	10.0	10.0	-	-	10.0	150.00	10.00	-	DC..0702	SL LV-2	SL PI-2 PIN	SR 10400611	HW 2.0/5
PDACR/L 1212M-07S	12.0	12.0	-	-	12.0	150.00	12.00	-	DC..0702	SL LV-2	SL PI-2 PIN	SR 10400611	HW 2.0/5
PDACR/L 1616M-07S	16.0	16.0	-	-	16.0	150.00	16.00	-	DC..0702	SL LV-2	SL PI-2 PIN	SR 10400611	HW 2.0/5
PDACR/L 1012M-11S	10.0	10.0	22.0	2.5	12.0	150.00	12.00	2.00	DC..11T3	SL LV-3	SL PI-3	SR 10400150	HW 2.5/5
PDACR/L 1212M-11S	12.0	12.0	-	-	12.0	150.00	12.00	2.00	DC..11T3	SL LV-3	SL PI-3	SR 10400150	HW 2.5/5
PDACR/L 1616M-11S	16.0	16.0	-	-	16.0	150.00	16.00	-	DC..11T3	SL LV-3	SL PI-3	SR 10400150	HW 2.5/5
PDACR/L 2020K-11S	20.0	20.0	-	-	20.0	125.00	20.00	-	DC..11T3	SL LV-3	SL PI-3	SR 10400150	HW 2.5/5

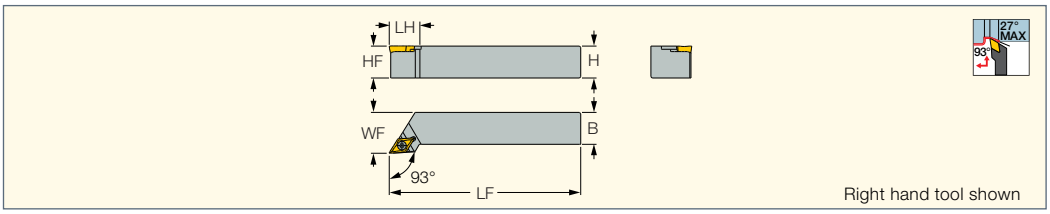
- The clamping screw may by transferred to the opposite side if needed

(1) Master insert identification

For inserts, see pages: DCGT-F1M-12P (243) • DCGT-F1M-20P (244) • DCMT-CERMET (243) • DCMT-F3P (240) • DCMT-M3P (241) • DCMT-M3M (241) • DCMT/DCGT-PF (245) • DCMT/DCGT-SM (246) • DCET-WF (247) • DCGT-AS (270) • DCGT-AF (271) • DCMT-14 (247) • DCMT/DCGT (246)

T-LOCK

SDJCR/L-13-SL
Screw Lock Tools Carrying 55° Diamond Inserts with 7° Clearance Angle for High Rigidity in Profiling Applications



Designation	H	HF	B	LF	LH	WF	MIID(1)
SDJCR/L 1616H-13-SL	16.0	16.0	16.0	100.00	24.0	20.00	DCMT 13T5-SL
SDJCR/L 2020K-13-SL	20.0	20.0	20.0	125.00	24.0	25.00	DCMT 13T5-SL
SDJCR/L 2525M-13-SL	25.0	25.0	25.0	150.00	24.0	32.00	DCMT 13T5-SL

- Insert clamping torque 3 Nxm

(1) Master insert identification

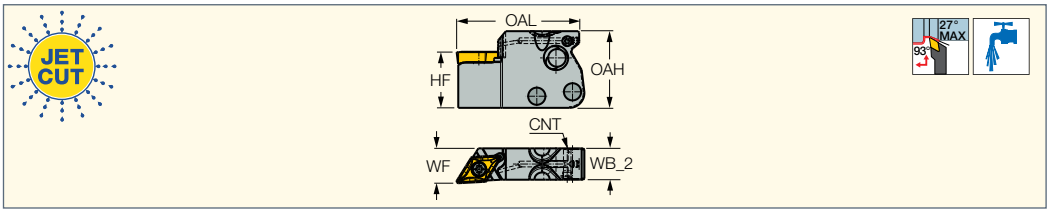
For inserts, see pages: DCMT-F3P-SL (240) • DCMT-M3M-SL (242) • DCMT-PF-SL (244) • DCMT-SM-SL (245)

Spare Parts

Designation		
SDJCR/L-13-SL	SR M4X0.7-L9.6 IP15	TORX PLUS IP15X45 GREEN

ISOTURN

SDJCR-SL-PAD-JHP
HP Screw Adapter, Coolant, 55° Diamond Inserts, 7° Clearance. Insert Bottom Ridge, Profiling Rigidity



Designation	HF	OAL	OAH	WF	WB_2	GAMP(1)	GAMF(2)	MIID(3)	CNT
SDJCR-13-SL-PAD-JHP	24.0	52.80	33.00	15.00	10.0	0.0	0.0	DCMT 13T5-SL	M4

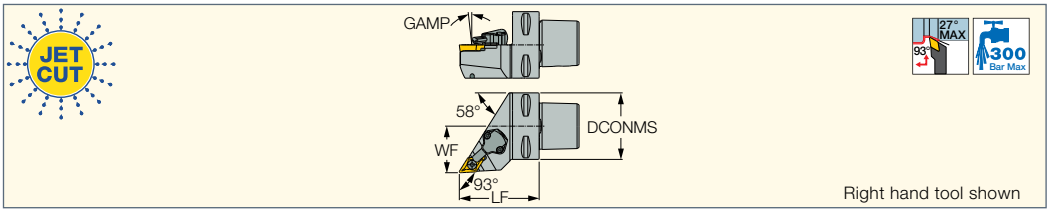
New

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see pages: DCMT-F3P-SL (240) • DCMT-M3M-SL (242) • DCMT-PF-SL (244) • DCMT-SM-SL (245)
For holders, see pages: C#-MAHPD-JHP (698) • MAHPR/L-JHP (308)

T-LOCK

C#-SDJCR/L-13-SL-JHP
Screw Clamp Tools with CAMFIX Shanks and Channels for High-Pressure Coolant Carrying Positive 55° Rhombic Inserts



Designation	DCONMS	WF	LF	GAMP(1)	MIID(2)	DCP(3)
C3 SDJCR-22040-13-SL-JHP	32.00	22.00	40.00	0.0	DCMT 13T5-SL	0
C4 SDJCR/L-27055-13-SL-JHP	40.00	27.00	55.00	0.0	DCMT 13T5-SL	1
C5 SDJCR/L-35060-13-SL-JHP	50.00	35.00	60.00	0.0	DCMT 13T5-SL	1

- For user guide, see pages 6-7,104-110

(1) Rake angle axial
(2) Master insert identification
(3) 1 - Slot for data chip, 0 - Without slot for data chip

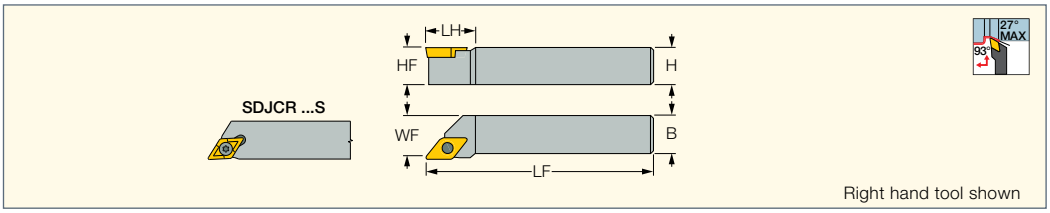
For inserts, see pages: DCMT-F3P-SL (240) • DCMT-M3M-SL (242) • DCMT-PF-SL (244) • DCMT-SM-SL (245)

Spare Parts

Designation				
C3 SDJCR-22040-13-SL-JHP	CH-1.9D-JHP	SR M4X4 DIN913 TL360	SR M4X0.7-L9.5 IP15	T-8/5
C4 SDJCR/L-27055-13-SL-JHP	CU-D-JHP	SR M5X5 DIN913 TL360	SR M4X0.7-L9.6 IP15	T-8/5
C5 SDJCR/L-35060-13-SL-JHP	CU-D-JHP	SR M5X5 DIN913 TL360	SR M4X0.7-L9.6 IP15	T-8/5

ISOTURN

SDJCR/L
Screw Lock Tools Carrying 55° Diamond Inserts with 7° Clearance Angle



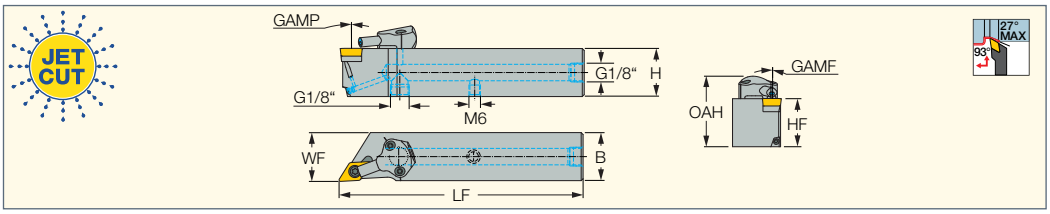
Designation	H	HF	B	LF	LH	WF	MIID(2)					
SDJCR/L 0808F-07	8.0	8.0	8.0	80.00	11.5	10.00	DC..0702	SR 14-548	T-7/5			
SDJCR/L 0808K-07S	8.0	8.0	8.0	125.00	10.6	8.15	DC..0702	SR 14-548	T-7/5			
SDJCR/L 1010F-07	10.0	10.0	10.0	80.00	11.5	12.00	DC..0702	SR 14-548	T-7/5			
SDJCR/L 1010M-07S	10.0	10.0	10.0	150.00	10.6	10.15	DC..0702	SR 14-548	T-7/5			
SDJCR/L 1212K-07S (1)	12.0	12.0	12.0	125.00	10.6	12.15	DC..0702	SR 14-548	T-7/5			
SDJCR/L 1616K-07S (1)	16.0	16.0	16.0	125.00	10.6	16.15	DC..0702	SR 14-548	T-7/5			
SDJCR/L 1010K-11S (1)	10.0	10.0	10.0	125.00	20.5	10.15	DC..11T3	SR 16-236	T-15/5			
SDJCR/L 1212F-11	12.0	12.0	12.0	80.00	20.0	16.00	DC..11T3	SR 16-236 P	T-15/5			
SDJCL 1212M-11S	12.0	12.0	12.0	150.00	20.0	12.15	DC..11T3	SR 16-236 P	T-15/5			
SDJCR 1212M-11S (1)	12.0	12.0	12.0	150.00	12.5	12.15	DC..11T3					
SDJCR/L 1616H-11	16.0	16.0	16.0	100.00	20.0	20.00	DC..11T3	SR 16-236 P	T-15/5			
SDJCL 1616M-11S	16.0	16.0	16.0	150.00	20.0	16.15	DC..11T3	SR 16-236 P	T-15/5			
SDJCR 1616M-11S (1)	16.0	16.0	16.0	150.00	12.5	16.15	DC..11T3					
SDJCR/L 2020K-11	20.0	20.0	20.0	125.00	20.0	25.00	DC..11T3	SR 16-236 P	T-15/5			
SDJCR/L 2525M-11	25.0	25.0	25.0	150.00	20.0	32.00	DC..11T3	SR 16-236 P	T-15/5	TDC 3-1P	SR TC-3P	HW 4.0

(1) For Swiss-type machines
(2) Master insert identification

For inserts, see pages: DCET-WF (247) • DCGT-AF (271) • DCGT-AS (270) • DCGT-F1M-12P (243) • DCGT-F1M-20P (244) • DCMT-14 (247) • DCMT-CERMET (243) • DCMT-F3P (240) • DCMT-M3M (241) • DCMT/DCGT (246) • DCMT/DCGT-PF (245) • DCMT/DCGT-SM (246)

ISOTURN

SDJCR/L-JHP-MC
Tools with High-Pressure Coolant Channels Carrying 55° Positive Rhombic Inserts



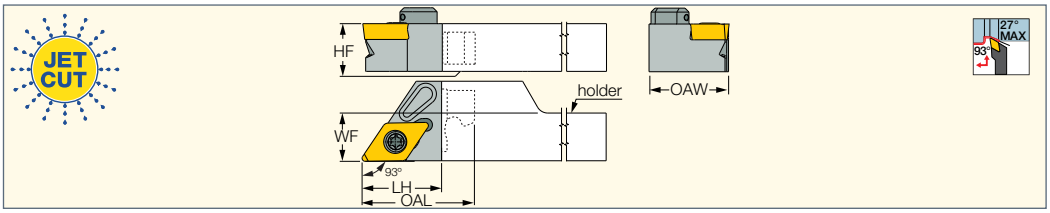
Designation	H	HF	B	LF	LH	WF	MIID(1)					
SDJCR/L 2020X-11-JHP-MC	20.0	20.0	20.0	105.00	35.0	25.00	DCMT 11T308	TDC 3-1P	HW 4.0	SR 16-236 P	CU-D-JHP	T-15/5
SDJCR/L 2525X-11-JHP-MC	25.0	25.0	25.0	115.00	35.0	32.00	DCMT 11T308	TDC 3-1P	HW 4.0	SR 16-236 P	CU-D-JHP	T-15/5

Designation		icon112	icon112	icon001	icon105
SDJCR/L 2020X-11-JHP-MC	SR TC-3P	PLG G1/8 TL360	SR M6X6 DIN913 TL360	T-8/5	SR M2.5X2.5 DIN913 TL360
SDJCR/L 2525X-11-JHP-MC	SR TC-3P	PLG G1/8 TL360	SR M6X6 DIN913 TL360	T-8/5	SR M2.5X2.5 DIN913 TL360

For inserts, see pages: DCET-WF (247) • DCGT-AF (271) • DCGT-AS (270) • DCGT-F1M-12P (243) • DCGT-F1M-20P (244) • DCMT-14 (247) • DCMT-CERMET (243) • DCMT-F3P (240) • DCMT-M3M (241) • DCMT/DCGT (246) • DCMT/DCGT-PF (245) • DCMT/DCGT-SM (246)

NEOSWISS

NQCH-SDJCR/L-S-JHP
Screw Lock JETCUT Modular Heads Carrying 7° Clearance 55° Rhombic Inserts for Swiss-Type Machines



Designation	WF	LH	HF	OAL	OAW	MIID(1)
NQCH10-SDJCR/L-07S-JHP	10.15	20.0	10.0	28.80	20.00	DC..07T3..
NQCH12-SDJCR/L-11S-JHP	12.15	20.0	12.0	28.80	20.00	DC..11T3..
NQCH16-SDJCR/L-11S-JHP	16.15	20.0	16.0	28.80	20.00	DC..11T3..
NQCH12R-SDJCL-11S-JHP	20.15	20.0	12.0	28.80	20.00	DC..11T3..
NQCH16R-SDJCL-11S-JHP	20.15	20.0	16.0	28.80	20.00	DC..11T3..

New

- Use only RH Shank with RH Head and LH Shank with LH Head

(1) Master insert identification

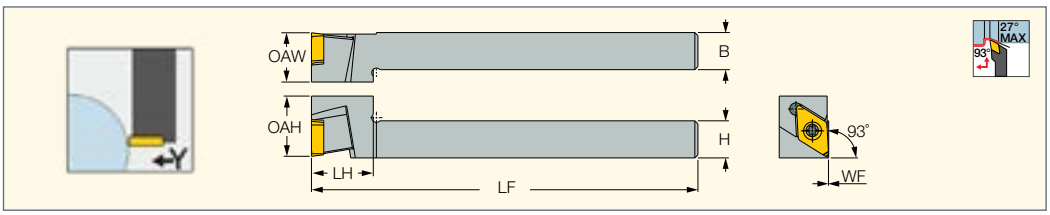
For inserts, see pages: DCET-WF (247) • DCGT-AF (271) • DCGT-AS (270) • DCGT-F1M-12P (243) • DCGT-F1M-20P (244) • DCMT-14 (247) • DCMT-CERMET (243) • DCMT-F3P (240) • DCMT-M3M (241) • DCMT/DCGT (246) • DCMT/DCGT-PF (245) • DCMT/DCGT-SM (246)
For holders, see page: NQCH-JHP (424)

Spare Parts

Designation		
NQCH10-SDJCR-07S-JHP	SR 14-548	T-7/5
NQCH12-SDJCR-11S-JHP	SR 16-236 P	T-15/5
NQCH16-SDJCR-11S-JHP	SR 16-236 P	T-15/5
NQCH12R-SDJCL-11S-JHP	SR 16-236 P	T-15/5

NEOYSWISS

Y-SDJCR-S
Y-Axis Screw Lock Integral Tools Carrying 55° Rhombic Inserts with 7° Clearance Angle for Swiss-Type Machines.



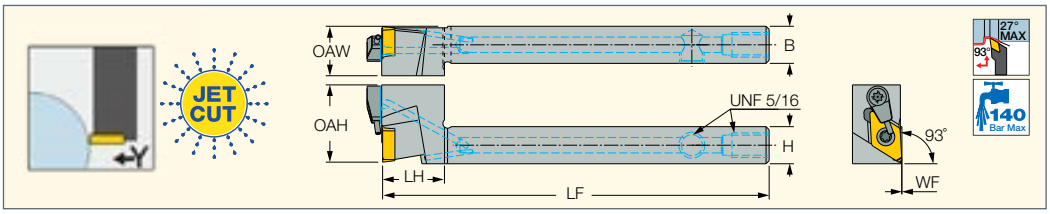
Designation	H	B	LF	LH	OAH	OAW	WF	MIID(1)		
Y-SDJCR 1212K-11S	12.0	12.0	125.00	21.0	20.00	16.00	0.00	DCMT 11T3##	SR 35080I	T-15/5
Y-SDJCR 1616K-11S	16.0	16.0	125.00	21.0	20.00	16.00	0.00	DCMT 11T3##	SR 35080I	T-15/5

(1) Master insert identification

For inserts, see pages: DCET-WF (247) • DCGT-AF (271) • DCGT-AS (270) • DCGT-F1M-12P (243) • DCGT-F1M-20P (244) • DCMT-14 (247) • DCMT-CERMET (243) • DCMT-F3P (240) • DCMT-M3M (241) • DCMT/DCGT (246) • DCMT/DCGT-PF (245) • DCMT/DCGT-SM (246)

NEOYSWISS

Y-SDJCR-S-JHP
Y-Axis Screw Lock JETCUT Integral Tools Carrying 55° Rhombic Inserts with 7° Clearance Angle



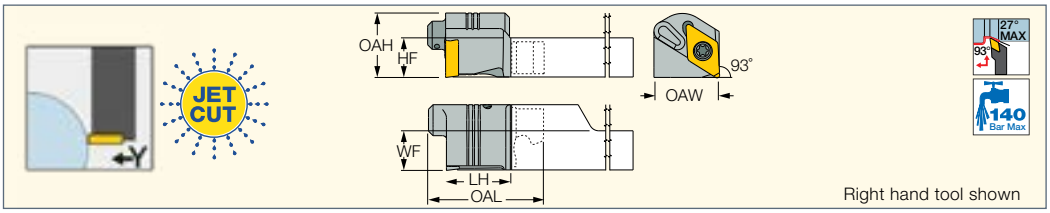
Designation	H	B	LF	LH	OAH	OAW	WF	MIID(1)					
Y-SDJCR 1212K-11S-JHP	12.0	12.0	125.00	21.0	25.50	16.00	0.00	DCMT 11T3##	SR 35080I	T-15/5	HW 5/32"	SR 5/16UNF TL360	S-CU-JHP-A SET
Y-SDJCR 1616K-11S-JHP	16.0	16.0	125.00	21.0	25.50	16.00	0.00	DCMT 11T3##	SR 35080I	T-15/5	HW 5/32"	SR 5/16UNF TL360	S-CU-JHP-A SET

(1) Master insert identification

For inserts, see pages: DCET-WF (247) • DCGT-AF (271) • DCGT-AS (270) • DCGT-F1M-12P (243) • DCGT-F1M-20P (244) • DCMT-14 (247) • DCMT-CERMET (243) • DCMT-F3P (240) • DCMT-M3M (241) • DCMT/DCGT (246) • DCMT/DCGT-PF (245) • DCMT/DCGT-SM (246)

NEOSWISS

NQCH-Y-SDJCR-S-JHP
Y-Axis Screw Lock JETCUT Modular Heads Carrying 55° Rhombic Inserts with 7° Clearance Angle for Swiss-Type Machines



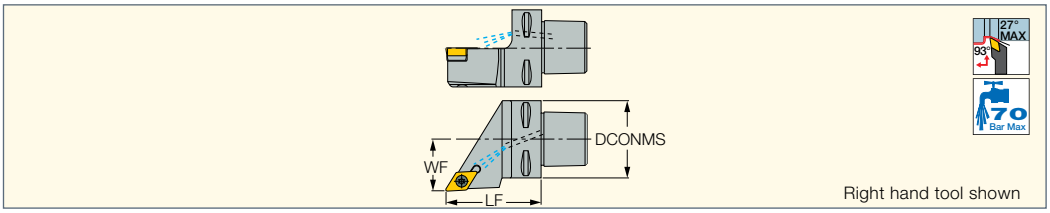
Designation	WF	HF	LH	OAL	OAW	OAH	MIID(1)		
NQCH12-Y-SDJCR-11S-JHP	12.15	12.2	20.0	34.30	20.00	19.60	DC.. 11T3	SR 16-236 P	T-15/5
NQCH16-Y-SDJCR-11S-JHP	16.15	16.2	20.0	34.30	20.00	18.20	DC.. 11T3	SR 16-236 P	T-15/5

• Use only RH Shank with RH Head and LH Shank with LH Head
(1) Master insert identification

For inserts, see pages: DCET-WF (247) • DCGT-AF (271) • DCGT-AS (270) • DCGT-F1M-12P (243) • DCGT-F1M-20P (244) • DCMT-14 (247) • DCMT-CERMET (243) • DCMT-F3P (240) • DCMT-M3M (241) • DCMT-M3P (241) • DCMT/DCGT (246) • DCMT/DCGT-PF (245) • DCMT/DCGT-SM (246)
For holders, see page: NQCH-JHP (424)

ISOTURN

C#-SDJCR/L
Screw Lock Tools with CAMFIX Exchangeable Shanks Carrying 55° Rhombic Inserts with 7° Clearance Angle



Designation	DCONMS	WF	LF	MIID(1)	DCP(3)	CP(2)						
C4 SDJCR-27050-11	40.00	27.00	50.00	DC.. 11T3	1	70	TDC 3-1P	SR TC-3P	HW 4.0	SR 16-236 P	T-15/5	EZ 83
C5 SDJCR-35060-11	50.00	35.00	60.00	DC.. 11T3	70	1	TDC 3-1P	SR TC-3P	HW 4.0	SR 16-236 P	T-15/5	EZ 104

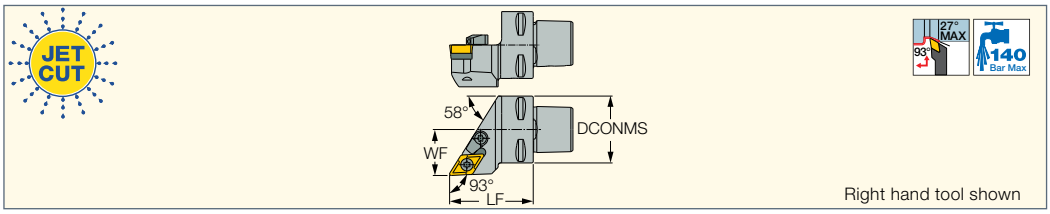
(1) Master insert identification
(2) Coolant pressure (Bar)
(3) 1 - Slot for data chip, 0 - Without slot for data chip

For inserts, see pages: DCGT-F1M-12P (243) • DCGT-F1M-20P (244) • DCMT-CERMET (243) • DCMT-F3P (240) • DCMT-M3P (241) • DCMT-M3M (241) • DCMT/DCGT-PF (245) • DCMT/DCGT-SM (246) • DCET-WF (247) • DCGT-AS (270) • DCGT-AF (271) • DCMT-14 (247) • DCMT/DCGT (246)

ISOTURN

C#-SDJCR-JHP

Screw Clamp Tools with CAMFIX Shanks and Channels for High-Pressure Coolant Carrying Positive 55° Rhombic Inserts



Designation	DCONMS	WF	LF	MIID[1]	CP[2]	DCP[3]
C3 SDJCR-22040-11-JHP	32.00	22.00	40.00	DC.. 11T3	140	0

- For user guide, see pages 6-7,104-110

[1] Master insert identification

[2] Coolant pressure (Bar)

[3] 1 - Slot for data chip, 0 - Without slot for data chip

For inserts, see pages: DCGT-F1M-12P (243) • DCGT-F1M-20P (244) • DCMT-CERMET (243) • DCMT-F3P (240) • DCMT-M3P (241) • DCMT-M3M (241) • DCMT/DCGT-PF (245) • DCMT/DCGT-SM (246) • DCET-WF (247) • DCGT-AS (270) • DCGT-AF (271) • DCMT-14 (247) • DCMT/DCGT (246)

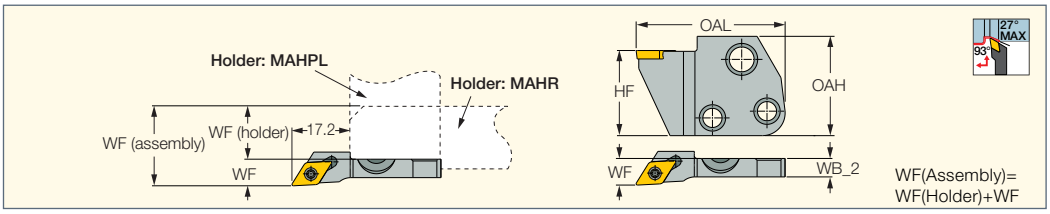
Spare Parts

Designation								
C3 SDJCR-22040-11-JHP	TDC 3-1P	SR TC-3P	SR 16-236 P	T-15/5	CH-1.9D-JHP	WASHER 4.2X5.6X0.5	SR M4X4 DIN913 TL360	HW 4.0

ISOTURN

SDJCR-PAD

Screw Lock Adapter Carrying 55° Diamond Inserts with 7° Clearance Angle



Designation	HF	OAH	OAL	WF	WB_2[1]	MIID[2]		
SDJCR-07-PAD	24.0	28.00	42.00	7.50	5.2	DCMT/DCGT 0702	SR 14-548	T-7/5

- WF (assembly) = WF (holder) + WF

[1] Rake angle axial

[2] Master insert identification

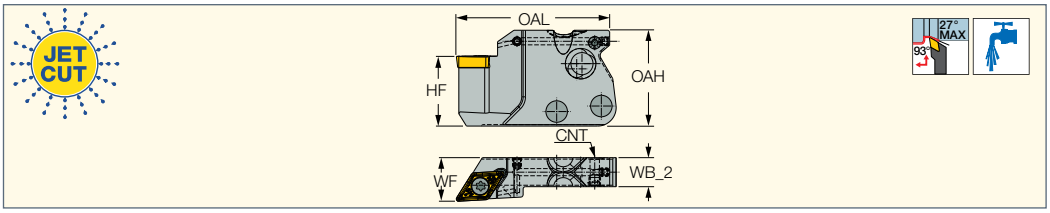
For inserts, see pages: DCGT-F1M-12P (243) • DCGT-F1M-20P (244) • DCMT-F3P (240) • DCMT-M3P (241) • DCMT-M3M (241) • DCMT/DCGT-PF (245) • DCMT/DCGT-SM (246) • DCET-WF (247) • DCGT-AS (270) • DCMT/DCGT (246)

For holders, see pages: C#-MAHPD-JHP (698) • MAHPR/L-JHP (308) • MAHPR/L (307) • MAHR/L (306) • IM-MAHPD (707) • C#-MAHD (697) • C#-MAHPD (698) • C#-MAHDR-45 (696) • HSK A63WH-MAHUR/L (706) • HSK A63WH-MAHDR-45 (705) • HSK A63WH-MAHDOR (705) • HMSN-New Britain (537)

ISOTURN

SDJCR/L-PAD-JHP

Screw Lock Adapter with High-Pressure Coolant Mounts 55° Diamond Inserts with 7° Clearance Angle



Designation	HF	OAL	OAH	WF	WB_2	MIID[1]	CNT				
SDJCR/L-07-PAD-JHP	24.0	52.80	33.00	15.00	10.0	DCMT/DCGT 0702	M4	SR 14-548	T-7/5	SR M4X4 DIN913 TL360	SR M3X3 DIN913 TL360
SDJCR/L-11-PAD-JHP	24.0	52.80	33.00	15.00	10.0	DCMT/DCGT 11T3	M4	SR 16-236 P	T-15/5	SR M4X4 DIN913 TL360	SR M3X3 DIN913 TL360

New

[1] Master insert identification

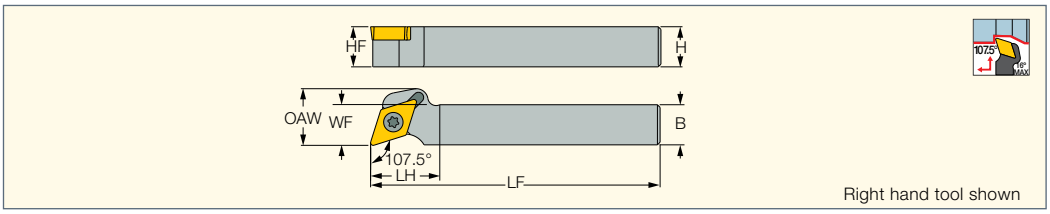
For inserts, see pages: DCET-WF (247) • DCGT-AF (271) • DCGT-AS (270) • DCGT-F1M-12P (243) • DCGT-F1M-20P (244) • DCMT-14 (247) • DCMT-CERMET (243) • DCMT-F3P (240) • DCMT-M3M (241) • DCMT-M3P (241) • DCMT/DCGT (246) • DCMT/DCGT-PF (245) • DCMT/DCGT-SM (246)

For holders, see pages: ABC MAHDR-#-XL-JHP (884) • C#-MAHPD-JHP (698) • DT##/2 MAHD#-#-XL-JHP (860) • MAHPR/L-JHP (308) • MS##-##-MG-JHP (859) • MS-ES#####-GWS-MG-JHP (861) • TR TNK36 MAHDL-R-XL-JHP (884) • TR45 MAHDR-#-XL-JHP (883) • TR45TNL MAHDN-R-XL-JHP (883) • V## MAHD#-#-XL-##-JHP (880) • V## MAHD-XL-JHP (881)

ISOTURN

SDHCR/L-S

Screw Lock Tools Carrying 55° Diamond Inserts with 7° Clearance Angle for Swiss-Type Machines



Designation	H	HF	B	LF	LH	WF	OAW	MIID(1)		
SDHCR/L 1010K-07S	10.0	10.0	10.0	125.00	12.5	10.20	-	DC..0702	SR 14-548	T-7/5
SDHCR/L 1212K-07S	12.0	12.0	12.0	125.00	12.0	12.20	-	DC..0702	SR 14-548	T-7/5
SDHCR/L 1616K-07S	16.0	16.0	16.0	125.00	12.0	16.20	-	DC..0702	SR 14-548	T-7/5
SDHCR/L 1212K-11S	12.0	12.0	12.0	125.00	19.0	12.20	17.00	DC..11T3	SR 16-236	T-15/5
SDHCR/L 1616K-11S	16.0	16.0	16.0	125.00	20.0	16.20	-	DC..11T3	SR 16-236	T-15/5

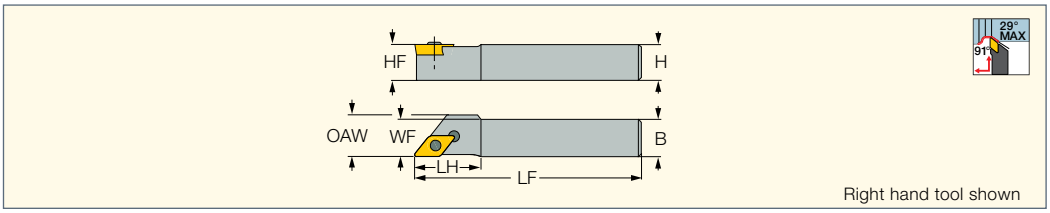
(1) Master insert identification

For inserts, see pages: DCGT-F1M-12P (243) • DCGT-F1M-20P (244) • DCMT-CERMET (243) • DCMT-F3P (240) • DCMT-M3P (241) • DCMT-M3M (241) • DCMT/DCGT-PF (245) • DCMT/DCGT-SM (246) • DCET-WF (247) • DCGT-AS (270) • DCGT-AF (271) • DCMT-14 (247) • DCMT/DCGT (246)

ISOTURN

SDACR/L-S

Screw Lock Tools Carrying 55° Diamond Inserts with 7° Clearance Angle



Designation	H	HF	B	LF	LH	WF	OAW	MIID(1)		
SDACR/L 1010K-07S	10.0	10.0	10.0	125.00	12.0	10.20	10.20	DC..0702	SR 14-548	T-7/5
SDACR/L 1212K-07S	12.0	12.0	12.0	125.00	12.0	12.20	12.20	DC..0702	SR 14-548	T-7/5
SDACR/L 1212K-11S	12.0	12.0	12.0	125.00	17.6	12.20	12.20	DC..11T3	SR 16-236 P	T-15/5
SDACR/L 1616K-11S	16.0	16.0	16.0	125.00	17.6	16.20	16.20	DC..11T3	SR 16-236 P	T-15/5

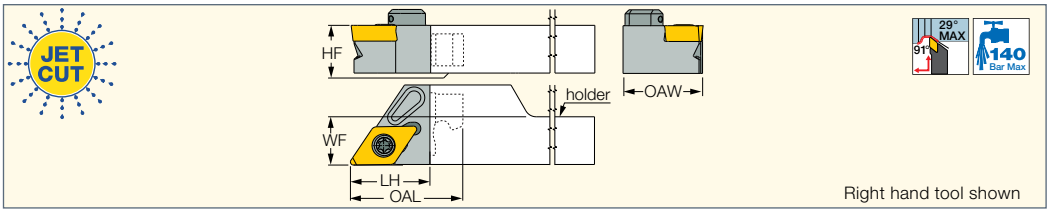
(1) Master insert identification

For inserts, see pages: DCGT-F1M-12P (243) • DCGT-F1M-20P (244) • DCMT-CERMET (243) • DCMT-F3P (240) • DCMT-M3P (241) • DCMT-M3M (241) • DCMT/DCGT-PF (245) • DCMT/DCGT-SM (246) • DCET-WF (247) • DCGT-AS (270) • DCGT-AF (271) • DCMT-14 (247) • DCMT/DCGT (246)

NEOSWISS

NQCH-SDACR/L-S-JHP

Screw Lock JETCUT Modular Heads Carrying 7° Clearance 55° Rhombic Inserts for Swiss-Type Machines



Designation	WF	HF	LH	OAL	OAW	MIID(1)		
NQCH10-SDACR-11S-JHP	10.15	10.0	20.0	28.80	20.15	DC.. 11T3	SR 16-236 P	T-15/5
NQCH12-SDACR/L-11S-JHP	12.15	12.0	20.0	28.80	20.15	DC.. 11T3	SR 16-236 P	T-15/5
NQCH16-SDACR/L-11S-JHP	16.15	16.0	20.0	28.80	20.15	DC.. 11T3	SR 16-236 P	T-15/5

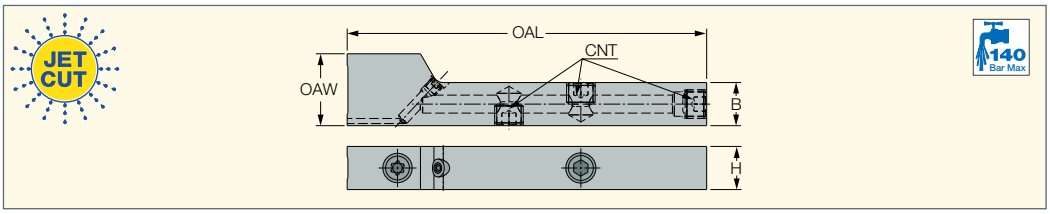
• Use only RH Shank with RH Head and LH Shank with LH Head

(1) Master insert identification

For inserts, see pages: DCET-WF (247) • DCGT-AF (271) • DCGT-AS (270) • DCGT-F1M-12P (243) • DCGT-F1M-20P (244) • DCMT-14 (247) • DCMT-CERMET (243) • DCMT-F3P (240) • DCMT-M3M (241) • DCMT-M3P (241) • DCMT/DCGT (246) • DCMT/DCGT-PF (245) • DCMT/DCGT-SM (246)
For holders, see page: NQCH-JHP (424)

NEOSWISS

NQCH-JHP
JETCUT Square Shanks for NEOSWISS Modular Heads intended for Swiss-Type Machines



Designation	B	H	OAL	OAW	CNT					
NQCH-1010-JHP	10.0	10.0	100.00	20.00	UNF 5/16-24	SR 5/16UNF TL360			NQCH PLUG*	NQCH12-16 LOCK SCREW
NQCH-1212-JHP (1)	12.0	12.0	100.00	20.00	UNF 5/16-24	SR 5/16UNF TL360	SW6-T-SH	BLD IP20/S7	NQCH PLUG*	NQCH12-16 LOCK SCREW
NQCH-1616-JHP (1)	16.0	16.0	100.00	20.00	UNF 5/16-24	SR 5/16UNF TL360	SW6-T-SH	BLD IP20/S7	NQCH PLUG*	NQCH12-16 LOCK SCREW

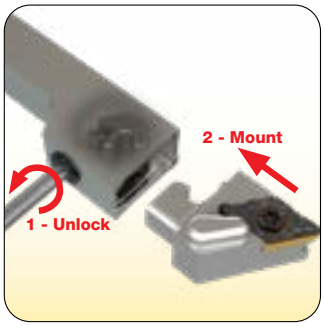
• Recommended torque for clamping screw 7-8 N*m • Replacing the clamping screw should be performed by an ISCAR qualified technician

(1) The shank is neutral and can be used for both left and right hand head

* Optional, to be ordered separately

For tools, see pages: NQCH-DGTR/L-D22-SH-JHP (530) • NQCH-GHSR/L-JHP (428) • NQCH-PCHR/L-24-JHP (348) • NQCH-PCHR/L-S-JHP (433) • NQCH-PCLXR/L-S-JHP (67) • NQCH-PTJNR/L-S-JHP (48) • NQCH-SCACR/L-S-JHP (72) • NQCH-SCHR/L-BF-JHP (408) • NQCH-SDACR/L-S-JHP (79) • NQCH-SDJCR/L-S-JHP (76) • NQCH-SDJNR/L-S-JHP (36) • NQCH-SDNCN-S-JHP (84) • NQCH-SER/L-JHP (800) • NQCH-SVACR/L-S-JHP (89) • NQCH-SVJCR/L-S-JHP (85) • NQCH-SVVCN-S-JHP (512) • NQCH-SWLNR/L-S-JHP (11) • NQCH-TGVR/L-JHP (405) • NQCH-Y-SCHR-BF-JHP (408) • NQCH-Y-SDJCR-S-JHP (77) • NQCH-Y-SVJCR-S-JHP (86)

Clamping Operational Steps





• Replacing clamping screw should be performed by an ISCAR qualified technician.
• To avoid damage, avoid excessive force when opening or clamping.
• Do not disassemble the tool to avoid damage to the clamping mechanism.

Supplied Accessories

Item No: 7003805
SW6-T-SH



Item No: 7002553
BLD IP20/S7



Recommended Accessories (optional)

Item No: 7007221
TSA 6 5-14 Nm



Item No: 7007027
BLD 6 T20IP



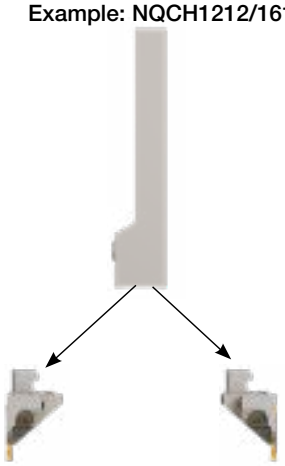


Shank's left-hand orientation for the left-hand tool machine
Example: NQCH1212/1616



Left hand head
Example: NQCH12/16-DGTL...

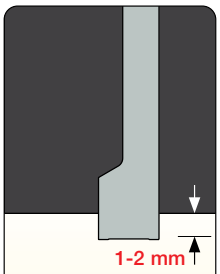
Shank's right-hand orientation for the right-hand tool machine
Example: NQCH1212/1616



Left hand head for Shank's right-hand orientation
Example: NQCH12R/16R-DGTL...
* Available for Grooving & Parting

Right hand head
Example: NQCH12/16-DGTR...

GANG / TOOL POST

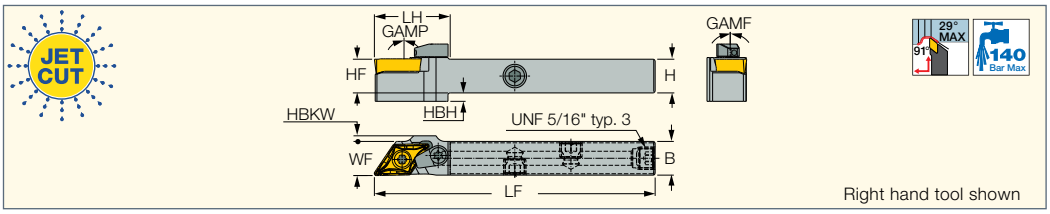


Tool shank overhang (excluding its head) from the tool post should be set at a maximum distance of 1-2mm.

T-LOCK

SDACR/L-S-SL-JHP

Tools with Channels for High-Pressure Coolant Carrying 55° Positive Rhombic Inserts for Swiss Automatic Machines



Designation	H	HF	B	LF	LH	WF	HBKW	HBH	GAMP(1)	GAMF(2)	MIID(3)	CNT
SDACR/L 1212H-13S-SL-JHP	12.0	12.0	12.0	100.00	27.0	12.15	2.35	3.0	0.0	0.0	DCMT 13T5-SL	UNF 5/16 "
SDACR/L 1616K-13S-SL-JHP	16.0	16.0	16.0	125.00	27.0	16.15	-	-	0.0	0.0	DCMT 13T5-SL	UNF 5/16 "

• For user guide, see pages 6-7,104-110

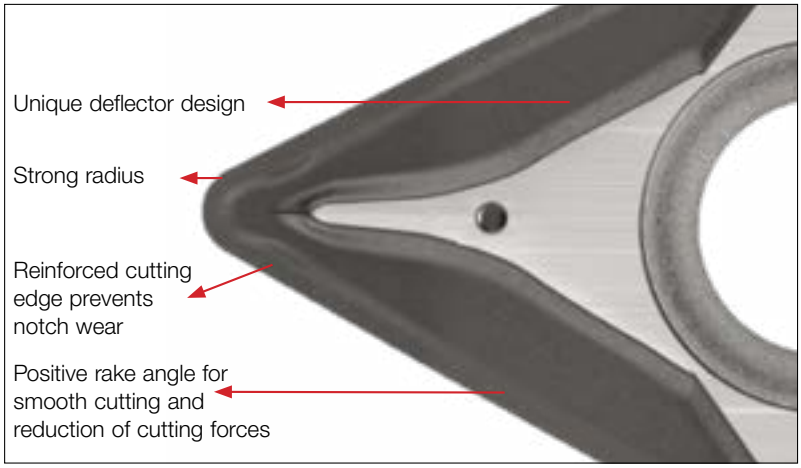
(1) Rake angle axial

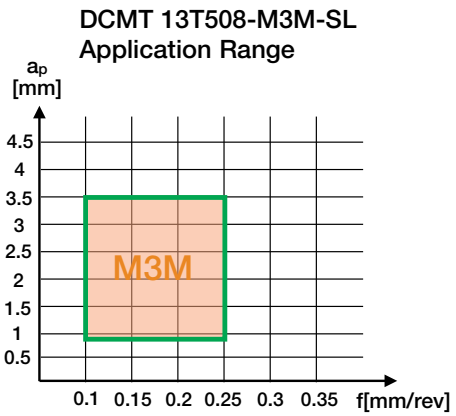
(2) Rake angle radial

(3) Master insert identification

For inserts, see pages: DCMT-F3P-SL (240) • DCMT-M3M-SL (242) • DCMT-PF-SL (244) • DCMT-SM-SL (245)

For holders, see page: SBTH-JHP (421)





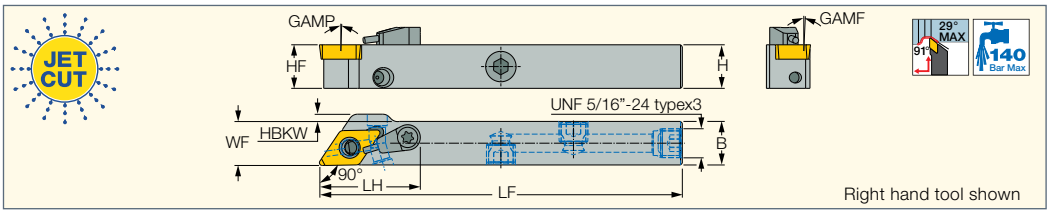
Spare Parts

Designation					
SDACL 1212H-13S-SL-JHP	CH-1.9D-JHP		WASHER 4.2X5.6X0.5		SR M4X0.7-L9.6 IP15
SDACR/L 1212H-13S-SL-JHP		SR 5/16UNF TL360		SR M3 CONE	
SDACR 1212H-13S-SL-JHP	CH-1.9D-JHP		WASHER 4.2X5.6X0.5		SR M4X0.7-L9.6 IP15
SDACR/L 1616K-13S-SL-JHP	CH-1.9D-JHP	SR 5/16UNF TL360	WASHER 4.2X5.6X0.5	SR M3 CONE	SR M4X0.7-L9.6 IP15

ISOTURN

PDACR/L-S-JHP

Tools with Channels for High-Pressure Coolant Carrying 55° Positive Rhombic Inserts for Swiss Automatic Machines



Designation	H	HF	B	LF	LH	WF	HBKW	GAMP(1)	GAMF(2)	MIID(3)
PDACR/L 1010H-07S-JHP	10.0	10.0	10.0	100.00	20.4	10.20	6.10	0.0	0.0	DC..0702
PDACR 1616K-07S-JHP	16.0	16.0	16.0	125.00	20.4	16.15	-	0.0	0.0	DC..0702
PDACR/L 1212H-11S-JHP	12.0	12.0	12.0	100.00	28.0	12.20	2.00	0.0	0.0	DC..11T3
PDACR/L 1616K-11S-JHP	16.0	16.0	16.0	125.00	28.0	16.20	-	0.0	0.0	DC..11T3
PDACR/L 2020K-11S-JHP	20.0	20.0	20.0	125.00	28.0	20.20	-	0.0	0.0	DC..11T3

- For user guide, see pages 6-7,104-110

(1) Rake angle axial

(2) Rake angle radial

(3) Master insert identification

For inserts, see pages: DCGT-F1M-12P (243) • DCGT-F1M-20P (244) • DCMT-CERMET (243) • DCMT-F3P (240) • DCMT-M3P (241) • DCMT-M3M (241) • DCMT/DCGT-PF (245) • DCMT/DCGT-SM (246) • DCET-WF (247) • DCGT-AS (270) • DCGT-AF (271) • DCMT-14 (247) • DCMT/DCGT (246)

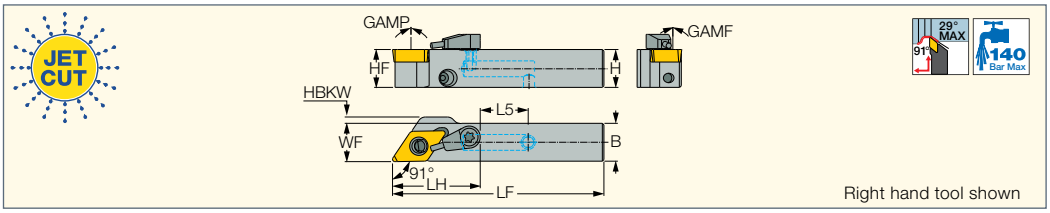
Spare Parts

Designation						
PDACR/L 1010H-07S-JHP	SL LV-2	SL PI-2 PIN	SR 10400611	HW 2.0/5	SR 5/16XUNF-TL-S	S-CU-JHP-A SET
PDACR 1616K-07S-JHP	SL LV-2	SL PI-2 PIN	SR 10400611	HW 2.0/5	SR 5/16UNF TL360	S-CU-JHP-A SET
PDACR/L 1212H-11S-JHP	SL LV-3	SL PI-3	SR 10400150	HW 2.5/5	SR 5/16UNF TL360	S-CU-JHP-A SET
PDACR/L 1616K-11S-JHP	SL LV-3	SL PI-3	SR 10400150	HW 2.5/5	SR 5/16UNF TL360	S-CU-JHP-A SET
PDACR/L 2020K-11S-JHP	SL LV-3	SL PI-3	SR 10400150	HW 2.5/5	SR 5/16UNF TL360	S-CU-JHP-A SET

ISOTURN

PDACR/L-S-JHP-MC

Tools with Channels for High-Pressure Coolant Carrying 55° Positive Rhombic Inserts for Swiss Automatic Machines



Designation	H	HF	B	LF	LH	L5	WF	HBKW	GAMP(1)	GAMF(2)	MIID(3)
PDACR/L 1212X-11S-JHP-MC	12.0	12.0	12.0	67.00	28.0	15.00	12.20	2.00	0.0	0.0	DC..11T3
PDACR/L 1616X-11S-JHP-MC	16.0	16.0	16.0	76.00	28.0	17.00	16.20	-	0.0	0.0	DC..11T3

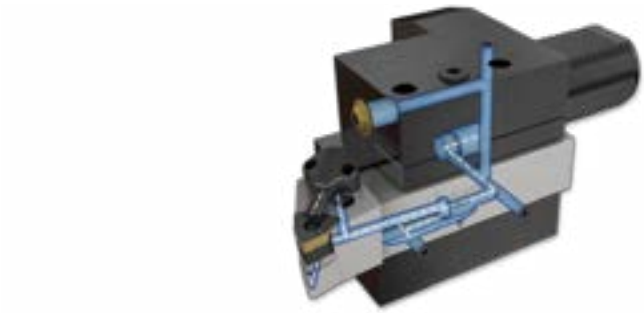
- For user guide, see pages 6-7,104-110

(1) Rake angle axial

(2) Rake angle radial

(3) Master insert identification

For inserts, see pages: DCET-WF (247) • DCGT-AF (271) • DCGT-AS (270) • DCGT-F1M-12P (243) • DCGT-F1M-20P (244) • DCMT-14 (247) • DCMT-CERMET (243) • DCMT-F3P (240) • DCMT-M3M (241) • DCMT-M3P (241) • DCMT/DCGT (246) • DCMT/DCGT-PF (245) • DCMT/DCGT-SM (246)

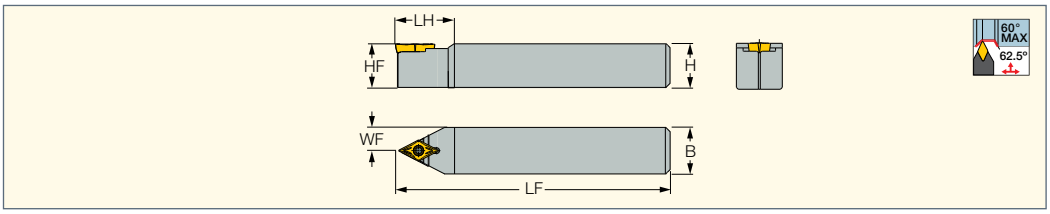


Spare Parts

Designation						
PDACR/L-S-JHP-MC	SL LV-3	SL PI-3	SR 10400150	HW 2.5/5	SR 5/16UNF TL360	S-CU-JHP-A SET

T-LOCK

SDNCN-13-SL
Screw Lock Tools Carrying 55° Diamond Inserts with 7° Clearance Angle for High Rigidity in Profiling Applications



Designation	H	HF	B	LF	LH	WF	MIID(1)		
SDNCN 1616H-13-SL	16.0	16.0	16.0	100.00	25.0	8.00	DCMT 13T5-SL	SR M4X0.7-L9.6 IP15	TORX PLUS IP15X45 GREEN
SDNCN 2020K-13-SL	20.0	20.0	20.0	125.00	25.0	10.00	DCMT 13T5-SL	SR M4X0.7-L9.6 IP15	TORX PLUS IP15X45 GREEN
SDNCN 2525M-13-SL	25.0	25.0	25.0	150.00	25.0	12.50	DCMT 13T5-SL	SR M4X0.7-L9.6 IP15	TORX PLUS IP15X45 GREEN

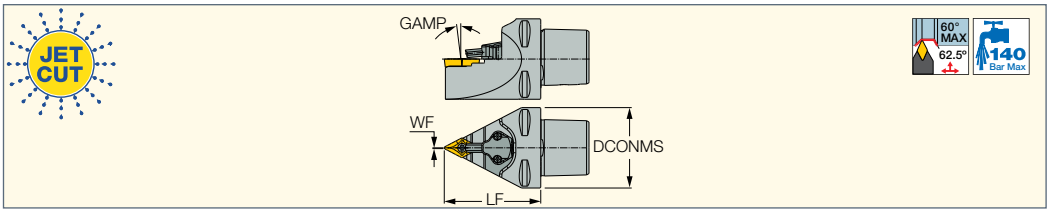
- Insert clamping torque 3 Nxm

(1) Master insert identification

For inserts, see pages: DCMT-F3P-SL (240) • DCMT-M3M-SL (242) • DCMT-PF-SL (244) • DCMT-SM-SL (245)

T-LOCK

C#-SDNCN-13-SL-JHP
Screw Clamp Tools with CAMFIX Shanks and Channels for High-Pressure Coolant Carrying Positive 55° Rhombic Inserts



Designation	DCONMS	WF	LF	GAMP(1)	MIID(2)	CP(3)	DCP(4)
C3 SDNCN-00045-13-SL-JHP	32.00	0.50	45.00	0.0	DCMT 13T5-SL	140	0
C4 SDNCN-00060-13-SL-JHP	40.00	0.50	60.00	0.0	DCMT 13T5-SL	140	1
C5 SDNCN-00060-13-SL-JHP	50.00	0.50	60.00	0.0	DCMT 13T5-SL	140	1

- For user guide, see pages 6-7,104-110

(1) Rake angle axial

(2) Master insert identification

(3) Coolant pressure (Bar)

(4) 1 - Slot for data chip, 0 - Without slot for data chip

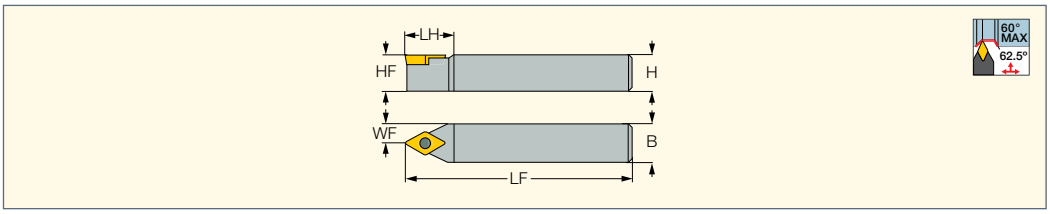
For inserts, see pages: DCMT-F3P-SL (240) • DCMT-M3M-SL (242) • DCMT-PF-SL (244) • DCMT-SM-SL (245)

Spare Parts

Designation					
C3 SDNCN-00045-13-SL-JHP	CH-1.9D-JHP	WASHER 4.2X5.6X0.5	SR M4X4 DIN913 TL360	SR M4X0.7-L9.5 IP15	
C4 SDNCN-00060-13-SL-JHP	CU-D-JHP			SR M4X0.7-L9.6 IP15	T-8/5
C5 SDNCN-00060-13-SL-JHP	CU-D-JHP			SR M4X0.7-L9.6 IP15	T-8/5

ISOTURN

SDNCN
Screw Lock Tools Carrying 55° Diamond Inserts with 7° Clearance Angle



Designation	H	HF	B	LF	LH	WF	MIID(2)					
SDNCN 0808F-07	8.0	8.0	8.0	80.00	14.0	4.00	DC..0702	SR 14-548	T-7/5			
SDNCN 1010F-07	10.0	10.0	10.0	80.00	14.5	5.00	DC..0702	SR 14-548	T-7/5			
SDNCN 1010K-11S (1)	10.0	10.0	10.0	120.00	20.0	5.00	DC..11T3	SR 16-236	T-15/5			
SDNCN 1212F-11	12.0	12.0	12.0	80.00	21.3	6.00	DC..11T3	SR 16-236 P	T-15/5			
SDNCN 1616H-11	16.0	16.0	16.0	100.00	21.0	8.00	DC..11T3	SR 16-236 P	T-15/5			
SDNCN 2020K-11	20.0	20.0	20.0	125.00	21.0	10.00	DC..11T3	SR 16-236 P	T-15/5			
SDNCN 2525M-11	25.0	25.0	25.0	150.00	30.0	12.50	DC..11T3	SR 16-236 P	T-15/5	TDC 3-1P	SR TC-3P	HW 4.0

(1) For Swiss-type machines

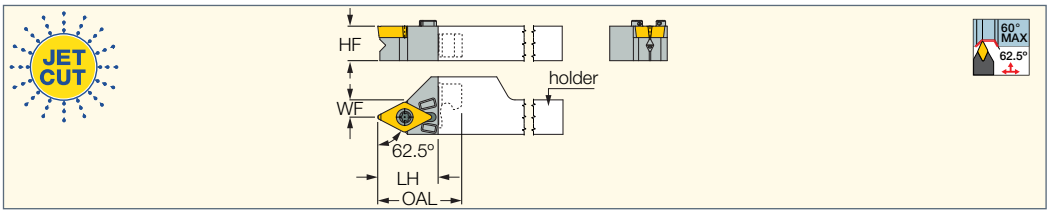
(2) Master insert identification

For inserts, see pages: DCGT-AF (271) • DCGT-AS (270) • DCGT-F1M-12P (243) • DCGT-F1M-20P (244) • DCMT-14 (247) • DCMT-CERMET (243) • DCMT-F3P (240) • DCMT-M3M (241) • DCMT-M3P (241) • DCMT/DCGT (246) • DCMT/DCGT-PF (245) • DCMT/DCGT-SM (246)

NEOSWISS

NQCH-SDNCN-S-JHP

Screw Lock JETCUT Modular Heads Carrying 7° Clearance 55° Rhombic Inserts for Swiss-Type Machines



Designation	WF	HF	LH	OAL	MIID[1]
NQCH12R/L-SDNCN-11S-JHP	6.00	12.0	21.0	28.80	DC..11T3..
NQCH16R/L-SDNCN-11S-JHP	8.00	16.0	21.0	28.80	DC..11T3..

New

- Use only RH Shank with RH Head and LH Shank with LH Head

[1] Master insert identification

For inserts, see pages: DCGT-AF (271) • DCGT-AS (270) • DCGT-F1M-12P (243) • DCGT-F1M-20P (244) • DCMT-14 (247) • DCMT-CERMET (243) • DCMT-F3P (240) • DCMT-M3M (241) • DCMT-M3P (241) • DCMT/DCGT (246) • DCMT/DCGT-PF (245) • DCMT/DCGT-SM (246)

For holders, see page: NQCH-JHP (424)

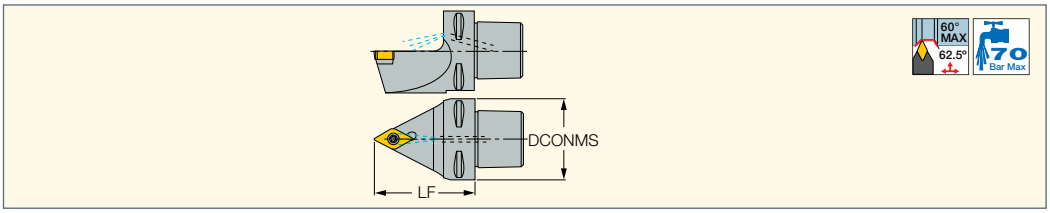
Spare Parts

Designation		
NQCH-SDNCN-S-JHP	SR 16-236 P	T-15/5

ISOTURN

C#-SDNCN

Screw Lock Tools with CAMFIX Exchangeable Shanks Carrying 55° Rhombic Inserts with 7° Clearance Angle



Designation	DCONMS	LF	MIID[1]	CP[2]	DCP[3]						
						TDC 3-1P	SR TC-3P	HW 4.0	SR 16-236 P	T-15/5	EZ 104
C4 SDNCN-00050-11	40.00	50.00	DC.. 11T3	70	1						

[1] Master insert identification

[2] Coolant pressure (Bar)

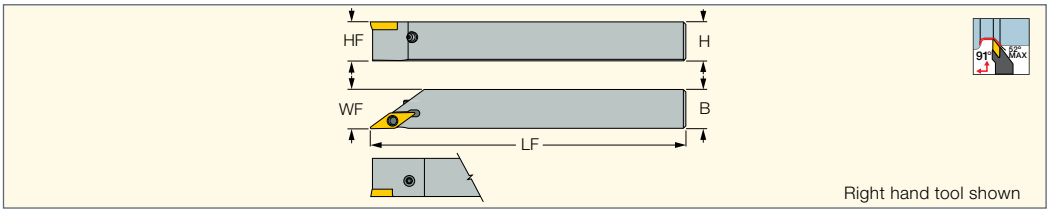
[3] 1 - Slot for data chip, 0 - Without slot for data chip

For inserts, see pages: DCGT-F1M-12P (243) • DCGT-F1M-20P (244) • DCMT-CERMET (243) • DCMT-F3P (240) • DCMT-M3P (241) • DCMT-M3M (241) • DCMT/DCGT-PF (245) • DCMT/DCGT-SM (246) • DCGT-AS (270) • DCGT-AF (271) • DCMT-14 (247) • DCMT/DCGT (246)

ISOTURN

PVACR/L-S

Side Lever Lock Tools Carrying 35° Positive Rhombic Inserts for Swiss Automatic Machines



Designation	H	HF	B	LF	WF	MIID[1]				
PVACR/L 0808M-11S	8.0	8.0	8.0	150.00	8.00	VC..1103	SL LV-2	SL PI-2 PIN	SR 10400611	HW 2.0/5
PVACR/L 1010M-11S	10.0	10.0	10.0	150.00	10.20	VC..1103	SL LV-2	SL PI-2 PIN	SR 10400611	HW 2.0/5
PVACR/L 1212M-11S	12.0	12.0	12.0	150.00	12.20	VC..1103	SL LV-2	SL PI-2 PIN	SR 10400611	HW 2.0/5
PVACR/L 1616M-11S	16.0	16.0	16.0	150.00	16.20	VC..1103	SL LV-2	SL PI-2 PIN	SR 10400611	HW 2.0/5
PVACR 2020K-11S	20.0	20.0	20.0	125.00	20.20	VC..1103	SL LV-2	SL PI-2 PIN	SR 10400611	HW 2.0/5

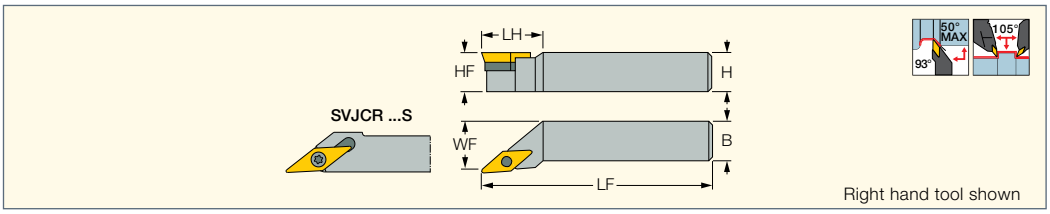
- The clamping screw may by transferred to the opposite side if needed

[1] Master insert identification

For inserts, see pages: VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-F3M (249) • VCMT-SM (251) • VCET-WF (251) • VCGT-AS (269)

ISOTURN

SVJCR/L
93° Lead Angle Screw Lock Tools Carrying 35° Diamond Inserts with 7° Clearance Angle



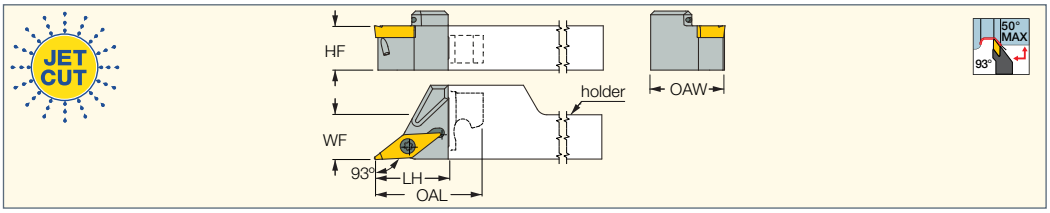
Designation	H	HF	B	LF	LH	WF	MIID(2)				
SVJCR/L 0808K-11S (1)	8.0	8.0	8.0	125.00	11.5	8.20	VC..1103	SR 14-560	T-8/5		
SVJCR/L 1010K-11S (1)	10.0	10.0	10.0	125.00	22.0	10.20	VC..1103	SR 14-560	T-8/5		
SVJCR/L 1212K-11S (1)	12.0	12.0	12.0	125.00	-	12.20	VC..1103	SR 14-560	T-8/5		
SVJCR/L 1616K-11	16.0	16.0	16.0	125.00	25.0	20.00	VC..1103	SR 14-560	T-8/5		
SVJCR/L 2020K-11	20.0	20.0	20.0	125.00	30.0	25.00	VC..1103	SR 14-560	T-8/5		
SVJCR/L 2525M-11	25.0	25.0	25.0	150.00	30.0	32.00	VC..1103	SR 14-560	T-8/5		
SVJCR/L 2020K-16	20.0	20.0	20.0	125.00	30.0	25.00	VC..1604	SR 16-236 P	T-15/5	TVC 3-1	SR TC-3
SVJCR/L 2525M-16	25.0	25.0	25.0	150.00	30.0	32.00	VC..1604	SR 16-236 P	T-15/5	TVC 3-1	SR TC-3

(1) For Swiss-type machines
(2) Master insert identification

For inserts, see pages: VCET-WF (251) • VCGT-AS (269) • VCGT-DW (PCD) (515) • VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCMT-14 (252) • VCMT-F3M (249) • VCMT-F3P (248) • VCMT-FPC-CERMET (250) • VCMT-M3M (249) • VCMT-M3P (248) • VCMT-SM (251) • VCMW (252)

NEOSWISS

NQCH-SVJCR/L-S-JHP
Screw Lock JETCUT Modular Heads Carrying 35° Rhombic Inserts with 7° Clearance Angle for Swiss-Type Machines



Designation	WF	LH	HF	OAW	OAL	MIID(1)
NQCH10-SVJCR/L-11S-JHP	10.15	20.0	10.0	20.15	28.80	VC..1103..
NQCH12-SVJCR/L-11S-JHP	12.15	20.0	12.0	20.15	28.80	VC..1103..
NQCH12R-SVJCL-11S-JHP	12.15	20.0	12.0	20.15	28.80	VC..1103..
NQCH16-SVJCR/L-11S-JHP	16.15	20.0	16.0	20.15	28.80	VC..1103..
NQCH16R-SVJCL-11S-JHP	16.15	20.0	16.0	20.15	28.80	VC..1103..

New

- Use only RH Shank with RH Head and LH Shank with LH Head

(1) Master insert identification

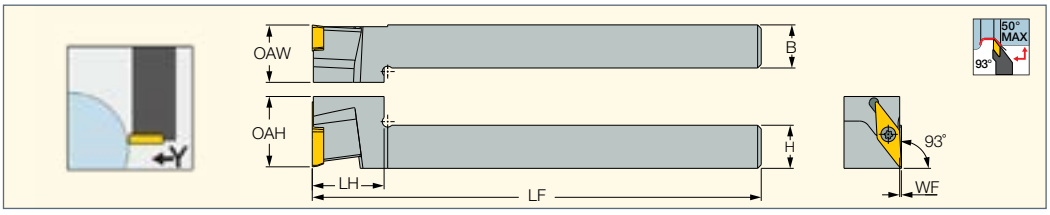
For inserts, see pages: VCET-WF (251) • VCGT-AS (269) • VCGT-DW (PCD) (515) • VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCMT-14 (252) • VCMT-F3M (249) • VCMT-F3P (248) • VCMT-FPC-CERMET (250) • VCMT-M3M (249) • VCMT-M3P (248) • VCMT-SM (251) • VCMW (252)
For holders, see page: NQCH-JHP (424)

Spare Parts

Designation		
NQCH-SVJCR/L-S-JHP	SR 14-560	T-8/5

NEOSWISS Y-AXIS

Y-SVJCR-S
Y-Axis Screw Lock Integral Tools Carrying 7° Clearance 35° Rhombic Inserts for Swiss-Type Machines



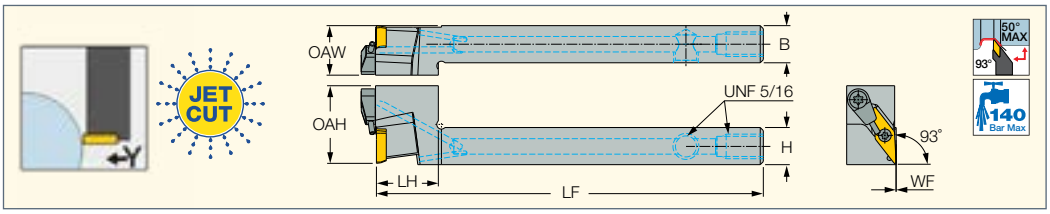
Designation	H	B	LF	LH	OAH	OAW	WF	MIID(1)		
Y-SVJCR 1212K-11S	12.0	12.0	125.00	21.0	20.00	16.00	0.00	VCMT 1103##	T-7/5	SO 250651
Y-SVJCR 1616K-11S	16.0	16.0	125.00	21.0	20.00	16.00	0.00	VCMT 1103##	T-7/5	SO 250651

(1) Master insert identification

For inserts, see pages: VCET-WF (251) • VCGT-AS (269) • VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCMT-F3M (249) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-SM (251)

NEOSWISS AXIS

Y-SVJCR-S-JHP
Y-Axis Screw Lock JETCUT Integral Tools Carrying 7° Clearance 35° Rhombic Inserts for Swiss-Type Machines



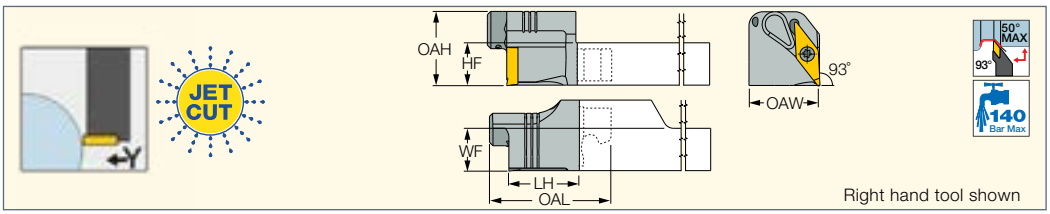
Designation	H	B	LF	LH	OAH	OAW	WF	MIID(1)					
Y-SVJCR 1212K-11S-JHP	12.0	12.0	125.00	21.0	25.50	16.00	0.00	VCMT 1103..	T-7/5	HW 5/32"	SR 5/16UNF TL360	S-CU-JHP-A SET	SO 250651
Y-SVJCR 1616K-11S-JHP	16.0	16.0	125.00	21.0	25.50	16.00	0.00	VCMT 1103..	T-7/5	HW 5/32"	SR 5/16UNF TL360	S-CU-JHP-A SET	SO 250651

(1) Master insert identification

For inserts, see pages: VCET-WF (251) • VCGT-AS (269) • VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCMT-F3M (249) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-SM (251)

NEOSWISS

NQCH-Y-SVJCR-S-JHP
Y-Axis Screw Lock JETCUT Modular Heads Carrying 35° Rhombic Inserts with 7° Clearance Angle for Swiss-Type Machines



Designation	WF	HF	LH	OAL	OAW	OAH	MIID(1)		
NQCH12-Y-SVJCR-11S-JHP	12.15	12.2	20.0	34.30	20.15	21.90	VC.. 1103	SR 14-560	T-8/5
NQCH16-Y-SVJCR-11S-JHP	16.15	16.2	20.0	34.30	20.15	21.10	VC.. 1103	SR 14-560	T-8/5

- Use only RH Shank with RH Head and LH Shank with LH Head

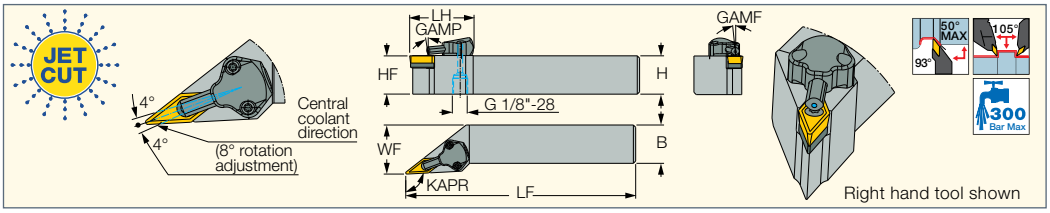
(1) Master insert identification

For inserts, see pages: VCET-WF (251) • VCGT-AS (269) • VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCMT-F3M (249) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-SM (251)

For holders, see page: NQCH-JHP (424)

ISOTURN

SVJCR/L-16-JHP
Screw Lock Tools with Channels for High-Pressure Coolant Carrying 35° Rhombic Inserts with 7° Clearance Angle



Designation	H	B	HF	LF	LH	WF	KAPR(1)	GAMP(2)	GAMF(3)	MIID(4)
SVJCR/L 2525M-16-JHP	25.0	25.0	25.0	150.00	42.0	32.00	93.0	0.0	0.0	VCMT 1604

- For user guide, see pages 6-7,104-110

(1) Tool cutting edge angle
(2) Rake angle axial
(3) Rake angle radial
(4) Master insert identification

For inserts, see pages: VCMT-FPC-CERMET (250) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-F3M (249) • VCMT-M3M (249) • VCMT-SM (251) • VCGT-AS (269) • VCMT-14 (252) • VCMW (252) • VCGT-DW (PCD) (515)

Spare Parts

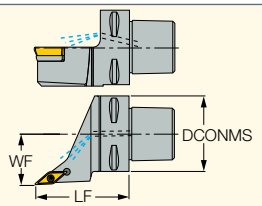
Designation								
SVJCR/L 2525M-16-JHP	TVC 3-1	SR TC-3	SR 16-236 P	CU-V-JHP	T-15/5	HW 2.5	T-8/5	TVC 3-04675*

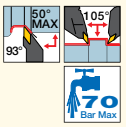
* Optional, to be ordered separately

ISOTURN

C#-SVJCR/L

Screw Lock Tools with CAMFIX Exchangeable Shanks Carrying 35° Rhombic Inserts with 7° Clearance Angle





Right hand tool shown

Designation	DCONMS	WF	LF	CP(1)	DCP(2)	MIID(3)						
C4 SVJCR/L-27050-11	40.00	27.00	50.00	70	1	VC.. 1103				SR 14-560/S M2.5X0.45	T-8/5	EZ 83
C4 SVJCR/L-27050-16	40.00	27.00	50.00	70	1	VC.. 1604	TVC 3-1	SR TC-3	HW 2.5	SR 16-236 P	T-15/5	EZ 83
C5 SVJCR-35060-11	50.00	35.00	60.00	70	1	VC.. 1103				SR 14-560/S M2.5X0.45	T-8/5	EZ 104
C5 SVJCR/L-35060-16	50.00	35.00	60.00	70	1	VC.. 1604	TVC 3-1	SR TC-3	HW 2.5	SR 16-236 P	T-15/5	EZ 104
C6 SVJCR/L-45065-16	63.00	45.00	65.00	70	1	VC.. 1604	TVC 3-1	SR TC-3	HW 2.5	SR 16-236 P	T-15/5	EZ 125

(1) Coolant pressure (Bar)
(2) 1 - Slot for data chip, 0 - Without slot for data chip
(3) Master insert identification

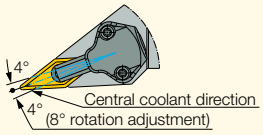
For inserts, see pages: VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCMT-FPC-CERMET (250) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-F3M (249) • VCMT-M3M (249) • VCMT-SM (251) • VCET-WF (251) • VCGT-AS (269) • VCMT-14 (252) • VCMW (252) • VCGT-DW (PCD) (515)

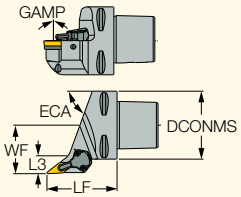
ISOTURN

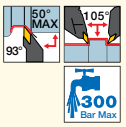
C#-SVJCR/L-JHP

Screw Lock Tools with CAMFIX Exchangeable Shanks Carrying 35° Rhombic Inserts with 7° Clearance Angle









Right hand tool shown

Designation	DCONMS	WF	LF	GAMP(1)	ECA	L3	MIID(2)	CP(3)	DCP(4)
C3 SVJCL 22040-11-JHP	32.00	22.00	40.00	0.0	55.0	-	VCMT 1103	300	0
C3 SVJCR-22040-11-JHP	32.00	22.00	40.00	0.0	55.0	-	VCMT 1103	300	0
C4 SVJCR/L-27055-16-JHP	40.00	27.00	55.00	0.0	55.0	-	VCMT 1604	300	1
C5 SVJCR/L-35060-16-JHP	50.00	35.00	60.00	0.0	55.0	-	VCMT 1604	300	1
C6 SVJCR-45065-16-JHP	63.00	45.00	65.00	0.0	70.0	16.80	VCMT 1604	300	1

- For user guide, see pages 6-7,104-110

(1) Rake angle axial
(2) Master insert identification
(3) Coolant pressure (Bar)
(4) 1 - Slot for data chip, 0 - Without slot for data chip

For inserts, see pages: VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCMT-FPC-CERMET (250) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-F3M (249) • VCMT-M3M (249) • VCMT-SM (251) • VCET-WF (251) • VCGT-AS (269) • VCMT-14 (252) • VCMW (252) • VCGT-DW (PCD) (515)

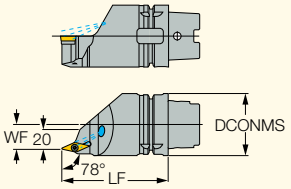
Spare Parts

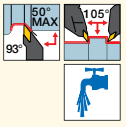
Designation							
C3 SVJCR-22040-11-JHP				SR 14-560	CH-1.9D-JHP	T-8/5	
C4 SVJCR/L-27055-16-JHP	TVC 3-1	SR TC-3	T-15/5	SR 16-236 P	CU-V-JHP	T-8/5	HW 2.5
C5 SVJCR/L-35060-16-JHP	TVC 3-1	SR TC-3	T-15/5	SR 16-236 P	CU-V-JHP	T-8/5	HW 2.5
C6 SVJCR-45065-16-JHP	TVC 3-1	SR TC-3	T-15/5	SR 16-236 P	CU-V-JHP	T-8/5	HW 2.5

ISOTURN HSK

HSK A63WH-SVJCR/L

Tools with HSK Exchangeable Tapered Shanks Carrying Positive 35° Inserts for Mounting at 15° on Turn-Mill Machines





Right hand tool shown

Designation	DCONMS	LF	WF	DCP(1)	MIID(2)						
HSK A63WH-SVJCR/L-J16	63.00	110.00	25.00	0	VC.. 1604	TVC 3-1	SR TC-3	HW 2.5	SR 16-236 P	T-15/5	EZ 104

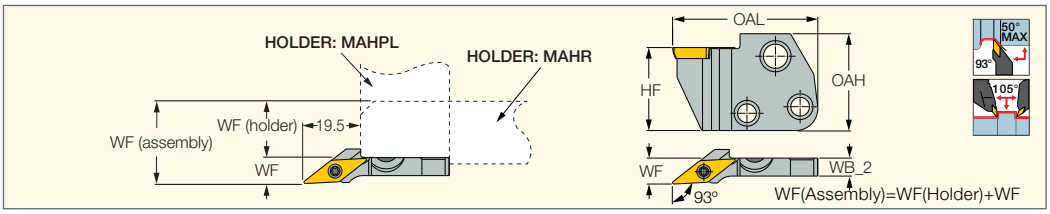
- Complies with ICTM standard (ISO 12164-3).
- A cooling tube must be used with all coolant through HSK spindles (should be ordered separately).
- For shank dimensions, see page 835

(1) 1 - Slot for data chip, 0 - Without slot for data chip
(2) Master insert identification

For inserts, see pages: VCMT-FPC-CERMET (250) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-F3M (249) • VCMT-M3M (249) • VCMT-SM (251) • VCGT-AS (269) • VCMT-14 (252) • VCMW (252) • VCGT-DW (PCD) (515)

ISOTURN

SVJCR-PAD
93° Lead Angle Screw Lock Adapters Carrying 35° Diamond Inserts with 7° Clearance Angle



Designation	HF	OAH	OAL	WF	WB_2[1]	MIID[2]		
SVJCR-11-PAD	24.0	28.00	42.00	7.50	5.2	VC.. 1103	SR 14-560	T-8/5

- WF(assembly) = WF(holder) + WF

[1] Rake angle axial

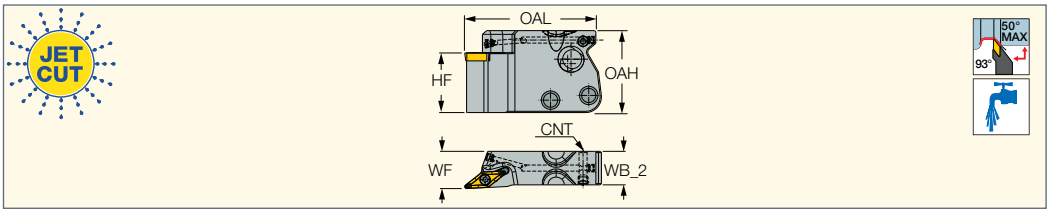
[2] Master insert identification

For inserts, see pages: VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-F3M (249) • VCMT-SM (251) • VCET-WF (251) • VCGT-AS (269)

For holders, see pages: C#-MAHPD-JHP (698) • MAHPR/L-JHP (308) • C#-MAHD (697) • C#-MAHDR-45 (696) • C#-MAHPD (698) • HMSN-New Britain (537) • HSK A63WH-MAHDOR (705) • HSK A63WH-MAHDR-45 (705) • HSK A63WH-MAHUR/L (706) • IM-MAHPD (707) • MAHPR/L (307) • MAHR/L (306)

ISOTURN

SVJCR/L-PAD-JHP
Screw Lock Adapter with High-Pressure Coolant Mounts 35° Diamond Inserts with a 7° Clearance Angle



Designation	HF	OAL	OAH	WF	WB_2	MIID[1]	CNT				
SVJCL-11-PAD-JHP	24.0	52.80	33.00	15.00	10.0	VC.. 1103	M4	SR 14-560	T-8/5	SR M4X4 DIN913 TL360	SR M3X3 DIN913 TL360
SVJCR-11-PAD-JHP	24.0	52.80	33.00	15.00	10.0	VC.. 1104	M4	SR 14-560	T-8/5	SR M4X4 DIN913 TL360	SR M3X3 DIN913 TL360

NEW

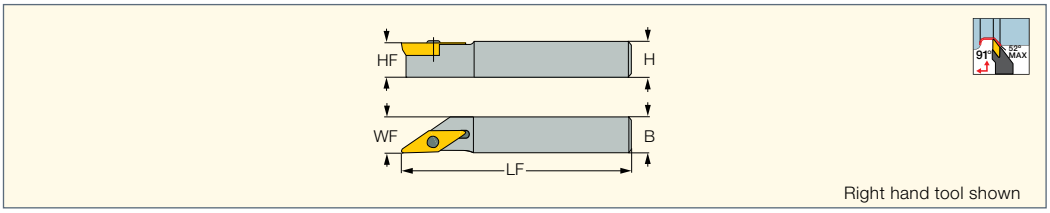
[1] Master insert identification

For inserts, see pages: VCET-WF (251) • VCGT-AS (269) • VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCMT-F3M (249) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-SM (251)

For holders, see pages: ABC MAHDR-#-XL-JHP (884) • C#-MAHPD-JHP (698) • DT##/2 MAHD#-#-XL-JHP (860) • MAHPR/L-JHP (308) • MS##-##-MG-JHP (859) • MS-ES#####-GWS-MG-JHP (861) • TR TNK36 MAHDL-R-XL-JHP (884) • TR45 MAHDR-#-XL-JHP (883) • TR45TNL MAHDN-R-XL-JHP (883) • V## MAHD#-#-XL-##-JHP (880) • V## MAHD-XL-JHP (881)

ISOTURN

SVACR/L-S
91° Lead Angle Screw Lock Tools Carrying 35° Diamond Inserts with 7° Clearance Angle



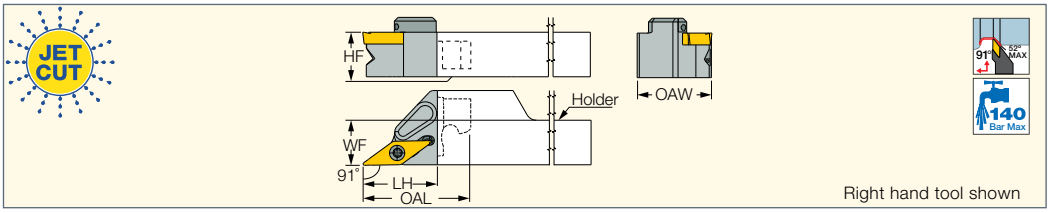
Designation	H	B	HF	LF	WF	MIID[1]		
SVACR 1010M-11S	10.0	10.0	10.0	150.00	10.15	VC..11..	SR 14-560	T-8/5
SVACR/L 1212K-11S	12.0	12.0	12.0	125.00	12.00	VC..11..	SR 14-560	T-8/5
SVACR 1616K-11S	16.0	16.0	16.0	125.00	16.00	VC..11..	SR 14-560	T-8/5
SVACR/L 1212K-13S	12.0	12.0	12.0	125.00	12.00	VC..13..	SR 14-513	T-8/5
SVACR/L 1616K-13S	16.0	16.0	16.0	125.00	16.00	VC..13..	SR 14-513	T-8/5
SVACR/L 2020K-13S	20.0	20.0	20.0	125.00	20.00	VC..13..	SR 14-513	T-8/5

[1] Master insert identification

For inserts, see pages: VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-F3M (249) • VCGT-MD/PF (251) • VCMT-SM (251) • VCET-WF (251) • VCGT-AS (269)

NEOSWISS

NQCH-SVACR/L-S-JHP
Screw Lock JETCUT Modular Heads Carrying 35° Rhombic Inserts with 7° Clearance Angle for Swiss-Type Machines



Designation	WF	HF	LH	OAL	OAW	MIID(1)		
NQCH12-SVACR/L-11S-JHP	12.15	12.0	20.0	28.80	20.15	VC.. 1103..	SR 14-560	T-8/5
NQCH16-SVACR/L-11S-JHP	16.15	16.0	20.0	28.80	20.15	VC.. 1103..	SR 14-560	T-8/5

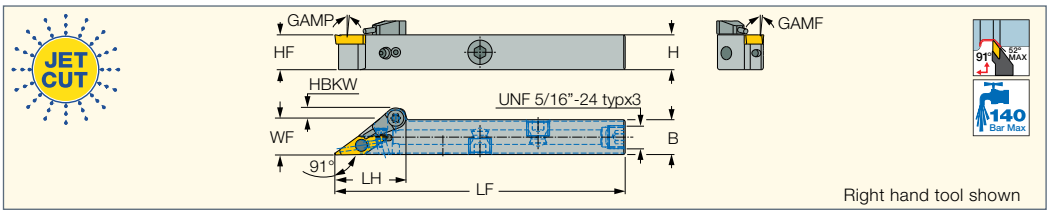
- Use only RH Shank with RH Head and LH Shank with LH Head

(1) Master insert identification

For inserts, see pages: VCET-WF (251) • VCGT-AS (269) • VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCGT-MD/PF (251) • VCMT-F3M (249) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-SM (251)
For holders, see page: NQCH-JHP (424)

ISOTURN

PVACR/L-S-JHP
Tools with Channels for High Pressure Coolant Carrying 35° Positive Rhombic Inserts for Swiss Automatic Machines



Designation	H	HF	B	LF	LH	WF	HBKW	GAMP(1)	GAMF(2)	MIID(3)
PVACR 1010H-11S-JHP	10.0	10.0	10.0	100.00	20.0	10.20	5.80	0.0	0.0	VC..1103
PVACR/L 1212H-11S-JHP	12.0	12.0	12.0	100.00	20.0	12.20	3.80	0.0	0.0	VC..1103
PVACR/L 1616K-11S-JHP	16.0	16.0	16.0	125.00	20.0	16.20	-	0.0	0.0	VC..1103
PVACR/L 2020K-11S-JHP	20.0	20.0	20.0	125.00	25.0	20.20	-	0.0	0.0	VC..1103

- For user guide, see pages 6-7,104-110

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

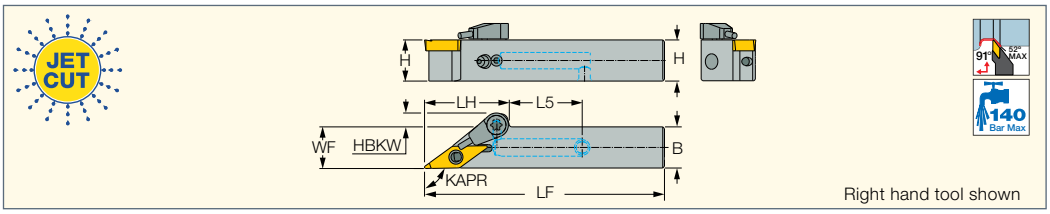
For inserts, see pages: VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-F3M (249) • VCMT-SM (251) • VCET-WF (251) • VCGT-AS (269)

Spare Parts

Designation						
PVACR 1010H-11S-JHP	SL LV-2	SL PI-2 PIN	SR 10400611	HW 2.0/5		S-CU-JHP-A SET
PVACR/L 1212H-11S-JHP	SL LV-2	SL PI-2 PIN	SR 10400611	HW 2.0/5	SR 5/16UNF TL360	S-CU-JHP-A SET
PVACR/L 1616K-11S-JHP	SL LV-2	SL PI-2 PIN	SR 10400611	HW 2.0/5	SR 5/16UNF TL360	S-CU-JHP-A SET
PVACR 2020K-11S-JHP	SL LV-2	SL PI-2 PIN	SR 10400611	HW 2.5/5	SR 5/16UNF TL360	S-CU-JHP-A SET

ISOTURN

PVACR/L-S-JHP-MC
Tools with Channels for High Pressure Coolant Carrying 35° Positive Rhombic Inserts for Swiss Automatic Machines



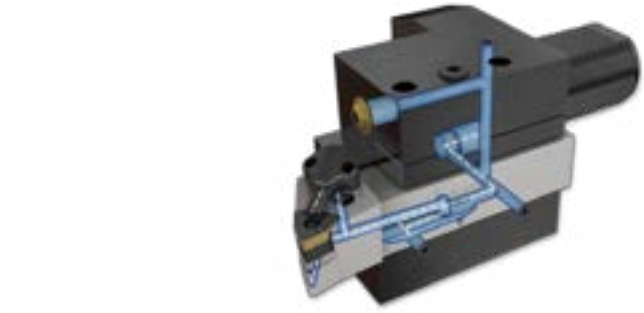
Designation	H	B	LF	LH	L5	WF	HBKW	MIID[1]	KAPR[2]
PVACR/L 1212X-11S-JHP-MC	12.0	12.0	70.00	25.0	21.00	12.20	3.80	VC..1103	91.0
PVACR/L 1616X-11S-JHP-MC	16.0	16.0	73.00	26.0	16.00	16.20	-	VC..1103	91.0

- For user guide, see pages 6-7,104-110

(1) Master insert identification

(2) Tool cutting edge angle

For inserts, see pages: VCET-WF (251) • VCGT-AS (269) • VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCMT-F3M (249) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-SM (251)

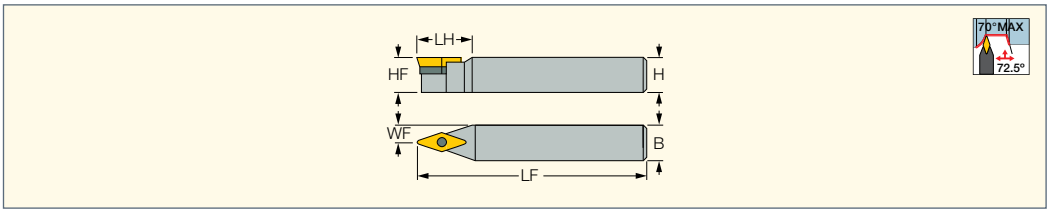


Spare Parts

Designation						
PVACR/L-S-JHP-MC	SL LV-2	SL PI-2 PIN	SR 10400611	HW 2.0/5	SR 5/16UNF TL360	S-CU-JHP-A SET

ISOTURN

SVVCN
72.5° Lead Angle Screw Lock Tools Carrying 35° Diamond Inserts with 7° Clearance Angle



Designation	H	HF	B	LF	LH	WF	MIID[2]				
SVVCN 0808K-11S [1]	8.0	8.0	8.0	125.00	-	4.30	VC..1103	SR 14-560	T-8/5		
SVVCN 1010K-11S [1]	10.0	10.0	10.0	125.00	-	5.30	VC..1103	SR 14-560	T-8/5		
SVVCN 1212K-11S [1]	12.0	12.0	12.0	125.00	-	6.30	VC..1103	SR 14-560	T-8/5		
SVVCN 1616K-11S [1]	16.0	16.0	16.0	125.00	-	8.30	VC..1103	SR 14-560	T-8/5		
SVVCN 2020K-16	20.0	20.0	20.0	125.00	34.0	10.00	VC..1604	SR 16-236 P	T-15/5	TVC 3-1	SR TC-3
SVVCN 2525M-16	25.0	25.0	25.0	150.00	38.1	12.50	VC..1604	SR 16-236 P	T-15/5	TVC 3-1	SR TC-3

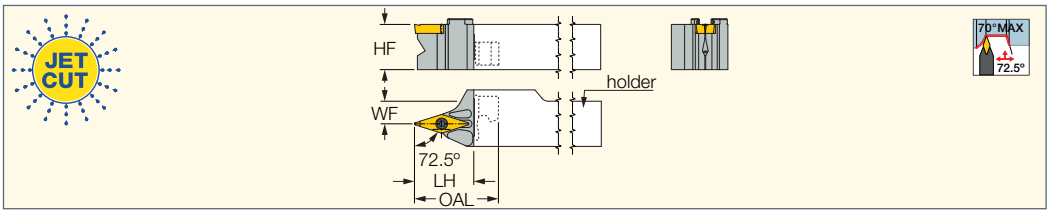
(1) For Swiss-type machines

(2) Master insert identification

For inserts, see pages: VCGT-AS (269) • VCGT-DW (PCD) (515) • VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCMT-14 (252) • VCMT-F3M (249) • VCMT-F3P (248) • VCMT-FPC-CERMET (250) • VCMT-M3M (249) • VCMT-M3P (248) • VCMT-SM (251) • VCMW (252)

NEOSWISS

NQCH-SVVCN-S-JHP
Screw Lock JETCUT Modular Heads Carrying 35° Rhombic Inserts with 7° Clearance Angle for Swiss-Type Machines



Designation	WF	HF	LH	OAL	MIID[1]
NQCH12R/L-SVVCN-11S-JHP	6.00	12.0	21.0	28.80	VC..1103..

NEW

- Use only RH Shank with RH Head and LH Shank with LH Head

[1] Master insert identification

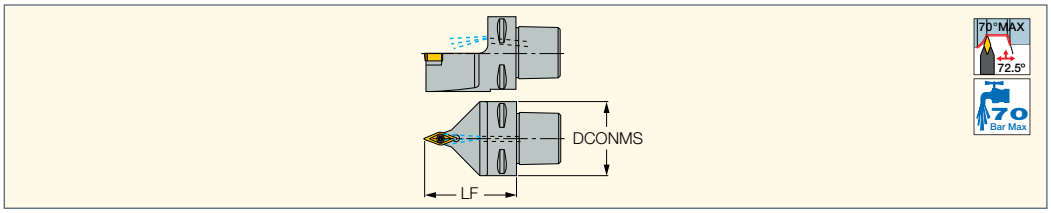
For inserts, see pages: VCGT-AS (269) • VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCMT-F3M (249) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-SM (251)
For holders, see page: NQCH-JHP (424)

Spare Parts

Designation		
NQCH-SVVCN-S-JHP	SR 14-560	T-8/5

ISOTURN

C#-SVVCN
Screw Lock Tools with CAMFIX Exchangeable Shanks Carrying 35° Rhombic Inserts with 7° Clearance Angle



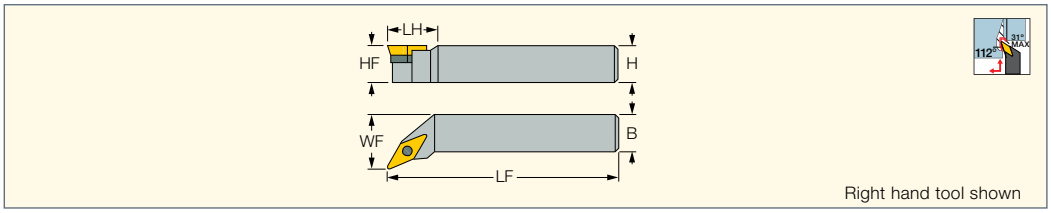
Designation	DCONMS	LF	MIID[1]	DCP[3]	CP[2]						
C4 SVVCN-00050-16	40.00	40.00	VC.. 1604	70	1	TVC 3-1	SR TC-3	HW 2.5	SR 16-236 P	T-15/5	EZ 83
C5 SVVCN-00060-16	50.00	50.00	VC.. 1604	1	70	TVC 3-1	SR TC-3	HW 2.5	SR 16-236 P	T-15/5	EZ 125

[1] Master insert identification
[2] Coolant pressure (Bar)
[3] 1 - Slot for data chip, 0 - Without slot for data chip

For inserts, see pages: VCMT-FPC-CERMET (250) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-F3M (249) • VCMT-M3M (249) • VCMT-SM (251) • VCGT-AS (269) • VCMT-14 (252) • VCMW (252) • VCGT-DW (PCD) (515)

ISOTURN

SVXCR/L
112° Lead Angle Screw Lock Tools Carrying 35° Diamond Inserts with 7° Clearance Angle



Right hand tool shown

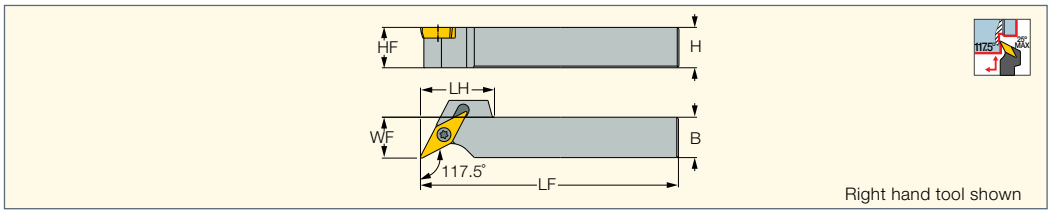
Designation	H	HF	B	LF	LH	WF	MIID[1]				
SVXCR/L 2020K-16	20.0	20.0	20.0	125.00	25.0	25.00	VC..1604	TVC 3-1	SR TC-3	HW 2.5	SR 16-236 P
SVXCR/L 2525M-16	25.0	25.0	25.0	150.00	30.0	32.00	VC..1604	TVC 3-1	SR TC-3	HW 2.5	SR 16-236 P

[1] Master insert identification

For inserts, see pages: VCMT-FPC-CERMET (250) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-F3M (249) • VCMT-M3M (249) • VCMT-SM (251) • VCGT-AS (269) • VCMT-14 (252) • VCMW (252) • VCGT-DW (PCD) (515)

ISOTURN

SVPCR/L-S
117° Lead Angle Screw Lock Tools Carrying 35° Diamond Inserts with 7° Clearance Angle



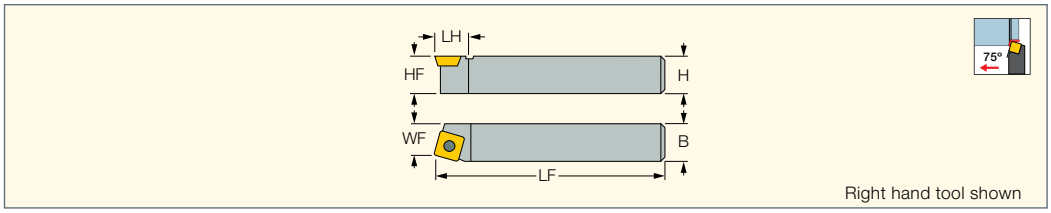
Designation	H	HF	B	LF	LH	WF	MIID[1]		
SVPCR/L 1212K-11S	12.0	12.0	12.0	125.00	19.0	12.20	VC..1103	SR 14-560	T-8/5
SVPCR/L 1616K-11S	16.0	16.0	16.0	125.00	-	16.20	VC..1103	SR 14-560	T-8/5

[1] Master insert identification

For inserts, see pages: VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-F3M (249) • VCMT-SM (251) • VCGT-AS (269)

ISOTURN

SSBCR/L
75° Lead Angle Screw Lock Tools Carrying Square Inserts with 7° Clearance Angle



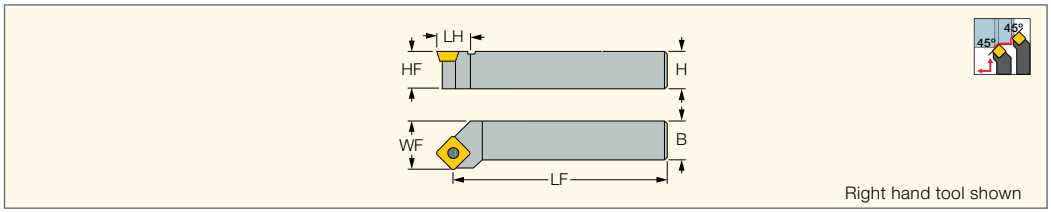
Designation	H	HF	B	LF	LH	WF	MIID[1]					
SSBCR/L 1616H-09	16.0	16.0	16.0	100.00	15.0	13.00	SC.. 09T3	SR 16-236	T-15/5			
SSBCR/L 2020K-12	20.0	20.0	20.0	125.00	19.0	17.00	SC..1204	SR 16-212	T-20/5			
SSBCR/L 2525M-12	25.0	25.0	25.0	150.00	19.0	22.00	SC..1204	SR 16-212	T-20/5	TSC 4-2	SR TC-4	HW 3.0

[1] Master insert identification

For inserts, see pages: SCMT-F3P (252) • SCMT-M3P (253) • SCMT-F3M (253) • SCMT-M3M (253) • SCMT-SM (254) • SCGT-AS (268) • SCMT-14 (254) • SCMT-19 (254)

ISOTURN

SSSCR/L
45° Lead Angle Screw Lock Tools Carrying Square Inserts with 7° Clearance Angle



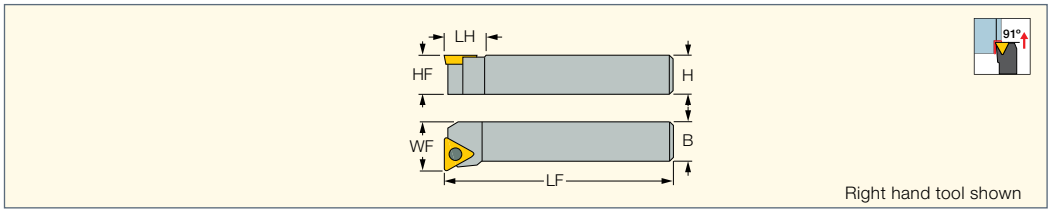
Designation	H	HF	B	LF	LH	WF	MIID[1]					
SSSCR/L 1212F-09	12.0	12.0	12.0	80.00	18.0	16.00	SC.. 09T3	SR 16-236	T-15/5			
SSSCR/L 1616H-09	16.0	16.0	16.0	100.00	18.0	20.00	SC.. 09T3	SR 16-236	T-15/5			
SSSCR/L 2020K-12	20.0	20.0	20.0	125.00	22.0	25.00	SC.. 1204	SR 16-212	T-20/5			
SSSCR/L 2525M-12	25.0	25.0	25.0	150.00	25.0	32.00	SC.. 1204	SR 16-212	T-20/5	TSC 4-2	SR TC-4	HW 3.0

[1] Master insert identification

For inserts, see pages: SCMT-F3P (252) • SCMT-M3P (253) • SCMT-F3M (253) • SCMT-M3M (253) • SCMT-SM (254) • SCGT-AS (268) • SCMT-14 (254) • SCMT-19 (254)

ISOTURN

STFCR/L
Screw Lock Tools Carrying Triangular Inserts with 7° Clearance Angle for Face Turning



Designation	H	HF	B	LF	LH	WF	MIID[1]					
STFCR/L 1212F-11	12.0	12.0	12.0	80.00	13.0	16.00	TC.. 1102	SR 14-548	T-7/5			
STFCR/L 2020K-16	20.0	20.0	20.0	125.00	18.0	25.00	TC.. 16T3	SR 16-236	T-15/5			
STFCR/L 2525M-16	25.0	25.0	25.0	150.00	20.0	32.00	TC.. 16T3	SR 16-236	T-15/5	TTC 3-2	SR TC-3	HW 2.5

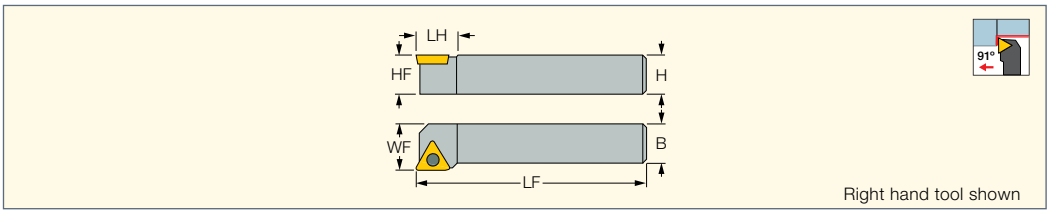
[1] Master insert identification

For inserts, see pages: TCMT-F3P (255) • TCMT-M3P (255) • TCMT-M3M (256) • TCMT-PF (256) • TCMT-SM (256) • TCGT-AS (269)

ISOTURN

STGCR/L

91° Lead Angle Screw Lock Tools Carrying Triangular Inserts with 7° Clearance Angle



Designation	H	HF	B	LF	LH	WF	MIID(1)					
STGCR/L 1212F-11	12.0	12.0	12.0	80.00	13.0	16.00	TC.. 1102	SR 14-548	T-7/5			
STGCR/L 1616H-11	16.0	16.0	16.0	100.00	13.0	20.00	TC.. 1102	SR 14-548	T-7/5			
STGCR/L 2020K-16	20.0	20.0	20.0	125.00	18.0	25.00	TC.. 16T3	SR 16-236	T-15/5			
STGCR/L 2525M-16	25.0	25.0	25.0	150.00	18.0	32.00	TC.. 16T3	SR 16-236	T-15/5	TTC 3-2	SR TC-3	HW 2.5

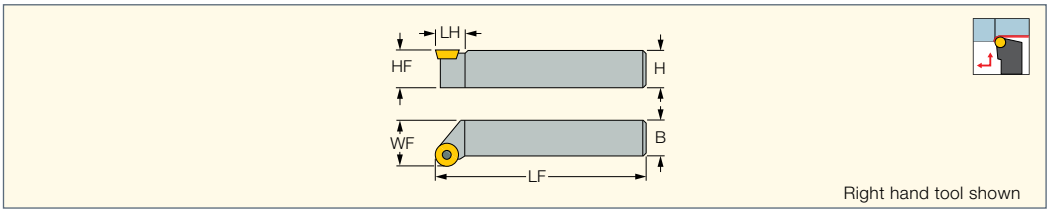
(1) Master insert identification

For inserts, see pages: TCMT-F3P (255) • TCMT-M3P (255) • TCMT-M3M (256) • TCMT-PF (256) • TCMT-SM (256) • TCGT-AS (269)

ISOTURN

SRGCR/L

Screw Lock Tools Carrying Round Inserts with 7° Clearance Angle



Designation	H	HF	B	LF	LH	WF	MIID(1)
SRGCR/L 1616H-08	16.0	16.0	16.0	100.00	11.0	20.00	RCMT 0803MO
SRGCR/L 2020K-10	20.0	20.0	20.0	125.00	14.0	25.00	RCMT 10T3MO
SRGCR 2525M-10	25.0	25.0	25.0	150.00	18.0	32.00	RCMT 10T3MO
SRGCR/L 2525M-12	25.0	25.0	25.0	150.00	18.0	32.00	RCMT 1204MO
SRGCR/L 2525M-16	25.0	25.0	25.0	150.00	20.0	32.00	RCMT 1606MO
SRGCR/L 3232P-20	32.0	32.0	32.0	170.00	25.0	40.00	RCMT 2006MO

(1) Master insert identification

For inserts, see pages: RCGT-AS (271) • RCMT-14 (257) • RCMT-M3P (257) • RCMT-SR (257)

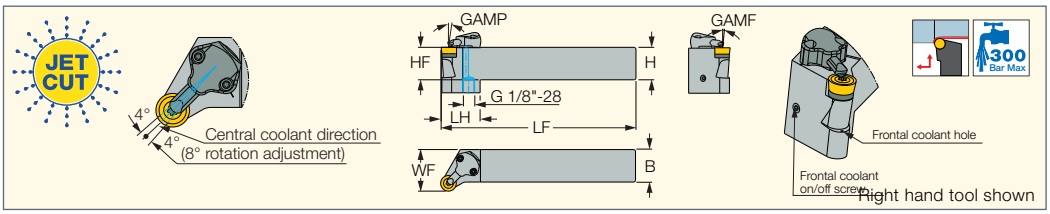
Spare Parts

Designation							
SRGCR/L 1616H-08	SR 14-513			T-8/5			
SRGCR/L 2020K-10				T-15/5			
SRGCR 2525M-10		TRC 3-0	SR TC-3	T-15/5			
SRGCR/L 2525M-12	SR 16-212	TRC 4-0	SR TC-4	T-20/5	HW 3.0		
SRGCR/L 2525M-16	SR 16-212	TRC 5-0	SR TC-4	T-20/5	HW 3.0		
SRGCR/L 3232P-20	SR 14-519	TRC 6-0	SR TC-6		HW 4.0	BLD T20/S7	SW6-T-SH

ISOTURN

SRGCR-12-JHP

Screw Lock Tools with Channels for High-Pressure Coolant Carrying Round Inserts with 7° Clearance Angle



Designation	H	B	HF	LF	LH	WF	GAMP(1)	GAMF(2)	MIID(3)
SRGCR 2525M-12-JHP	25.0	25.0	25.0	150.00	30.0	32.00	0.0	0.0	RCMT 1204

- For user guide, see pages 6-7,104-110

(1) Rake angle axial

(2) Rake angle radial

(3) Master insert identification

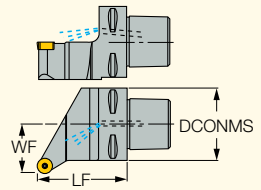
For inserts, see pages: RCMT-14 (257) • RCMT-M3P (257)

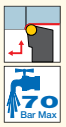
Spare Parts

Designation									
SRGCR 2525M-12-JHP	TRC 4-0	SR TC-4	T-8/5	SR 16-212	T-20/5	CU-R-JHP	SR M4X4 DIN913 TL360	HW 2.0	HW 3.0

ISOTURN

C#-SRGCR/L
Screw Lock Tools with CAMFIX Exchangeable Shanks Carrying Round Inserts with 7° Clearance Angle





Right hand tool shown

Designation	DCONMS	WF	LF	MIID(1)	CP(2)	DCP(3)						
												
C5 SRGCR-35060-12	50.00	35.00	60.00	RCMT 1204MO	70	1	TRC 4-0	SR TC-4	HW 3.0	SR 16-212	T-20/5	EZ 104

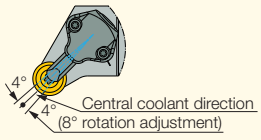
(1) Master insert identification
(2) Coolant pressure (Bar)
(3) 1 - Slot for data chip, 0 - Without slot for data chip

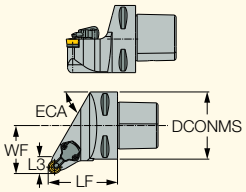
For inserts, see pages: RCMT-14 (257) • RCMT-M3P (257)

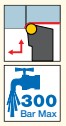
ISOTURN

C#-SRGCR-12-JHP
Screw Lock Tools with CAMFIX Exchangeable Shanks Carrying Round Inserts with 7° Clearance Angle









Right hand tool shown

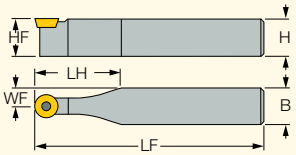
Designation	DCONMS	WF	LF	ECA	L3	MIID(1)	CP(3)	DCP(2)							
															
C6 SRGCR-45065-12-JHP	63.00	45.00	65.00	60.0	16.00	RCMT 1204MO	1	300	TRC 4-0	SR TC-4	T-20/5	SR 16-212	HW 3.0	CU-R-JHP	T-8/5

• For user guide, see pages 6-7,104-110
(1) Master insert identification
(2) 1 - Slot for data chip, 0 - Without slot for data chip
(3) Coolant pressure (Bar)

For inserts, see pages: RCMT-14 (257) • RCMT-M3P (257)

ISOTURN

SRDCN
Screw Lock Neutral Tools Carrying Round Inserts with 7° Clearance Angle





Designation	H	HF	B	LF	LH	WF	MIID(1)
SRDCN 1616H-08	16.0	16.0	16.0	100.00	33.0	8.00	RCMT 0803MO
SRDCN 2020K-10	20.0	20.0	20.0	125.00	38.0	10.00	RCMT 10T3MO
SRDCN 2525M-12	25.0	25.0	25.0	150.00	50.0	12.50	RCMT 1204MO
SRDCN 3225P-12	32.0	32.0	25.0	170.00	50.0	12.50	RCMT 1204MO
SRDCN 3225P-16	32.0	32.0	25.0	170.00	50.0	12.50	RCMT 1606MO
SRDCN 3232P-20	32.0	32.0	32.0	170.00	50.0	16.00	RCMT 2006MO

(1) Master insert identification

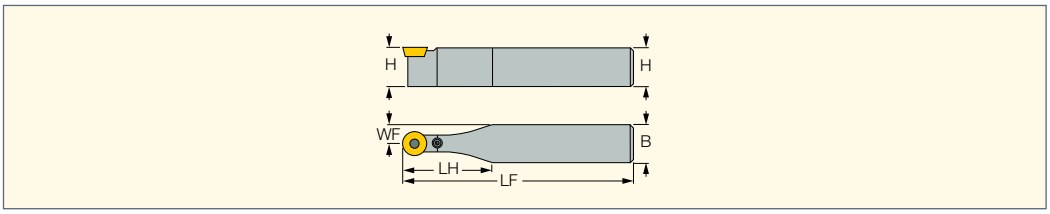
For inserts, see pages: RCGT-AS (271) • RCMT-14 (257) • RCMT-M3P (257) • RCMT-SR (257)

Spare Parts

Designation							
							
SRDCN 1616H-08	SR 14-513	T-8/5					
SRDCN 2020K-10	SR 16-236	T-15/5					
SRDCN 2525M-12	SR 16-212	T-20/5	TRC 4-0	SR TC-4	HW 3.0		
SRDCN 3225P-12	SR 16-212	T-20/5	TRC 4-0	SR TC-4	HW 3.0		
SRDCN 3225P-16	SR 16-212	T-20/5	TRC 5-0	SR TC-4	HW 3.0		
SRDCN 3232P-20	SR 14-519		TRC 6-0	SR TC-6	HW 4.0	BLD T20/S7	SW6-T-SH

ISOTURN

PRDCN
Lever Lock Tools Carrying RCMX Round Inserts



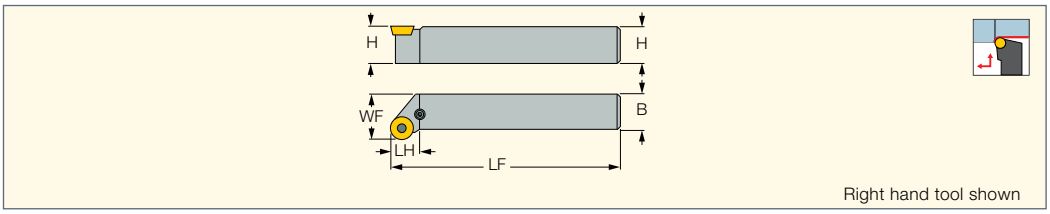
Designation	H	HF	B	LF	LH	WF	MIID(1)					
PRDCN 4040S-25	40.0	40.0	40.0	250.00	80.0	20.00	RCMX 2507	TRC 25	SP 66	HW 4.0	SR 10402289	LR 25C
PRDCN 5050U-32	50.0	50.0	50.0	350.00	90.0	25.00	RCMX 3209	TRC 32	SP 8	HW 5.0	SR 10402264	LR 32C

(1) Master insert identification

For inserts, see pages: RCMX-M3P-R (258) • RCMX-NR (259) • RCMX-R3P-R (258)

ISOTURN

PRGCR
Lever Lock Tools Carrying RCMX Round Inserts



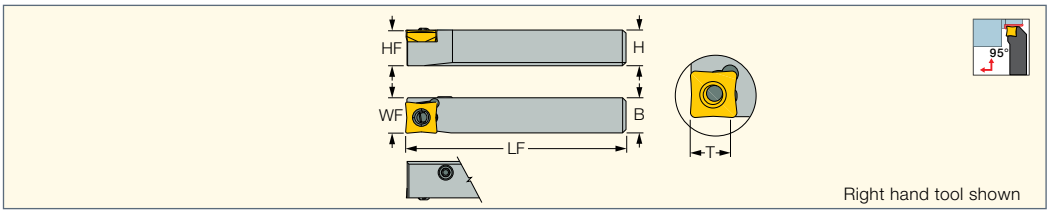
Designation	H	B	HF	LF	LH	WF	MIID(1)					
PRGCR 4040S-25	40.0	40.0	40.0	250.00	30.0	50.00	RCMX 2507	TRC 25	SP 66	SR 10402289	LR 25C	HW 4.0

(1) Master insert identification

For inserts, see pages: RCMX-NR (259)

ISOTURN

PQLCR/L-S
Side Lever Lock Tools Carrying 80° Positive 4-Cornered Inserts for Swiss Automatic Machines



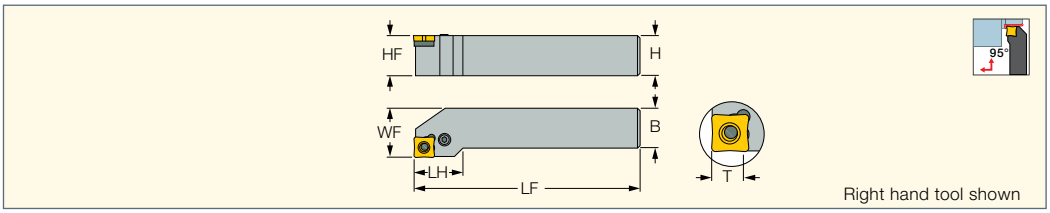
Designation	H	B	HF	LF	WF	T	MIID(1)				
PQLCR/L 1212M-09S	12.0	12.0	12.0	150.00	12.00	8.5	QCMT 09T3	SL LV-3	SL PI-3	SR 10400150	HW 2.5/5

(1) Master insert identification

For inserts, see pages: QCMT-PF (259) • QCMT-SM (259)
For holders, see pages: SBTH-JHP (421)

ISOTURN

PQLCR/L
Lever Lock Tools Carrying 80° Positive 4-Cornered Inserts



Designation	H	HF	B	LF	LH	WF	T	Insert
PQLCR/L 1616H-09	16.0	16.0	16.0	100.00	22.0	20.00	8.5	QCMT 09T3
PQLCR/L 2020K-09	20.0	20.0	20.0	125.00	25.0	25.00	8.5	QCMT 09T3
PQLCR/L 2525M-09	25.0	25.0	25.0	150.00	26.0	32.00	8.5	QCMT 09T3

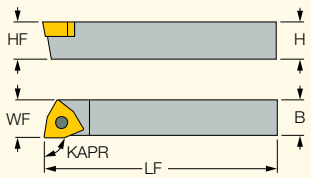
For inserts, see pages: QCMT-PF (259) • QCMT-SM (259)

Spare Parts

Designation						
PQLCR/L	TXC 322	SP 3	PN 3-4	LR 3	SR 117-2014	HW 2.5/5

ISOTURN

SWAPR/L-S
90° Lead Angle Screw Lock Tools Carrying Trigon Inserts for Swiss Automatic Machines





Right hand tool shown

Designation	H	HF	B	LF	WF	KAPR(1)	MIID(2)		
SWAPR/L 0808-04	8.0	8.0	8.0	140.00	8.10	90.0	WPEB/X 04..	T-8/5	SR M3.0R/L
SWAPR 1010-04	10.0	10.0	10.0	150.00	10.10	90.0	WPEB/X 04..	T-8/5	SR M3.0R
SWAPR/L 1010-05	10.0	10.0	10.0	150.00	10.10	90.0	WPEB/X 05..	T-8/5	SR M3.5R/L
SWAPL 1212-05	12.0	12.0	12.0	150.00	12.10	90.0	WPEB/X 05..	T-8/5	SR M3.5R/L
SWAPR/L 1212-06	12.0	12.0	12.0	150.00	12.10	90.0	WPEB/X 06..	T-8/5	SR M3.5R/L
SWAPR 1414-06	14.0	14.0	14.0	150.00	14.10	90.0	WPEB/X 06..	T-8/5	SR M3.5R/L
SWAPR/L 1616-06	16.0	16.0	16.0	150.00	16.10	90.0	WPEB/X 06..	T-8/5	SR M3.5R/L

- For R.H. tool use -R screw, for L.H. tool use -L screw.

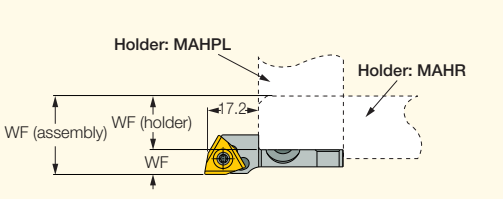
(1) Tool cutting edge angle

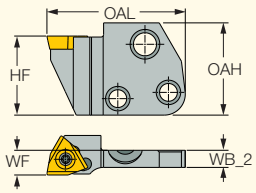
(2) Master insert identification

For inserts, see page: WPEX (265)
For holders, see page: SBTH-JHP (421)

ISOTURN

SWAPR-PAD
90° Lead Angle Screw Lock Adapters Carrying Trigon Inserts for Swiss Automatic Machines







Designation	HF	OAH	OAL	WF	WB_2(1)	MIID(2)		
SWAPR-06-PAD	24.0	28.00	42.00	7.50	5.2	WPEX/B 0604	SR M3.5R	T-8/5

- WF(assembly) = WF(holder) + WF

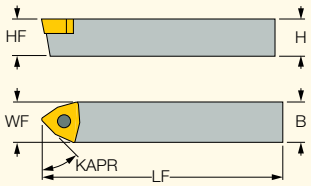
(1) Rake angle axial

(2) Master insert identification

For inserts, see page: WPEX (265)
For holders, see pages: C#-MAHD (697) • C#-MAHDR-45 (696) • C#-MAHPD (698) • C#-MAHPD-JHP (698) • HMSN-New Britain (537) • HSK A63WH-MAHDOR (705) • HSK A63WH-MAHDR-45 (705) • HSK A63WH-MAHUR/L (706) • IM-MAHPD (707) • MAHPR/L (307) • MAHPR/L-JHP (308) • MAHR/L (306)

ISOTURN

SWDPR/L
45° Lead Angle Screw Lock Tools Carrying Trigon Inserts for Swiss Automatic Machines





Designation	H	HF	B	LF	WF	KAPR(1)	MIID(2)		
SWDPR 1010-04	10.0	10.0	10.0	150.00	10.10	45.0	WPEB/X 04..	T-8/5	SR M3.0R
SWDPR/L 1212-05	12.0	12.0	12.0	150.00	12.10	45.0	WPEB/X 05..	T-8/5	SR M3.5R/L
SWDPR 1616-06	16.0	16.0	16.0	150.00	16.10	45.0	WPEB/X 06..	T-8/5	SR M3.5R

- For R.H. tool use -R screw, for L.H. tool use -L screw

(1) Tool cutting edge angle

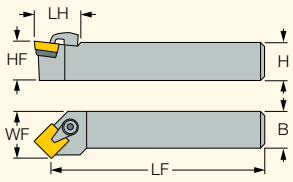
(2) Master insert identification

For inserts, see page: WPEX (265)
For holders, see page: SBTH-JHP (421)

ISOTURN

CSSPR/L

Clamp Lock Tools Carrying 11° Clearance Square Inserts for Longitudinal and Face Turning





Right hand tool shown

Designation	H	HF	B	LF	LH	WF	MIID[2]				
CSSPR 1212F-09	12.0	12.0	12.0	80.00	21.0	16.00	SPMR 090304			LC 15 SET 1	HW 2.5
CSSPR 1616H-12 [1]	16.0	16.0	16.0	100.00	26.0	20.00	SPMR 120304	ISQP 162	SP 16	LC 30 SET 2	HW 3.0
CSSPR 2020K-12 [1]	20.0	20.0	20.0	125.00	26.0	25.00	SPMR 120304	ISQP 162	SP 16	LC 30 SET 1	HW 3.0
CSSPR/L 2525M-12 [1]	25.0	25.0	25.0	150.00	28.0	32.00	SPMR 120304	ISQP 162	SP 16	LC 30 SET 1	HW 3.0

[1] ISQP 163 for inserts with corner radii 1.6-2.4 mm.

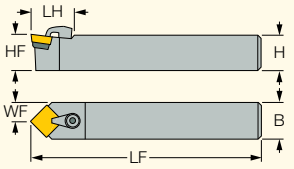
[2] Master insert identification

For inserts, see page: SPMR (260)

ISOTURN

CSDPN

45° Lead Angle Clamp Lock Tools Carrying 11° Clearance Square Inserts





Designation	H	HF	B	LF	LH	WF	MIID[1]				
CSDPN 2020K-12	20.0	20.0	20.0	125.00	30.0	10.00	SPMR 1203	ISQP 162	SP 16	LC 30 SET 1	HW 3.0
CSDPN 2525M-12	25.0	25.0	25.0	150.00	30.0	12.50	SPMR 1203	ISQP 162	SP 16	LC 30 SET 1	HW 3.0

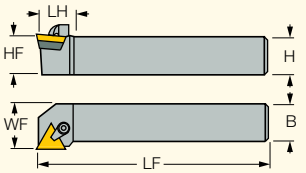
[1] Master insert identification

For inserts, see page: SPMR (260)

ISOTURN

CTGPR/L

Clamp Lock Tools Carrying 11° Clearance Triangular Inserts





Right hand tool shown

Designation	H	HF	B	LF	LH	WF	MIID[1]					
CTGPR/L 1212F-11	12.0	12.0	12.0	80.00	17.0	16.00	TPMR/TPGN 1103				LC 15 SET 1	HW 2.5
CTGPR 1616H-11	16.0	16.0	16.0	100.00	16.0	20.00	TPMR/TPGN 1103				LC 15 SET 1	HW 2.5
CTGPR/L 2020K-16	20.0	20.0	20.0	125.00	26.0	25.00	TPMR/TPGN 1603	ITBP 122	ITBP 123*	SP 16	LC 30 SET 1	HW 3.0
CTGPR/L 2525M-16	25.0	25.0	25.0	150.00	26.0	32.00	TPMR/TPGN 1603	ITBP 122	ITBP 123*	SP 16	LC 30 SET 1	HW 3.0

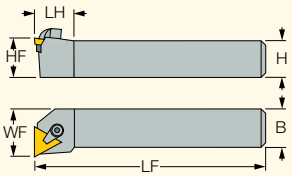
[1] Master insert identification

* Optional, to be ordered separately

For inserts, see pages: TPMR (260) • TPMR-FTF (261) • TPMR-PF (260)

ISOTURN

CTFPR/L
Clamp Lock Tools Carrying 11° Clearance Triangular Inserts for Face Turning





Right hand tool shown

Designation	H	HF	B	LF	LH	WF	MIID[1]
CTFPR 1212F-11	12.0	12.0	12.0	80.00	16.0	16.00	TPMR/TPGN 1103
CTFPR/L 1616H-11	16.0	16.0	16.0	100.00	16.0	20.00	TPMR/TPGN 1103
CTFPR 2020K-16	20.0	20.0	20.0	125.00	22.0	25.00	TPMR/TPGN 1603
CTFPR/L 2525M-16	25.0	25.0	25.0	150.00	22.0	32.00	TPMR/TPGN 1603

(1) Master insert identification

For inserts, see pages: TPMR (260) • TPMR-FTF (261) • TPMR-PF (260)

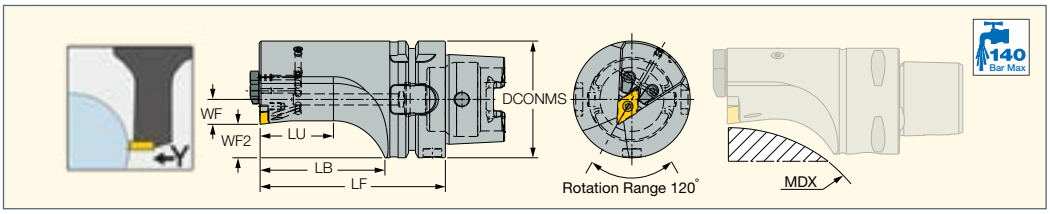
Spare Parts

Designation					
CTFPR 1212F-11		HW 2.5		LC 15 SET 1	
CTFPR/L 1616H-11		HW 2.5		LC 15 SET 1	
CTFPR 2020K-16	ITBP 122	HW 3.0	SP 16	LC 30 SET 1	ITBP 123*
CTFPL 2525M-16	ITBP 122	HW 3.0	SP 16	LC 30 SET 1	
CTFPR 2525M-16	ITBP 122	HW 3.0	SP 16	LC 30 SET 1	ITBP 123*

* Optional, to be ordered separately

HSK ISOYTURN AXIS

HSK A63WH-SDJCN-13-Y
Y-Axis Turning Tools Carrying
55° Diamond Inserts with
7° Clearance Angle

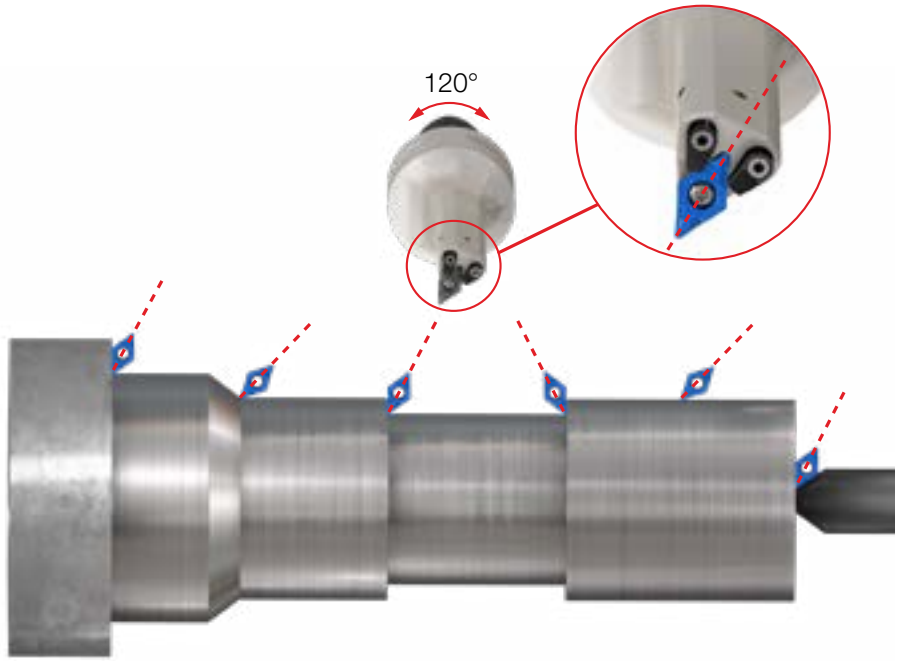


Designation	DCONMS	LU	LB	LF	WF	WF2	MDX(1)	DCP(2)	MIID(3)
HSK A63WH-SDJCN-13SL-125Y	63.00	64.60	92.40	125.00	13.44	18.1	390.00	1	DCMT 13T504-F3P-SL

- A cooling tube must be used with all coolant through HSK spindles (should be ordered separately).
- For shank dimensions, see page 835

(1) Machinable diameter maximum (For D>2*LF please use extension adapters with same diameter)
(2) 1 - Slot for data chip, 0 - Without slot for data chip
(3) Master insert identification

For inserts, see pages: DCMT-F3P-SL (240) • DCMT-M3M-SL (242) • DCMT-PF-SL (244) • DCMT-SM-SL (245)

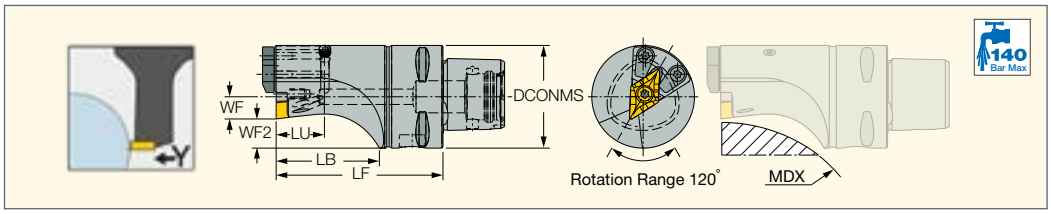


Spare Parts

Designation					
HSK A63WH-SDJCN-13-Y	CH-1.9D-JHP-A SET	BLD IP15/S7	SW6-T-SH	SR M4X4 DIN913 TL360	SR M4X0.7-L9.6 IP15

ISOY TURN AXIS

C#-SDJCN-13-Y
Y-Axis Turning Tools Carrying 55° Diamond Inserts with 7° Clearance Angle



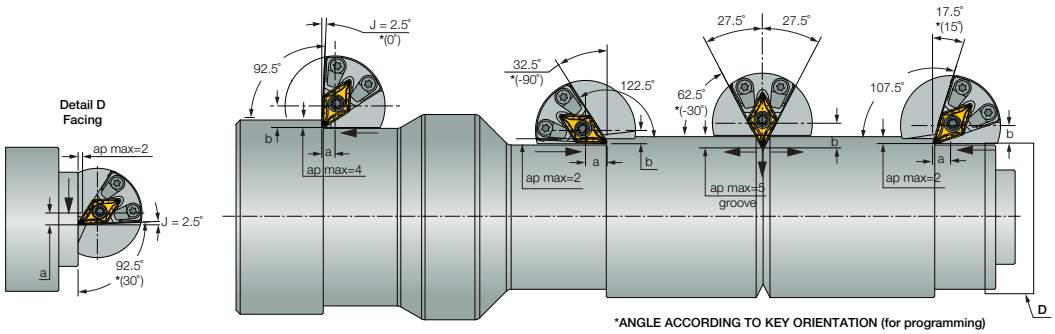
Designation	DCONMS	LU	LB	LF	WF	WF2	MDX(1)	DCP(2)	MIID(3)
C4 SDJCN-13-SL-H65-Y	40.00	18.80	40.20	65.00	8.64	11.4	120.00	1	DCMT 13T504-F3P-SL
C4 SDJCN-13-SL-H80-Y	40.00	30.30	54.40	80.00	8.64	11.4	210.00	1	DCMT 13T504-F3P-SL
C5 SDJCN-13-SL-H80-Y	50.00	28.20	53.70	80.00	10.76	14.2	180.00	1	DCMT 13T504-F3P-SL
C5 SDJCN-13-SL-H100-Y	50.00	48.20	73.70	100.00	10.76	14.2	320.00	1	DCMT 13T504-F3P-SL
C6 SDJCN-13-SL-H100-Y	63.00	46.80	73.80	100.00	13.44	18.1	260.00	1	DCMT 13T504-F3P-SL

- For user guide, see page 6-7,104-110

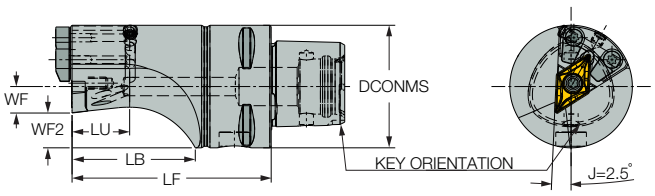
(1) Machinable diameter maximum (For D>2*LF please use extension adapters with same diameter)
(2) 1 - Slot for data chip, 0 - Without slot for data chip
(3) Master insert identification

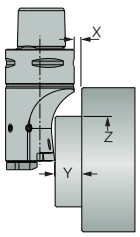
For inserts, see pages: DCMT-F3P-SL (240) • DCMT-M3M-SL (242) • DCMT-PF-SL (244) • DCMT-SM-SL (245)

Positioning Angle Samples DCMT-SL



				Position angle			
	Deg			92.5	122.5	62.5	107.5
	AP max	Longitudinal		4	2	5	2
		Face		2			
	D min	Longitudinal		9	80	0	20
		Face		0			
C4	a			5.32	8.64	0	7.2
	b			8.64	5.32	9.85	7.2
	Longitudinal	D max	h=65	120			
			h=80	210			
	Face	D max	h=65	70			
			h=80	70			
C5	a			6.55	10.76	0	8.93
	b			10.76	6.55	12.3	8.93
	Longitudinal	D max	h=80	180			
			h=100	360			
	Face	D max	h=80	70			
			h=100	110			
C6	a			8.1	13.44	0	11.12
	b			13.44	8.1	15.4	11.12
	Longitudinal	D max	h=100	260			
			h=125	420			
	Face	D max	h=100	150			
			h=125	150			
HSK A63	a			8.1	13.44	0	11.12
	b			13.44	8.1	15.4	11.12
	Longitudinal	D max	h=100	215			
			h=125	390			
	Face	D max	h=100	90			
			h=125	140			





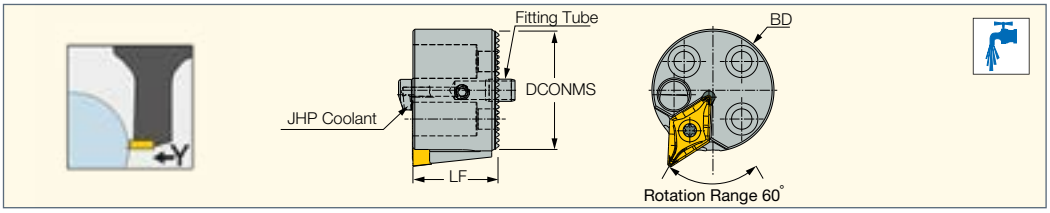
Item	Description	X	Y	Z
3400355	C4-SDJCN-13-SL-H65-Y	2.6	14	45
3395647	C4-SDJCN-13-SL-H80-Y	2.6	14	70
3400356	C5-SDJCN-13-SL-H80-Y	2.8	16	70
3395648	C5-SDJCN-13-SL-H100-Y	2.8	17	110
3400357	C6-SDJCN-13-SL-H100-Y	2.0	20	100
3394803	C6-SDJCN-13-SL-H125-Y	2.2	20.2	150
3395679	HSK A63WH-SDJCN-13SL-100Y	2.6	20.6	90
3395678	HSK A63WH-SDJCN-13SL-125Y	2.6	20.6	140

Spare Parts

Designation					
C#-SDJCN-13-Y	CH-1.9D-JHP-A SET	BLD IP15/S7	SW6-T-SH	SR M4X4 DIN913 TL360	SR M4X0.7-L9.6 IP15

ISOY AXIS TURN

AVC-SDJCN-Y
Y-Axis Interchangeable Heads
Carrying 55° Rhombic Inserts



Designation	DCONMS	BD	LF	CSP[1]	MIID[2]
AVC-D25-SDJCN-13-SL-Y	25.00	26.00	20.00	1	DCMT 13T504-F3P-SL
AVC-D32-SDJCN-13-SL-Y	32.00	33.00	23.00	1	DCMT 13T504-F3P-SL
AVC-D40-SDJCN-13-SL-Y	40.00	41.00	25.00	1	DCMT 13T504-F3P-SL

[1] 0 - Without coolant supply, 1 - With coolant supply
[2] Master insert identification

For inserts, see pages: DCMT-F3P-SL (240) • DCMT-M3M-SL (242) • DCMT-PF-SL (244) • DCMT-SM-SL (245)
For holders, see pages: C#-SH-E-JHP (704) • C#-SH-JHP (704)

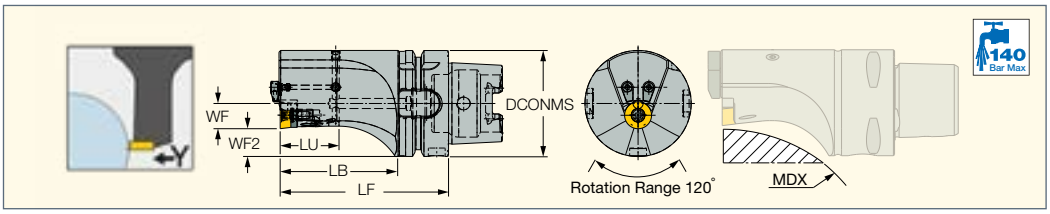
Spare Parts

Designation					
AVC-D25-SDJCN-13-SL-Y	SR M3X3 DIN913 TL360	BLD IP15/S7	SW6-T-SH	SR M4X0.7-L9.6 IP15	
AVC-D32-SDJCN-13-SL-Y	SR M3X3 DIN913 TL360	BLD IP15/S7	SW6-T-SH	SR M4X0.7-L9.6 IP15	
AVC-D40-SDJCN-13-SL-Y	SR M5X5 DIN913 TL360	BLD IP15/S7	SW6-T-SH	SR M4X0.7-L9.6 IP15	CH-1.9D-JHP-A SET



HSK ISOYTURN AXIS

HSK A63WH-SRDCN-Y
Y-Axis Turning Tools
Carrying Round Inserts
with 7° Clearance Angle



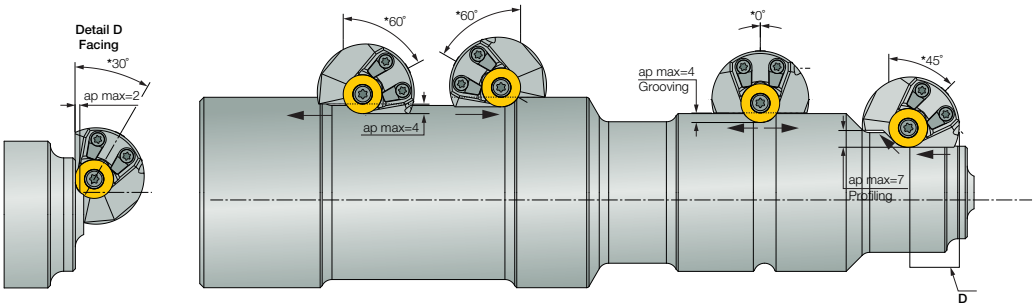
Designation	DCONMS	LU	LB	LF	WF	WF2	MDX(1)	DCP(2)	MIID(3)
HSK A63WH-SRDCN-16-100Y	63.00	34.90	69.80	100.00	15.00	16.5	240.00	1	RCMT 1606MO-14
HSK A63WH-SRDCN-16-125Y	63.00	60.00	93.40	125.00	15.00	16.5	380.00	1	RCMT 1606MO-14

- A cooling tube must be used with all coolant through HSK spindles (should be ordered separately).
- For shank dimensions, see page 835

(1) Machinable diameter maximum (For D>2*LF please use extension adapters with same diameter)
(2) 1 - Slot for data chip, 0 - Without slot for data chip
(3) Master insert identification

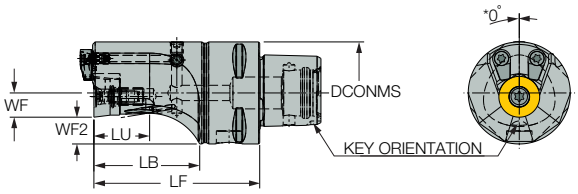
For inserts, see pages: RCMT-14 (257) • RCMT-M3P (257) • RCMT-SR (257)

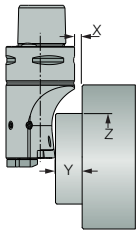
Positioning Angle Samples RCMT



				Position angle			
		Deg		30	45	60	0
		AP max	Longitudinal		7	4	4
			Face	2			
		D min	Longitudinal				
			Face				
C4	a			9.5			
	b			9.5			
	Longitudinal	D max	LF=h=65	130			
			h=80	210			
	Face	D max	h=65	50			
			h=80	75			
C5	a			12			
	b			12			
	Longitudinal	D max	h=80	180			
			h=100	350			
	Face	D max	h=80	60			
			h=100	95			
C6	a			15			
	b			15			
	Longitudinal	D max	h=100	260			
			h=125	450			
	Face	D max	h=100	80			
			h=125	110			
HSK A63	a			15			
	b			15			
	Longitudinal	D max	h=100	240			
			h=125	380			
	Face	D max	h=100	80			
			h=125	125			

*ANGLE ACCORDING TO KEY ORIENTATION (for programming)





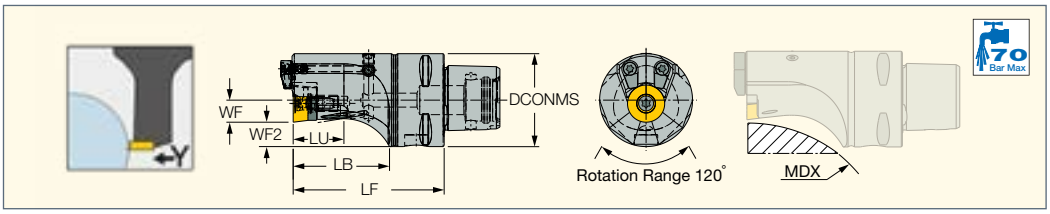
Item	Description	X	Y	Z
3400364	C4-SRDCN-16-H65-Y	2.2	13.5	50
3395661	C4-SRDCN-16-H80-Y	2.2	13.5	75
3400365	C5-SRDCN-16-H80-Y	2	17	60
3395662	C5-SRDCN-16-H100-Y	2	17	95
3400366	C6-SRDCN-16-H100-Y	2	22	80
3395663	C6-SRDCN-16-H125-Y	2	22	110
3395689	HSK A63WH-SRDCN-16-100Y	3	23	80
3395688	HSK A63WH-SRDCN-16-125Y	3	23	125

Spare Parts

Designation							
HSK A63WH-SRDCN-Y	TRC 5-0	SR TC-4	CH-1.9D-JHP-A SET	SR 16-212	HW 3.0	BLD T20/S7	SW6-T-SH

ISOYTURN AXIS

C#-SRDCN-16-Y
Y-Axis Turning Tools
Carrying Round Inserts
with 7° Clearance Angle



Designation	DCONMS	LU	LB	LF	WF	WF2	MDX(1)	DCP(2)	MIID(3)
C4 SRDCN-16-H65-Y	40.00	21.90	41.50	65.00	9.50	10.5	130.00	1	RCMT 1606M0-14
C4 SRDCN-16-H80-Y	40.00	36.80	56.70	80.00	9.50	10.5	210.00	1	RCMT 1606M0-14
C5 SRDCN-16-H80-Y	50.00	27.00	56.20	80.00	12.00	13.0	180.00	1	RCMT 1606M0-14
C5 SRDCN-16-H100-Y	50.00	44.40	76.20	100.00	12.00	13.0	350.00	1	RCMT 1606M0-14
C6 SRDCN-16-H100-Y	63.00	40.50	74.00	100.00	15.00	16.5	260.00	1	RCMT 1606M0-14
C6 SRDCN-16-H125-Y	63.00	65.50	98.90	125.00	15.00	16.5	450.00	1	RCMT 1606M0-14

• For user guide, see page 6-7,104-110
(1) Machinable diameter maximum (For D>2*LF please use extension adapters with same diameter)
(2) 1 - Slot for data chip, 0 - Without slot for data chip
(3) Master insert identification

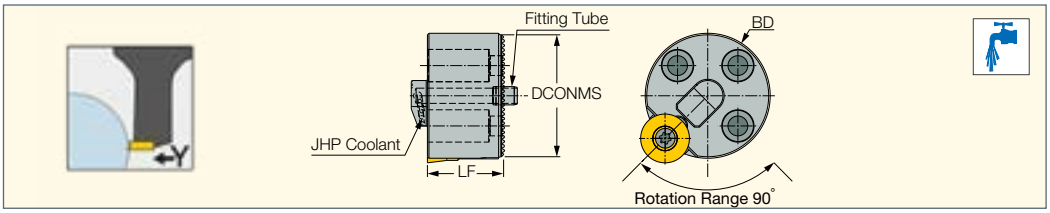
For inserts, see pages: RCMT-14 (257) • RCMT-M3P (257) • RCMT-SR (257)

Spare Parts

Designation							
C#-SRDCN-16-Y	TRC 5-0	SR TC-4	CH-1.9D-JHP-A SET	SR 16-212	HW 3.0	BLD T20/S7	SW6-T-SH

ISOYTURN AXIS

AVC-SRDCN-Y
Y-Axis Interchangeable Heads
Carrying Round Inserts
with 7° Clearance Angle



Designation	DCONMS	BD	LF	MIID(1)
AVC-D16-SRDCN-08-Y	16.00	17.00	12.00	RCMT 0803M0-14
AVC-D20-SRDCN-10-Y	20.00	21.00	20.00	RCMT 10T3M0-14
AVC-D25-SRDCN-12-Y	25.00	26.00	20.00	RCMT 1204M0-14
AVC-D32-SRDCN-16-Y	32.00	33.00	23.00	RCMT 1606M0-14
AVC-D40-SRDCN-16-Y	40.00	41.00	25.00	RCMT 1606M0-14

(1) Master insert identification

For inserts, see pages: RCMT-14 (257) • RCMT-M3P (257) • RCMT-SR (257)
For holders, see pages: C#-SH-E-JHP (704) • C#-SH-JHP (704)

Spare Parts

Designation							
AVC-D16-SRDCN-08-Y	SR 14-513	T-8/5					
AVC-D20-SRDCN-10-Y	SR 16-236	T-15/5	HW 2.5	SR TC-3	TRC 3-0		
AVC-D25-SRDCN-12-Y	SR 16-212	T-20/5	HW 3.0	SR TC-4	TRC 4-0		
AVC-D32-SRDCN-16-Y	SR 16-212		HW 3.0	SR TC-4	TRC 5-0	SW6-T-SH	BLD T20/S7
AVC-D40-SRDCN-16-Y	SR 16-212		HW 3.0	SR TC-4	TRC 5-0	SW6-T-SH	BLD T20/S7

JET HIGH-PRESSURE TOOLS

High-Pressure Coolant

Important Features

- Up to 200% increased cutting speed when machining titanium and heat resistant alloys.
- Effective chip control on problematic materials.
- Up to 100% increased tool life when machining titanium, heat resistant alloys and alloy steel.

JHP tools are essential and important for the aviation, aerospace and medical industries.

The coolant channels of the JHP tools feature outlets very close to the cutting edges, thus gaining the following advantages:

- Shorter machining time – cutting speed may be increased by up to 200% when machining titanium and heat resistant alloys.
- Longer tool life – increased tool life by up to 100% not only on titanium and heat resistant alloys, but also on stainless and alloy steels.
- Improved chip control – small chips can be obtained even on the most ductile and problematic materials
- Effective cooling down of the cutting edge, reducing sensitivity to heat fluctuations.
- Safer and more stable process.

JHP tools provide advantageous performance, also when conventional pressure is applied.

Pressure vs. Flow

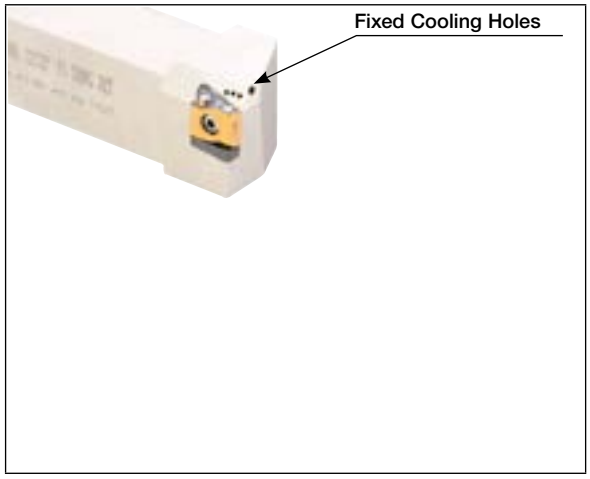
- Each JHP tool is designed to work at a certain flow rate, depending on the pressure. The flow rates are listed in the catalog pages for each tool. The user should verify that the pump can supply the required flow in order to achieve the optimal results. The pump data sheet will usually list the maximum flow rate for each pressure range.

Chips & Pressure

- The coolant flow will start to break the chips at a certain pressure, depending on the specific tool and the workpiece material. If the chips are not breaking, the pressure should be increased until chip control is achieved. As the pressure is increased, the chips become smaller and smaller. It is possible to control the size of the chips by modifying the pressure.



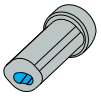
There are 4 various telescopic tubes intended for various insert geometries (see attached table).
Each tube possesses a different profile optimized for the specific geometry of the insert.





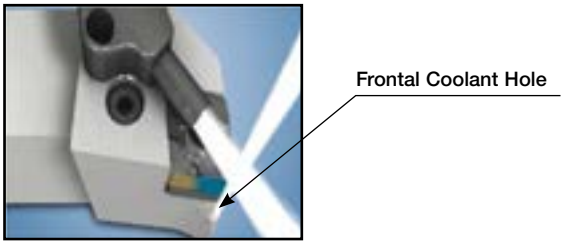
The flow rate for each tube is listed in the table below.

Flow Rate for Various JHP Nozzles

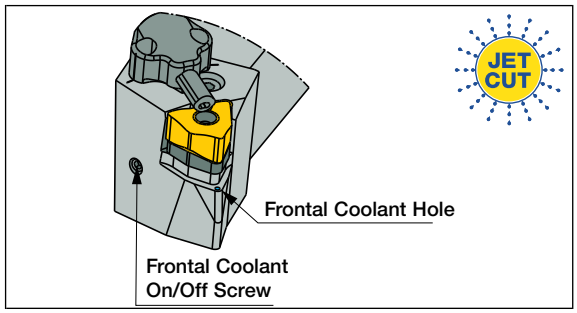
Insert	Channel Shape Inside the Nozzle Tube	Nozzle Tube	Flow Rate liter/min			
			70 Bar	100 Bar	140 Bar	300 Bar
		NZ-CW-JHP	19-23.5	22.5-28	26.5-33	46-52
		NZ-D-JHP	19-23.5	22.5-28	26.5-33	46-52
		NZ-V-JHP	9.5-11.8	11.3-14	13.4-16.7	22-26
		NZ-R-JHP	19-23.5	22.5-28	26.5-33	46-52
		Holes	14-16	18-23	23-26	33-37
Frontal Coolant Hole (1)		Hole	5.4-6.6	6.4-8	7.5-9.5	10-14

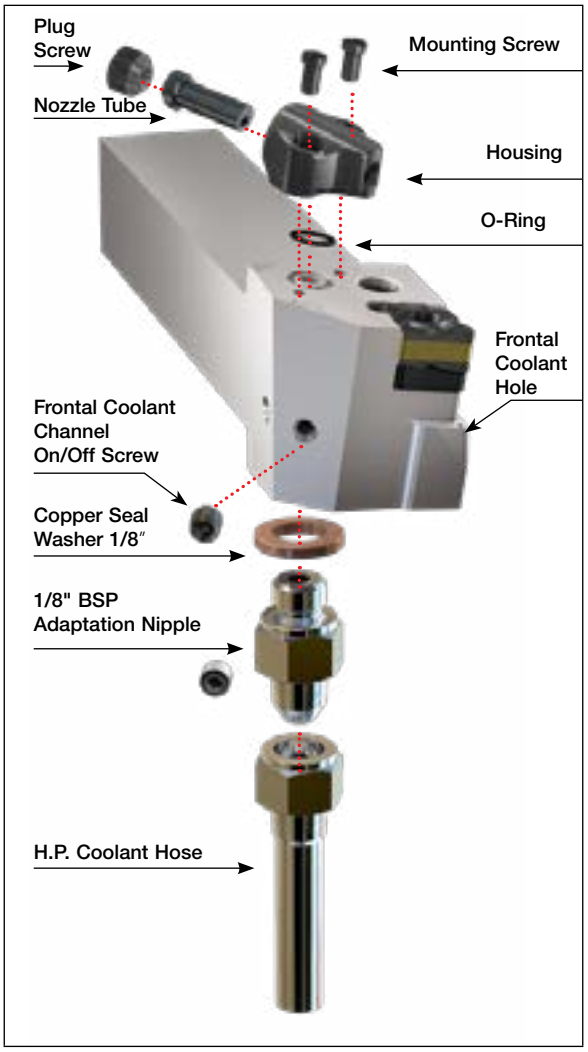
The tools with LNMX 1506… inserts feature fixed cooling channels.

For most of the tools that have a square shank, a frontal coolant hole has been added underneath the seat of the insert to enable coolant flow directed to the flank area of the insert. The frontal coolant jet increases the amount of coolant to the cutting zone. By closing or opening a screw, it acts as a valve that monitors the rate of coolant flow.



SLAN-15-TANG JHP tools for LNMX 1506... inserts, SVJCR/L-16-JHP for VCMT 1604.. inserts and all high-pressire coolant tools with **CAMFIX** shanks do not have the frontal cooling channel option.

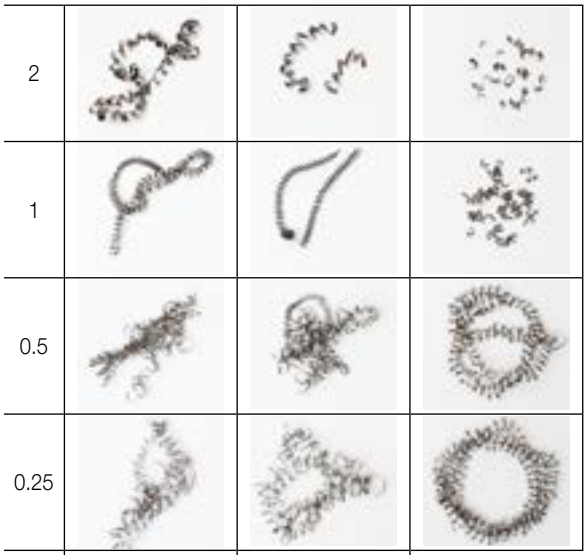




Inconel 718-Chip Control with
CNMX 120708-M4MW IC807 V_c = 70 (m/min)

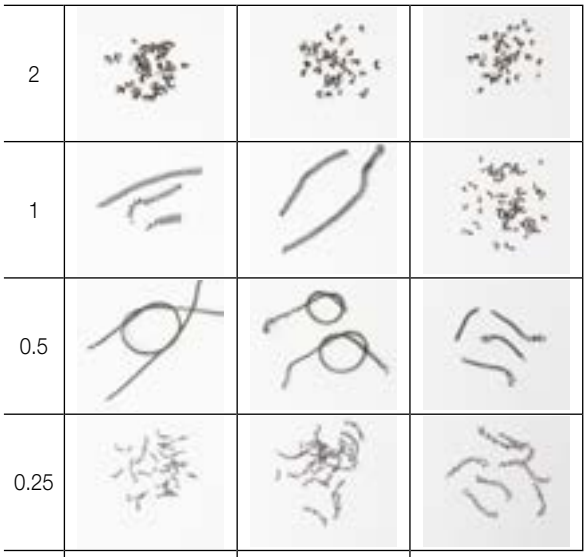
Normal Pressure

a_p (mm)



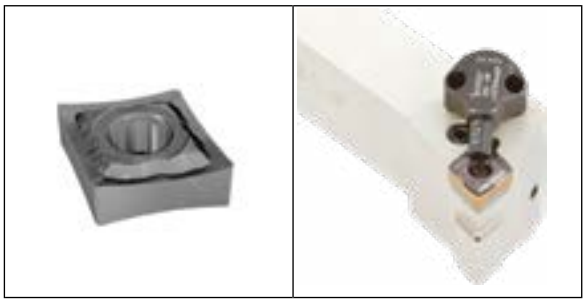
High-Pressure 80 bar

a_p (mm)

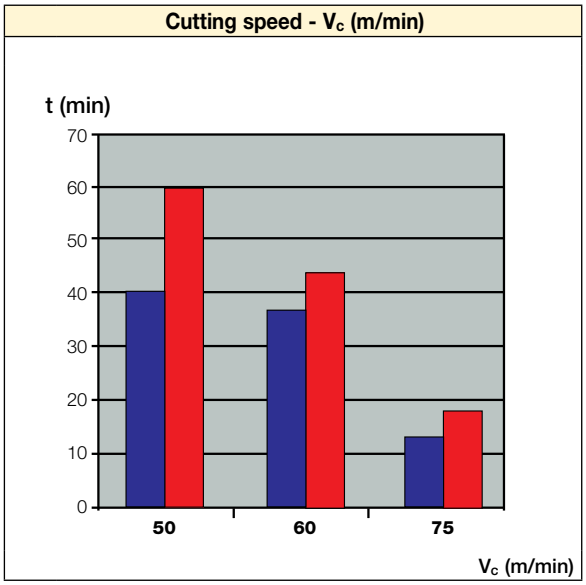


Test Report

Material: Titanium (Ti6Al4V)
Operation: Turning
Tool: PCLNL 2525M-12-JHP
Insert: CNMG 120412-PP IC20
a_p: 2.5 (mm)
f: 0.3 (mm/rev)

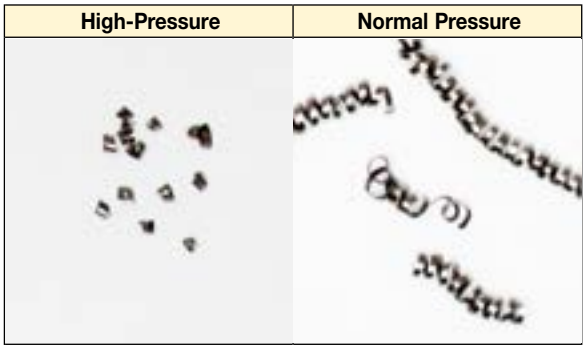


Pressure Influence on Tool Life



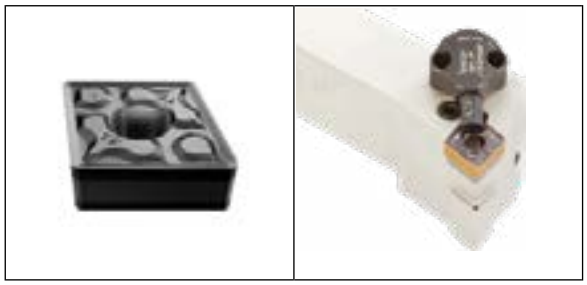
Normal pressure (6-8 bars)
High-Pressure (70 bars)

Pressure Influence on Chip Control

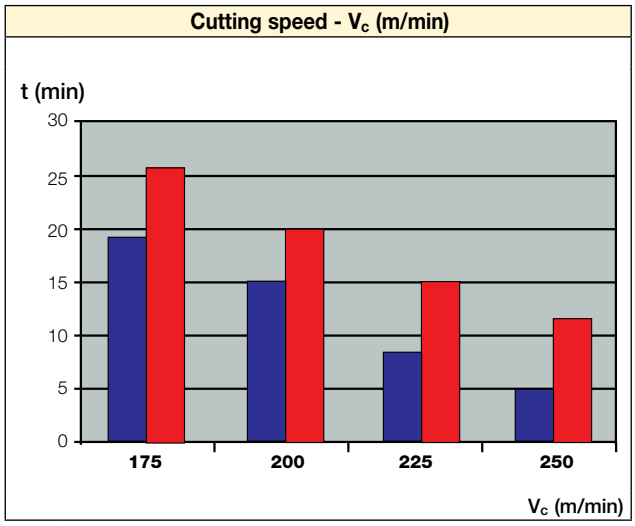


Test Report

Material: Stainless steel 316L
Operation: Turning
Tool: PCLNL 2525M-12-JHP
Insert: CNMG 120408-TF IC908
a_p: 2.5 (mm)
f: 0.3 (mm/rev)

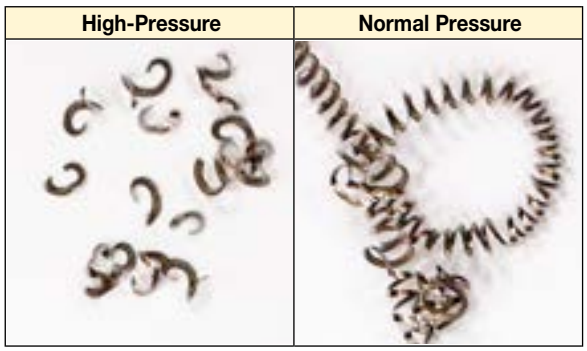


Pressure Influence on Tool Life



Normal pressure (6-8 bars)
High-Pressure (70 bars)

Pressure Influence on Chip Control

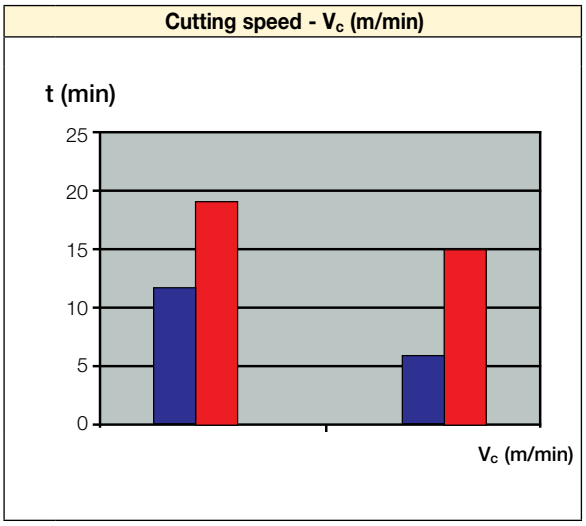


Test Report

Material: Inconel 718 (46 HRC)
Operation: Turning
Tool: PCLNL 2525M-12-JHP
Insert: CNMG 120408-TF IC808
a_p: 2.5 (mm)
f: 0.3 (mm/rev)

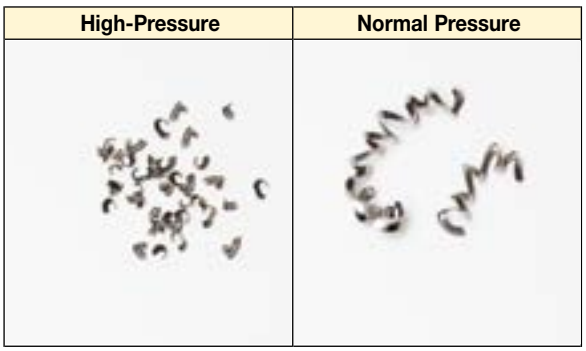


Pressure Influence on Tool Life



Normal pressure (6-8 bars)
High-Pressure (70 bars)

Pressure Influence on Chip Control



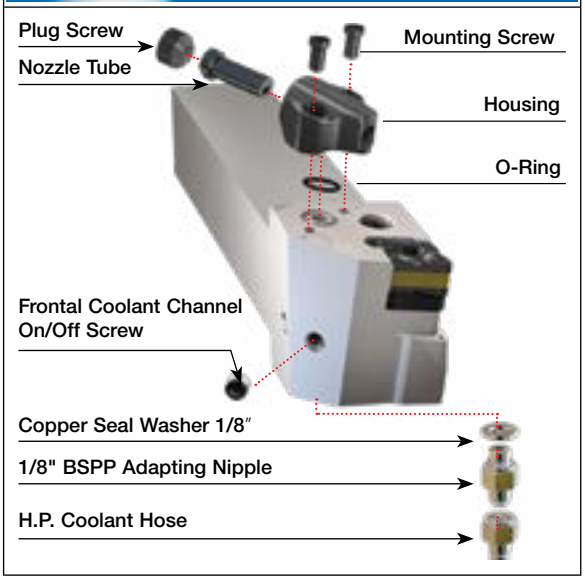
Assembly and Safety Guidelines when using JET HP ISO Turning and Grooving tools.Before use, please ensure that:

- The machine door is in a fully closed position
- The coolant hose is in the correct location and fully tightened with all seals in position
- A blank plug is inserted into the unused coolant hole
- All O-rings and washers are in place
- The coolant hose is tightened securely to the tool holder and tool block to prevent coolant leakage

Important
Always pay attention not to exceed the maximum safe working pressure of 300 bar.

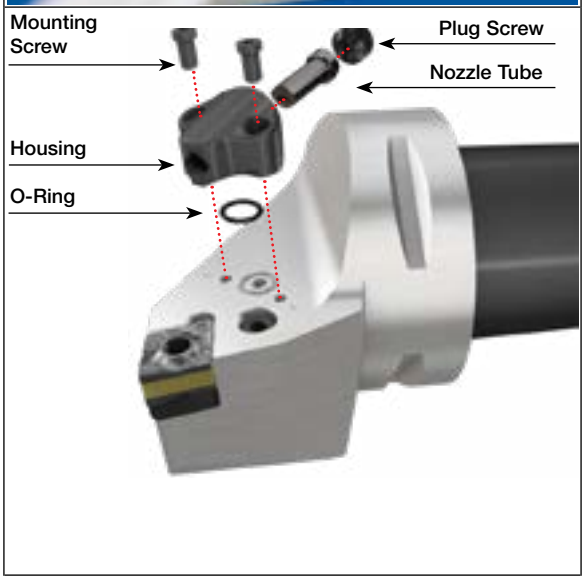
Maximum Pressure 300 Bar





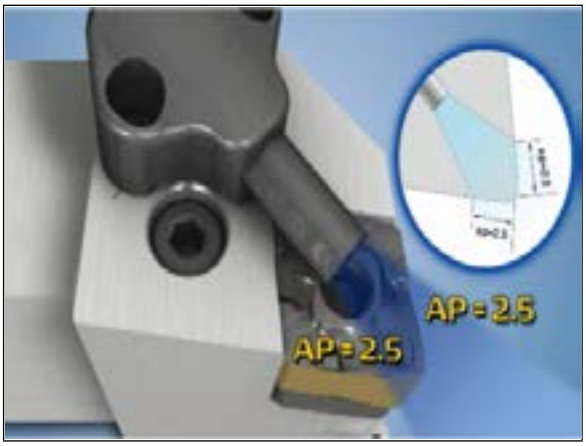
Maximum Pressure 300 Bar





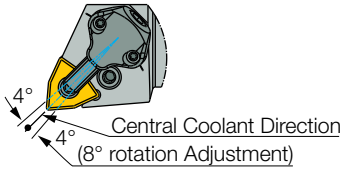
ISOTURN JHP Tools

The unique High-Pressure coolant system is composed of a static housing and telescopic tube to direct the coolant exactly to the cutting edge of the insert. The telescopic tube embedded in the housing skews right and left, according to the working direction of the tool (see drawing). The advantage of this system is that there is no need to detach the housing of the tool when changing an insert. This reduces setup time.



To mount or change an insert, press on the telescopic tube in a backward direction.

After indexing the cutting edge of the insert, starting the coolant will extract the tube automatically to its operating position.

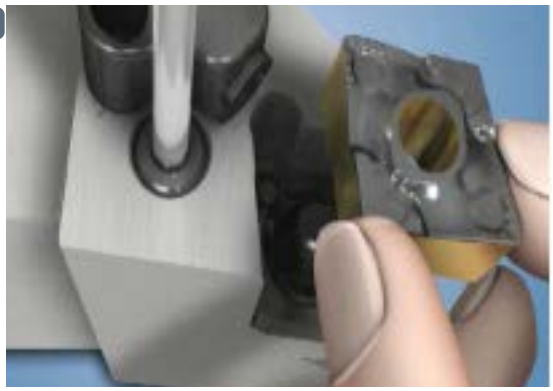


Insert Indexing Procedure

1

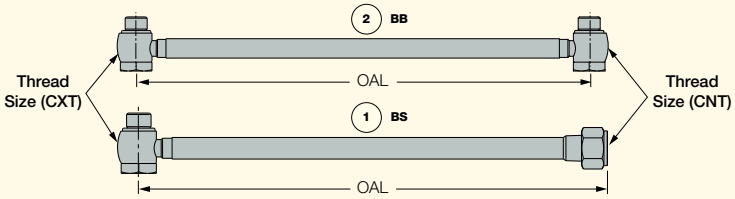

2


3


4


Accessories

JHP HOSE
High-Pressure Coolant Hose



Designation	OAL	Fig.	CXT	CNT
JHP HOSE G1/8-7/16-200BS	200.00	1	G1/8"-28 BSPP	UNF7/16"-20FLARE 37°
JHP HOSE 5/16-G1/8-200BS	200.00	1	5/16"-24 UNF	G1/8"-28 BSPP
JHP HOSE 5/16-7/16-200BS	200.00	1	5/16"-24 UNF	UNF7/16"-20FLARE 37°
JHP HOSE G1/8-G1/8-200BB	200.00	2	G1/8"-28 BSPP	G1/8"-28 BSPP
JHP HOSE G1/8-7/16-250BS	250.00	1	G1/8"-28 BSPP	UNF7/16"-20FLARE 37°
JHP HOSE G1/8-G1/8-250BB	250.00	2	G1/8"-28 BSPP	G1/8"-28 BSPP

Spare Parts

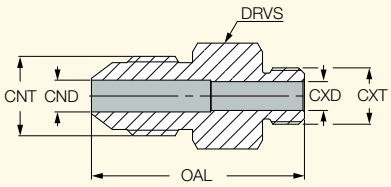
Designation		
JHP HOSE 5/16-7/16-200BS	JHP BANJO BOLT 5/16" UNF	JHP COPPER SEAL 5/16"
JHP HOSE G1/8-G1/8-200BB		JHP COPPER SEAL 1/8"*
JHP HOSE G1/8-G1/8-250BB	JHP BANJO BOLT G1/8"*	JHP COPPER SEAL 1/8"*

* Optional, to be ordered separately

Accessories

JHP NIPPLE
High-Pressure Adaptation Nipple





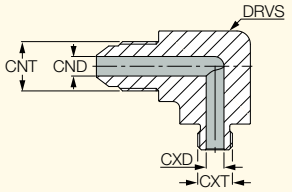


Designation	CXT	CNT	OAL	CND(1)	CXD	DRVS(2)
JHP NIPPLE G1/8"-7/16"UNF	1/8"-28 BSPP	7/16"-20 UNF	28.75	4.00	4.00	14.3
JHP NIPPLE 1/8NPT-7/16UNF	1/8"-27 NPT	7/16"-20 UNF	31.00	4.80	4.40	12.7
JHP NIPPLE 1/4NPT-7/16UNF	1/4"-18 NPT	7/16"-20 UNF	36.00	4.40	4.40	14.3
JHP NIPPLE5/16UNF-7/16UNF	5/16"-24 UNF	7/16"-20 UNF	29.50	4.40	4.00	12.7

(1) Coolant entry diameter
(2) Torque key size

Accessories

JHP ELBOW
High-Pressure Adaptation Elbow





Designation	CNT	CND(2)	CXT	CXD	DRVS(3)
JHP ELBOW TUB3/16-5/16UNF (1)	-	3.10	5/16"-24 UNF	4.00	12.7
JHP ELBOW 90-5/16-7/16UNF	7/16"-20 UNF	4.40	5/16"-24 UNF	4.00	12.7
JHP ELBOW 90-G1/8-7/16UNF	7/16"-20 UNF	4.40	1/8"-28 BSPP	4.00	15.9

(1) For connection to a simple 3/16" stainless or copper tube
(2) Coolant entry diameter
(3) Torque key size

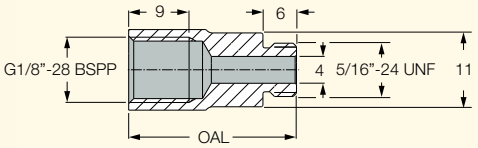
Spare Parts

Designation	
JHP ELBOW	JHP COPPER SEAL 1/8"

Accessories

JHP CONNECTOR
High-Pressure Connector





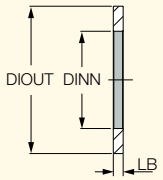
Designation	OAL	DRVS[1]
JHP CONECTOR 5/16"-G1/8"	25.00	12.0

(1) Torque key size

Accessories

JHP COPPER SEAL
High-Pressure Copper Seal

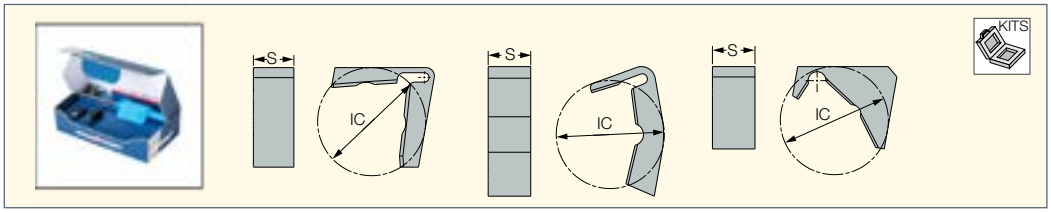




Designation	DIOUT	DINN	LB
JHP COPPER SEAL 5/16"-2.5	9.40	8.00	2.50
JHP COPPER SEAL 5/16"	11.90	8.15	1.35
JHP COPPER SEAL 1/8"	15.00	10.00	1.00

For High-Pressure Quick Connection accessories see page 493

AD-SET
Pocket Reducer Adapter
for Turning Inserts



Designation	IC	S
AD-CL-4/3-WIP-SET	12.70	4.76
AD-CL-S-4/3-WIP-SET	12.70	4.76
AD-CL-4/3-SET	12.70	4.76
AD-CL-4/3-W-SET	12.70	4.76
AD-CL-4/3X SET	12.70	4.76
AD-CL-4/3-X70-SET	12.70	4.76
AD-SS-4/3-SET	12.70	4.76
AD-WL-4/3-SET	12.70	4.76
AD-CL-6/5IQ-SET	19.00	5.60

- Tools with K-type coolant cannot be used for facing applications

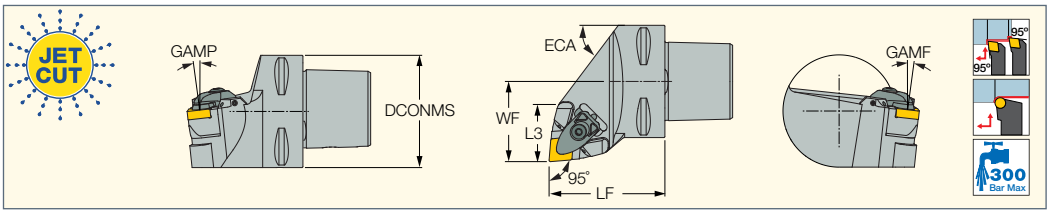
Toolholder	Set Designation	Item No.	Pocket Size Reducer From	Pocket Size Reducer To
 PCLNR/L...12	**AD-CL-4/3-X70-SET**  LR 4-3 + AD-CL-4/3-X70 + TCN-432-WIP	3395512	 CNMG 12...	 XNMG 09...
 PCLNR/L...12	**AD-CL-4/3-SET**  LR 4-3 + AD-CL-4/3	3351719	 CNMG 12...	 CNMG 09...
 PCLNR/L...12	**AD-CL-4/3-W-SET**  LR 4-3 + AD-CL-W-4/3	3362999	 CNMG 12...	 WNMG 06...
 PCLNR/L...12	**AD-CL-4/3X-SET**  LR 4-3X + AD-CL-4/3X + TCN 4/3X	3362630	 CNMG 12...	 CXMG 09...
 PWLNR/L...08	**AD-WL-4/3-SET**  LR 4-3 + AD-WL-4/3	3363000	 WNMG 08...	 WNMG 06...
 PSKNR/L...12	**AD-SS-4/3-SET**  LR 4-3 + AD-SS-4/3	3364103	 SNMG 12...	 SNMG 09...
 PCLNR/L...19	**AD-CL-6/5IQ-SET**  LR 6/5IQ + AD-CL-6/5IQ + TCX 6/5IQ	3364102	 CNMG 19...	 COMG 16...
 PCLNR/L...12	**AD-CL-4/3-WIP-SET**  LR 4-3 + AD-CL-4/3-WIP + TCN-432-WIP	3373957	 CNMG 12...	 CNMG 09...
 PCLNR/L...12	**AD-CL-S-4/3-WIP-SET**  LR 4-3 + AD-CL-4/3-WIP + TCN-432-WIP	3382096	 SNMG 12...	 SNMG 09...

Spare Parts

Designation			
AD-CL-4/3-WIP-SET	LR 4/3	HW 3.0/5	TCN-432-WIP
AD-CL-S-4/3-WIP-SET	LR 4/3	HW 3.0/5	TCN-432-WIP
AD-CL-4/3-SET	LR 4/3	HW 3.0/5	
AD-CL-4/3-W-SET	LR 4/3	HW 3.0/5	
AD-CL-4/3X SET	LR 4/3X	HW 3.0/5	TCN 4/3X
AD-CL-4/3-X70-SET	LR 4/3	HW 3.0/5	TCN-432-WIP
AD-WL-4/3-SET	LR 4/3	HW 3.0/5	
AD-CL-6/5IQ-SET	LR 6/5IQ		TCX 6/5IQ

CERMTURN

C# CXXNR/L-AD-JHP
Turning Tools with CAMFIX Polygon Shaped Shanks with Indexable Inserts Mounted on Cartridges



Designation	DCONMS	WF	LF	L3	GAMP(1)	GAMF(2)	ECA	DCP(3)
C5 CXXNR/L-35060-AD09/12JHP	50.00	35.00	60.00	32.00	6.0	6.0	42.0	1
C6 CXXNR/L-45065-AD09/12JHP	63.00	45.00	65.00	32.00	6.0	6.0	53.0	1
C8 CXXNR/L-55080-AD09/12JHP	80.00	55.00	80.00	32.00	6.0	6.0	57.0	1

NEW

- For user guide, see pages 6-7,104-110

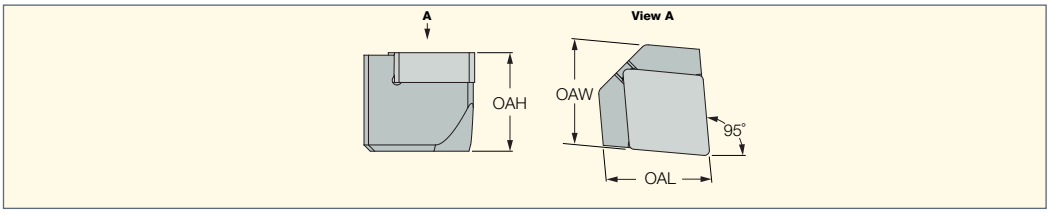
(1) Rake angle axial
(2) Rake angle radial
(3) 1 - Slot for data chip, 0 - Without slot for data chip

Spare Parts

Designation										
C# CXXNR/L-AD-JHP	DCL S-4F	DLS 4	DSP 4	HW 3.0	SR M5X0.5X12.5	SR M4X4 DIN913 TL360	SW6-T-SH	BLD IP20/S7	SR M5X5 DIN913 TL360	SR M2.5X2.5 DIN913 TL360

CERMTURN

AD-CCLNX
Indexable Cartridges for 80° Rhombic Ceramic Inserts



Designation	OAH	OAW	OAL	MIID(1)
AD-CCLNX-1204	15.76	16.85	16.85	CNGN 1204
AD-CCLNX-1207	15.76	16.85	16.85	CNGN 1207

NEW

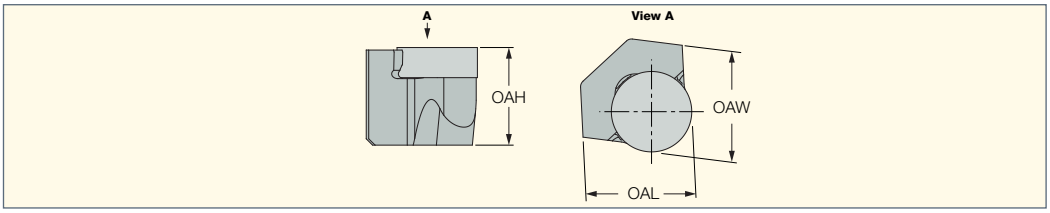
(1) Master insert identification

Spare Parts

Designation	
AD-CCLNX	SR M5X0.5X12.5

CERMTURN

AD-CRSNX
Indexable Cartridges for Round Ceramic Inserts



Designation	OAH	OAW	OAL	MIID(1)
AD-CRSNX-0903	15.42	17.21	17.21	RNGN 0903
AD-CRSNX-0904	15.42	17.21	17.21	RNGN 0904
AD-CRSNX-1204	15.42	17.36	17.36	RNGN 1204
AD-CRSNX-1207	15.44	17.36	17.36	RNGN 1207

NEW

(1) Master insert identification

Spare Parts

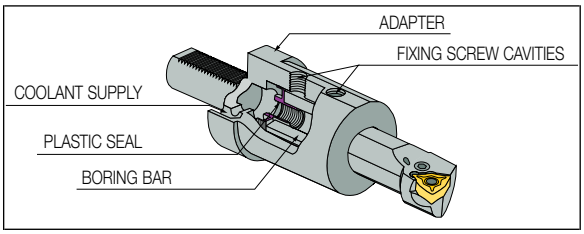
Designation	
AD-CRSNX	SR M5X0.5X12.5

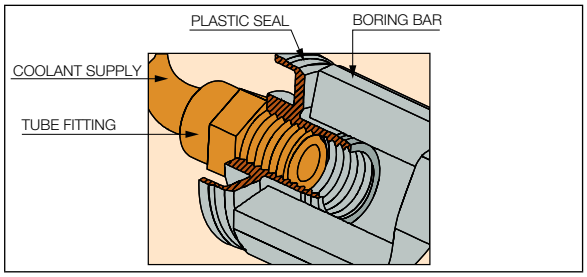
ISOTURN Boring Bars

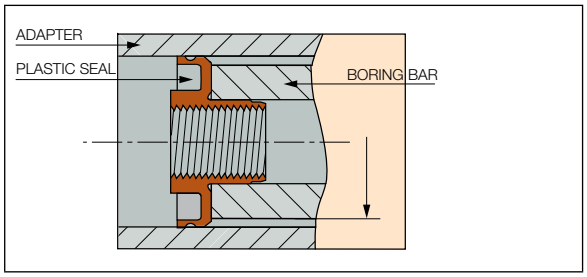
ISCAR boring bars are equipped with internal coolant. A unique plastic seal is supplied for insertion into the channel which:

- Features a threaded tube fitting connection
- Performs a sealing role while clamped in a cylindrical adapter
- Requires no re-threading after shortening the bar

This unique design is a simple and versatile solution for installing coolant supply and extends tool life, improves chip flow and machining reliability.





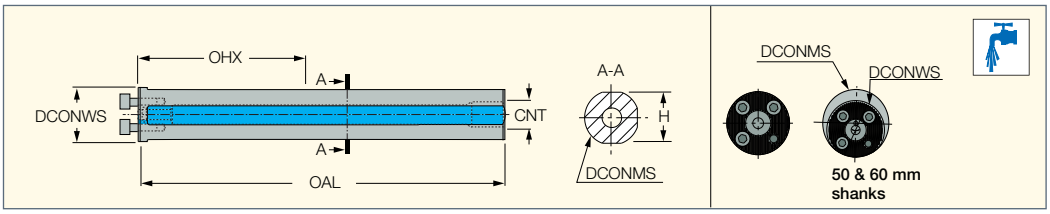




Straight Shank

ISOTURN

SH-D
Steel Boring Bars With Serrated Connection For AVC Heads



Designation	DCONWS	DCONMS	OAL	OHX[1]	CNT	H	BMC[2]
SH-D16-4D-A	16.00	16.00	105.00	44.0	UNC-2B 3/8"-16	15.0	S
SH-D20-4D-A	20.00	20.00	140.00	60.0	UNFC-2B 3/8"-24	18.0	S
SH-D25-4D-A	25.00	25.00	200.00	80.0	UNF-2B 1/2"-20	23.0	S
SH-D32-4D-A	32.00	32.00	218.00	96.0	UNF-2B 1/2"-20	29.0	S
SH-D40-4D-A	40.00	40.00	283.00	128.0	UNF-2B 1/2"-20	36.0	S
SH-D50-4D-40-A	40.00	50.00	368.00	168.0	UNF-2B 1/2"-20	46.0	S
SH-D60-4D-40-A	40.00	60.00	468.00	208.0	UNF-2B 1/2"-20	57.0	S

(1) Maximum overhang
(2) S-steel body, H-solid carbide body

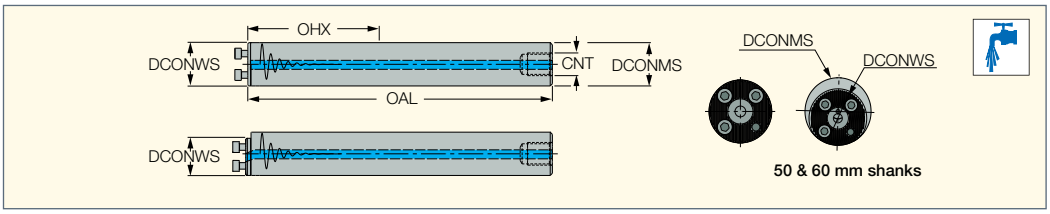
For tools, see pages: AVC-D-SIR/L (805) • AVC-DDMNR/L (126) • AVC-DDUNR/L (126) • AVC-DVUNR/L (127) • AVC-GAIR/L (390) • AVC-PCLNR/L (124) • AVC-PCLXR/L (124) • AVC-PTLNR/L (125) • AVC-PXJNR/L (125) • AVC-SCLCR/L (121) • AVC-SCLXR/L-06X (121) • AVC-SDUCR/L (122) • AVC-SVLCR/L (123) • AVC-SVMCR/L (124) • AVC-SVPCR/L (123) • AVC-SVQCR/L (123) • AVC-SVUCR/L (122)

Spare Parts

Designation				
SH-D16-4D-A	SR M3X10DIN912	HW 2.5	PL 16	
SH-D20-4D-A	SR M3.5XL10-D5.5	HW 2.5	PL 20	OR 5.6X1.8 NBR
SH-D25-4D-A	SR M4X12DIN912	HW 3.0	PL 25	OR 5.6X1.8 NBR
SH-D32-4D-A	SR M5X12 DIN912	HW 4.0	PL 32	OR 5.6X1.8 NBR
SH-D40-4D-A	SR M6X16 DIN912	HW 5.0	PL 40	OR 5.6X1.8 NBR
SH-D50-4D-40-A	SR M6X16 DIN912	HW 5.0	PL 40	OR 5.6X1.8 NBR
SH-D60-4D-40-A	SR M6X16 DIN912	HW 5.0	PL 40	OR 5.6X1.8 NBR

WHISPERLINE

AV-D
Anti-Vibration Bars with Through Coolant for Interchangeable Heads



Designation	DCONWS	DCONMS	OAL	OHN(2)	OHX(3)	CNT	BMC(4)	CP(5)	kg	
AV-D16-7D-C	16.00	16.00	156.30	55.0	92.0	G1/8	S	30	0.24	SR M3X10DIN912
AV-D16-10D-E (1)	16.00	16.00	204.30	96.0	140.0	-	H	30	0.58	SR M3X10DIN912
AV-D20-7D-C	20.00	20.00	200.30	70.0	120.0	G1/4	S	30	0.48	SR M3.5XL10-D5.5
AV-D20-10D-E (1)	20.00	20.00	260.30	120.0	180.0	-	H	30	0.80	SR M3.5XL10-D5.5
AV-D25-7D-C	25.00	25.00	257.50	88.0	155.0	G1/4	S	40	1.00	SR M4X12DIN912
AV-D25-10D-C	25.00	25.00	332.50	155.0	230.0	G1/4	S	40	1.30	SR M4X12DIN912
AV-D25-12D-E (1)	25.00	25.00	380.00	230.0	280.0	G1/8	H	40	2.00	SR M4X12DIN912
AV-D25-14D-E (1)	25.00	25.00	430.00	280.0	330.0	G1/8	H	40	2.60	SR M4X12DIN912
AV-D32-7D-C	32.00	32.00	323.00	120.0	192.0	G3/8	S	50	2.10	SR M5X12 DIN912
AV-D32-10D-C	32.00	32.00	419.00	192.0	288.0	G3/8	S	50	2.80	SR M5X12 DIN912
AV-D32-12D-E (1)	32.00	32.00	480.00	288.0	352.0	G1/4	H	50	4.20	SR M5X12 DIN912
AV-D32-14D-E (1)	32.00	32.00	544.00	352.0	416.0	G1/4	H	50	4.80	SR M5X12 DIN912
AV-D40-7D-C	40.00	40.00	411.00	128.0	251.0	G1/2	S	70	4.60	SR M6X16 DIN912
AV-D40-10D-C	40.00	40.00	531.00	248.0	368.0	G1/2	S	70	5.30	SR M6X16 DIN912
AV-D40-12D-E (1)	40.00	40.00	608.00	368.0	448.0	G3/8	H	70	8.30	SR M6X16 DIN912
AV-D40-14D-E (1)	40.00	40.00	688.00	448.0	528.0	G3/8	H	70	9.40	SR M6X16 DIN912
AV-D50-7D-C	40.00	50.00	523.00	168.0	318.0	G1/2	S	70	7.20	SR M6X16 DIN912
AV-D50-10D-C	40.00	50.00	673.00	318.0	468.0	G1/2	S	70	9.30	SR M6X16 DIN912
AV-D50-12D-E (1)	40.00	50.00	768.00	468.0	568.0	G1/2	H	70	14.40	SR M6X16 DIN912
AV-D50-14D-E (1)	40.00	50.00	868.00	568.0	668.0	G1/2	H	70	16.60	SR M6X16 DIN912
AV-D60-7D-C	40.00	60.00	633.00	208.0	388.0	G3/4	S	70	12.50	SR M6X16 DIN912
AV-D60-10D-C	40.00	60.00	813.00	388.0	568.0	G3/4	S	70	16.30	SR M6X16 DIN912
AV-D60-12D-E (1)	40.00	60.00	920.00	588.0	688.0	G3/4	H	70	27.10	SR M6X16 DIN912
AV-D60-14D-E (1)	40.00	60.00	1040.00	688.0	808.0	G3/4	H	70	30.90	SR M6X16 DIN912

- Only steel bars can be shortened. For details, see table below
- 12xBD and 14xBD cannot be shortened

(1) Solid Carbide Shank
(2) Minimum overhang
(3) Maximum overhang
(4) S-steel body, H-solid carbide body
(5) Coolant pressure (Bar)

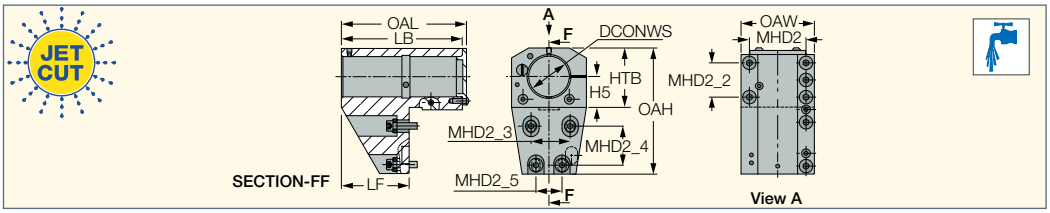
For tools, see pages: AVC-D-SIR/L (805) • AVC-DDMNR/L (126) • AVC-DDUNR/L (126) • AVC-DVUNR/L (127) • AVC-GAIR/L (390) • AVC-GEAIR/L (389) • AVC-PCLNR/L (124) • AVC-PCLXR/L (124) • AVC-PTLNR/L (125) • AVC-PXJNR/L (125) • AVC-SCLCR/L (121) • AVC-SCLXR/L-06X (121) • AVC-SDUCR/L (122) • AVC-SVLCR/L (123) • AVC-SVMCR/L (124) • AVC-SVPCR/L (123) • AVC-SVQCR/L (123) • AVC-SVUCR/L (122)

Bar Diameter	Minimum Length After Shortening	
DCONMS (mm)	OAL 7D (mm)	OAL 10D (mm)
16	100	- (1)
20	125	- (1)
25	155	255
32	190	320
40	240	410
50	305	520
60	380	630

(1) Cannot be shortened

WHISPERLINE

BLKT AV-JHP
BLKT Sleeve Type Blocks for DMG Machines

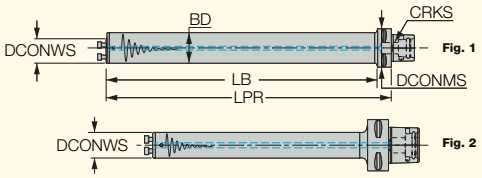


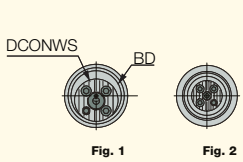
Designation	DCONWS	OAW	OAH	OAL	H5	LB	LF	HTB	MHD2	MHD2_2	MHD2_3	MHD2_4	MHD2_5
BLKT AV-2540-JHP	40.00	92.00	145.00	145.00	30.00	140.00	74.00	63.0	71.0	43.0	48.0	48.0	32.0
BLKT AV-3240-JHP	40.00	135.00	172.00	145.00	40.00	140.00	58.00	75.0	115.0	63.0	50.0	63.0	50.0
BLKT AV-3250-JHP	50.00	135.00	172.00	155.00	40.00	150.00	68.00	75.0	115.0	63.0	50.0	63.0	50.0
BLKT AV-3260-JHP	60.00	135.00	177.00	165.00	40.00	160.00	78.00	80.0	115.0	63.0	50.0	63.0	50.0
BLKT AV-3280-JHP	80.00	134.00	179.00	185.00	50.00	180.00	98.00	100.0	115.0	63.0	50.0	63.0	50.0

New

WHISPERLINE

C#-AV-C
Integral Anti-Vibration Holder with CAMFIX Connection with Through Tool Coolant for Interchangeable Heads





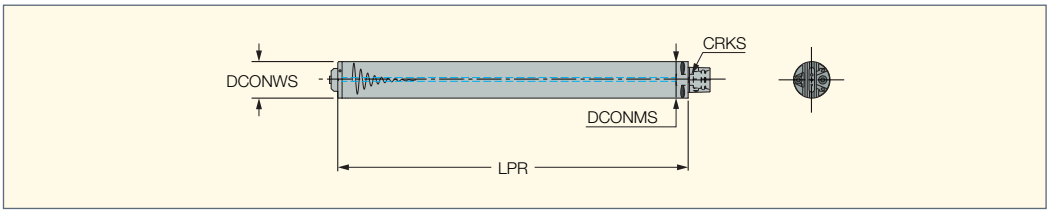
Designation	DCONMS	DCONWS	BD	LPR	LB	CRKS	CP(1)	Fig.	kg	DCP(2)	
C3 AV-D16-L66-C	32.00	16.00	16.00	82.30	66.00	M12	30	2	0.25	0	SR M3X10DIN912
C3 AV-D20-L85-C	32.00	20.00	20.00	101.30	85.00	M12	30	2	0.39	0	SR M3.5XL10-D5.5
C3 AV-D25-L110-C	32.00	25.00	25.00	125.50	110.00	M12	40	2	0.60	0	SR M4X12DIN912
C3 AV-D32-L133-C	32.00	32.00	32.00	133.50	-	M12	50	2	1.00	0	SR M5X12 DIN912
C4 AV-D16-L67-C	40.00	16.00	16.00	88.30	67.00	M14	30	2	0.40	0	SR M3X10DIN912
C4 AV-D20-L86-C	40.00	20.00	20.00	107.30	86.00	M14	30	2	0.54	0	SR M3.5XL10-D5.5
C4 AV-D25-L112-C	40.00	25.00	25.00	132.50	112.00	M14	40	2	0.80	0	SR M4X12DIN912
C4 AV-D32-L134-C	40.00	32.00	32.00	154.50	134.00	M14	50	2	1.29	0	SR M5X12 DIN912
C4 AV-D40-L173-C	40.00	40.00	40.00	173.50	-	M14	70	2	1.75	0	SR M6X16 DIN912
C4 AV-D40-L288-C	40.00	40.00	40.00	288.50	-	M14	70	2	3.42	0	SR M6X16 DIN912
C5 AV-D16-L64-C	50.00	16.00	16.00	85.30	64.00	M16	30	2	0.63	0	SR M3X10DIN912
C5 AV-D20-L88-C	50.00	20.00	20.00	109.30	88.00	M16	30	2	0.74	0	SR M3.5XL10-D5.5
C5 AV-D25-L113-C	50.00	25.00	25.00	133.50	113.00	M16	40	2	1.00	0	SR M4X12DIN912
C5 AV-D25-L210-C	50.00	25.00	25.00	230.50	210.00	M16	40	2	1.40	0	SR M4X12DIN912
C5 AV-D32-L134-C	50.00	32.00	32.00	154.50	134.00	M16	50	2	1.40	0	SR M5X12 DIN912
C5 AV-D32-L204-C	50.00	32.00	32.00	224.50	204.00	M16	50	2	1.90	0	SR M5X12 DIN912
C5 AV-D32-L268-C	50.00	32.00	32.00	288.50	268.00	M16	50	2	2.40	0	SR M5X12 DIN912
C5 AV-D40-L174-C	50.00	40.00	40.00	194.50	174.00	M16	70	2	2.24	0	SR M6X16 DIN912
C5 AV-D40-L348-C	50.00	40.00	40.00	368.50	348.00	M16	70	2	4.20	0	SR M6X16 DIN912
C5 AV-D50-L223-L-C	50.00	40.00	50.00	223.00	-	M16	70	1	3.60	0	SR M6X16 DIN912
C5 AV-D50-L223-R-C	50.00	40.00	50.00	223.00	-	M16	70	1	3.60	0	SR M6X16 DIN912
C5 AV-D50-L368-L-C	50.00	40.00	50.00	368.50	-	M16	70	1	5.50	0	SR M6X16 DIN912
C5 AV-D50-L368-R-C	50.00	40.00	50.00	368.50	-	M16	70	1	5.50	0	SR M6X16 DIN912
C6 AV-D16-L62-C	63.00	16.00	16.00	88.00	62.00	M20	30	2	1.01	0	SR M3X10DIN912
C6 AV-D20-L83-C	63.00	20.00	20.00	108.00	83.00	M20	30	2	1.00	0	SR M3.5XL10-D5.5
C6 AV-D25-L108-C	63.00	25.00	25.00	132.50	108.00	M20	40	2	1.35	0	SR M4X12DIN912
C6 AV-D25-L158-C	63.00	25.00	25.00	180.50	158.00	M20	40	2	1.50	0	SR M4X12DIN912
C6 AV-D25-L208-C	63.00	25.00	25.00	230.50	208.00	M20	40	2	1.70	0	SR M4X12DIN912
C6 AV-D32-L137-C	63.00	32.00	32.00	159.50	137.00	M20	50	2	1.80	0	SR M5X12 DIN912
C6 AV-D32-L202-C	63.00	32.00	32.00	224.50	202.00	M20	50	2	2.20	0	SR M5X12 DIN912
C6 AV-D32-L264-C	63.00	32.00	32.00	288.50	266.00	M20	50	2	2.70	0	SR M5X12 DIN912
C6 AV-D40-L176-C	63.00	40.00	40.00	198.50	176.00	M20	70	2	2.60	0	SR M6X16 DIN912
C6 AV-D40-L266-C	63.00	40.00	40.00	288.50	266.00	M20	70	2	3.60	0	SR M6X16 DIN912
C6 AV-D40-L346-C	63.00	40.00	40.00	368.50	346.00	M20	70	2	4.20	0	SR M6X16 DIN912
C6 AV-D50-L225-L-C	63.00	40.00	50.00	247.50	225.00	M20	70	1	4.20	0	SR M6X16 DIN912
C6 AV-D50-L225-R-C	63.00	40.00	50.00	247.50	225.00	M20	70	1	4.20	0	SR M6X16 DIN912
C6 AV-D50-L346-L-C	63.00	40.00	50.00	368.00	346.00	M20	70	1	5.80	0	SR M6X16 DIN912
C6 AV-D50-L346-R-C	63.00	40.00	50.00	368.00	346.00	M20	70	1	5.80	0	SR M6X16 DIN912
C6 AV-D50-L446-L-C	63.00	40.00	50.00	468.00	446.00	M20	70	1	7.40	0	
C6 AV-D50-L446-R-C	63.00	40.00	50.00	468.00	446.00	M20	70	1	7.40	0	
C6 AV-D60-L273-L-C	63.00	40.00	60.00	295.50	273.00	M20	70	1	6.80	0	SR M6X16 DIN912
C6 AV-D60-L273-R-C	63.00	40.00	60.00	295.50	273.00	M20	70	1	6.80	0	SR M6X16 DIN912
C6 AV-D60-L426-L-C	63.00	40.00	60.00	448.00	426.00	M20	70	1	11.80	0	SR M6X16 DIN912
C6 AV-D60-L426-R-C	63.00	40.00	60.00	448.00	426.00	M20	70	1	11.80	0	SR M6X16 DIN912
C6 AV-D60-L546-L-C	63.00	40.00	60.00	568.00	546.00	M20	70	1	12.20	0	SR M6X16 DIN912
C6 AV-D60-L546-R-C	63.00	40.00	60.00	568.00	546.00	M20	70	1	12.20	0	SR M6X16 DIN912
C8 AV-D25-L113-C	80.00	25.00	25.00	147.50	113.00	M20	40	2	2.30	0	SR M4X12DIN912
C8 AV-D32-L139-C	80.00	32.00	32.00	172.50	139.00	M20	50	2	2.80	0	SR M5X12 DIN912
C8 AV-D32-L190-C	80.00	32.00	32.00	224.00	190.00	M20	50	2	3.62	0	SR M5X12 DIN912
C8 AV-D40-L191-C	80.00	40.00	40.00	224.00	191.00	M20	70	2	3.70	0	SR M6X16 DIN912
C8 AV-D40-L255-C	80.00	40.00	40.00	288.00	255.00	M20	70	2	4.40	0	SR M6X16 DIN912
C8 AV-D40-L335-C	80.00	40.00	40.00	368.00	335.00	M20	70	2	5.40	0	SR M6X16 DIN912
C8 AV-D50-L267-L-C	80.00	40.00	50.00	297.00	267.00	M20	70	1	5.80	0	SR M6X16 DIN912
C8 AV-D50-L267-R-C	80.00	40.00	50.00	297.00	267.00	M20	70	1	5.80	0	SR M6X16 DIN912
C8 AV-D50-L438-L-C	80.00	40.00	50.00	468.00	438.00	M20	70	1	8.30	0	SR M6X16 DIN912
C8 AV-D50-L438-R-C	80.00	40.00	50.00	468.00	438.00	M20	70	1	8.30	0	SR M6X16 DIN912
C8 AV-D60-L325-L-C	80.00	40.00	60.00	355.00	325.00	M20	70	1	8.90	0	SR M6X16 DIN912
C8 AV-D60-L325-R-C	80.00	40.00	60.00	355.00	325.00	M20	70	1	8.90	0	SR M6X16 DIN912
C8 AV-D60-L538-L-C	80.00	40.00	60.00	568.00	538.00	M20	70	1	13.00	0	SR M6X16 DIN912
C8 AV-D60-L538-R-C	80.00	40.00	60.00	568.00	538.00	M20	70	1	13.00	0	SR M6X16 DIN912

(1) Coolant pressure (Bar)
(2) 1 - Slot for data chip, 0 - Without slot for data chip

For tools, see pages: AVC-D-SIR/L (805) • AVC-DDMNR/L (126) • AVC-DDUNR/L (126) • AVC-DVUNR/L (127) • AVC-GAIR/L (390) • AVC-GEAIR/L (389) • AVC-PCLNR/L (124) • AVC-PCLXR/L (124) • AVC-PTLNR/L (125) • AVC-PXJNR/L (125) • AVC-SCLCR/L (121) • AVC-SCLXR/L-06X (121) • AVC-SDUCR/L (122) • AVC-SVLCR/L (123) • AVC-SVMCR/L (124) • AVC-SVPCR/L (123) • AVC-SVQCR/L (123) • AVC-SVUCR/L (122)

WHISPERLINE

C#-AV-C-VH
Integral Anti-Vibration Holder with CAMFIX Connection with Through Tool Coolant for Interchangeable Heads



Designation	DCONMS	DCONWS	LPR	CRKS	kg	DCP(1)
C8 AV-D80-L365-C-VH	80.00	80.00	365.00	M20	15.40	0
C8 AV-D80-L608-C-VH	80.00	80.00	608.00	M20	23.20	0
C8 AV-D80-L768-C-VH	80.00	80.00	768.00	M20	28.30	0

(1) 1 - Slot for data chip, 0 - Without slot for data chip

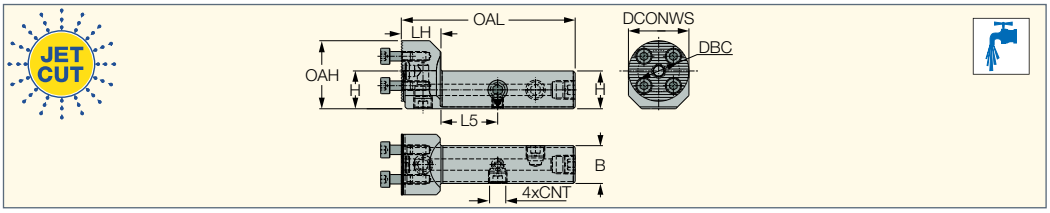
For tools, see pages: AVC-DDUNR/L-VH (128) • AVC-SDUCR/L-VH (128) • AVC-SVLCR/L-VH (128)

Spare Parts

Designation					
C#-AV-C-VH	PB20 M10X11 CLAMP	PB20 M10X16 CLAMP	SR50 M5X6	SR55 M3X6	PIN FT77 D5X10

NEOMODU
INDEXABLE TURNING HEADS

SH-S#-N-AVC
Square shank with serrated connection



Designation	DCONWS	LH	OAH	OAL	H	B	DBC	L5	CNT
SH-S2020-N-AVC-D20-JHP-MC	20.00	21.0	30.00	92.00	20.0	20.0	13.00	30.00	G 1/8
SH-S2020-N-AVC-D25-JHP-MC	25.00	21.0	32.50	92.00	20.0	20.0	16.00	30.00	G 1/8
SH-S2020-N-AVC-D32-JHP-MC	32.00	21.0	36.00	92.00	20.0	20.0	22.00	30.00	G 1/8
SH-S2525-N-AVC-D25-JHP-MC	25.00	21.0	37.50	107.00	25.0	25.0	16.00	36.00	G 1/8
SH-S2525-N-AVC-D32-JHP-MC	32.00	21.0	41.00	107.00	25.0	25.0	22.00	36.00	G 1/8
SH-S2525-N-AVC-D40-JHP-MC	40.00	21.0	45.00	107.00	25.0	25.0	28.00	36.00	G 1/8
SH-S3232-N-AVC-D32-JHP-MC	32.00	21.0	48.00	152.00	32.0	32.0	22.00	-	G 1/8
SH-S3232-N-AVC-D40-JHP-MC	40.00	26.0	52.00	152.00	32.0	32.0	28.00	-	G 1/8
SH-S4040-N-AVC-D40-JHP-MC	40.00	26.0	60.00	200.00	40.0	40.0	28.00	-	G 1/8

New

- Steel shanks without anti-vibration mechanism

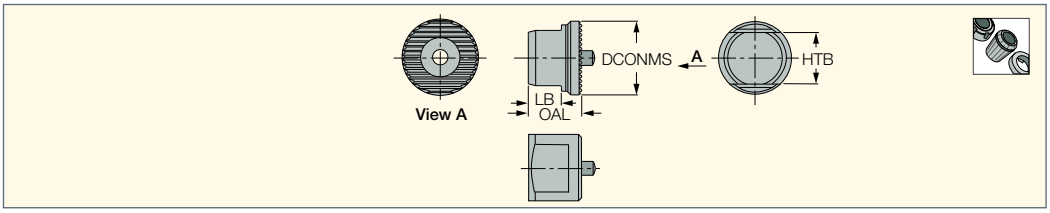
For tools, see pages: AVC-DDMNR/L (126) • AVC-DDUNR/L (126) • AVC-DVUNR/L (127) • AVC-PCLNR/L (124) • AVC-PCLXR/L (124) • AVC-PTLNR/L (125) • AVC-SCLCR/L (121) • AVC-SDUCR/L (122) • AVC-SVLCR/L (123) • AVC-SVMCR/L (124) • AVC-SVUCR/L (122)

Spare Parts

Designation					
SH-S2020-N-AVC-D20-JHP-MC	SR M3.5XL10-D5.5	SR M6X6 DIN913 TL360	HW 2.5	OR 5.6X1.8 NBR	PLG G1/8 TL360
SH-S2020-N-AVC-D25-JHP-MC	SR M4X12DIN912	SR M6X6 DIN913 TL360	HW 3.0	OR 5.6X1.8 NBR	PLG G1/8 TL360
SH-S2020-N-AVC-D32-JHP-MC	SR M5X12 DIN912	SR M6X6 DIN913 TL360	HW 4.0	OR 5.6X1.8 NBR	PLG G1/8 TL360
SH-S2525-N-AVC-D25-JHP-MC	SR M4X12DIN912	SR M6X6 DIN913 TL360	HW 3.0	OR 5.6X1.8 NBR	PLG G1/8 TL360
SH-S2525-N-AVC-D32-JHP-MC	SR M5X12 DIN912	SR M6X6 DIN913 TL360	HW 4.0	OR 5.6X1.8 NBR	PLG G1/8 TL360
SH-S2525-N-AVC-D40-JHP-MC	SR M6X16 DIN912	SR M6X6 DIN913 TL360	HW 5.0	OR 5.6X1.8 NBR	PLG G1/8 TL360
SH-S3232-N-AVC-D32-JHP-MC	SR M5X12 DIN912		HW 4.0	OR 5.6X1.8 NBR	PLG G1/8 TL360
SH-S3232-N-AVC-D40-JHP-MC	SR M6X16 DIN912		HW 5.0	OR 5.6X1.8 NBR	PLG G1/8 TL360
SH-S4040-N-AVC-D40-JHP-MC	SR M6X16 DIN912		HW 5.0	OR 5.6X1.8 NBR	PLG G1/8 TL360

WHISPERLINE

AVC-SET
Center Height Set Up Device

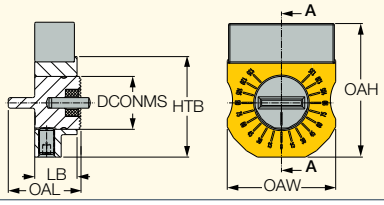


Designation	DCONMS	HTB	OAL	LB	Shank
AVC-SET 16-25	20.00	15.0	14.50	9.00	16, 20, 25
AVC-SET 32-60	29.00	16.0	17.50	11.50	32, 40, 50, 60

WHISPERLINE

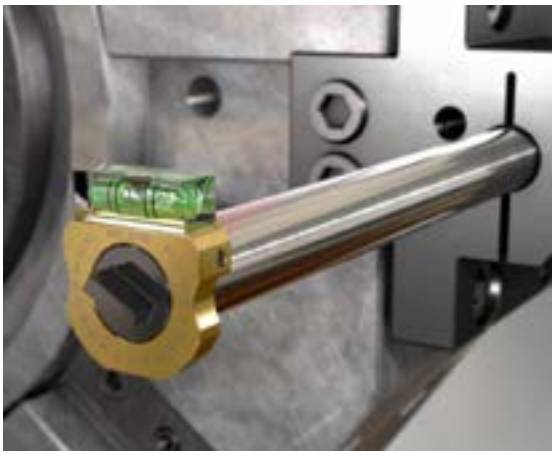
AVC-SET-LEV
Center Height Set Up Device





Designation	DCONMS	HTB	OAL	LB	Shank	OAH	OAW
AVC-SET 16-25-LEV	20.00	38.0	27.50	16.00	16, 20, 25	50.50	41.00
AVC-SET 32-60-LEV	29.00	49.0	28.00	16.00	32, 40, 50, 60	59.00	49.00

- Serrated head with magnetic core ensures fixed position of the shank.
- The setting head is simply connected to the shank without screws.
- The bubble level indicates the tool position and easily enables adjustment of the boring bar to the center.
- Significant time saving can be achieved by using this unique setting head.
- High setting accuracy can be easily attained and ensure excellent performance for ***WHISPERLINE*** boring bars.
- During tool assembly and the positioning process on the machine, please pay attention to the angle position selector. It must be set to the angle that is defined for each head - while most ISO turning heads have a 0° angle, **CUT-GRIP** heads need to be set to 15° or 30°.



ISO turning head



CUT-GRIP head



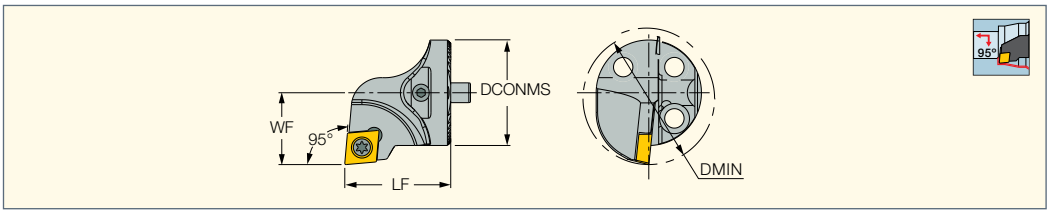
Spare Parts

Designation		
AVC-SET-LEV	SR M6X10 DIN1835B	HW 3.0

WHISPERLINE

AVC-SCLCR/L

Interchangeable Boring Heads Carrying 80° Rhombic Inserts with 7° Clearance



Designation	WF	DCONMS	DMIN	LF	CSP[2]	MIID[3]
AVC-D16-SCLCR/L-06	11.00	16.00	20.00	20.00	0	CCMT 2-1-14
AVC-D20-SCLCR/L-09	13.00	20.00	25.00	20.00	0	CCMT 3-2-M3M
AVC-D25-SCLCR/L-09	17.00	25.00	32.00	20.00	1	CCMT 3-2-M3M
AVC-D32-SCLCR/L-09	22.00	32.00	40.00	32.00	1	CCMT 3-2-M3M
AVC-D40-SCLCR/L-12T [1]	27.00	40.00	50.00	38.00	1	CCMT 432-SM

[1] DMIN of 50mm shank is DMIN of requested head + 10mm • DMIN of 60mm shanks is DMIN of requested head + 20mm
[2] 0 - Without coolant supply, 1 - With coolant supply
[3] Master insert identification

For inserts, see pages: CCGT-F1M-12P (232) • CCGT-F1M-20P (233) • CCET-WF (238) • CCGT-AF (270) • CCGT-AS (270) • CCMT-14 (237) • CCMT-F3M (234) • CCMT-M3M (235) • CCMT-M3P (234) • CCMT-PF (236) • CCMT-WG (238) • CCMT/CCGT (237) • CCMT/CCGT-SM (236)
For holders, see pages: AV-D (117) • C#-AV-C (118) • C#-SH-E-JHP (704) • C#-SH-JHP (704) • SH-D (116) • SH-S#-N-AVC (119)

Spare Parts

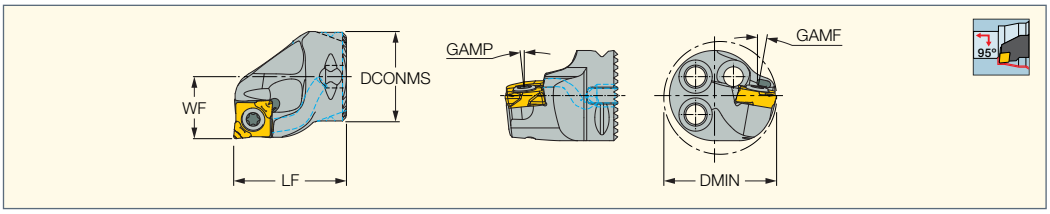
Designation				
AVC-D16-SCLCR/L-06	SR 14-548*	T-7/5*		
AVC-D20-SCLCR/L-09	SR 16-236*	T-15/5*		
AVC-D25-SCLCR/L-09	SR 16-236*	T-15/5*		
AVC-D32-SCLCR/L-09	SR 16-236*	T-15/5		
AVC-D40-SCLCR/L-12T	SR 16-212*	T-20/5*	SR TC-4*	TCC 4-2*

* Optional, to be ordered separately

LOGIQ4TURN

AVC-SCLXR/L-06X

Screw Lock Tools Carrying CXMU 80° Rhombic Inserts



Designation	WF	DCONMS	DMIN	LF	CSP[1]	GAMP[2]	GAMF[3]	MIID[4]
AVC-D16-SCLXR/L-06X	11.00	16.00	20.00	20.00	1	6.0	10.0	M CXMU 060204

NEW

[1] 0 - Without coolant supply, 1 - With coolant supply
[2] Rake angle axial
[3] Rake angle radial
[4] Master insert identification

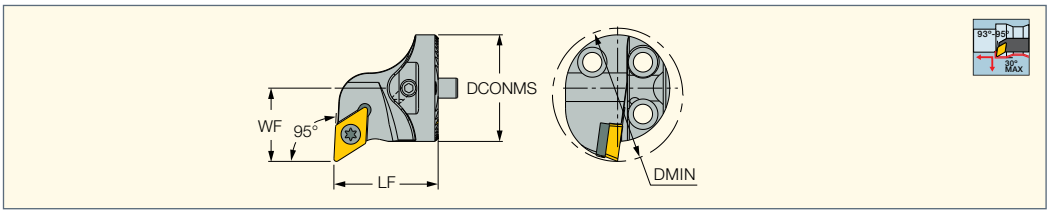
For inserts, see pages: CXMU-F3M (231) • CXMU-F3P (231)
For holders, see pages: AV-D (117) • C#-AV-C (118) • C#-SH-E-JHP (704) • C#-SH-JHP (704) • SH-D (116)

Spare Parts

Designation		
AVC-SCLXR/L-06X	SR M2.5-T8-MT	T-8/5

WHISPERLINE

AVC-SDUCR/L
Interchangeable Boring Heads Carrying 55° Rhombic Inserts with 7° Clearance



Designation	WF	DCONMS	DMIN	LF	CSP[2]	MIID[3]
AVC-D16-SDUCR/L-07	11.00	16.00	20.00	20.00	0	DCMT 2-1
AVC-D20-SDUCR/L-11	13.00	20.00	25.00	20.00	0	DCMT 3-2-14
AVC-D25-SDUCR/L-11	17.00	25.00	32.00	20.00	1	DCMT 3-2-14
AVC-D32-SDUCR/L-11T	22.00	32.00	40.00	32.00	1	DCMT 3-2-14
AVC-D40-SDUCR/L-11T [1]	27.00	40.00	50.00	32.00	1	DCMT 3-2-14

[1] DMIN of 50mm shank is DMIN of requested head + 10mm • DMIN of 60mm shanks is DMIN of requested head + 20mm
[2] 0 - Without coolant supply, 1 - With coolant supply
[3] Master insert identification

For inserts, see pages: DCET-WF (247) • DCGT-AF (271) • DCGT-AS (270) • DCGT-F1M-12P (243) • DCGT-F1M-20P (244) • DCMT-14 (247) • DCMT-CERMET (243) • DCMT-F3P (240) • DCMT-M3M (241) • DCMT-M3P (241) • DCMT/DCGT (246) • DCMT/DCGT-PF (245) • DCMT/DCGT-SM (246)
For holders, see pages: AV-D (117) • C#-AV-C (118) • C#-SH-E-JHP (704) • C#-SH-JHP (704) • SH-D (116) • SH-S#-N-AVC (119)

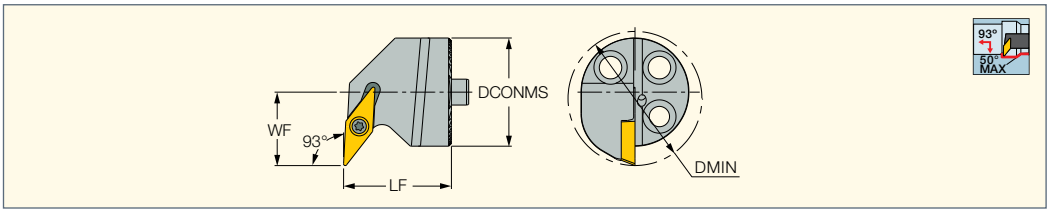
Spare Parts

Designation				
AVC-D16-SDUCR/L-07	SR 14-548*	T-7/5*		
AVC-D20-SDUCL-11	SR 16-236 P*	T-15/5*		
AVC-D20-SDUCR-11	SR 16-236 P	T-15/5		
AVC-D25-SDUCL-11	SR 16-236 P*	T-15/5*		
AVC-D25-SDUCR-11	SR 16-236 P	T-15/5		
AVC-D32-SDUCR/L-11T	SR 16-236 P*	T-15/5*	SR TC-3P*	TDC 3-1P*
AVC-D40-SDUCR/L-11T	SR 16-236 P*	T-15/5*	SR TC-3P*	TDC 3-1P*

* Optional, to be ordered separately

WHISPERLINE

AVC-SVUCR/L
Interchangeable Boring Heads Carrying 35° Rhombic Inserts with 7° Clearance



Designation	WF	DCONMS	DMIN	LF	CSP[1]	MIID[2]		
AVC-D20-SVUCR/L-11	16.00	20.00	27.00	20.00	0	VCMT 221-F3P	SR 14-560*	T-8/5*
AVC-D25-SVUCR/L-11	17.00	25.00	32.00	25.00	1	VCMT 221-F3P	SR 14-560*	T-8/5*

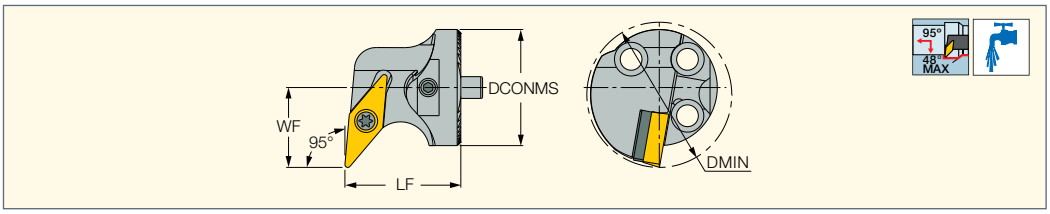
[1] 0 - Without coolant supply, 1 - With coolant supply
[2] Master insert identification
* Optional, to be ordered separately

For inserts, see pages: VCGT-AS (269) • VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCMT-F3M (249) • VCMT-M3P (248) • VCMT-SM (251)
For holders, see pages: AV-D (117) • C#-AV-C (118) • C#-SH-E-JHP (704) • C#-SH-JHP (704) • SH-D (116) • SH-S#-N-AVC (119)

WHISPERLINE

AVC-SVLCR/L

Interchangeable Boring Heads Carrying 35° Rhombic Inserts with 7° Clearance



Designation	WF	DCONMS	DMIN	LF	CSP(2)	MIID(3)
AVC-D32-SVLCR/L-16T	22.00	32.00	40.00	32.00	1	VCMT 332-F3M
AVC-D40-SVLCR/L-16T (1)	27.00	40.00	50.00	32.00	1	VCMT 332-F3M

• For positive "V" insert geometry with radius 1.2mm please use set: TVC 3-04675 *5592726

(1) DMIN of 50mm shank is DMIN of requested head + 10mm • DMIN of 60mm shanks is DMIN of requested head + 20mm

(2) 0 - Without coolant supply, 1 - With coolant supply

(3) Master insert identification

For inserts, see pages: VCGT-AS (269) • VCGT-DW (PCD) (515) • VCMT-14 (252) • VCMT-F3M (249) • VCMT-F3P (248) • VCMT-FPC-CERMET (250) • VCMT-M3M (249) • VCMT-M3P (248) • VCMT-SM (251) • VCMW (252)

For holders, see pages: AV-D (117) • C#-AV-C (118) • C#-SH-E-JHP (704) • C#-SH-JHP (704) • SH-D (116) • SH-S#-N-AVC (119)

Spare Parts

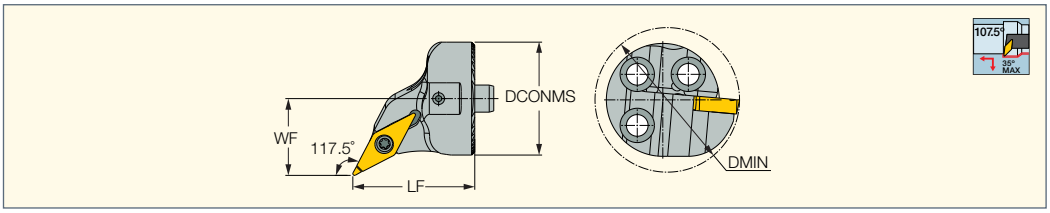
Designation					
AVC-SVLCR/L	SR 16-236 P*	T-15/5*	SR TC-3P*	TVC 3-1P*	TVC 3-04675*

* Optional, to be ordered separately

WHISPERLINE

AVC-SVPCR/L

Interchangeable Boring Heads Carrying 35° Rhombic Inserts with 7° Clearance and 117.5° Approach Angle



Designation	WF	DCONMS	DMIN	LF	CSP(1)	MIID(2)
AVC-D20-SVPCR/L-11	14.00	20.00	25.00	23.00	0	VCMT 221-F3P
AVC-D32-SVPCR/L-16T	22.00	32.00	40.00	32.00	1	VCMT 332-F3M
AVC-D40-SVPCR/L-16T	27.00	40.00	50.00	32.00	1	VCMT 332-F3M

NEW

(1) 0 - Without coolant supply, 1 - With coolant supply

(2) Master insert identification

For inserts, see pages: VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCGT-AS (269) • VCGT-DW (PCD) (515) • VCMT-14 (252) • VCMT-F3M (249) • VCMT-F3P (248) • VCMT-FPC-CERMET (250) • VCMT-M3M (249) • VCMT-M3P (248) • VCMT-SM (251) • VCMW (252)

For holders, see pages: AV-D (117) • C#-AV-C (118) • C#-SH-E-JHP (704) • C#-SH-JHP (704) • SH-D (116)

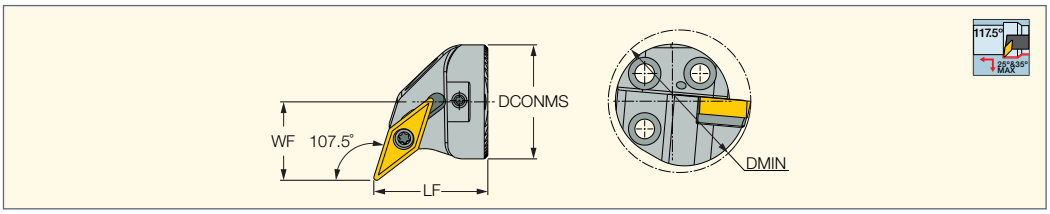
Spare Parts

Designation							
AVC-D20-SVPCR/L-11	FT39 D6-5X8	T-8/5	SR 14-560				
AVC-D32-SVPCR/L-16T	FT39 D6-5X8	T-15/5	SR 16-236 P	TVC 3-1P	SR TC-3P	HW 4.0	SR M4X4 DIN913 TL360
AVC-D40-SVPCR/L-16T		T-15/5	SR 16-236 P	TVC 3-1P	SR TC-3P		

WHISPERLINE

AVC-SVQCR/L

Interchangeable Boring Heads Carrying 35° Rhombic Inserts with 7° Clearance and 107.5 Approach Angle



Designation	WF	DCONMS	DMIN	LF	CSP(1)	MIID(2)							
AVC-D25-SVQCR/L-11	17.00	25.00	32.00	30.00	1	VCMT 221-F3P	FT39 D6-5X8	SR 14-560	T-8/5				SR M2.5X2.5 DIN913 TL360
AVC-D32-SVQCR/L-16	22.00	32.00	40.00	32.00	1	VCMT 332-F3M	FT39 D6-5X8	SR 16-236 P	T-15/5	TVC 3-1P	SR TC-3P	HW 4.0	SR M4X4 DIN913 TL360
AVC-D40-SVQCR/L-16	27.00	40.00	50.00	40.00	1	VCMT 332-F3M	FT39 D6-5X8	SR 16-236 P	T-15/5	TVC 3-1P	SR TC-3P	HW 4.0	SR M4X4 DIN913 TL360

NEW

(1) 0 - Without coolant supply, 1 - With coolant supply

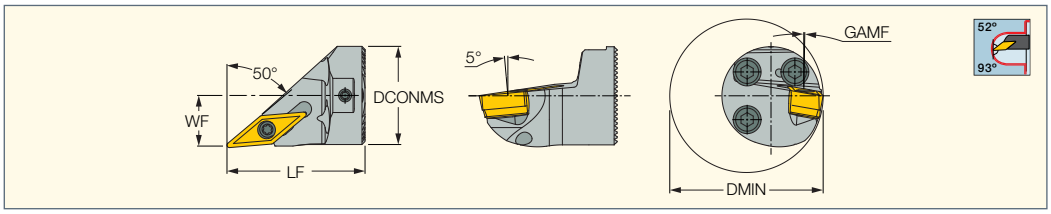
(2) Master insert identification

For inserts, see pages: VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCGT-AS (269) • VCGT-DW (PCD) (515) • VCMT-14 (252) • VCMT-F3M (249) • VCMT-F3P (248) • VCMT-FPC-CERMET (250) • VCMT-M3M (249) • VCMT-M3P (248) • VCMT-SM (251) • VCMW (252)

For holders, see pages: AV-D (117) • C#-AV-C (118) • C#-SH-E-JHP (704) • C#-SH-JHP (704) • SH-D (116)

WHISPERLINE

AVC-SVMCR/L
Interchangeable Boring Heads Carrying 35° Rhombic Inserts with 7° Clearance and 50° Approach Angle



Designation	WF	DCONMS	DMIN	LF	GAMF[1]	CSP[2]	MIID[3]
AVC-D25-SVMCR/L-16T	13.00	25.00	35.00	40.00	3.0	1	VCMT 160408
AVC-D32-SVMCR/L-16T	17.00	32.00	50.00	45.00	4.0	1	VCMT 160408
AVC-D40-SVMCR/L-16T	20.50	40.00	60.00	50.00	3.0	1	VCMT 160408

[1] Rake angle radial
[2] 0 - Without coolant supply, 1 - With coolant supply
[3] Master insert identification

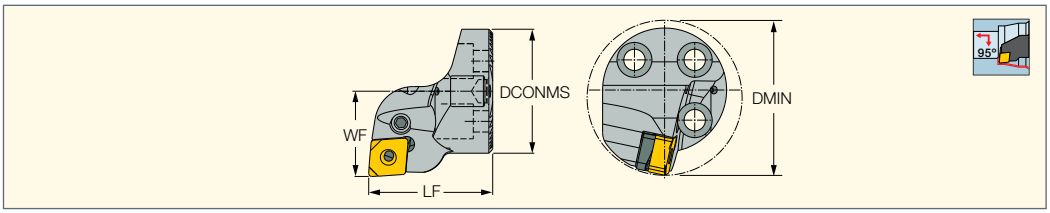
For inserts, see pages: VCMT-FPC-CERMET (250) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-F3M (249) • VCMT-M3M (249) • VCMT-SM (251) • VCGT-AS (269)
For holders, see pages: AV-D (117) • C#-AV-C (118) • C#-SH-E-JHP (704) • C#-SH-JHP (704) • SH-D (116) • SH-S#-N-AVC (119)

Spare Parts

Designation							
AVC-D25-SVMCR/L-16T			FT39 D6-5X8	SR 16-236 P	T-15/5		SR M3X3 DIN913 TL360
AVC-D32-SVMCR/L-16T	TVC 3-1P	HW 4.0	FT39 D6-5X8	SR 16-236 P	T-15/5	SR TC-3P	SR M4X4 DIN913 TL360
AVC-D40-SVMCR/L-16T	TVC 3-1P	HW 4.0	FT39 D6-5X8	SR 16-236 P	T-15/5	SR TC-3P	SR M4X4 DIN913 TL360

WHISPERLINE

AVC-PCLNR/L
Interchangeable Boring Heads Carrying 80° Rhombic Inserts



Designation	WF	DCONMS	DMIN	LF	MIID[1]
AVC-D20-PCLNR/L-09	13.00	20.00	25.00	26.00	CNMG 09
AVC-D25-PCLNR/L-09	17.00	25.00	32.00	28.00	CNMG 09
AVC-D32-PCLNR/L-09	22.00	32.00	40.00	32.00	CNMG 09

[1] Master insert identification

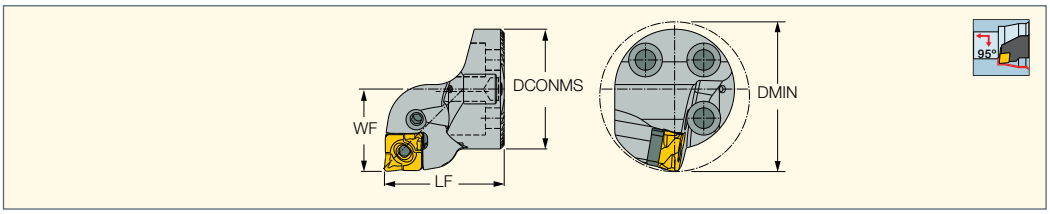
For inserts, see pages: CNMG-F3S (186) • CNGG-F3N (266) • CNMG-F3M (185) • CNMG-F3P (181) • CNMG-M3M (185) • CNMG-M3P (182)
For holders, see pages: AV-D (117) • C#-AV-C (118) • C#-SH-E-JHP (704) • C#-SH-JHP (704) • SH-D (116) • SH-S#-N-AVC (119)

Spare Parts

Designation							
AVC-D20-PCLNR/L-09			LR 3S	SR 117-2009	HW 2.0		
AVC-D25-PCLNR/L-09			LR 3S	SR 117-2009	HW 2.0		
AVC-D32-PCLNR/L-09	TCN 323	TCX 3	LR 3	SR 117-2014	HW 2.5	SP 3	PN 3-4

LOGIQ4TURN

AVC-PCLXR/L
Interchangeable Boring Heads Carrying 80° Rhombic Inserts



Designation	WF	DCONMS	DMIN	LF	MIID[2]
AVC-D20-PCLXR/L-09X	13.00	20.00	25.00	26.00	CXMG 09
AVC-D25-PCLXR/L-09X	17.00	25.00	32.00	28.00	CXMG 09
AVC-D32-PCLXR/L-09X	22.00	32.00	40.00	32.00	CXMG 09
AVC-D40-PCLXR/L-12X [1]	27.00	40.00	50.00	35.00	CXMG 12

[1] DMIN of 50mm shank is DMIN of requested head + 10mm • DMIN of 60mm shanks is DMIN of requested head + 20mm
[2] Master insert identification

For inserts, see pages: CXGG-M3N-P (230) • CXMG-F3M (230) • CXMG-F3P (229) • CXMG-M3M (230) • CXMG-M3P (229)
For holders, see pages: AV-D (117) • C#-AV-C (118) • C#-SH-E-JHP (704) • C#-SH-JHP (704) • SH-D (116) • SH-S#-N-AVC (119)

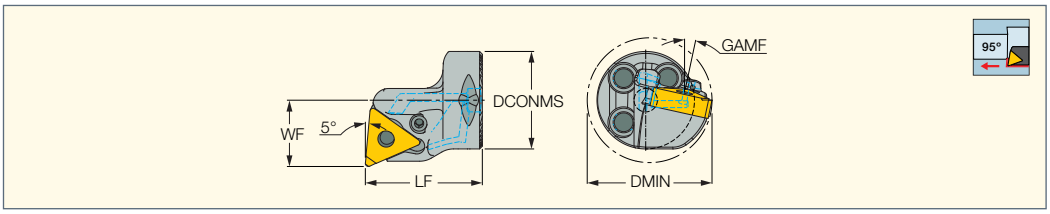
Spare Parts

Designation							
AVC-D20-PCLXR/L-09X		LR 3X SET	SR M6XL11.5V		T-8/5		
AVC-D25-PCLXR/L-09X		LR 3X SET	SR M6XL11.5V		T-8/5		
AVC-D32-PCLXR/L-09X	TSN 323	LR 3XL	SR 117-2014	HW 2.5/5		SP 3	PN 3-4
AVC-D40-PCLXR/L-12X	TCNX 423	LR 4X-CA	SR LCS 5	HW 3.0		SP 4	PN 3-4

WHISPERLINE

AVC-PTLNR/L

Interchangeable Boring Heads
Carrying 60° Triangular Inserts



Designation	WF	DCONMS	DMIN	GAMF[1]	LF	MIID[2]
AVC-D25-PTLNR/L-16	17.00	25.00	32.00	-12.0	30.00	TNMG 160408
AVC-D32-PTLNR/L-16	22.00	32.00	40.00	-12.0	30.00	TNMG 160408
AVC-D40-PTLNR/L-16	27.00	40.00	50.00	-10.0	35.00	TNMG 160408

NEW

(1) Rake angle radial

(2) Master insert identification

For inserts, see pages: D6NMG-F3P (209) • D6NMG-M3M (209) • D6NMG-M3P (209) • TNGG-M3N (267) • TNMG-F3S (212) • TNMG-FFG-CERMET (212) • TNMG-F3P (210) • TNMG-M3P (210) • TNMG-F3M (211) • TNMG-M3M (211) • TNMG-TF (213) • TNMG-GN (215) • TNMG/TNGG-PP (214) • TNMG-VL (214) • TNMG-PF (213) • TNMG-SF (213) • TNMG-NF (214) • TNMA (215)

For holders, see pages: AV-D (117) • C#-AV-C (118) • C#-SH-E-JHP (704) • C#-SH-JHP (704) • SH-D (116) • SH-S#-N-AVC (119)

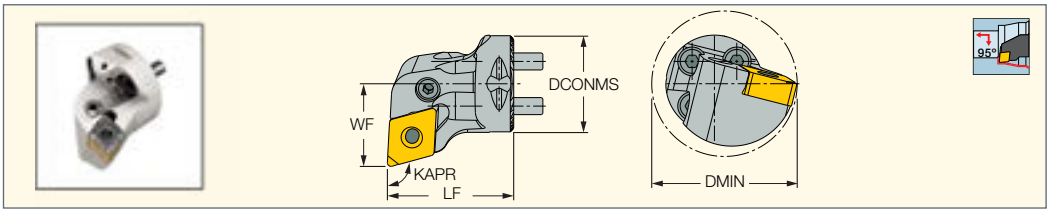
Spare Parts

Designation							
AVC-D25-PTLNR/L-16	SR 117-2009	HW 2.0	FT39 D6-5X8	LR 3S			
AVC-D32-PTLNR/L-16	SR 117-2014	HW 2.5	FT39 D6-5X8	LR 3	TTN 322	PN 3-4	SP 3
AVC-D40-PTLNR/L-16	SR 117-2014	HW 2.5	FT39 D6-5X8	LR 3	TTN 322	PN 3-4	SP 3

NEOTURN ISOTURNING

AVC-PXJNR/L

Interchangeable Boring Heads
Carrying 70° Rhombic Inserts



Designation	WF	DCONMS	DMIN	LF	MIID[1]	CSP[2]
AVC-D20-PXJNR/L-09	17.00	20.00	28.00	26.00	XNMG 0904	0
AVC-D32-PXJNR/L-09	22.00	32.00	40.00	32.00	XNMG 0904	1
AVC-D25-PXJNR/L-09	25.00	25.00	32.00	30.00	XNMG 0904	1

NEW

(1) Master insert identification

(2) 0 - Without coolant supply, 1 - With coolant supply

For inserts, see pages: XNMG-F3M (195) • XNMG-F3P (194) • XNMG-M3M (195) • XNMG-M3P (194)

For holders, see pages: AV-D (117) • C#-AV-C (118) • C#-SH-E-JHP (704) • C#-SH-JHP (704) • SH-D (116)

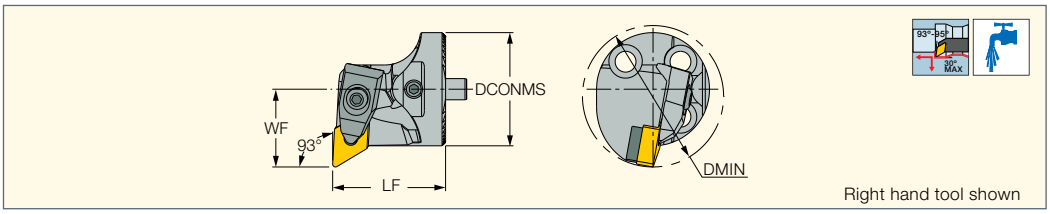
Spare Parts

Designation						
AVC-D20-PXJNR/L-09	FT39 D6-5X8	LR 3DS	SR 117-2009	HW 2.0		
AVC-D32-PXJNR/L-09	FT39 D6-5X8	LR 3D	SR 117-2014	HW 2.5	SP 3	SR M2.5X2.5 DIN913 TL360
AVC-D25-PXJNR/L-09	FT39 D6-5X8	LR 3DS	SR 117-2009	HW 2.0		

WHISPERLINE

AVC-DDUNR/L

Interchangeable Boring Heads
Carrying 55° Rhombic Inserts



Designation	WF	DCONMS	DMIN	LF	MIID[2]	CSP[3]
AVC-D32-DDUNR/L-11T	22.00	32.00	40.00	32.00	DNMG 332-NF	1
AVC-D40-DDUNR/L-15T [1]	27.00	40.00	50.00	38.00	DNMG 442-F3M	1
AVC-D40-DDUNR/L-1504T	27.00	40.00	50.00	38.00	DNMG 432[150408]	1

• Remark for tools with a -15T suffix only: For DNMG 1506 (6.35mm thick) inserts use Seat, 5505710: RDT 433, For DNMG 1504 (4.76mm thick) inserts use Seat, 5505709: RDT 443

[1] DMIN of 50mm shank is DMIN of requested head + 10mm • DMIN of 60mm shanks is DMIN of requested head + 20mm

[2] Master insert identification

[3] 0 - Without coolant supply, 1 - With coolant supply

For inserts, see pages: DNGG-M3N (267) • DNMA (203) • DNMG-F3M (197) • DNMG-F3P (196) • DNMG-F3S (198) • DNMG-GN (202) • DNMG-M3M (198) • DNMG-M3P (196) • DNMG-NF (200) • DNMG-NR (202) • DNMG-PF (200) • DNMG-VL (201) • DNMG-WG (200) • DNMG/DNGG-PP (201) • DNMG/DNGG-SF (199) • DNMG/DNGG-TF (202) • DNMM-NM (203) • DNMM-R3P (203)

For holders, see pages: AV-D (117) • C#-AV-C (118) • C#-SH-E-JHP (704) • C#-SH-JHP (704) • SH-D (116) • SH-S#-N-AVC (119)

Spare Parts

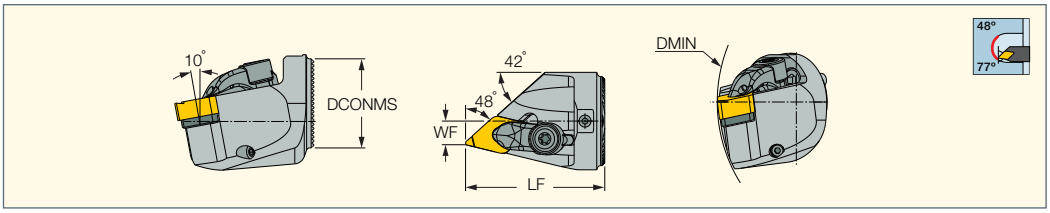
Designation								
AVC-D32-DDUNR/L-11T	RDT 3-2*		SR RC3*	SR 40085I*	HW 2.5*	T-15/5*	LCGR-3*	KSP 3*
AVC-D40-DDUNL-15T	RDT 433*	RDT 443*	DLS 4*	SR 14-506 M4X0.7*	HW 3.0	T-15/5*	DLM 4*	DSP 4*
AVC-D40-DDUNR-15T	RDT 433*	RDT 443*	DLS 4*	SR 14-506 M4X0.7*		T-15/5*	DLM 4*	DSP 4*

* Optional, to be ordered separately

WHISPERLINE

AVC-DDMNR/L

Interchangeable Boring Heads
Carrying 55° Rhombic Inserts



Designation	WF	DCONMS	DMIN	LF	CSP[1]	MIID[2]
AVC-D32-DDMNR/L-15	8.50	32.00	110.00	50.00	1	DNM# 442[150608]
AVC-D40-DDMNR/L-15	11.00	40.00	110.00	50.00	1	DNM# 442[150608]

NEW

[1] 0 - Without coolant supply, 1 - With coolant supply

[2] Master insert identification

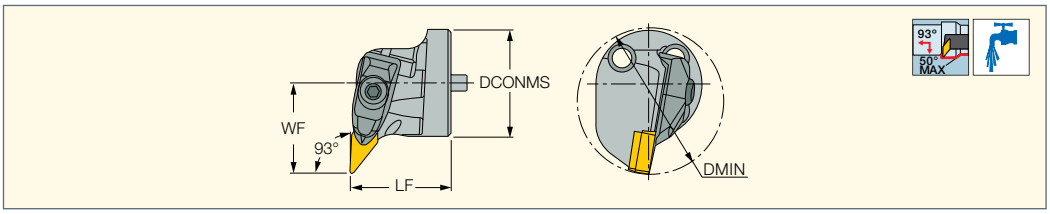
For holders, see pages: AV-D (117) • C#-AV-C (118) • C#-SH-E-JHP (704) • C#-SH-JHP (704) • SH-D (116) • SH-S#-N-AVC (119)

Spare Parts

Designation						
AVC-DDMNR/L	LCGR/L-4JC SET	TDN 422	T-20/3	FT39 D6-5X8	SP 4	SR M4X4 DIN913 TL360

WHISPERLINE

AVC-DVUNR/L
Interchangeable Boring Heads
Carrying 35° Rhombic Inserts



Designation	WF	DCONMS	DMIN	LF	CSP[2]	MIID[3]
AVC-D40-DVUNR/L-16T [1]	34.00	40.00	56.00	38.00	1	VNMG 332-F3M

[1] DMIN of 50mm shank is DMIN of requested head + 10mm • DMIN of 60mm shanks is DMIN of requested head + 20mm
[2] 0 - Without coolant supply, 1 - With coolant supply
[3] Master insert identification

For inserts, see pages: VNGG-M3N (268) • VNMG-F3M (205) • VNMG-F3P (205) • VNMG-M3M (205) • VNMG-TF (207) • VNMG/VNGG-NF (207)
For holders, see pages: AV-D (117) • C#-AV-C (118) • C#-SH-E-JHP (704) • C#-SH-JHP (704) • SH-D (116) • SH-S#-N-AVC (119)

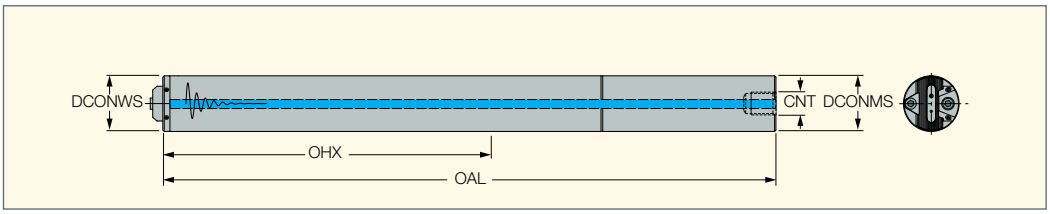
Spare Parts

Designation							
AVC-D40-DVUNR/L-16T	DLM 3V*	SR 10402267*	IVSN 40	HW 4.0*	KSP 5*	T-15/5*	SR 35080I*

* Optional, to be ordered separately

WHISPERLINE

AV-D-VH
Anti-Vibration Bars with
Through Coolant for
Interchangeable Turning Heads



Designation	DCONMS	DCONWS	OAL	OHN[2]	OHX[3]	CNT	BMC[4]	CP[5]	kg
AV-D80-7D-C-VH	80.00	80.00	880.00	396.0	515.0	G3/4"	S	70	31.80
AV-D80-10D-C-VH	80.00	80.00	1200.00	515.0	755.0	G3/4"	S	70	52.30
AV-D80-12D-E-VH [1]	80.00	80.00	1240.00	755.0	916.0	G3/4"	H	70	60.00
AV-D80-14D-E-VH [1]	80.00	80.00	1400.00	916.0	1076.0	G3/4"	H	70	70.00

• Only steel bars can be shortened. For details, see table below • 12xBD and 14xBD cannot be shortened
[1] Solid Carbide Shank
[2] Minimum overhang
[3] Maximum overhang
[4] S-solid steel body, H-solid carbide body
[5] Coolant pressure (Bar)

For tools, see pages: AVC-DDUNR/L-VH (128) • AVC-SDUCR/L-VH (128) • AVC-SVLCR/L-VH (128)

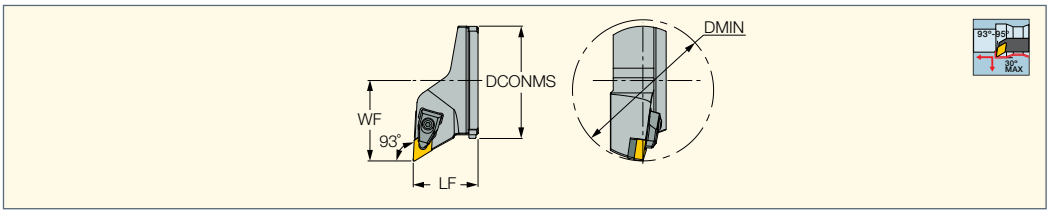
Bar Diameter	Minimum Length After Shortening	
DCONMS (mm)	AV-D80-7D-C-VH	AV-D80-10D-V-AV
80	630	630

Spare Parts

Designation						
AV-D-VH	SR55 M10X25	PB20 M10X16 CLAMP	PB20 M10X11 CLAMP	PIN FT77 D5X10	SR55 M3X6	SR50 M5X6

WHISPERLINE

AVC-DDUNR/L-VH
Interchangeable Boring Heads Carrying 55° Rhombic Inserts



Designation	WF	DCONMS	DMIN	LF	MIID[1]
AVC-D80-DDUNR/L-15T-VH	57.00	77.00	100.00	46.00	DNMG 442-F3M

[1] Master insert identification

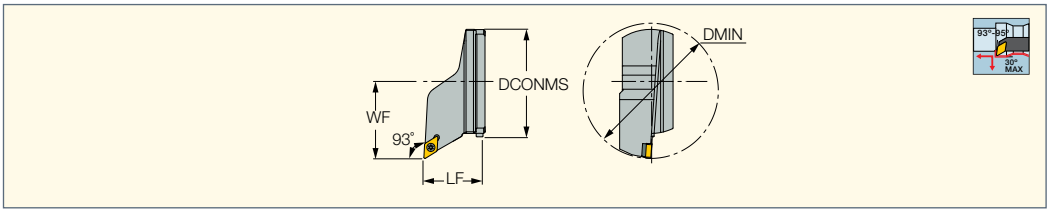
For inserts, see pages: DNMA (203) • DNMG-F3M (197) • DNMG-F3P (196) • DNMG-F3S (198) • DNMG-GN (202) • DNMG-M3M (198) • DNMG-M3P (196) • DNMG-NF (200) • DNMG-NR (202) • DNMG-PF (200) • DNMG-WG (200) • DNMG/DNGG-PP (201) • DNMG/DNGG-TF (202) • DNMM-NM (203) • DNMM-R3P (203)
For holders, see pages: AV-D-VH (127) • C#-AV-C-VH (119)

Spare Parts

Designation								
AVC-D80-DDUNL-15T-VH	RDT 443	RDT 433	HW 3.0	SR 14-506 M4X0.7	T-15/5	DSP 4	DLS 4	DLM 4

WHISPERLINE

AVC-SDUCR/L-VH
Interchangeable Boring Heads Carrying 55° Rhombic Inserts with 7° Clearance



Designation	WF	DCONMS	DMIN	LF	MIID[1]
AVC-D80-SDUCR/L-11T-VH	57.00	77.00	100.00	45.00	DCMT 11T304

[1] Master insert identification

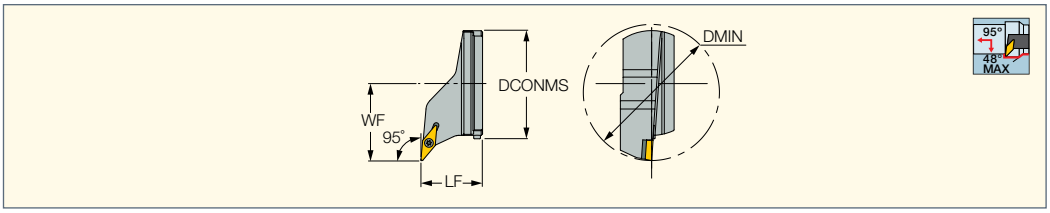
For inserts, see pages: DCET-WF (247) • DCGT-AF (271) • DCGT-AS (270) • DCGT-F1M-12P (243) • DCGT-F1M-20P (244) • DCMT-14 (247) • DCMT-CERMET (243) • DCMT-F3P (240) • DCMT-M3M (241) • DCMT-M3P (241) • DCMT/DCGT (246) • DCMT/DCGT-PF (245) • DCMT/DCGT-SM (246)
For holders, see pages: AV-D-VH (127) • C#-AV-C-VH (119)

Spare Parts

Designation					
AVC-D80-SDUCL-11T-VH	TDC 3-1P	SR 16-236 P	HW 4.0	SR TC-3P	T-15/5

WHISPERLINE

AVC-SVLCR/L-VH
Interchangeable Boring Heads Carrying 35° Rhombic Inserts with 7° Clearance



Designation	WF	DCONMS	DMIN	LF	MIID[1]
AVC-D80-SVLCR/L-16T-VH	57.00	77.00	100.00	45.00	VCMT 160404

[1] Master insert identification

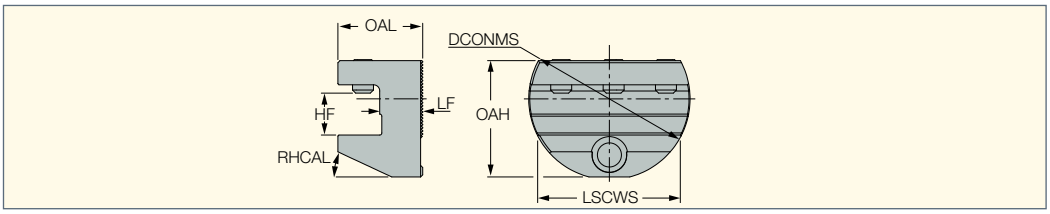
For inserts, see pages: VCGT-AS (269) • VCGT-DW (PCD) (515) • VCMT-14 (252) • VCMT-F3M (249) • VCMT-F3P (248) • VCMT-FPC-CERMET (250) • VCMT-M3M (249) • VCMT-M3P (248) • VCMT-SM (251) • VCMW (252)
For holders, see pages: AV-D-VH (127) • C#-AV-C-VH (119)

Spare Parts

Designation				
AVC-SVLCR/L-VH	TVC 3-1P	SR 16-236 P	SR TC-3P	T-15/5

WHISPERLINE

AVC-D80-VH
Perpendicular Adaptor for
External Square-Shank Tools



Designation	LSCWS	OAH	DCONMS	LF	HF	OAL	RHCAL
AVC-D80-2020-80-VH	67.80	55.50	77.00	20.50	20.0	40.50	25.0

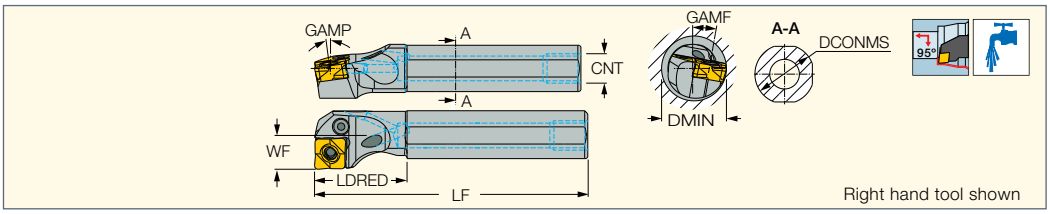
For tools, see pages: CKJNR/L (41) • CTGPR/L (97) • DCLNR/L (32) • DDJNR/L (39) • DGTR/L (534) • DGTR/L-B-D-SH (529) • DGTR/L-B/BC-D (533) • DGTR/L-BC-T (535) • DGTR/L-XL (536) • DTGNR/L (50) • DWLNR/L (13) • FLSR/L (807) • GEHSR (427) • GHDR/L (short pocket) (302) • GHGR/L (305) • GHMR/L (300) • HELIR/L (290) • MTJNR/L-W (49) • MVJNR/L (43) • MVVNN (45) • MWLNR/L-W (22) • PCHR/L-24 (346) • PCHR/L-34 (351) • PCHR/L-D-IQ (591) • PCHRS/LS (350) • PCLNR/L (24) • PCLNR/L-X (27) • PCLXR/L (65) • PDJNR/L (36) • PHGR/L (338) • PQFNR/L (64) • PQLCR/L (95) • PQLNR/L (63) • PSBNR/L (56) • PSBNR/L-JHP-MC (57) • PTGNR/L (45) • PTGNR/L-X (46) • PWLNR/L (12) • PWLNR/L-X (14) • SCLCR/L (70) • SDJCR/L (75) • SDJCR/L-13-SL (74) • SDJCR/L-JHP-MC (76) • SDNCN (83) • SER/L (798) • SGFFR/L (670) • STGCR/L (93) • SUXCR/L-CM (70) • SVACR/L-S (88) • SVJCR/L (511) • SVJNR/L-F (42) • SVVCN (511) • SVVNN-F (43) • SVXCR/L (512) • TGDR/L (297) • TGTR/L-IQ (564) • TGTR/L-IQ-2Z (565)

Spare Parts

Designation	
AVC-D80-VH	SR M10X16 DIN913

LOGIQ4TURN

A-PCLXR/L
Lever Lock Boring Bars Carrying
CXMG 80° Rhombic Inserts



Designation	DCONMS	LF	LDRED	WF	GAMP(1)	GAMF(2)	DMIN	CNT	MIID(3)
A16Q PCLXR/L-09X	16.00	180.00	30.0	11.00	8.0	10.0	20.00	UNC 3/8"-16	CXMG 09..
A20R PCLXR/L-09X	20.00	200.00	30.0	13.00	5.0	10.0	25.00	UNC 3/8"-24	CXMG 09..
A25S PCLXR/L-09X	25.00	250.00	40.0	17.00	5.0	10.0	32.00	UNC 1/2"-20	CXMG 09..
A25R PCLXR/L-12X	25.00	200.00	40.0	17.00	6.0	9.0	32.00	UNF-2B 1/2"-20	CXMG 12..
A32T PCLXR/L-12X	32.00	300.00	48.0	22.00	6.0	9.0	40.00	UNF-2B 1/2"-20	CXMG 12..
A40U PCLXR/L-12X	40.00	350.00	50.0	27.00	6.0	10.0	50.00	UNF-2B 1/2"-20	CXMG 12..

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

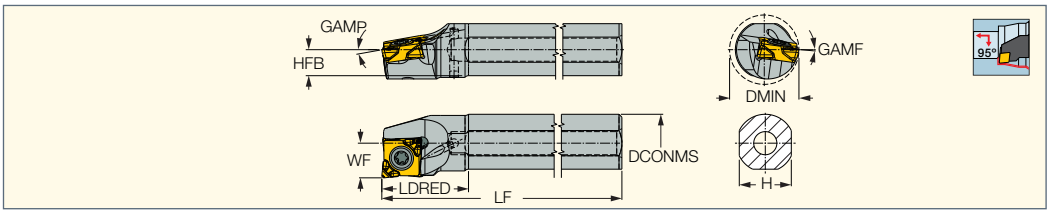
For inserts, see pages: CXGG-M3N-P (230) • CXMG-F3M (230) • CXMG-F3P (229) • CXMG-M3M (230) • CXMG-M3P (229)

Spare Parts

Designation								
A16Q PCLXR/L-09X	LR 3X SET	PL 16	SR M6XL11.5V	T-8/5				
A20R PCLXR/L-09X	LR 3X SET	PL 20	SR M6XL11.5V	T-8/5				
A25S PCLXR/L-09X	LR 3X SET	PL 25	SR M6XL11.5V	T-8/5				
A25R PCLXR/L-12X	LR 4MX	PL 25	SR 117-2010-S		HW 3.0			
A32T PCLXR/L-12X	LR 4MX	PL 32	SR 117-2010-S		HW 3.0			
A40U PCLXR/L-12X	LR 4X-CA	PL 40	SR LCS 5		HW 3.0	TCNX 423	PN 3-4	SP 4

LOGIQ4TURN

A/E-SCLXR/L-06X
Screw Lock Boring Bars on which CXMU 80° Rhombic Inserts are Mounted



Designation	DCONMS	LF	LDRED	H	HFB	WF	DMIN	GAMP(1)	GAMF(2)	MIID(3)
A08H SCLXR/L-06X	8.00	100.00	12.0	7.2	3.6	5.00	10.00	8.0	10.0	CXMU 060208
E08K SCLXR/L-06X	8.00	125.00	19.0	7.2	3.6	5.00	10.00	8.0	10.0	CXMU 060208
A10K SCLXR/L-06X	10.00	125.00	15.0	9.0	4.5	6.00	12.00	8.0	8.0	CXMU 060208
E10M SCLXR/L-06X	10.00	150.00	21.5	9.0	4.5	6.00	12.00	8.0	8.0	CXMU 060208
A12M SCLXR/L-06X	12.00	150.00	18.0	11.0	5.5	9.00	16.00	8.0	8.0	CXMU 060208
E12Q SCLXR/L-06X	12.00	180.00	25.0	11.0	5.5	9.00	16.00	8.0	8.0	CXMU 060208

NEW

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

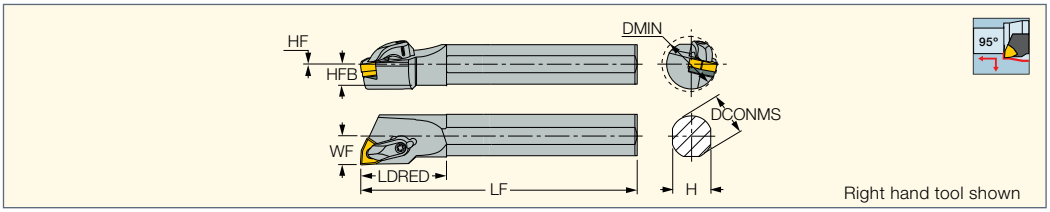
For inserts, see pages: CXMU-F3M (231) • CXMU-F3P (231)

Spare Parts

Designation		
A/E-SCLXR/L-06X	SR M2.5-T8-MT	T-8/5

ISOTURN

S-DWLNR/L
R-Clamp Boring Bars Carrying Negative Trigon Inserts



Designation	DCONMS	LF	LDRED	H	HFB	HF	WF	DMIN	MIID(1)
S25T DWLNR/L-08	25.00	300.00	50.0	23.0	12.3	0.8	17.00	32.00	WNMG 0804
S32U DWLNR/L-08	32.00	350.00	55.0	29.0	15.8	1.3	22.00	40.00	WNMG 0804
S40V DWLNR/L-08	40.00	400.00	55.0	36.0	19.8	1.8	27.00	60.00	WNMG 0804

(1) Master insert identification

For inserts, see pages: WNMG-CERMET (173) • WNMG-F3S (176) • WNMG-F3P (172) • WNMG-M3P (173) • WNMG-F3M (175) • WNMG-M3M (175) • WNMG-TF (178) • WNMG-GN (179) • WNMG-NR (179) • WNMG-PP (178) • WNMG-VL (177) • WNMG-TNM (180) • WNMG-NF (176) • WNMM-NM (179) • WNMG-WF (177) • WNMA/WNMA-WG (180) • WNMG-WG (177)
For holders, see page: HSK A63TM ABB (839)

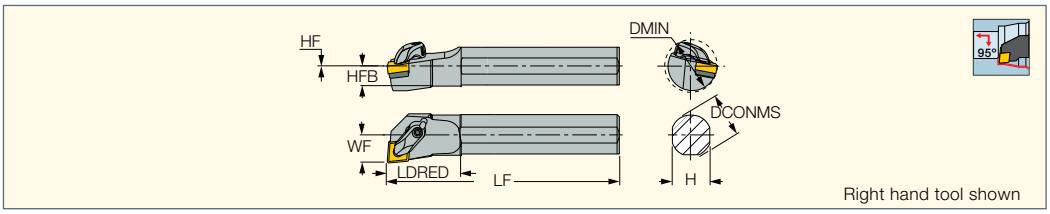
Spare Parts

Designation					
S-DWLNR/L	TWN 423	SP 4	LCGR-4	SR 10400270-25.5	T-15/5

ISOTURN

S-DCLNR/L

R-Clamp Boring Bars Carrying Negative 80° Diamond Inserts



Designation	DCONMS	LF	LDRED	H	HFB	WF	DMIN	HF	MIID[1]
S25R DCLNR-12	25.00	200.00	45.0	23.0	12.3	17.00	36.00	0.8	CNMG 1204..
S32T DCLNR/L-12	32.00	300.00	45.0	28.0	15.8	22.00	40.00	1.8	CNMG 1204..
S40U DCLNR/L-12	40.00	350.00	55.0	36.0	19.8	27.00	48.00	1.8	CNMG 1204..

[1] Master insert identification

For inserts, see pages: CNMG-CERMET (183) • CNMG-F3S (186) • CNMG-F3P (181) • CNMG-M3P (182) • CNMM-R3P (192) • CNMM-M4PW (192) • CNMG-F3M (185) • CNMG-M3M (185) • CNMG/CNGG-TF (189) • CNMG-GN (190) • CNMG-NR (190) • CNMG/CNGG-PP (189) • CNMG-VL (186) • CNMG/CNGG-SF (187) • CNMG-NF (187) • CNMG-WF (187) • CNMG-WG/NRW (188) • CNMA (188)

For holders, see pages: HSK A63TM ABB (839)

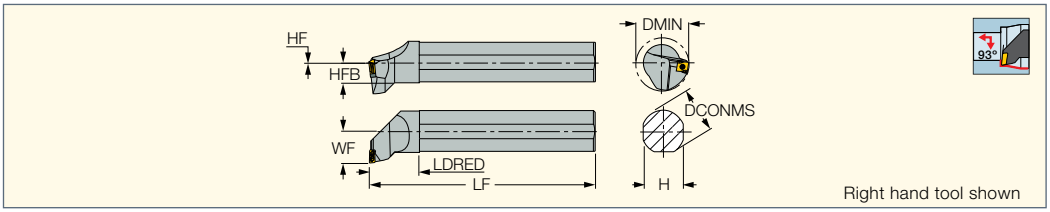
Spare Parts

Designation					
S-DCLNR/L	TCN 423	SP 4	LCGR-4	SR 10400270-25.5	T-15/5

HELITURN TANGENTIAL LINE

S-SLANR/L-TANG

Boring Bars Carrying LNMX Tangentially Screw Clamped Inserts with 4 Cutting Edges for High Metal Removal Rates



Designation	DCONMS	LF	LDRED	H	HFB	WF	DMIN	HF	MIID[1]
S25T SLANR/L-11 TANG	25.00	300.00	40.0	23.0	11.5	17.00	53.00	1.0	LNMX 1104..
S32U SLANR-11 TANG	32.00	350.00	45.0	30.0	15.0	22.00	53.00	1.0	LNMX 1104..
S40V SLANR/L-11 TANG	40.00	400.00	60.0	37.0	18.5	27.00	53.00	1.5	LNMX 1104..
S50U SLANR/L-15 TANG	50.00	350.00	60.0	47.0	23.5	37.00	85.00	1.5	LNMX 1506..

• Right-hand inserts for left-hand bars. Left-hand inserts for right-hand bars. • a_p max for facing: LNMX 11-2.8 mm, LNMX 15-3.8 mm.

[1] Master insert identification

For inserts, see pages: LNMX-HM (226) • LNMX-HT (226) • LNMX-WG (227)

For holders, see page: HSK A63TM ABB (839)

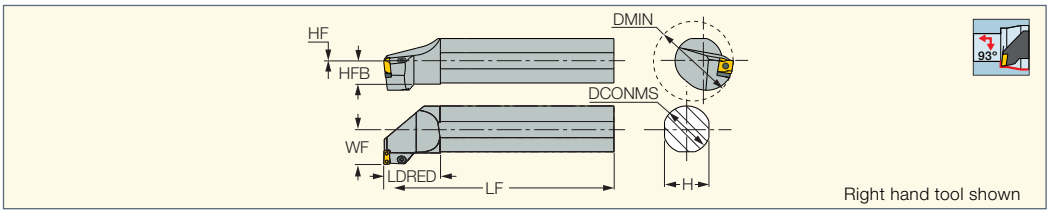
Spare Parts

Designation							
S25T SLANR/L-11 TANG	TLN 11R/L-HTI	SR RS4	T-6/5	SR 34-550-C	BLD T10/S7		SW6-SD
S32U SLANR-11 TANG	TLN 11L-HTI	SR RS4	T-6/5	SR 34-550-C	BLD T10/S7		SW6-SD
S40V SLANR/L-11 TANG	TLN 11R/L-HTI	SR RS4	T-6/5	SR 34-550-C	BLD T10/S7		SW6-SD
S50U SLANR/L-15 TANG	TLN 15R/L-HTI	SR RS4	T-6/5	SR 34-535-SN	BLD T15/S7	SW6-T-SH	

HELITURN TANGENTIAL LINE

S-PLANR-TANG

Boring Bars Carrying LNMX... Tangentially Clamped Inserts with 4 Cutting Edges for High Production Rates



Designation	DCONMS	LF	LDRED	H	HFB	WF	DMIN	HF	MIID[1]
S50U PLANR-15 TANG	50.00	350.00	60.0	47.0	1.5	37.00	85.00	1.5	LNMX 1506...

• Right-hand inserts for left-hand bars. Left-hand inserts for right-hand bars. • a_p max for facing 3.8 mm.

[1] Master insert identification

For inserts, see pages: LNMX-HM (226) • LNMX-HT (226) • LNMX-WG (227)

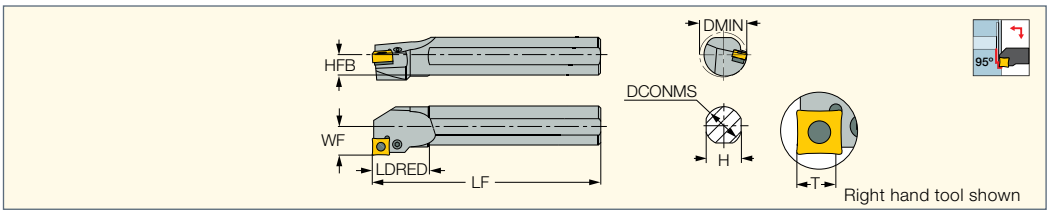
Spare Parts

Designation						
S50U PLANR-15 TANG	TLN 15L-HTI	SR RS4	T-6/5	LR T15	SR TL-15	HW 3.5

ISOTURN

S-PQFNR/L

Lever Lock Boring Bars Carrying Negative Square Inserts with 80° Corners for Internal Facing



Designation	DCONMS	LF	LDRED	H	HFB	WF	T	DMIN	MIID[1]
S20Q PQFNR/L-09	20.00	180.00	40.0	18.0	9.0	13.00	7.5	28.00	QNMG 0904...
S32R PQFNR-09	32.00	200.00	45.0	29.0	14.5	22.00	7.5	40.00	QNMG 0904...
S25R PQFNL-12	25.00	200.00	40.0	23.0	11.5	17.00	9.0	32.00	QNMG 1204...
S32R PQFNR-12	32.00	200.00	45.0	29.0	14.5	22.00	9.0	40.00	QNMG 1204...
S40S PQFNL-12	40.00	250.00	50.0	36.0	18.0	27.00	9.0	50.00	QNMG 1204...

[1] Master insert identification

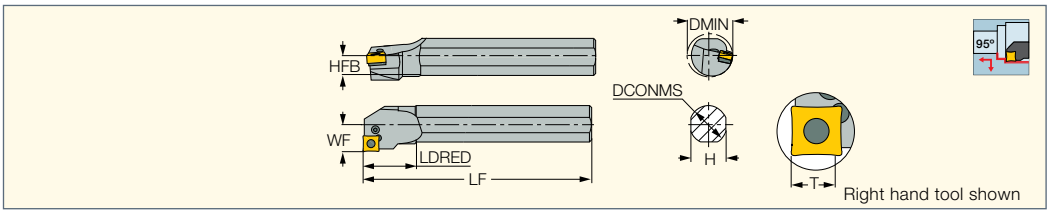
For inserts, see pages: QNMG-GN (229) • QNMG-NF (228) • QNMG-PP (228) • QNMG-TF (228)

Spare Parts

Designation						
S20Q PQFNR/L-09				LR 3S	SR 117-2016	HW 2.0
S32R PQFNR-09	TXC 322	SP 3	PN 3-4	LR 3	SR 117-2014	HW 2.5
S25R PQFNL-12				LR 4M	SR 117-2011	HW 2.5/5
S32R PQFNR-12	TSN 423	SP 4	PN 3-4	LR 4	SR 117-2010	HW 3.0
S40S PQFNL-12	TSN 423	SP 4	PN 3-4	LR 4	SR 117-2010	HW 3.0

ISOTURN

S-PQLNR/L
Lever Lock Boring Bars
Carrying Negative Square
Inserts with 80° Corners



Designation	DCONMS	LF	LDRED	H	HFB	WF	T	DMIN	MIID[1]
S20S PQLNR/L-09	20.00	250.00	40.0	18.0	9.0	13.00	6.5	25.00	QNMG 0904
S25T PQLNR-09	25.00	300.00	40.0	23.0	11.5	17.00	6.5	32.00	QNMG 0904
S32U PQLNR-09	32.00	350.00	45.0	29.0	14.5	22.00	6.5	40.00	QNMG 0904
S25T PQLNR/L-12	25.00	300.00	40.0	23.0	11.5	17.00	8.5	32.00	QNMG 1204
S32U PQLNR/L-12	32.00	350.00	45.0	29.0	14.5	22.00	8.5	40.00	QNMG 1204
S40V PQLNR/L-12	40.00	400.00	50.0	36.0	18.0	27.00	8.5	50.00	QNMG 1204

(1) Master insert identification

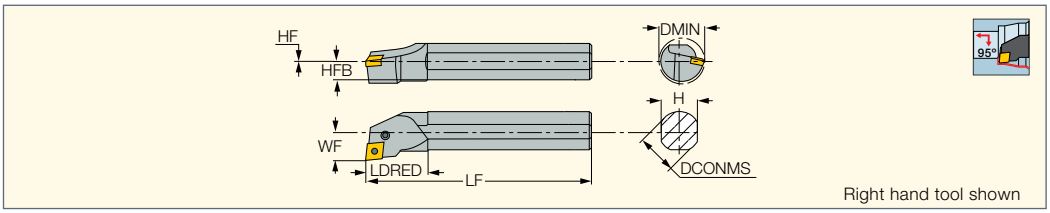
For inserts, see pages: QNMG-GN (229) • QNMG-NF (228) • QNMG-PP (228) • QNMG-TF (228)

Spare Parts

Designation						
S20S PQLNR/L-09				LR 3S	SR 117-2016	HW 2.0
S25T PQLNR-09				LR 3S	SR 117-2016	HW 2.0
S32U PQLNR-09	TXC 322	SP 3	PN 3-4	LR 3	SR 117-2014	HW 2.5
S25T PQLNR/L-12				LR 4M	SR 117-2011	HW 2.5/5
S32U PQLNR/L-12	TSN 423	SP 4	PN 3-4	LR 4	SR 117-2010	HW 3.0
S40V PQLNR/L-12	TSN 423	SP 4	PN 3-4	LR 4	SR 117-2010	HW 3.0

ISOTURN

A/S-PCLNR/L
Lever Lock Boring Bars Carrying
Negative 80° Rhombic Inserts



Designation	DCONMS	LF	LDRED	H	HFB	WF	HF	CSP[1]	DMIN	MIID[2]
A25R PCLNR/L-12	25.00	200.00	40.0	23.0	11.5	17.00	0.0	1	32.00	CNMG 1204..
S25S PCLNR/L-12	25.00	250.00	48.0	23.0	11.5	17.00	0.0	0	32.00	CNMG 1204..
A32T PCLNR/L-12	32.00	300.00	45.0	30.0	14.5	22.00	-0.5	1	40.00	CNMG 1204..
S32T PCLNR/L-12	32.00	300.00	51.0	30.0	14.5	22.00	-0.5	0	40.00	CNMG 1204..
S40U PCLNR/L-12	40.00	350.00	51.0	36.0	18.0	27.00	0.0	0	49.00	CNMG 1204..
S50W PCLNR-19	50.00	450.00	70.0	47.0	23.5	35.00	0.0	0	63.00	CNMG 1906..

(1) 0 - Without coolant supply, 1 - With coolant supply
(2) Master insert identification

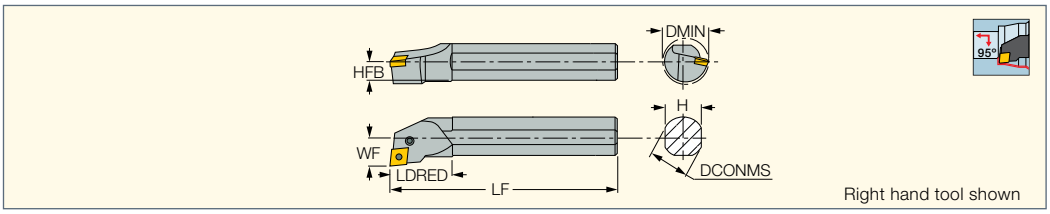
For inserts, see pages: CNMG-CERMET (183) • CNMG-F3S (186) • CNMG-R3P (182) • CNMG-F3P (181) • CNMG-M3P (182) • CNMM-R3P (192) • CNMM-M4PW (192) • CNMG-F3M (185) • CNMG-M3M (185) • CNMG-R3M (186) • CNMG/CNGG-TF (189) • CNMG-GN (190) • CNMG-NR (190) • CNMG/CNGG-PP (189) • CNMG-VL (186) • CNMG/CNGG-SF (187) • CNMG-NF (187) • CNMG-WF (187) • CNMG-WG/NRW (188) • CNMS-12 (272) • CNMM-H3P (193) • CNMM-H4P (193) • CNMA (188)

Spare Parts

Designation								
A25R PCLNR/L-12				LR 4M	SR 117-2011	HW 2.5/5	HW 2.0	PL 25
S25S PCLNR/L-12				LR 4M	SR 117-2011	HW 2.5/5		
A32T PCLNR/L-12	TCN 423	SP 4	PN 3-4	LR 4	SR 117-2010	HW 2.0	HW 3.0	PL 32
S32T PCLNR/L-12	TCN 423	SP 4	PN 3-4	LR 4	SR 117-2010	HW 3.0		
S40U PCLNR/L-12	TCN 423	SP 4	PN 3-4	LR 4	SR 117-2010	HW 3.0		
S50W PCLNR-19	TCN 63	SP 66		LR 6	SR 10402352	HW 4.0		

HELITURN LD

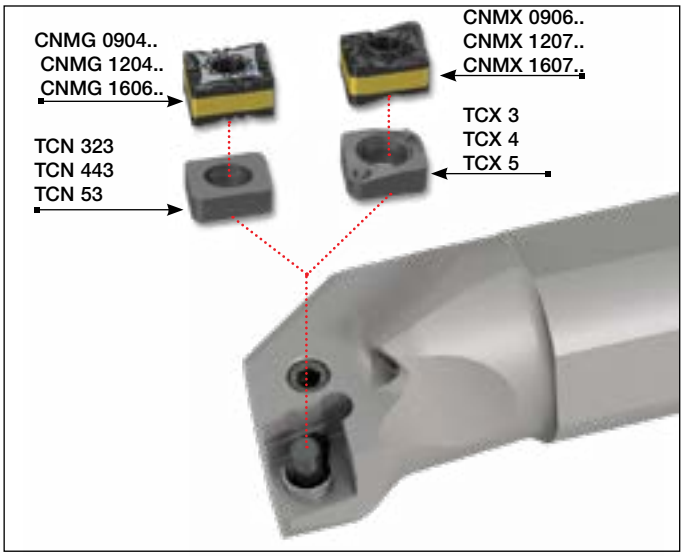
A/S-PCLNR/L-X/G
Lever Lock Boring Bars
Carrying Negative CNMX/CNMG
80° Rhombic Inserts



Designation	DCONMS	LF	LDRED	H	HFB	WF	DMIN	CSP(5)	MIID(6)
A16M PCLNR/L-09G (1)	16.00	150.00	30.0	15.0	7.5	11.00	21.00	1	CNMG 0904..
A20Q PCLNR/L-09G (1)	20.00	180.00	30.0	18.0	9.0	13.00	25.00	1	CNMG 0904..
A25R PCLNR/L-09X (2)	25.00	200.00	35.0	23.0	11.5	17.00	32.00	1	CNMX 0906, CNMG 0904
A32S PCLNR/L-09X (2)	32.00	250.00	40.0	29.0	14.5	22.00	40.00	1	CNMX 0906, CNMG 0904
A25R PCLNR/L-12X (3)	25.00	200.00	51.0	23.0	11.5	21.00	50.00	1	CNMX 1207, CNMG 1204
A32S PCLNR/L-12X (3)	32.00	250.00	51.0	29.0	14.5	21.00	54.00	1	CNMX 1207, CNMG 1204
S50W PCLNR-16X (4)	50.00	450.00	70.0	47.0	23.5	35.00	63.00	0	CNMX 1607, CNMG 1606

(1) For CNMG 0904.. inserts only
(2) Supplied with TCX 3 seat for CNMX 0906.. inserts and TCN 323 seat for CNMG 0904.. inserts.
(3) Supplied with TCX 4 seat for CNMX 1207.. inserts and TCN 443 seat for CNMG 1204.. inserts.
(4) Supplied with TCN 53 seat for CNMG 1606.. inserts. Use TCX 5 seat (optional) for CNMX 1607.. inserts.
(5) 0 - Without coolant supply, 1 - With coolant supply
(6) Master insert identification

For inserts, see pages: CNGX-M3N (267) • CNMG-F3S (186) • CNMG-R3P (182) • CNMX-M3/4MW (191) • CNMX-M3/4PW (191) • CNMG-F3P (181) • CNMG-M3P (182) • CNMG-F3M (185) • CNMG-M3M (185) • CNMG-R3M (186) • CNMM-R3P (192) • CNMA (188) • CNMG-GN (190) • CNMG-MR (191) • CNMG-NF (187) • CNMG-NR (190) • CNMG-VL (186) • CNMG-WF (187) • CNMG-WG/NRW (188) • CNMG/CNGG-PP (189) • CNMG/CNGG-SF (187) • CNMG/CNGG-TF (189) • CNMS-12 (272) • CNGG-F3N (266) • CNMG-CERMET (183)



Spare Parts

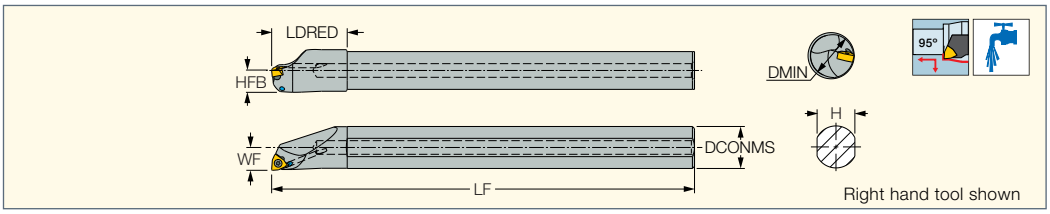
Designation									
A16M PCLNR/L-09G					LR 3S	SR 117-2009	HW 2.0	PL 16	
A20Q PCLNR/L-09G					LR 3S	SR 117-2009	HW 2.0	PL 20	
A25R PCLNR/L-09X	TCX 3	TCN 323	SP 3	PN 3-4	LR 3	SR 117-2014	HW 2.5	PL 25	
A32S PCLNR/L-09X	TCX 3	TCN 323	SP 3	PN 3-4	LR 3	SR 117-2014	HW 2.5	PL 32	
A25R PCLNR/L-12X	TCX 4	TCN 443	SP 4	PN 3-4L	LR 4DH	SR 117-2010	HW 3.0	PL 25	LR 4DHTL (MR INJ)*
A32S PCLNR/L-12X	TCX 4	TCN 443	SP 4	PN 3-4L	LR 4DH	SR 117-2010	HW 3.0	PL 32	LR 4DHTL (MR INJ)*
S50W PCLNR-16X	TCX 5*	TCN 53	SP 5		LR 5	SR LCS 5	HW 3.0		

* Optional, to be ordered separately

MINIPTURN POSITIVE DOUBLE SIDED

A/E-SWLNR/L-04

Boring Bars Carrying
WNGP 0403.. Double-Sided
Trigon Inserts for
Small Diameters



Designation	DCONMS	LF	LDRED	H	HFB	WF	DMIN	MIID[1]
A10K SWLNR/L-04	10.00	125.00	20.0	9.0	5.5	6.00	12.00	WNGP 04
A12M SWLNR/L-04	12.00	150.00	24.0	11.0	6.5	7.00	14.00	WNGP 04
A16Q SWLNR/L-04	16.00	180.00	32.0	15.0	8.5	9.00	18.00	WNGP 04
A20R SWLNR/L-04	20.00	200.00	36.0	18.0	10.5	11.00	22.00	WNGP 04
E10M SWLNR/L-04	10.00	150.00	25.0	9.0	5.5	6.00	12.00	WNGP 04
E12Q SWLNR/L-04	12.00	180.00	27.0	11.0	6.5	7.00	14.00	WNGP 04
E16R SWLNR/L-04	16.00	200.00	32.0	15.0	8.5	9.00	18.00	WNGP 04
E20S SWLNR/L-04	20.00	250.00	36.0	18.0	10.5	11.00	22.00	WNGP 04

• Use left-hand inserts on right-hand bars and vice versa. • A - steel shank with coolant hole, E - carbide shank with coolant hole.

[1] Master insert identification

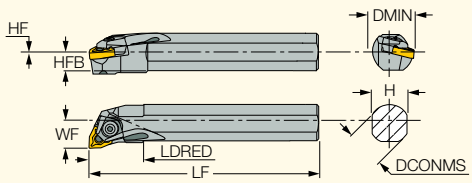
For inserts, see pages: WNGP-F2M (174) • WNGP-F2P (172)

Spare Parts

Designation	
A/E-SWLNR/L-04	SR 34-514

ISOTURN

A/S-MWLNR/L-W
Top Wedge Lock Boring Bars Carrying Double-Sided Trigon Inserts



Right hand tool shown

Designation	DCONMS	LF	LDRED	H	HFB	WF	DMIN	HF	CSP(2)	MIID(3)
A20Q MWLNR/L-06W	20.00	180.00	28.0	18.0	9.2	13.00	25.00	0.2	1	WNMG 06T3
A20 MWLNR/L-06W-AD (1)	20.00	100.00	28.0	18.0	9.0	13.00	25.00	0.0	1	WNMG 06T3
A25R MWLNR/L-06W	25.00	200.00	34.0	23.0	11.7	17.00	32.00	0.2	1	WNMG 06T3
A32S MWLNR/L-06W	32.00	250.00	28.0	29.0	14.7	19.00	36.00	0.2	1	WNMG 06T3
S20S MWLNR/L-06W	20.00	250.00	28.0	18.0	9.2	13.00	25.00	0.2	0	WNMG 06T3
S25T MWLNR/L-06W	25.00	300.00	28.0	23.0	11.7	17.00	32.00	0.2	0	WNMG 06T3
S32U MWLNL-06W	32.00	350.00	40.0	29.0	14.7	19.00	36.00	0.2	0	WNMG 06T3
S32U MWLNR-06W	32.00	350.00	28.0	29.0	14.7	19.00	36.00	0.2	0	WNMG 06T3
A25R MWLNR/L-08W	25.00	200.00	40.0	23.0	11.7	17.00	32.00	0.2	1	WNMG 0804
A25 MWLNR-08W-AD (1)	25.00	120.00	35.0	23.0	11.7	17.00	32.00	0.2	1	WNMG 0804
A32S MWLNR/L-08W	32.00	250.00	45.0	29.0	14.7	22.00	40.00	0.2	1	WNMG 0804
A40T MWLNR/L-08W	40.00	300.00	50.0	36.0	18.2	27.00	50.00	0.2	1	WNMG 0804
S25T MWLNR/L-08W	25.00	300.00	35.0	23.0	11.7	17.00	32.00	0.2	0	WNMG 0804
S32U MWLNR/L-08W	32.00	350.00	45.0	28.0	14.7	22.00	40.00	0.7	0	WNMG 0804
S40V MWLNR/L-08W	40.00	400.00	50.0	36.0	18.2	27.00	50.00	0.2	0	WNMG 0804
S50V MWLNL-13W	50.00	400.00	63.0	47.0	23.5	35.00	63.00	0.0	0	WNMG 1306
S50V MWLNR-13W	50.00	400.00	63.0	47.0	23.5	35.00	63.00	0.2	0	WNMG 1306

(1) AD - short tool for adapter holders
(2) 0 - Without coolant supply, 1 - With coolant supply
(3) Master insert identification

For inserts, see pages: WNMG-F3P (172) • WNMG-M3P (173) • WNMG-F3S (176) • WNMG-F3M (175) • WNMG-M3M (175) • WNMM-NM (179) • WNMG-TF (178) • WNMG-GN (179) • WNMG-NR (179) • WNMG-PP (178) • WNMG-VL (177) • WNMG-TNM (180) • WNMG-SF (176) • WNMG-NF (176) • WNMG-WF (177) • WNMA/WNMA-WG (180) • WNMG-WG (177) • WNMG-CERMET (173) • WNGG-F3N (266)

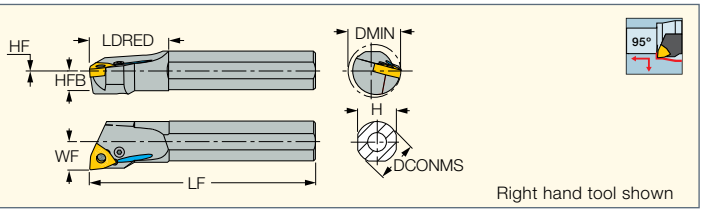
Spare Parts

Designation										
A20 MWLNR/L-06W-AD			ZNW 3WI	LC 250 SET 1					HW 2.5	PL 20
A20Q MWLNR/L-06W			ZNW 3WI	LC 250 SET 1					HW 2.5	PL 20
A25R MWLNR/L-06W	IWSN 322W	IWSN 3-2W*	ZNW 3W	LC 250 SET 1					HW 2.5	PL 25
A32S MWLNR/L-06W	IWSN 322W	IWSN 3-2W*	ZNW 3W	LC 250 SET 1					HW 2.5	PL 32
S20S MWLNR/L-06W			ZNW 3WI	LC 250 SET 1					HW 2.5	
S25T MWLNR/L-06W	IWSN 322W	IWSN 3-2W*	ZNW 3W	LC 250 SET 1					HW 2.5	
S32U MWLNR/L-06W	IWSN 322W	IWSN 3-2W*	ZNW 3W	LC 250 SET 1					HW 2.5	
A25R MWLNR/L-08W	TWN 423		ZNW-4WI	LC 252 SET 2					HW 3.0	PL 25
A25 MWLNR-08W-AD	TWN 423		ZNW-4WI	LC 252 SET 2					HW 3.0	PL 25
A32S MWLNR/L-08W	TWN 423		ZNW-4WI	LC 252 SET 1					HW 3.0	PL 32
A40T MWLNR/L-08W	IWSN 433	IWSN 433M*	ZNW 4W	LC 252 SET 1					HW 3.0	PL 40
S25T MWLNR/L-08W	TWN 423		ZNW-4WI	LC 252 SET 2					HW 3.0	
S32U MWLNR/L-08W	TWN 423		ZNW-4WI	LC 252 SET 1					HW 3.0	
S40V MWLNR/L-08W	IWSN 433	IWSN 433M*	ZNW 4W	LC 252 SET 1					HW 3.0	
S50V MWLNR/L-13W	IWSN 635		ZNW 6W		LC 253	SPR 17-362	WA M8	SR 17-362	HW 4P	

* Optional, to be ordered separately

ISOTURN

A/S-PWLNR/L
Lever Lock Boring Bars Carrying Double-Sided Trigon Inserts



Right hand tool shown

Designation	DCONMS	LF	LDRED	H	HFB	WF	DMIN	HF	CSP(1)	MIID(2)
A16M PWLNR/L-06	16.00	150.00	27.0	15.0	8.0	11.00	20.00	0.5	1	WNMG 06T3
A20Q PWLNR/L-06	20.00	180.00	36.0	18.0	9.2	13.00	27.00	0.2	1	WNMG 06T3
A25R PWLNR/L-06	25.00	200.00	35.0	23.0	11.7	17.00	32.00	0.2	1	WNMG 06T3
S16Q PWLNR/L-06	16.00	180.00	27.0	15.0	8.0	11.00	20.00	0.5	0	WNMG 06T3
S20R PWLNR/L-06	20.00	200.00	36.0	18.0	9.0	13.00	27.00	0.0	0	WNMG 06T3
S25S PWLNR/L-06	25.00	250.00	40.4	23.0	11.5	17.00	32.00	0.0	0	WNMG 06T3
S32T PWLNR-06	32.00	300.00	50.0	29.0	14.5	19.00	39.00	0.0	0	WNMG 06T3
A25R PWLNR/L-08	25.00	200.00	47.0	23.0	11.5	17.00	32.00	0.5	1	WNMG 0804
A32S PWLNR/L-08	32.00	250.00	50.0	28.0	14.7	22.00	39.00	0.7	1	WNMG 0804
S25S PWLNR/L-08	25.00	250.00	47.0	23.0	11.5	17.00	32.00	0.0	0	WNMG 0804
S32T PWLNR/L-08	32.00	300.00	50.0	29.0	14.5	22.00	39.00	0.0	0	WNMG 0804
S40U PWLNL-08	40.00	350.00	59.0	36.0	18.0	27.00	49.00	0.0	0	WNMG 0804
S40U PWLNR-08	40.00	350.00	59.0	36.0	18.0	27.00	49.00	0.7	0	WNMG 0804

(1) 0 - Without coolant supply, 1 - With coolant supply
(2) Master insert identification

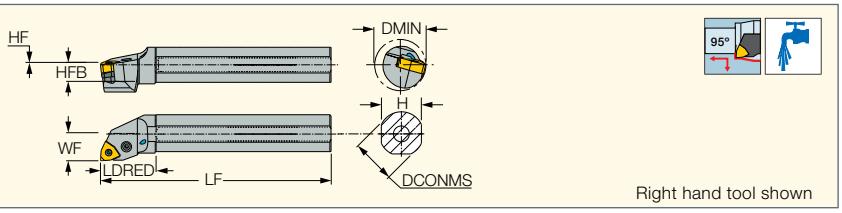
For inserts, see pages: WNMG-F3S (176) • WNMG-F3P (172) • WNMG-M3P (173) • WNMG-F3M (175) • WNMG-M3M (175) • WNMG-TF (178) • WNMG-GN (179) • WNMG-NR (179) • WNMG-PP (178) • WNMG-VL (177) • WNMG-TNM (180) • WNMG-SF (176) • WNMG-NF (176) • WNMM-NM (179) • WNMG-WF (177) • WNMA/WNMA-WG (180) • WNMG-WG (177) • WNMG-CERMET (173)

Spare Parts

Designation							
A16M PWLNR/L-06				LR 3S	SR 117-2009	PL 16	HW 2.0/5
A20Q PWLNR/L-06	TWN 322	SP 3	PN 3-4	LR 3W	SR 117-2014	PL 20	HW 2.5/5
A25R PWLNR/L-06	TWN 322	SP 3	PN 3-4	LR 3	SR 117-2014	PL 25	HW 2.5/5
S16Q PWLNR/L-06				LR 3S	SR 117-2009		HW 2.0/5
S20R PWLNR/L-06	TWN 322	SP 3	PN 3-4	LR 3W	SR 117-2014		HW 2.5/5
S25S PWLNR/L-06	TWN 322	SP 3	PN 3-4	LR 3	SR 117-2014		HW 2.5/5
S32T PWLNR-06	TWN 322	SP 3	PN 3-4	LR 3	SR 117-2014		HW 2.5/5
A25R PWLNR/L-08				LR 4M	SR 117-2011	PL 25	HW 2.5/5
A32S PWLNR/L-08	TWN 423	SP 4	PN 3-4	LR 4	SR 117-2010	PL 32	HW 3.0
S25S PWLNR/L-08				LR 4M	SR 117-2011		HW 2.5/5
S32T PWLNR/L-08	TWN 423	SP 4	PN 3-4	LR 4	SR 117-2010		HW 3.0
S40U PWLNR/L-08	TWN 423	SP 4	PN 3-4	LR 4	SR 117-2010		HW 3.0

HELITURN LD

A-PWLNR/L-X/G
Lever Lock Boring Bars with Coolant Holes Carrying HELITURN LD WNMX or WNMG Trigon Inserts



Right hand tool shown

Designation	DCONMS	H	HFB	LF	LDRED	WF	DMIN	HF	MIID[3]
A16M PWLNR/L-06G [1]	16.00	15.0	8.0	150.00	30.0	11.00	25.00	0.5	WNMG 0604
A20Q PWLNR/L-06G [1]	20.00	18.0	9.2	180.00	35.0	13.00	25.00	0.2	WNMG 0604
A25R PWLNR-06G [1]	25.00	23.0	11.5	200.00	35.0	17.00	32.00	0.0	WNMG 0604
A32S PWLNR-06G [1]	32.00	29.0	14.5	250.00	48.0	22.00	40.00	0.0	WNMG 0604
A32S PWLNR/L-08X [2]	32.00	29.0	14.5	250.00	51.0	21.00	54.00	0.0	WNMX 0807, WNMG 0804

[1] For WNMG 0604.. inserts only
[2] Supplied with TWX 4 seat for WNMX 0807.. inserts and TWN 443 seat for WNMG 0804.. inserts
[3] Master insert identification

For inserts, see pages: WNGG-F3N (266) • WNMA/WNMA-WG (180) • WNMG-F3M (175) • WNMG-F3P (172) • WNMG-F3S (176) • WNMG-GN (179) • WNMG-M3M (175) • WNMG-M3P (173) • WNMG-NF (176) • WNMG-PP (178) • WNMG-TF (178) • WNMG-WF (177) • WNMG-WG (177) • WNMX-M3/4MW (181) • WNMX-M3/4PW (181)

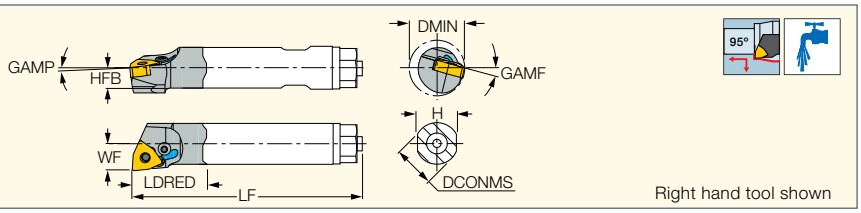
Spare Parts

Designation									
A16M PWLNR/L-06G					LR 3S	SR 117-2009	PL 16	HW 2.0	
A20Q PWLNR/L-06G					LR 3S	SR 117-2009	PL 20	HW 2.0	
A25R PWLNR-06G		TWN 3	SP 3	PN 3-4	LR 3W	SR 117-2014	PL 25	HW 2.5	
A32S PWLNR-06G		TWN 3	SP 3	PN 3-4	LR 3W	SR 117-2014	PL 32	HW 2.5	
A32S PWLNR/L-08X	TWX 4	TWN 443	SP 4	PN 3-4L	LR 4DH	SR 117-2010	PL 32	HW 3.0	LR 4DHTL (MR INJ)*

* Optional, to be ordered separately

ISOTURN

E-PWLNR/L-HEAD
Lever Lock Interchangeable Boring Heads Clamped on a Solid Carbide Shank Carrying Negative WNMG Trigon Inserts



Right hand tool shown

Designation	DCONMS	LF	LDRED	H	HFB	WF	GAMP[1]	GAMF[2]	DMIN	MIID[3]
E16 PWLNR-06 HEAD	16.00	200.00	37.0	15.0	8.0	11.00	-14.0	-6.0	20.00	WNMG/WNGG 06T3

[1] Rake angle axial
[2] Rake angle radial
[3] Master insert identification

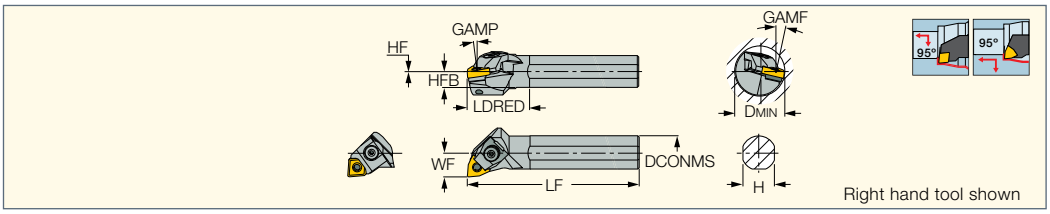
For inserts, see pages: WNMG-CERMET (173) • WNMG-M3P (173) • WNMG-TF (178) • WNMG-GN (179) • WNMG-PP (178) • WNMG-VL (177) • WNMG-SF (176) • WNMG-NF (176) • WNMA/WNMA-WG (180) • WNMG-WG (177)

Spare Parts

Designation			
E-PWLNR/L-HEAD	LR 3S	SR 117-2009	HW 2.0/5

MULTI-WEDGE

S-MULNR-MW
MULTI-WEDGE Lock Boring Bars Carrying 80° Negative Rhombic, Trigon, or Square Inserts



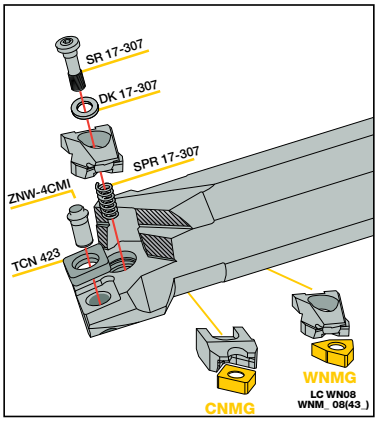
Designation	DCONMS	LF	LDRED	H	HFB	WF	HF	GAMP(1)	GAMF(2)	DMIN	MIID(3)
S25T MULNR-12MW	25.00	300.00	45.0	23.0	11.6	17.00	-11.4	-6.0	-12.0	36.00	WM..0804/CN..1204

- Only LC WN08 is supplied with the boring bar. The other wedge should be ordered separately.

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see pages: CNMG-CERMET (183) • CNMG-F3S (186) • WNMG-CERMET (173) • WNMG-F3S (176) • WNMG-F3P (172) • WNMG-M3P (173) • WNMG-F3M (175) • WNMG-M3M (175) • WNMG-TF (178) • WNMG-GN (179) • WNMG-NR (179) • WNMG-PP (178) • WNMG-VL (177) • WNMG-TNM (180) • WNMG-NF (176) • WNMM-NM (179) • WNMG-WF (177) • WNMA/WNMA-WG (180) • WNMG-WG (177) • CNMG-F3P (181) • CNMG-M3P (182) • CNMM-R3P (192) • CNMM-M4PW (192) • CNMG-F3M (185) • CNMG-M3M (185) • CNMG/CNGG-TF (189) • CNMG-GN (190) • CNMG-NR (190) • CNMG/CNGG-PP (189) • CNMG-VL (186) • CNMG/CNGG-SF (187) • CNMG-NF (187) • CNMG-WF (187) • CNMG-WG/NRW (188) • CNMA (188)

Toolholder Options



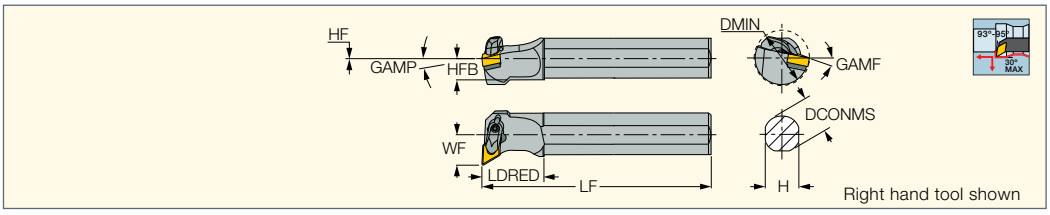
Spare Parts

Designation								
S-MULNR-MW	TCN 423	ZNW 4CMI	LC WN08	LCR CN12*	SR 17-307	SPR 17-307	DK 17-307	HW 3.0

* Optional, to be ordered separately

ISOTURN

S-DDUNR/L
R-Clamp Boring Bars Carrying ISO Negative DNMG Inserts



Designation	DCONMS	LF	LDRED	H	HFB	WF	DMIN	HF	GAMP(1)	GAMF(2)	MIID(3)
S32T DDUNR/L-15	32.00	300.00	45.0	29.0	15.8	22.00	42.00	1.3	-6.0	-11.0	DNMG 1506
S40U DDUNR/L-15	40.00	350.00	50.0	36.0	19.8	27.00	48.00	1.8	-6.0	-10.0	DNMG 1506

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see pages: DNMG-F3S (198) • DNMG-F3P (196) • DNMG-M3P (196) • DNMX-M3P (204) • DNMM-R3P (203) • DNMG-CERMET (199) • DNMG-F3M (197) • DNMG-M3M (198) • DNMG/DNGG-TF (202) • DNMG-GN (202) • DNMG-NR (202) • DNMG/DNGG-PP (201) • DNMG-VL (201) • DNMG-PF (200) • DNMG-NF (200) • DNMM-NM (203) • DNMA (203)
For holders, see page: HSK A63TM ABB (839)

Spare Parts

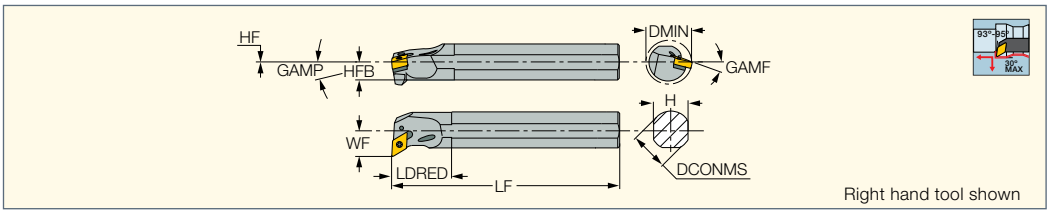
Designation						
S-DDUNR/L	TDN 422	TDN 432*	SP 4	LCGR-4	SR 10400270-25.5	T-15/5

* Optional, to be ordered separately

ISOTURN

A/S-PDUNR/L

Lever Lock Boring Bars Carrying 55° Negative Rhombic Inserts



Designation	DCONMS	LF	LDRED	H	HFB	HF	WF	GAMP(1)	GAMF(2)	DMIN	CSP(3)	MIID(4)
A20Q PDUNR/L-11	20.00	180.00	35.0	18.0	9.2	0.2	16.00	-6.0	-14.0	27.00	1	DNMG 1104
A25R PDUNR/L-11	25.00	200.00	40.0	23.0	11.5	0.0	17.00	-6.0	-13.0	32.00	1	DNMG 1104
A32S PDUNR/L-11	32.00	250.00	45.0	29.0	14.5	0.0	22.00	-6.0	-11.0	40.00	1	DNMG 1104
S32T PDUNR/L-15	32.00	300.00	51.0	29.0	15.5	1.0	22.00	-6.0	-13.0	40.00	0	DNMG 1506
S40U PDUNR/L-15	40.00	350.00	50.0	36.0	18.0	0.0	27.00	-6.0	-11.5	50.00	0	DNMG 1506

(1) Rake angle axial
(2) Rake angle radial
(3) 0 - Without coolant supply, 1 - With coolant supply
(4) Master insert identification

For inserts, see pages: DNGG-M3N (267) • DNMG-CERMET (199) • DNMG-F3S (198) • DNMG-F3P (196) • DNMG-M3P (196) • DNMX-M3P (204) • DNMM-R3P (203) • DNMG-F3M (197) • DNMG-M3M (198) • DNMG/DNGG-TF (202) • DNMG-GN (202) • DNMG-NR (202) • DNMG/DNGG-PP (201) • DNMG-VL (201) • DNMG-PF (200) • DNMG/DNGG-SF (199) • DNMG-NF (200) • DNMM-NM (203) • DNMG-WG (200) • DNMS-12 (272) • DNMA (203)

For holders, see pages: HSK A63TM ABB (839)

Spare Parts

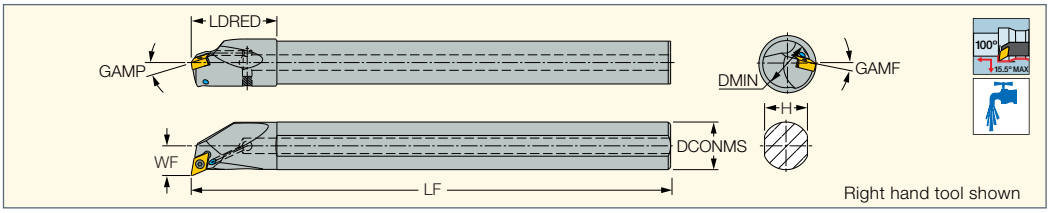
Designation								
A20Q PDUNR/L-11				LR 3DS	SR 117-2011	HW 2.5/5	PL 20	
A25R PDUNR/L-11	TDN 3P2		SP 3	LR 3D	SR 117-2014	HW 2.5/5	PL 25	PN 3-4
A32S PDUNR/L-11	TDN 322		SP 3	LR 3D	SR 117-2014	HW 2.5/5	PL 32	PN 3-4
S32T PDUNR/L-15	TDN 422	TDN 432*	SP 4	LR 4D	SR 117-2010	HW 3.0		PN 3-4
S40U PDUNR/L-15	TDN 422	TDN 432*	SP 4	LR 4D	SR 117-2010	HW 3.0		PN 3-4

* Optional, to be ordered separately

MINIPTURN POSITIVE DOUBLE SIDED

A/E-SDXNR/L-07

Boring Bars Carrying DNGP 0703.. Double-Sided 55° Rhombic Inserts for Small Diameters



Designation	DCONMS	LF	LDRED	H	WF	DMIN	GAMP(1)	GAMF(2)	MIID(3)	
A10K SDXNR/L-07	10.00	125.00	20.0	9.0	7.60	13.00	-14.0	-16.0	DNGP 07	SR 34-514
A12M SDXNR/L-07	12.00	150.00	24.0	11.0	8.60	16.00	-14.0	-14.0	DNGP 07	SR 34-514
A16Q SDXNR/L-07	16.00	180.00	32.0	15.0	10.60	20.00	-13.0	-13.0	DNGP 07	SR 34-514
A20R SDXNR/L-07	20.00	200.00	36.0	18.0	12.60	24.00	-13.0	-12.0	DNGP 07	SR 34-514
E10M SDXNR/L-07	10.00	150.00	20.0	9.0	7.60	13.00	-14.0	-16.0	DNGP 07	SR 34-514
E12Q SDXNR/L-07	12.00	180.00	24.0	11.0	8.60	16.00	-14.0	-14.0	DNGP 07	SR 34-514
E16R SDXNR/L-07	16.00	200.00	32.0	15.0	10.60	20.00	-13.0	-13.0	DNGP 07	SR 34-514
E20S SDXNR/L-07	20.00	250.00	36.0	18.0	12.60	24.00	-13.0	-12.0	DNGP 07	SR 34-514

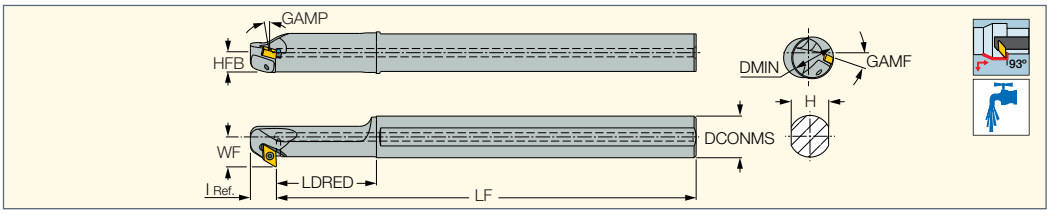
• Use left-hand inserts on right-hand bars and vice versa. • A - steel shank with coolant hole, E - carbide shank with coolant hole.
(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see pages: DNGP-F2M (197) • DNGP-F2P (195)

MINIPTURN POSITIVE DOUBLE SIDED

A/E-SDZNR/L-07

Back Turning Boring Bars
Carrying DNGP 0703..
Double-Sided 55° Rhombic
Inserts for Small Diameters



Designation	DCONMS	LF	LDRED	l Ref.	H	HFB	WF	DMIN	GAMP(1)	GAMF(2)	MIID(3)	
A12M SDZNR/L-07	12.00	150.00	38.0	13.00	11.0	5.5	10.50	14.00	-10.0	-14.0	DNGP 07	SR 34-514
A16Q SDZNR/L-07	16.00	180.00	43.0	13.00	15.0	7.5	12.50	16.00	-10.0	-12.5	DNGP 07	SR 34-514
A20R SDZNR/L-07	20.00	200.00	48.0	12.50	18.0	9.0	14.50	20.00	-10.0	-10.5	DNGP 07	SR 34-514
E12Q SDZNR/L-07	12.00	180.00	-	13.00	11.0	5.5	10.50	18.00	-11.0	-11.0	DNGP 07	SR 34-514
E16R SDZNR/L-07	16.00	200.00	-	13.00	15.0	7.5	12.50	22.00	-11.0	-9.0	DNGP 07	SR 34-514

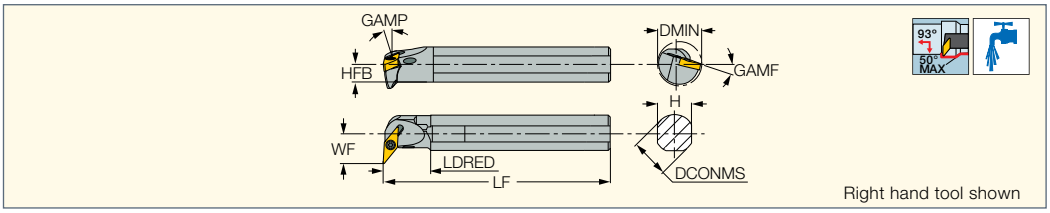
• Use right-hand inserts on right-hand bars and vice versa. • A - steel shank with coolant hole, E - carbide shank with coolant hole.
(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see pages: DNGP-F2M (197) • DNGP-F2P (195)

ISOTURN

A-SVUNR/L

Boring Bars with Internal
Coolant Holes Carrying 35°
Negative Rhombic Inserts



Designation	DCONMS	LF	LDRED	H	HFB	WF	DMIN	GAMP(1)	GAMF(2)	MIID(3)			
A20Q SVUNR/L-12	20.00	180.00	38.0	18.0	9.0	16.00	26.50	-6.5	-14.0	VNMG 2.5..	SR 14-551	T-9/5	PL 20
A25R SVUNR/L-12	25.00	200.00	35.0	23.0	11.5	18.50	31.50	-6.5	-14.0	VNMG 2.5..	SR 14-551	T-9/5	PL 25
A32S SVUNR/L-12	32.00	250.00	50.0	29.0	14.5	23.00	37.00	-6.5	-14.0	VNMG 2.5..	SR 14-551	T-9/5	PL 32

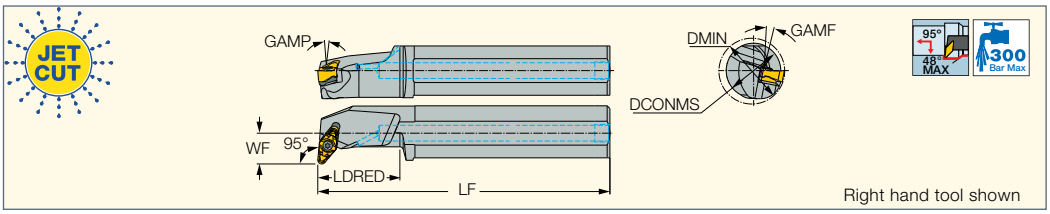
• For inserts with corner radius of 0.8 mm and larger, seat needs to be modified to ensure clearance.
(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see pages: VNMG-F3M (205) • VNMG-F3P (205) • VNMG-F3S (206) • VNMG-FNF-CERMET (206) • VNMG-M3M (205) • VNMG-SF (206) • VNMG/VNGG-NF (207) • VNMM-PP (207)

ISOTURN

A-SVLFNR-AL-JHP

Screw Lock Boring Bars
Carrying 35° Rhombic
Inserts with 7° Clearance



Designation	DCONMS	LF	LDRED	H	WF	DMIN	GAMP(1)	GAMF(2)	MIID(3)
A40U SVLFNR-22-AL-JHP	40.00	350.00	60.0	36.0	22.50	48.00	4.5	11.0	VNGU 220630-R3N

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see page: VNGU-R3N (268)
For holders, see page: HSK A63TM ABB (839)

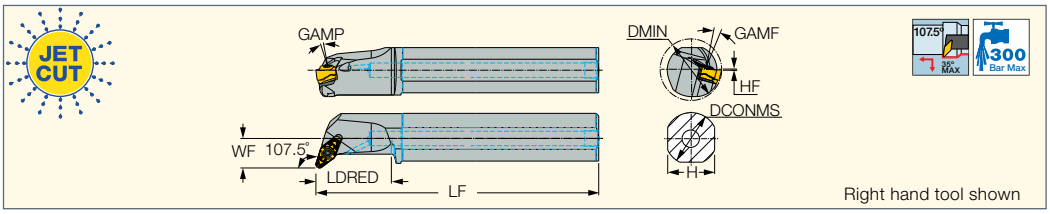
Spare Parts

Designation									
A40U SVLFNR-22-AL-JHP	TVX 2230	SR 14-591/L-SN	HW 3.0	PL 40	SW6-T-SH	BLD T20/S7	SR TC-4	TVX 2212*	TVX 2216*

* Optional, to be ordered separately

ISOTURN

A-SVQNR/L-AL-JHP
Screw Lock Boring Bars
Carrying 35° Rhombic Inserts



Designation	DCONMS	LF	LDRED	H	HF	WF	DMIN	GAMP(1)	GAMF(2)	MIID(3)
A40U SVQNR/L-22-AL-JHP	40.00	348.10	60.0	36.0	0.1	23.40	49.00	14.5	6.5	VNGU 220630-R3N

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see page: VNGU-R3N (268)
For holders, see page: HSK A63TM ABB (839)

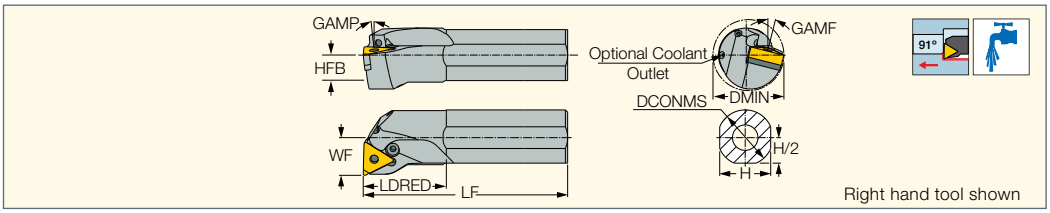
Spare Parts

Designation									
A40U SVQNL-22-AL-JHP	TVX 2230		HW 3.0		BLD T20/S7		SR TC-4		TVX 2216*
A40U SVQNR/L-22-AL-JHP		SR 14-591/L-SN		SW6-T-SH		PL 40		TVX 2212*	
A40U SVQNR-22-AL-JHP	TVX 2230		HW 3.0		BLD T20/S7		SR TC-4		TVX 2216*

* Optional, to be ordered separately

HELITURN LD

A-PTFNR/L-X/G
91° Lead Angle Lever Lock
Boring Bars Carrying Negative
TNMX or TNMG Triangular Inserts



Designation	DCONMS	LF	LDRED	H	HFB	WF	GAMP(1)	GAMF(2)	DMIN	MIID(3)
A16M PTFNR/L-16G	16.00	150.00	31.0	15.0	7.5	11.00	-12.0	-16.0	20.00	TNMG 1604
A20Q PTFNR/L-16G	20.00	180.00	31.0	18.0	9.0	13.00	-6.0	-14.0	25.00	TNMG 1604
A25S PTFNR/L-16X	25.00	250.00	37.5	23.0	11.5	17.00	-6.0	-14.0	32.00	TNMX 1606, TNMG 1604
A32T PTFNR/L-16X	32.00	300.00	48.0	29.0	14.5	22.00	-6.0	-12.0	40.00	TNMX 1606, TNMG 1604
A40U PTFNR/L-16X	40.00	350.00	50.0	36.0	18.0	27.00	-6.0	-12.0	50.00	TNMX 1606, TNMG 1604

• Use TTX 3 seat for TNMX 1606.. inserts and TTN 3 seat for TNMG 1604.. inserts
(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

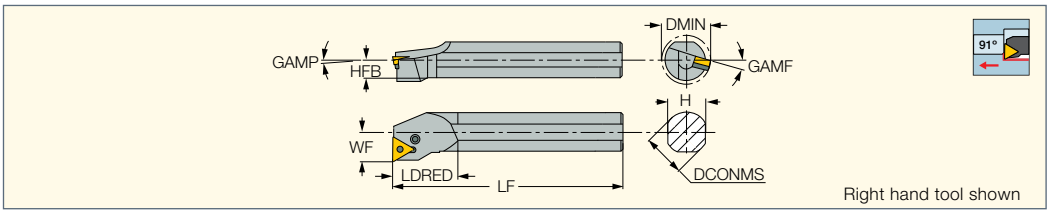
For inserts, see pages: D6NMG-F3P (209) • D6NMG-M3M (209) • D6NMG-M3P (209) • TNMG-F3S (212) • TNMX-M3/4PW (210) • TNMG-F3P (210) • TNMG-M3P (210) • TNMG-F3M (211) • TNMG-M3M (211) • TNMG-FFG-CERMET (212) • TNGG-M3N (267) • TNMG-TF (213) • TNMG-GN (215) • TNMG/TNGG-PP (214) • TNMG-VL (214) • TNMG-PF (213) • TNMG-SF (213) • TNMG-NF (214) • TNMS-12 (271) • TNMA (215)

Spare Parts

Designation									
A16M PTFNR/L-16G					LR 3S	SR 117-2009		HW 2.0	PL 16
A20Q PTFNR/L-16G					LR 3S	SR 117-2009	SR M4X4 DIN913 TL360	HW 2.0	PL 20
A25S PTFNR/L-16X	TTX 3	TTN 3	SP 3	PN 3-4	LR 3	SR 117-2014	SR M4X4 DIN913 TL360	HW 2.5	PL 25
A32T PTFNR/L-16X	TTX 3	TTN 3	SP 3	PN 3-4	LR 3	SR 117-2014	SR M4X4 DIN913 TL360	HW 2.5	PL 32
A40U PTFNR/L-16X	TTX 3	TTN 3	SP 3	PN 3-4	LR 3	SR 117-2014	SR M4X4 DIN913 TL360	HW 2.5	PL 40

ISOTURN

S-PTFNR/L
91° Lead Angle Lever
Lock Boring Bars Carrying
Negative Triangular Inserts



Designation	DCONMS	LF	LDRED	H	HFB	WF	GAMP(1)	GAMF(2)	DMIN	MIID(3)
S20R PTFNR/L-11	20.00	200.00	32.0	18.0	9.0	13.00	-6.0	-14.0	24.00	TNMG 1103
S25S PTFNR/L-16	25.00	250.00	48.0	23.0	11.5	17.00	-6.0	-13.0	32.50	TNMG 1604
S32T PTFNR/L-16	32.00	300.00	63.0	30.0	15.0	22.00	-6.0	-10.0	40.00	TNMG 1604
S40U PTFNR-16	40.00	350.00	30.0	36.0	18.0	27.00	-6.0	-10.0	49.00	TNMG 1604
S40U PTFNR-22	40.00	350.00	62.0	36.0	18.0	27.00	-6.0	-10.0	49.00	TNMG 2204

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see pages: D6NMG-F3P (209) • D6NMG-M3M (209) • D6NMG-M3P (209) • TNGG-M3N (267) • TNMG-F3S (212) • TNMG-FFG-CERMET (212) • TNMG-F3P (210) • TNMG-M3P (210) • TNMG-F3M (211) • TNMG-M3M (211) • TNMG-TF (213) • TNMG-GN (215) • TNMM-NR (215) • TNMG/TNGG-PP (214) • TNMG-VL (214) • TNMG-PF (213) • TNMG-SF (213) • TNMG-NF (214) • TNMS-12 (271) • TNMA (215)

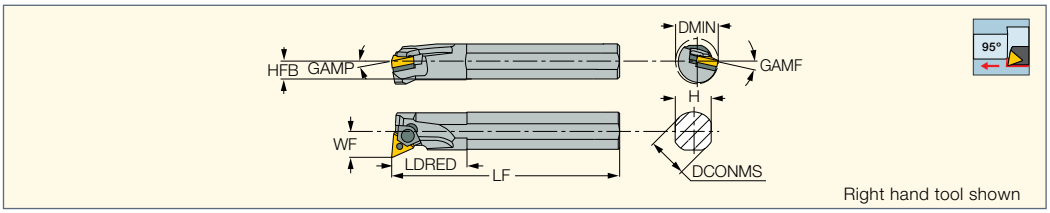
Spare Parts

Designation							
S20R PTFNR/L-11				LR 2	SR 117-2015	HW 2.0/5	
S25S PTFNR/L-16	TTN 322	TTN 332*	SP 3	LR 3	SR 117-2014	HW 2.5/5	PN 3-4
S32T PTFNR/L-16	TTN 322	TTN 332*	SP 3	LR 3	SR 117-2014	HW 2.5/5	PN 3-4
S40U PTFNR-16	TTN 322		SP 3	LR 3	SR 117-2014	HW 2.5/5	PN 3-4
S40U PTFNR-22	TTN 422		SP 4	LR 4	SR 117-2010	HW 3.0	PN 3-4

* Optional, to be ordered separately

ISOTURN

S-MTLNR/L-W
95° Lead Angle Wedge
Lock Boring Bars Carrying
Negative Triangular Inserts



Designation	DCONMS	LF	LDRED	H	HFB	WF	GAMP(1)	GAMF(2)	DMIN	MIID(3)
S25S MTLNR/L-16W-M	25.00	250.00	40.0	23.0	11.5	17.00	-6.0	-12.0	32.00	TNMG 1604
S32T MTLNR/L-16W-M	32.00	300.00	50.0	30.0	15.0	22.00	-6.0	-12.0	40.00	TNMG 1604
S40U MTLNR/L-22W	40.00	350.00	50.0	36.0	18.0	27.00	-6.0	-10.0	49.00	TNMG 2204

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see pages: D6NMG-F3P (209) • D6NMG-M3M (209) • D6NMG-M3P (209) • TNGG-M3N (267) • TNMG-F3S (212) • TNMG-FFG-CERMET (212) • TNMG-F3P (210) • TNMG-M3P (210) • TNMG-F3M (211) • TNMG-M3M (211) • TNMG-TF (213) • TNMG-GN (215) • TNMM-NR (215) • TNMG/TNGG-PP (214) • TNMG-VL (214) • TNMG-PF (213) • TNMG-SF (213) • TNMG-NF (214) • TNMA (215)
For holders, see page: HSK A63TM ABB (839)

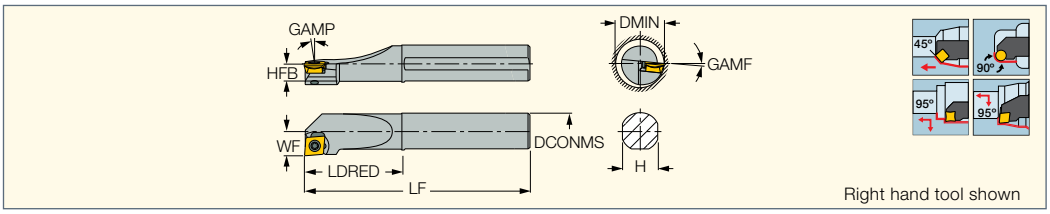
Spare Parts

Designation								
S25S MTLNR/L-16W-M			ZNW 3WNS	SR 17-317NS		LC 291N CLAMP	HW 3.0	E RING N
S32T MTLNR/L-16W-M	TTT 322N	TTT 332N*	ZNW 3WN	SR 17-317N		LC 291N CLAMP	HW 3.0	E RING N
S40U MTLNR/L-22W		TTT 434	ZNW 4	SR 17-295	HW 2.5	LC 281 SET 1	HW 3.0	

* Optional, to be ordered separately

CHAMTURN

S-SUXCR/L-CM
Screw Lock Boring Bars
Carrying Four Different 7° Clearance Geometries

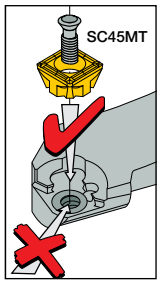


Designation	DCONMS	LF	LDRED	H	HFB	DMIN	GAMP(1)	GAMF(2)	WF	MIID(3)
S16Q SUXCR/L-10 CM	16.00	180.00	45.0	15.0	7.5	20.00	0.0	-12.0	11.00	CC95MT 10..
S20R SUXCR/L-10 CM	20.00	200.00	52.0	18.0	9.0	25.00	0.0	-6.0	13.00	CC95MT 10..
S25S SUXCR/L-10 CM	25.00	250.00	55.0	23.0	11.5	32.00	0.0	-4.0	17.00	CC95MT 10..

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see pages: CC95MT-SM (265) • SC45MT-SM (266)

Designation	DCONMS	LF	LDRED	H	HFB	DMIN	GAMP	GAMF	WF	Inserts
S16Q SUXCR/L-10 CM	16.00	180.00	45.0	15.0	7.5	20.00	0	-12	11 12.14	CC95MT... SC45MT...
S20R SUXCR/L-10 CM	20.00	200.00	52.0	18.0	9.0	25.00	0	-6	13 14.14	CC95MT... SC45MT...
S25S SUXCR/L-10 CM	25.00	250.00	55.0	23.0	11.5	32.00	0	-4	17 18.14	CC95MT... SC45MT...



Multifunction Tool Can Carry Two Different Inserts

- Unique, versatile **ISCAR** pocket
- For external applications
- Covers most common operations
- Simplifies tool selection
- Simple screw clamping
- Minimum spare parts

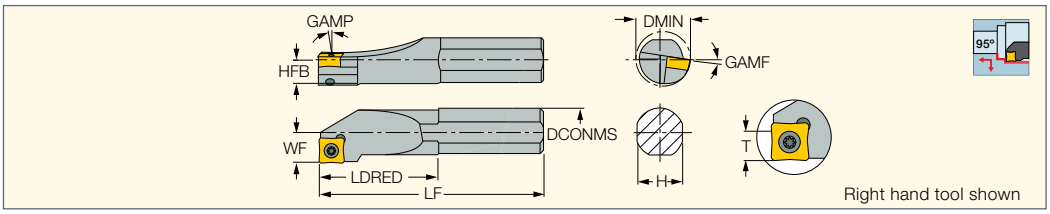
Clamping direction for SC45MT...

Spare Parts

Designation		
S-SUXCR/L-CM	SR 14-544/S	T-15/5

ISOTURN

S/A-SQLCR/L
Screw Lock Boring Bars
Carrying 80° Square Inserts with 7° Clearance



Designation	DCONMS	LF	LDRED	H	HFB	WF	T	GAMP(1)	GAMF(2)	DMIN	CSP(3)	MIID(4)
S16Q SQLCR/L-09	16.00	180.00	45.0	15.0	7.5	11.00	8.5	0.0	-12.0	20.00	0	QCMT 09T304
S20R SQLCR-09	20.00	200.00	45.0	15.0	7.5	13.00	8.5	0.0	-6.0	25.00	0	QCMT 09T304
S25S SQLCR-09	25.00	250.00	55.0	15.0	7.5	17.00	8.5	0.0	-6.0	32.00	0	QCMT 09T304

(1) Rake angle axial
(2) Rake angle radial
(3) 0 - Without coolant supply, 1 - With coolant supply
(4) Master insert identification

For inserts, see pages: QCMT-PF (259) • QCMT-SM (259)

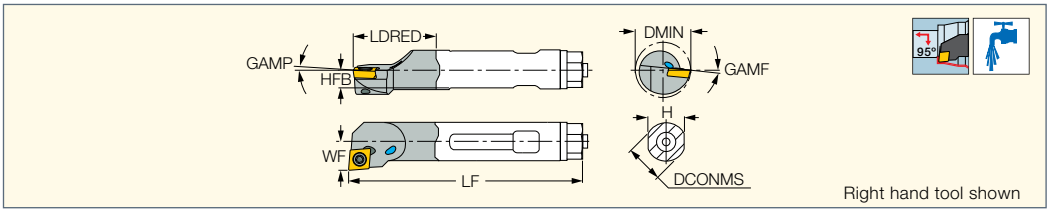
Spare Parts

Designation		
S/A-SQLCR/L	SR 16-236	T-15/5

ISOTURN

E-SCLCR/L-HEAD

Screw Clamped Boring Heads
Carrying 80° Rhombic Inserts
with Positive 7° Clearance
Mounted on Carbide Bars



Right hand tool shown

Designation	DCONMS	LF	LDRED	H	HFB	WF	GAMP(1)	GAMF(2)	DMIN	MIID(3)
E12 SCLCR/L-06 HEAD	12.00	179.00	24.8	11.0	5.5	9.00	0.0	-7.0	15.80	CCMT/CCGT 0602
E16 SCLCR-09 HEAD	16.00	200.00	37.0	15.0	7.5	11.00	0.0	-6.0	20.00	CCMT/CCGT 09T3

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see pages: CCGT-F1M-12P (232) • CCGT-F1M-20P (233) • CCMT-CERMET (235) • CCMT-F3P (233) • CCMT-M3P (234) • CCMT-F3M (234) • CCMT-M3M (235) • CCMT-PF (236) • CCMT/CCGT-SM (236) • CCET-WF (238) • CCMT-WG (238) • CCGT-AS (270) • CCGT-AF (270) • CCMT-14 (237) • CCMT/CCGT (237)

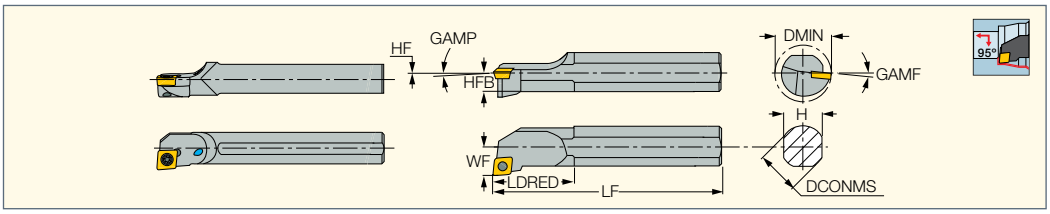
Spare Parts

Designation		
E12 SCLCR/L-06 HEAD	SR 14-548	T-7/5
E16 SCLCR-09 HEAD	SR 16-236	T-15/5



ISOTURN

A/E/S-SCLCR/L
Screw Lock Boring Bars
Carrying 80° Rhombic Inserts
with 7° Clearance for 20 mm
Minimum Bore Diameter



Designation	DCONMS	LF	LDRED	WF	H	HFB	HF	DMIN	CSP(1)	GAMP(2)	GAMF(3)	MIID(4)
A04F SCLCR/L-03	4.00	80.00	8.0	2.50	3.8	1.9	0.0	5.00	1	0.0	-15.0	CCGT 03X102-F1P
A05F SCLCR/L-03	5.00	80.00	9.0	3.00	4.8	2.4	0.0	6.00	1	0.0	-13.0	CCGT 03X102-F1P
A06G SCLCR/L-04	6.00	90.00	11.0	3.50	5.8	2.9	0.0	7.00	1	0.0	-13.0	CCGT 04T102-F1P
A07G SCLCR/L-04	7.00	90.00	12.0	4.00	6.8	3.4	0.0	8.00	1	0.0	-11.0	CCGT 04T102-F1P
A10K SCLCR/L-06	10.00	125.00	18.0	7.00	9.0	4.5	0.0	12.30	1	-3.0	-7.0	CCMT 060204-14
A12M SCLCR/L-06	12.00	150.00	20.0	9.00	11.0	5.5	0.0	15.80	1	0.0	-7.0	CCMT 060204-14
A16M SCLCR/L-09	16.00	150.00	30.0	11.00	15.0	7.5	0.0	20.00	1	0.0	-7.0	CCMT 09T304-14
A20R SCLCR/L-09	20.00	200.00	35.0	13.00	18.0	9.0	0.0	25.00	1	0.0	-4.0	CCMT 09T304-14
A25S SCLCR/L-09	25.00	250.00	35.0	17.00	23.0	11.5	0.0	32.00	1	0.0	-4.0	CCMT 09T304-14
E04G SCLCR/L-03	4.00	90.00	9.0	2.50	3.8	1.9	0.0	5.00	1	0.0	-15.0	CCGT 03X102-F1P
E05G SCLCR/L-03	5.00	90.00	10.0	3.00	4.8	2.4	0.0	6.00	1	0.0	-13.0	CCGT 03X102-F1P
E06H SCLCR/L-04	6.00	100.00	12.0	3.50	5.8	2.9	0.0	7.00	1	0.0	-13.0	CCGT 04T102-F1P
E07H SCLCR/L-04	7.00	100.00	14.0	4.00	6.8	3.4	0.0	8.00	1	0.0	-11.0	CCGT 04T102-F1P
E08K SCLCL-06	8.00	125.00	20.0	5.00	7.6	3.8	0.0	10.00	1	3.0	-11.0	CCMT 060204-14
E08K SCLCR-06	8.00	125.00	20.0	5.00	7.2	3.8	0.0	10.00	1	3.0	-11.0	CCMT 060204-14
E10M SCLCL-06	10.00	150.00	24.3	7.00	9.0	4.6	0.0	12.00	1	3.0	-7.0	CCMT 060204-14
E10M SCLCR-06	10.00	150.00	24.3	7.00	9.2	4.6	0.0	12.00	1	3.0	-7.0	CCMT 060204-14
E12Q SCLCL-06	12.00	180.00	26.5	9.00	11.0	5.5	0.0	16.00	1	0.0	-7.0	CCMT 060204-14
E12Q SCLCR-06	12.00	180.00	24.0	9.00	11.0	5.5	0.0	16.00	1	0.0	-7.0	CCMT 060204-14
E16R SCLCR/L-06	16.00	200.00	32.5	11.00	14.0	7.0	0.0	20.00	1	0.0	-7.0	CCMT 060204-14
E16R SCLCR/L-09	16.00	200.00	32.6	11.00	15.0	7.5	0.0	20.00	1	0.0	-9.0	CCMT 09T304-14
S08K SCLCL-06	8.00	125.00	14.5	5.00	8.0	3.8	0.0	10.50	0	0.0	-11.0	CCMT 060204-14
S08K SCLCR-06	8.00	125.00	12.0	5.00	8.0	3.8	0.0	10.50	0	0.0	-11.0	CCMT 060204-14
S10L SCLCL-06	10.00	140.00	20.0	7.00	9.0	4.5	0.0	13.00	0	0.0	-7.0	CCMT 060204-14
S10L SCLCR-06	10.00	140.00	20.0	7.00	9.0	4.5	0.0	13.00	0	3.0	-7.0	CCMT 060204-14
S12M SCLCL-06	12.00	150.00	24.0	9.00	11.0	5.5	0.0	16.00	0	0.0	-7.0	CCMT 060204-14
S12M SCLCR-06	12.00	150.00	25.0	9.00	12.0	5.5	0.0	16.00	0	0.0	-7.0	CCMT 060204-14
S16Q SCLCR/L-09	16.00	180.00	45.0	11.00	15.0	7.5	0.0	20.00	0	0.0	-9.0	CCMT 09T304-14
S20R SCLCR/L-09	20.00	200.00	50.0	13.00	18.0	9.0	0.0	25.00	0	0.0	-4.0	CCMT 09T304-14
S25S SCLCR/L-09	25.00	250.00	55.0	17.00	23.0	11.5	0.0	35.00	0	0.0	-4.0	CCMT 09T304-14

- S - steel shank, A - steel shank with coolant hole, E - carbide shank with coolant hole

(1) 0 - Without coolant supply, 1 - With coolant supply

(2) Rake angle axial

(3) Rake angle radial

(4) Master insert identification

For inserts, see pages: CCGT-F1M-20P (185) • CCMT-CERMET (187) • CCGT-F1P (184) • CCMT-F3P (185) • CCMT-M3P (185) • CCMT-F3M (186) • CCMT-M3M (186) • CCMT-PF (188) • CCMT/CCGT-SM (187) • CCET-WF (189) • CCMT-WG (189) • CCGT-AS (212) • CCGT-AF (212) • CCMT-14 (188) • CCMT/CCGT (188) • CCGW/CCMT (CBN) (227) • CCGW/CCMW-2 (CBN) (228)

Spare Parts

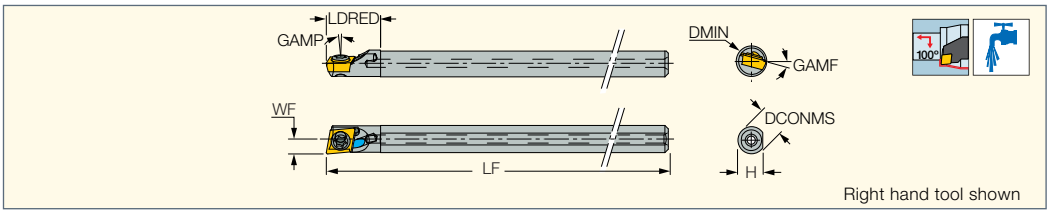
Designation				
A04F SCLCR/L-03	CSTA-1.6	T-6/5		
A05F SCLCR/L-03	CSTA-1.6	T-6/5		
A06G SCLCR/L-04	CSTB-2	T-6/5		
A07G SCLCR/L-04	CSTB-2	T-6/5		
A10K SCLCR/L-06	SR 14-548	T-7/5		
A12M SCLCR/L-06	SR 14-548	T-7/5		
A16M SCLCR/L-09	SR 16-236/L8.6	T-15/5	HW 2.0	PL 16
A20R SCLCR/L-09	SR 16-236	T-15/5	HW 2.0	PL 20
A25S SCLCR/L-09	SR 16-236	T-15/5	HW 2.0	PL 25
E04G SCLCR/L-03	CSTA-1.6	T-6/5		
E05G SCLCR/L-03	CSTA-1.6	T-6/5		
E06H SCLCR/L-04	CSTB-2	T-6/5		
E07H SCLCR/L-04	CSTB-2	T-6/5		
E08K SCLCR/L-06	SR 14-548	T-7/5		
E10M SCLCR/L-06	SR 14-548	T-7/5		
E12Q SCLCR/L-06	SR 14-548	T-7/5		
E16R SCLCR/L-06	SR 14-548	T-7/5		
E16R SCLCR/L-09	SR 16-236	T-15/5		
S08K SCLCR/L-06	SR 14-548	T-7/5		
S10L SCLCR/L-06	SR 14-548	T-7/5		
S12M SCLCR/L-06	SR 14-548	T-7/5		
S16Q SCLCR/L-09	SR 16-236/L8.6	T-15/5		
S20R SCLCR/L-09	SR 16-236	T-15/5		
S25S SCLCR/L-09	SR 16-236	T-15/5		





ISOTURN

A/E-SEXPR/L-03
Screw Lock Boring Bars Carrying 75° Rhombic Inserts with 11° Clearance for 4.5mm Minimum Bore Diameter



Designation	DCONMS	LF	LDRED	H	WF	DMIN	GAMP(1)	GAMF(2)	MIID(3)	
A04F SEXPR/L-03	4.00	80.00	8.0	3.8	2.30	4.50	0.0	-15.0	EPGT03	CSTA-1.6
E04G SEXPR/L-03	4.00	90.00	9.0	3.8	2.30	4.50	0.0	-15.0	EPGT03	CSTA-1.6

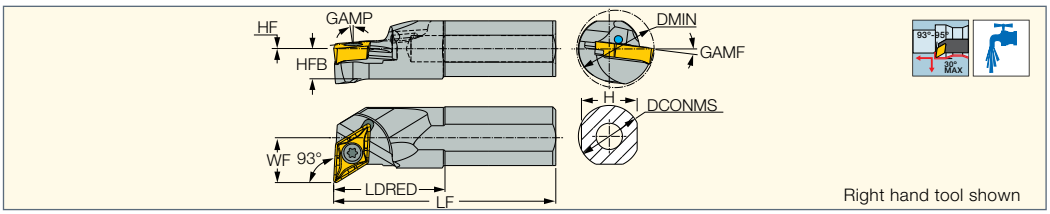
- A - steel shank with coolant hole, E - carbide shank with coolant hole

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see page: EPGT-F1P (238)

SAFE-T-LOCK

A-SDUCR/L-13-SL
Boring Bars Carrying 55° Rhombic Inserts with 7° Clearance Angle for High Rigidity in Profiling Applications



Designation	DCONMS	LF	LDRED	H	HFB	WF	HF	DMIN	GAMP(1)	GAMF(2)	Shank m.(3)	MIID(4)
A20R SDUCR/L-13-SL	20.00	200.00	36.0	18.0	9.1	14.50	0.1	25.00	0.0	-7.0	S	DCMT 13T5-SL
A25S SDUCR/L-13-SL	25.00	250.00	45.0	23.0	11.5	17.00	0.0	32.00	0.0	-6.0	S	DCMT 13T5-SL

(1) Rake angle axial
(2) Rake angle radial
(3) S-Steel
(4) Master insert identification

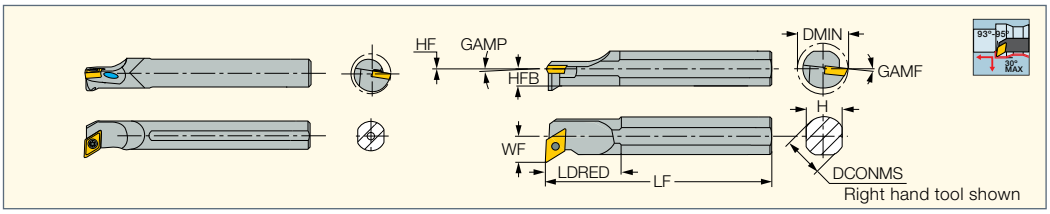
For inserts, see pages: DCMT-F3P-SL (240) • DCMT-M3M-SL (242) • DCMT-PF-SL (244) • DCMT-SM-SL (245)
For holders, see page: HSK A63TM ABB (739)

Spare Parts

Designation			
A20R SDUCR/L-13-SL	SR M4X0.7-L9.6 IP15	TORX PLUS IP15X45 GREEN	PL 20
A25S SDUCR/L-13-SL	SR M4X0.7-L9.6 IP15	TORX PLUS IP15X45 GREEN	PL 25

ISOTURN

A/E/S-SDUCR/L
Screw Lock Boring Bars
Carrying 55° Rhombic
Inserts with 7° Clearance



Designation	DCONMS	LF	LDRED	H	HFB	WF	HF	DMIN	GAMP(1)	GAMF(2)	Shank m.(3)	CSP(4)	MIID(5)
A20R SDUCR/L-11	20.00	200.00	50.0	18.0	8.5	14.50	0.5	25.00	0.0	-6.0	S	1	DC.. 11T3
A25S SDUCR/L-11	25.00	250.00	45.0	23.0	12.0	17.00	0.5	32.00	0.0	-5.0	S	1	DC.. 11T3
E10M SDUCR/L-07	10.00	150.00	25.0	9.2	5.1	8.00	0.5	14.00	3.0	-7.0	C	1	DC.. 0702
E12Q SDUCR/L-07	12.00	180.00	24.0	11.0	5.5	9.00	0.0	16.00	0.0	-7.0	C	1	DC.. 0702
E16R SDUCR/L-07	16.00	200.00	29.0	15.0	8.1	11.00	0.6	20.00	0.0	-8.0	C	1	DC.. 0702
S10L SDUCR/L-07	10.00	140.00	18.0	9.2	5.0	8.00	0.4	14.00	-3.0	-9.0	S	0	DC.. 0702
S12M SDUCR/L-07	12.00	150.00	20.0	12.0	5.5	9.00	0.5	16.00	-7.0	-9.0	S	0	DC.. 0702
S16Q SDUCR/L-07	16.00	180.00	25.0	15.0	8.0	11.00	0.5	20.00	0.0	-8.0	S	0	DC.. 0702
S20R SDUCR/L-11	20.00	200.00	50.0	18.0	8.5	13.00	0.5	25.00	0.0	-6.0	S	0	DC.. 11T3
S25S SDUCR/L-11	25.00	250.00	55.0	23.0	12.0	17.00	0.5	32.00	0.0	-5.0	S	0	DC.. 11T3
A10K SDUCR/L-07	10.00	125.00	20.0	9.0	4.5	7.00	0.4	13.00	0.0	-10.0	A	1	DC.. 0702
A12M-SDUCR/L-07	12.00	150.00	24.0	11.0	5.5	9.30	0.5	16.00	0.0	-6.0	A	1	DC.. 0702
A16Q-SDUCR/L-07	16.00	180.00	32.0	15.0	7.5	11.30	0.5	20.00	0.0	-5.0	A	1	DC.. 0702

- S - steel shank, A - steel shank with coolant hole, E - carbide shank with coolant hole

(1) Rake angle axial
(2) Rake angle radial
(3) S-Steel, C-carbide
(4) 0 - Without coolant supply, 1 - With coolant supply
(5) Master insert identification

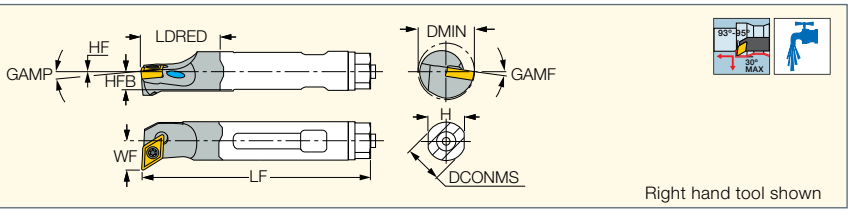
For inserts, see pages: DCGT-F1M-12P (243) • DCGT-F1M-20P (244) • DCMT-F3P (240) • DCMT-M3P (241) • DCMT-M3M (241) • DCMT/DCGT-PF (245) • DCMT/DCGT-SM (246) • DCET-WF (247) • DCGT-AS (270) • DCGT-AF (271) • DCMT-14 (247) • DCMT/DCGT (246) • DCMT-CERMET (243)

Spare Parts

Designation						
A20R SDUCR/L-11			HW 2.0	SR 16-236 P	T-15/5	PL 20
A25S SDUCR/L-11			HW 2.0	SR 16-236 P	T-15/5	PL 25
E10M SDUCR/L-07				SR 14-548	T-7/5	
E12Q SDUCR/L-07				SR 14-548	T-7/5	
E16R SDUCR/L-07				SR 14-548	T-7/5	
S10L SDUCR/L-07				SR 14-548	T-7/5	
S12M SDUCR/L-07				SR 14-548	T-7/5	
S16Q SDUCR/L-07				SR 14-548	T-7/5	
S20R SDUCR/L-11				SR 16-236 P	T-15/5	
S25S SDUCR/L-11	TDC 3-1P	SR TC-3P	HW 4.0	SR 16-236 P	T-15/5	
A10K SDUCR/L-07				SR 11201753-3S	T-8/5	
A12M-SDUCR/L-07				SR 11201753-3S	T-8/5	
A16Q-SDUCR/L-07				SR 11201753-3	T-8/5	

ISOTURN

E-SDUCR/L-HEAD
Interchangeable Screw
Clamped Boring Heads
Carrying 55° Rhombic Inserts
with Positive 7° Clearance
Mounted on a Carbide Bar



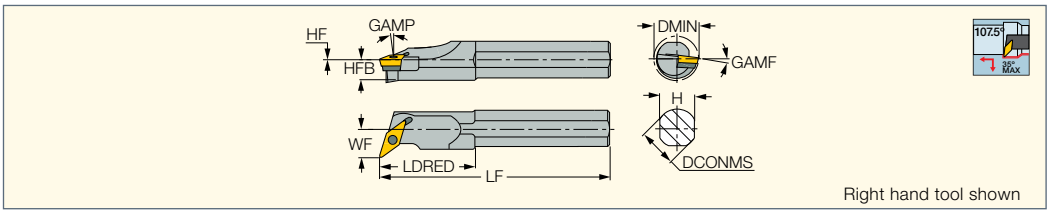
Designation	DCONMS	LF	LDRED	H	HFB	WF	HF	GAMP(1)	GAMF(2)	DMIN	MIID(3)		
E12 SDUCR/L-07 HEAD	12.00	179.00	24.8	11.0	5.5	9.00	0.0	0.0	-9.0	15.80	DCMT 070201-PF	SR 14-548	T-7/5
E16 SDUCR/L-07 HEAD	16.00	200.00	29.7	15.0	8.0	11.00	0.5	0.0	-9.0	20.00	DCMT 070201-PF	SR 14-548	T-7/5

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see pages: DCGT-F1M-12P (243) • DCGT-F1M-20P (244) • DCMT-F3P (240) • DCMT-M3P (241) • DCMT-M3M (241) • DCMT/DCGT-PF (245) • DCMT/DCGT-SM (246) • DCET-WF (247) • DCGT-AS (270) • DCMT/DCGT (246)

ISOTURN

A/S-SVQCR/L
Screw Lock Boring Bars
Carrying 35° Rhombic
Inserts with 7° Clearance



Right hand tool shown

Designation	DCONMS	LF	LDRED	H	HFB	WF	HF	DMIN	GAMP(1)	GAMF(2)	CSP(3)	MIID(4)
S25S SVQCR/L-16	25.00	250.00	61.0	23.0	12.0	17.00	0.5	32.00	0.0	-5.0	0	VC.. 1604
S32T SVQCR/L-16	32.00	300.00	70.0	30.0	15.0	22.00	0.0	40.00	0.0	-5.0	0	VC.. 1604
A40U SVQCR/L-22	40.00	350.00	64.0	36.0	18.0	27.00	0.0	47.50	0.0	-8.0	1	VCGT 2205

(1) Rake angle axial
(2) Rake angle radial
(3) 0 - Without coolant supply, 1 - With coolant supply
(4) Master insert identification

For inserts, see pages: VCMT-FPC-CERMET (250) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-F3M (249) • VCMT-M3M (249) • VCMT-SM (251) • VCGT-AS (269) • VCGT-AF (269) • VCMT-14 (252) • VCMW (252) • VCGT-DW (PCD) (515)

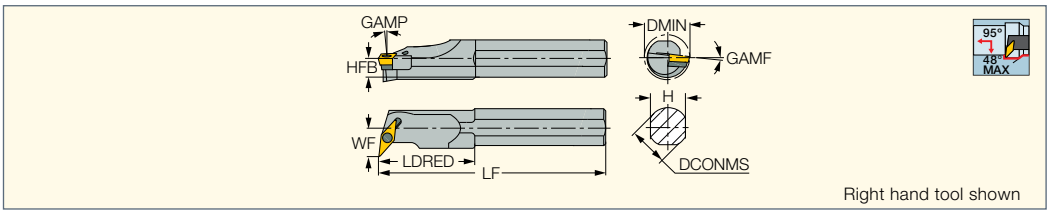
Spare Parts

Designation							
S25S SVQCR/L-16	SR 16-236 P	T-15/5					
S32T SVQCR/L-16	SR 16-236 P	T-15/5	TVC 3-1P	SR TC-3P	HW 4.0		TVC 3-04675*
A40U SVQCR/L-22	SR 14-536	T-20/5	TVC 22T330	SR TC-3	HW 2.5	PL 40	

* Optional, to be ordered separately

ISOTURN

A/S-SVLFCR/L; A-SVUCR/L
Screw Lock Boring Bars
Carrying 35° Rhombic
Inserts with 7° Clearance



Right hand tool shown

Designation	DCONMS	LF	LDRED	H	HFB	WF	DMIN	GAMP(2)	GAMF(3)	CSP(4)	MIID(5)
A32T SVUCR/L-16 (1)	32.00	300.00	50.0	29.0	14.5	22.00	40.00	0.0	-8.0	1	VC.. 1604
S32T SVLFCR/L-16	32.00	300.00	56.0	29.0	14.5	22.00	39.50	0.0	-8.0	0	VC.. 1604
S40U SVLFCR/L-16	40.00	350.00	-	36.0	18.0	27.00	49.00	0.0	-5.0	0	VC.. 1604
A40U SVLFCR/L-22	40.00	350.00	70.0	36.0	18.0	27.00	48.00	0.0	-8.0	1	VC.. 2205

(1) 93° approach angle
(2) Rake angle axial
(3) Rake angle radial
(4) 0 - Without coolant supply, 1 - With coolant supply
(5) Master insert identification

For inserts, see pages: VCMT-F3P (248) • VCMT-M3P (248) • VCMT-F3M (249) • VCMT-M3M (249) • VCMT-SM (251) • VCGT-AS (269) • VCGT-AF (269) • VCMT-14 (252) • VCMW (252) • VCGT-DW (PCD) (515) • VCMT-FPC-CERMET (250)
For holders, see page: HSK A63TM ABB (839)

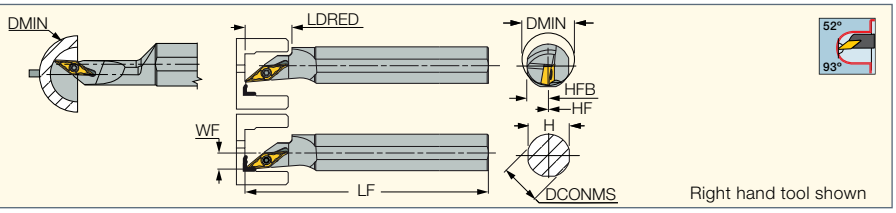
Spare Parts

Designation									
A32T SVUCR/L-16	TVC 3-1P	SR TC-3P	HW 4.0	SR 16-236 P	T-15/5	PL 32	TVC 3-04675*	SR M3X3DIN913	HW 1.5
S32T SVLFCR/L-16	TVC 3-1P	SR TC-3P	HW 4.0	SR 16-236 P	T-15/5		TVC 3-04675*		
S40U SVLFCR/L-16	TVC 3-1P	SR TC-3P	HW 4.0	SR 16-236 P	T-15/5		TVC 3-04675*		
A40U SVLFCR/L-22	TVC 22T330	SR TC-3	HW 2.5	SR 14-536	T-20/5	PL 40			

* Optional, to be ordered separately

ISOTURN

S/A-SVJCR/L
Screw Lock Boring Bars Carrying 35° Rhombic Inserts with 7° Clearance



Designation	DCONMS	LF	LDRED	H	HFB	WF	HF	DMIN	CSP(2)	MIID(3)
A16R SVJCR/L-11	16.00	200.00	47.5	15.0	7.5	8.50	0.0	20.00	1	VC.. 1103
S16R SVJCR/L-11 (1)	16.00	200.00	20.0	15.0	8.0	7.00	0.5	19.00	0	VC.. 1103
A20R SVJCR/L-11	20.00	200.00	43.0	18.0	9.0	11.00	0.0	25.00	1	VC.. 1103
S20R SVJCR/L-11	20.00	200.00	37.0	19.0	9.5	2.00	0.0	25.00	0	VC.. 1103

(1) Cannot be used for internal sphere turning • Center height - 0.5mm above the center
(2) 0 - Without coolant supply, 1 - With coolant supply
(3) Master insert identification

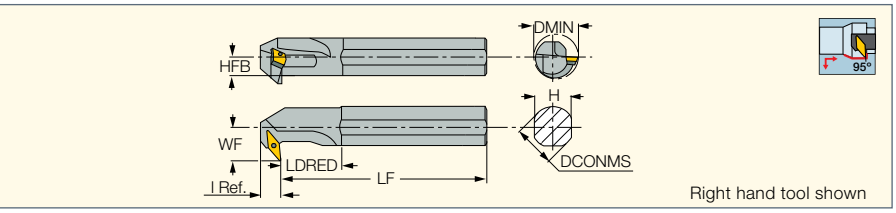
For inserts, see pages: VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-F3M (249) • VCMT-SM (251) • VCET-WF (251) • VCGT-AS (269)

Spare Parts

Designation			
A16R SVJCR/L-11	SR 14-560/S M2.5X0.45	T-8/5	PL 16
S16R SVJCR/L-11	SR 14-560/S M2.5X0.45	T-8/5	
A20R SVJCR/L-11	SR 14-560	T-8/5	PL 20
S20R SVJCR/L-11	SR 14-560	T-8/5	

ISOTURN

A/S-SVLBCR/L
Screw Lock Back Boring Bars Carrying 35° Rhombic Inserts with 7° Clearance



Designation	DCONMS	LF	LDRED	l Ref.	H	HFB	WF	DMIN	CSP(1)	MIID(2)
A32T SVLBCR/L-16	32.00	300.00	76.5	18.50	29.0	14.5	27.50	40.00	1	VC.. 1604
S32T SVLBCR/L-16	32.00	300.00	63.2	18.50	29.0	14.5	22.00	40.00	0	VC.. 1604
S40U SVLBCR/L-16	40.00	350.00	60.0	20.00	36.0	18.0	27.00	49.50	0	VC.. 1604

(1) 0 - Without coolant supply, 1 - With coolant supply
(2) Master insert identification

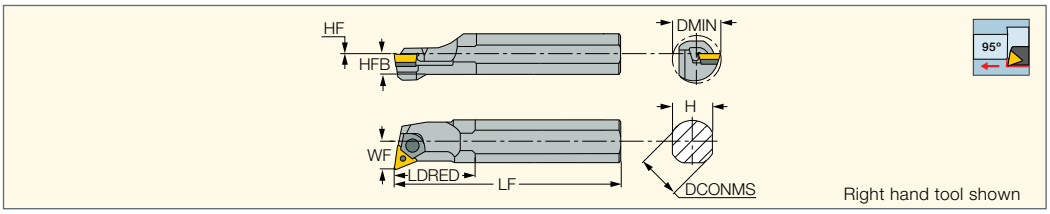
For inserts, see pages: VCMT-FPC-CERMET (250) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-F3M (249) • VCMT-M3M (249) • VCMT-SM (251) • VCGT-AS (269) • VCMT-14 (252) • VCMW (252) • VCGT-DW (PCD) (515)
For holders, see page: HSK A63TM ABB (839)

Spare Parts

Designation					
A/S-SVLBCR/L	TVC 3-1P	SR TC-3P	HW 4.0	SR 16-236 P	T-15/5

ISOTURN

S-MTLCR/L-W
Wedge Lock Boring Bars
Carrying 7° Clearance
Triangular Inserts



Designation	DCONMS	LF	LDRED	H	HFB	WF	HF	DMIN	MIID[1]
S25S MTLCR/L-16W	25.00	250.00	43.0	23.0	13.1	17.00	1.6	34.00	TC.. 16T3
S32T MTLCR/L-16W	32.00	300.00	45.0	29.0	14.5	22.00	0.0	39.00	TC.. 16T3

[1] Master insert identification

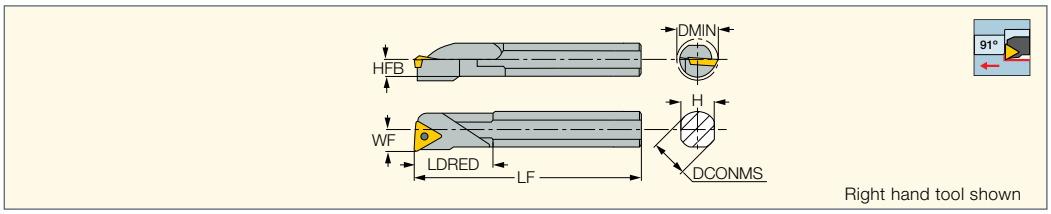
For inserts, see pages: TCMT-F3P (255) • TCMT-M3P (255) • TCMT-M3M (256) • TCMT-SM (256) • TCGT-AS (269)

Spare Parts

Designation						
S-MTLCR/L-W	TTC 331	HW 2.0	ZNW 3C	LC 291-MIM SET 1	SR 17-319	HW 2.5

ISOTURN

S-STFCR/L
Screw Lock Boring Bars Carrying
7° Clearance Triangular Inserts



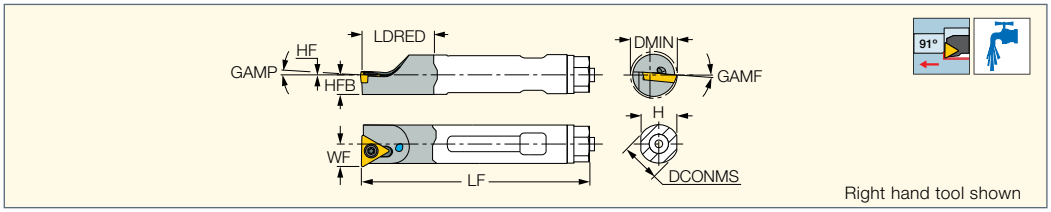
Designation	DCONMS	LF	LDRED	H	HFB	WF	DMIN	MIID[1]		
S10K STFCR/L-11	10.00	125.00	29.0	9.0	4.5	7.00	13.00	TC.. 1102	SR 14-548	T-7/5
S12M STFCR/L-11	12.00	150.00	30.0	11.0	5.5	9.00	15.80	TC.. 1102	SR 14-548	T-7/5

[1] Master insert identification

For inserts, see pages: TCMT-F3P (255) • TCMT-M3P (255) • TCMT-M3M (256) • TCMT-PF (256) • TCMT-SM (256) • TCGT-AS (269)

ISOTURN

E-STFCR-HEAD
Interchangeable Screw Clamped
Boring Heads Carrying Positive
7° Clearance Triangular Inserts
Mounted on Carbide Bars



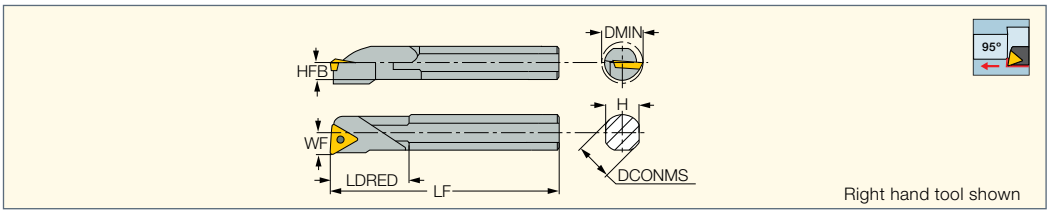
Designation	DCONMS	LF	LDRED	H	HFB	WF	HF	GAMP[1]	GAMF[2]	DMIN	MIID[3]		
E12 STFCR-11 HEAD	12.00	179.00	24.8	11.0	6.0	6.80	0.0	0.0	-6.0	13.80	TCMT 1102	SR 14-548	T-7/5
E16 STFCR-11 HEAD	16.00	200.00	37.0	15.0	8.0	9.00	0.0	0.0	-6.0	20.00	TCMT 1102	SR 14-548	T-7/5

[1] Rake angle axial
[2] Rake angle radial
[3] Master insert identification

For inserts, see pages: TCMT-F3P (255) • TCMT-M3P (255) • TCMT-M3M (256) • TCMT-PF (256) • TCMT-SM (256) • TCGT-AS (269)

ISOTURN

S-STLCR/L
Screw Clamp Boring Bars
Carrying 7° Clearance
Triangular Inserts



Designation	DCONMS	LF	LDRED	H	HFB	WF	DMIN	MIID[1]
S16Q STLCR/L-11	16.00	180.00	45.0	15.0	7.5	11.00	20.00	TC.. 1102
S20R STLCR/L-16	20.00	200.00	50.0	18.0	9.0	13.00	25.00	TC.. 16T3

(1) Master insert identification

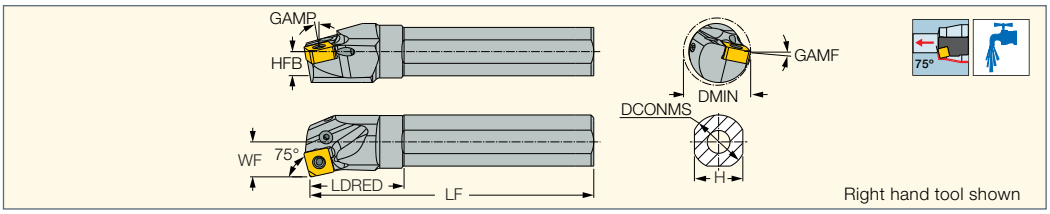
For inserts, see pages: TCMT-F3P (255) • TCMT-M3P (255) • TCMT-M3M (256) • TCMT-PF (256) • TCMT-SM (256) • TCGT-AS (269)

Spare Parts

Designation		
S16Q STLCR/L-11	SR 14-548	T-7/5
S20R STLCR/L-16	SR 16-236	T-15/5

ISOTURN

A-PSKNR/L-09
Lever Lock Boring Bars Carrying
90° Negative Square Inserts



Designation	DCONMS	LF	LDRED	H	HFB	WF	GAMP[1]	GAMF[2]	DMIN	MIID[3]
A25R PSKNR/L-09	25.00	200.00	35.0	23.0	11.5	17.00	-6.0	-15.0	32.00	SNMG 0903 SNMG 0904
A32S PSKNR/L-09	32.00	250.00	43.0	30.0	15.0	22.00	-6.0	-13.0	40.00	SNMG 0903 SNMG 0904

(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

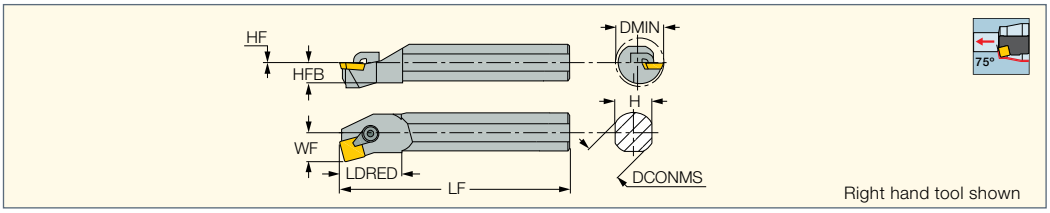
For inserts, see pages: SNMG-F3S (219) • SNMG-F3P (216) • SNMG-M3P (216) • SNMG-F3M (218) • SNMG-M3M (218)

Spare Parts

Designation								
A25R PSKNR/L-09	TSN 323	TSN 333	SP 3	PN 3-3L	LR 3	SR 117-2014	HW 2.5	PL 25
A32S PSKNR/L-09	TSN 323	TSN 333	SP 3	PN 3-3L	LR 3	SR 117-2014	HW 2.5	PL 32

ISOTURN

S-CSKPR
Clamp Lock Boring Bars Carrying
11° Clearance Square Inserts



Designation	DCONMS	LF	LDRED	H	HFB	WF	HF	DMIN	MIID[1]		
S16Q CSKPR-09	16.00	180.00	34.0	15.0	8.0	11.00	0.5	20.00	SPMR 090304	LC 15 SET 1	HW 2.5
S25S CSKPR-12	25.00	250.00	48.0	23.0	11.5	17.00	0.0	30.00	SPMR 120304	LC 30 SET 2	HW 3.0

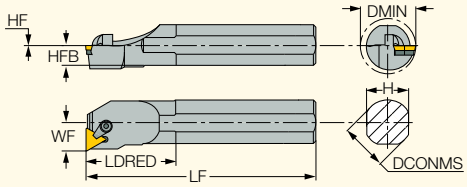
(1) Master insert identification

For inserts, see page: SPMR (260)

ISOTURN

S-CTFPR/L

Clamp Lock Boring Bars Carrying 11° Clearance Triangular Inserts



Right hand tool shown

Designation	DCONMS	LF	LDRED	H	HFB	WF	HF	DMIN	MIID[1]
S12L CTFPR/L-09	12.00	140.00	34.0	11.0	6.0	9.00	0.5	15.60	TPMR 0902
S16Q CTFPR/L-11	16.00	180.00	38.0	15.0	8.0	11.00	0.5	20.00	TPMR 1103
S20Q CTFPR-16	20.00	180.00	38.0	18.0	9.5	13.00	0.5	24.00	TPMR 1603
S20R CTFPR/L-16	20.00	200.00	46.0	18.0	9.5	13.00	0.5	24.00	TPMR 1603
S25R CTFPR-16	25.00	200.00	48.0	23.0	11.5	17.00	0.0	31.00	TPMR 1603
S25S CTFPR-16	25.00	250.00	48.0	23.0	11.5	17.00	0.0	31.00	TPMR 1603
S32T CTFPR/L-16	32.00	300.00	62.0	29.0	14.5	22.00	0.0	40.00	TPMR 1603
S40T CTFPR-16	40.00	300.00	62.0	36.0	18.0	27.00	0.0	48.00	TPMR 1603

[1] Master insert identification

For inserts, see pages: TPMR (260) • TPMR-FTF (261) • TPMR-PF (260)

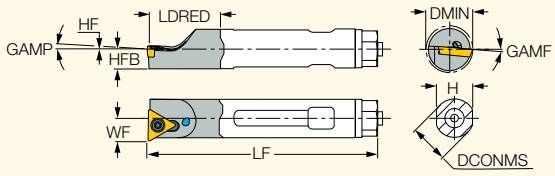
Spare Parts

Designation				
S12L CTFPR/L-09	LC12 SET1	HW 2.5		
S16Q CTFPR/L-11	LC 15 SET 1	HW 2.5		
S20Q CTFPR-16	LC 30 SET 2	HW 3.0		
S20R CTFPR/L-16	LC 30 SET 2	HW 3.0		
S25R CTFPR-16	LC 30 SET 2	HW 3.0		
S25S CTFPR-16	LC 30 SET 2	HW 3.0		
S32T CTFPR/L-16	LC 30 SET 1	HW 3.0	ITBP 122	SP 16
S40T CTFPR-16	LC 30 SET 1	HW 3.0	ITBP 122	SP 16

ISOTURN

E-STFPR-HEAD

Interchangeable Boring Heads Carrying Positive 11° Clearance Triangular Inserts on a Carbide Bar



Right hand tool shown

Designation	DCONMS	LF	LDRED	H	HFB	WF	HF	GAMP[1]	GAMF[2]	DMIN	MIID[3]		
E12 STFPR-11 HEAD	12.00	179.00	24.8	11.0	6.0	6.80	0.0	4.0	-6.0	13.00	TPMT/TPGH 1102	SR 14-505	T-7/5
E16 STFPR-11 HEAD	16.00	200.00	37.0	15.0	8.0	8.80	0.5	4.0	-6.0	20.00	TPGB 1102	SR 14-505	T-7/5

[1] Rake angle axial

[2] Rake angle radial

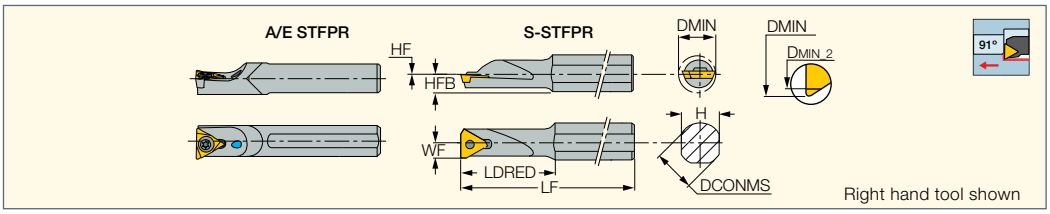
[3] Master insert identification

For inserts, see pages: TPMT-PF (262) • TPGT-SP (261) • TPGB-XL (262) • TPGH-XL (263) • TPGB (262) • TPMT (261)

ISOTURN

A/E/S-STFPR/L

Screw Lock Boring Bars
Carrying Triangular Inserts
with 11° Clearance



Right hand tool shown

Designation	DCONMS	LF	LDRED	H	HFB	HF	WF	DMIN	DMIN_2	MIID[1]	CSP[2]	Shank m.[3]		
A10K STFPR-11	10.00	125.00	-	9.0	5.3	0.8	6.00	11.00	12.00	TPMT 11..	1	S	SR 14-505	T-7/5
A12Q STFPR-11	12.00	180.00	-	11.0	6.3	0.8	7.00	13.00	14.00	TPMT 11..	1	S	SR 14-505	T-7/5
E10M STFPR-11	10.00	150.00	-	9.0	5.3	0.8	6.00	12.00	12.00	TPMT 11..	1	C	SR 14-505	T-7/5
E12Q STFPR/L-11	12.00	180.00	-	11.0	6.3	0.8	7.00	14.00	14.00	TPMT 11..	1	C	SR 14-505	T-7/5
S12K STFPR/L-11	12.00	125.00	35.0	11.0	6.3	0.8	5.60	11.00	11.00	TPMT 11..	0	S	SR 14-505	T-7/5
S12M STFPR/L-11	12.00	150.00	27.0	11.0	6.3	0.8	7.00	15.00	15.00	TPMT 11..	0	S	SR 14-505	T-7/5
S16Q STFPR/L-11	16.00	180.00	27.0	15.0	8.0	0.5	9.20	18.00	18.00	TPMT 11..	0	S	SR 14-505	T-7/5
S20R STFPR/L-16	20.00	200.00	63.0	18.0	10.0	1.0	10.20	21.50	21.50	TPMT 16..	0	S	SR 14-541	T-15/5

- (a1) When used with insert TPG. 110204-XL (a2) When used with insert TP.. 110204-..

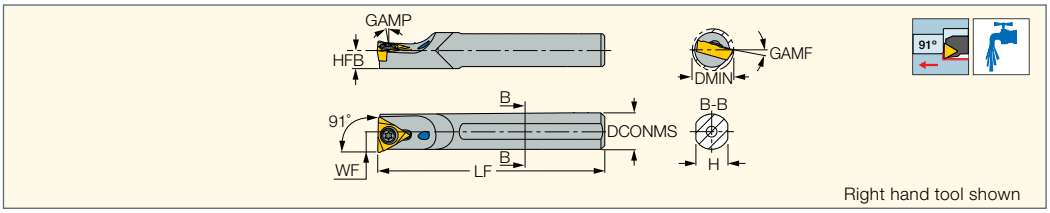
[1] Master insert identification
[2] 0 - Without coolant supply, 1 - With coolant supply
[3] S-Steel, C-Carbide

For inserts, see pages: TPMT-PF (262) • TPGB-XL (262) • TPGH-R/L (263) • TPGH-XL (263) • TPGB (262) • TPMT (261)

ISOTURN

A/E-STFPR-X

Boring Bars Carrying Triangular
TPGX 11° Clearance Inserts
for Small Diameters



Right hand tool shown

Designation	DCONMS	LF	WF	H	HFB	DMIN	GAMP[1]	GAMF[2]	Shank m.[3]	MIID[4]		
A08J STFPR-09X	8.00	110.00	5.00	7.2	3.6	9.50	5.0	-15.0	S	TPGX 0902	SR 14-298	T-8/5
A10K STFPR-09X	10.00	125.00	5.70	9.0	4.5	10.90	5.0	-8.0	S	TPGX 0902	SR 14-298	T-8/5
A12M STFPR-09X	12.00	150.00	6.70	11.0	5.5	13.00	5.0	-8.0	S	TPGX 0902	SR 14-298	T-8/5
A10K STFPR-11X	10.00	125.00	6.00	9.0	4.5	11.40	3.0	-15.0	S	TPGX 1103	SR 10400052	T-8/5
A12M STFPR-11X	12.00	150.00	6.80	11.0	5.5	13.50	3.0	-10.0	S	TPGX 1103	SR 10400052	T-8/5
A16Q STFPR-11X	16.00	180.00	8.80	14.0	7.0	17.30	3.0	-5.0	S	TPGX 1103	SR 10400052	T-8/5
E08K STFPR-09X	8.00	125.00	5.00	7.2	3.6	9.50	5.0	-15.0	C	TPGX 0902	SR 14-298	T-8/5
E10M STFPR-09X	10.00	150.00	5.70	9.0	4.5	10.90	5.0	-8.0	C	TPGX 0902	SR 14-298	T-8/5
E12Q STFPR-09X	12.00	180.00	6.70	11.0	5.5	13.00	5.0	-8.0	C	TPGX 0902	SR 14-298	T-8/5
E10M STFPR-11X	10.00	150.00	6.00	9.0	4.5	11.40	3.0	-15.0	C	TPGX 1103	SR 10400052	T-8/5
E12Q STFPR-11X	12.00	180.00	6.80	11.0	5.5	13.50	3.0	-10.0	C	TPGX 1103	SR 10400052	T-8/5
E16R STFPR-11X	16.00	200.00	8.80	14.0	7.0	17.30	3.0	-5.0	C	TPGX 1103	SR 10400052	T-8/5

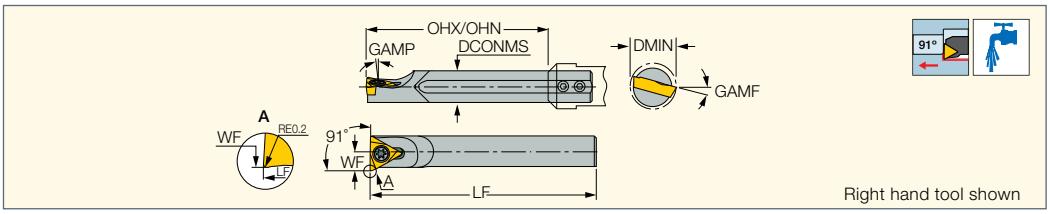
[1] Rake angle axial
[2] Rake angle radial
[3] S-Steel, C-Carbide
[4] Master insert identification

For inserts, see page: TPGX (263)

ISOTURN

MG STFPR-X

Solid Carbide Boring Bar
Carrying TPGX Inserts
for Small Diameters



Right hand tool shown

Designation	DCONMS	LF	OHN[1]	OHX[2]	WF	GAMP[3]	GAMF[4]	DMIN	MIID[5]		
MG 08-STFPR-09X	8.00	79.00	20.0	56.0	4.90	5.0	-15.0	9.50	TPGX 0902	SR 14-298	T-8/5

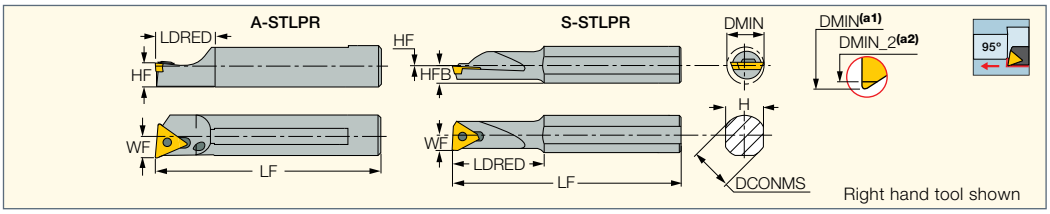
[1] Minimum overhang in adjustment range
[2] Maximum overhang in adjustment range
[3] Rake angle axial
[4] Rake angle radial
[5] Master insert identification

For inserts, see page: TPGX (263)
For holders, see page: SC-PICCO (420)

ISOTURN

A/S-STLPR/L

Screw Lock Boring Bars Carrying Triangular Inserts with 11° Clearance



Designation	DCONMS	LF	LDRED	H	HFB	HF	WF	DMIN	DMIN_2	CSP(1)	MIID(2)
A10K STLPR-11	10.00	125.00	18.0	9.5	5.8	1.1	6.00	12.00	11.00	1	TPMT 110204-PF
A12Q STLPR-11	12.00	180.00	18.0	11.5	6.0	0.3	7.00	14.00	13.00	1	TPMT 110204-PF
S12K STLPR/L-11	12.00	125.00	35.0	11.0	6.3	0.8	5.60	11.00	9.70	0	TPMT 110204-PF
S12M STLPR/L-11	12.00	150.00	27.0	11.0	6.3	0.8	7.00	15.00	14.00	0	TPMT 110204-PF
S16Q STLPR-11	16.00	180.00	27.0	15.0	8.0	0.5	9.00	18.00	17.00	0	TPMT 110204-PF
S20R STLPR-16	20.00	200.00	63.0	18.0	10.0	1.0	10.20	21.50	21.50	0	TPMT 160304

- (a1) When used with insert TP.. 110204-.. (a2) When used with insert TPG. 110204-XL

(1) 0 - Without coolant supply, 1 - With coolant supply

(2) Master insert identification

For inserts, see pages: TPMT-PF (262) • TPGB-XL (262) • TPGH-R/L (263) • TPGH-XL (263) • TPGB (262) • TPMT (261)

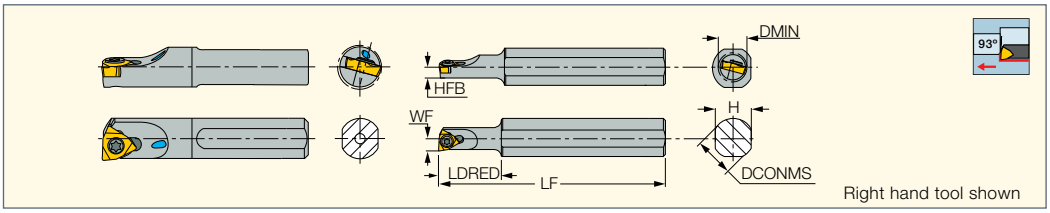
Spare Parts

Designation		
A10K STLPR-11	SR 14-505	T-7/5
A12Q STLPR-11	SR 14-505	T-7/5
S12K STLPR/L-11	SR 14-505	T-7/5
S12M STLPR/L-11	SR 14-505	T-7/5
S16Q STLPR-11	SR 14-505	T-7/5
S20R STLPR-16	SR 14-541	T-15/5

ISOTURN

E/S-SWUBR/L

Screw Clamp Miniature Boring Bars Carrying Small WBMT Trigon Inserts



Designation	DCONMS	LF	LDRED	H	HFB	WF	DMIN	CSP(1)	Shank m.(2)	MIID(3)		
E06H SWUBL-06	6.00	100.00	-	5.2	2.6	3.30	6.50	1	C	WBMT 060101R	SR 14-552	T-6/5
E06H SWUBR-06	6.00	100.00	-	5.2	2.6	3.30	6.50	1	C	WBMT 060101L		
E08K SWUBR-06	8.00	125.00	-	7.6	3.8	4.30	8.70	1	C	WBMT 060101L	SR 14-552	T-6/5
E10M SWUBR-06	10.00	150.00	-	9.0	4.5	5.20	10.90	1	C	WBMT 060101L	SR 14-552	T-6/5
S0606H SWUBR-06	6.00	100.00	-	5.2	2.6	3.30	6.50	0	S	WBMT 060101L	SR 14-552	T-6/5
S0610H SWUBL-06	10.00	100.00	20.0	9.0	4.5	3.00	6.00	0	S	WBMT 060101R	SR 14-552	T-6/5
S0610H SWUBR-06	10.00	100.00	20.0	9.0	4.5	3.00	6.00	0	S	WBMT 060101L		
S0710H SWUBL-06	10.00	100.00	24.0	9.0	4.5	3.50	7.00	0	S	WBMT 060101R	SR 14-552	T-6/5
S0710H SWUBR-06	10.00	100.00	24.0	9.0	4.5	3.50	7.00	0	S	WBMT 060101L		
S0808J SWUBR-06	8.00	100.00	-	7.4	3.7	4.30	8.50	0	S	WBMT 060101L	SR 14-552	T-6/5
S0812J SWUBL-06	12.00	110.00	32.0	11.0	5.5	4.00	8.00	0	S	WBMT 060101R	SR 14-552	T-6/5
S0812J SWUBR-06	12.00	110.00	32.0	11.0	5.5	4.00	8.00	0	S	WBMT 060101L		
S1010K SWUBL-06	10.00	125.00	-	9.0	4.5	5.20	11.00	0	S	WBMT 060101R	SR 14-552	T-6/5
S1010K SWUBR-06	10.00	125.00	-	9.0	4.5	5.20	11.00	0	S	WBMT 060101L		

- Use right-hand WBMT 06...R inserts on left-hand tools and left-hand WBMT 06...L inserts on right-hand tools.

(1) 0 - Without coolant supply, 1 - With coolant supply

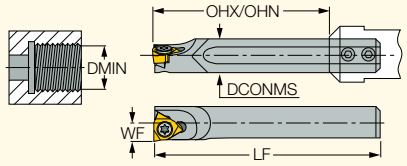
(2) S-Steel, C-Carbide

(3) Master insert identification

For inserts, see pages: WBGT (264) • WBMT (264)

ISCARTHREAD

MGSIR/L
Solid Carbide Bars for Internal Turning and Threading



Right hand tool shown

Designation	DCONMS	LF	OHN(1)	OHX(2)	WF	DMIN	MIID(3)		
MGSIL 06-06	6.00	59.00	16.0	42.0	3.90	7.00	06 IR../IRM..	SR 14-552	T-6/5
MGSIR 06-06	6.00	59.00	16.0	42.0	3.90	7.00	06 IL../ILM..		
MGSIL 08-06	8.00	72.00	20.0	56.0	5.00	9.20	06 IR../IRM..	SR 14-552	T-6/5
MGSIR 08-06	8.00	72.00	20.0	56.0	5.00	9.20	06 IL../ILM..		

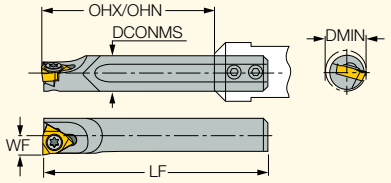
- In order to maintain high machining reliability, we strongly recommend replacing the clamping screw every 10 insert indexes

(1) Minimum overhang in adjustment range
(2) Maximum overhang in adjustment range
(3) Master insert identification

For inserts, see pages: IR/L-55° (716) • IR/L-60° (723) • IR/L-BSPT (767) • IR/L-ISO (737) • IR/L-NPT (762) • IR/L-NPTF (765) • IR/L-UN (749) • IR/L-W (757)
For holders, see page: SC-PICCO (420)

ISOTURN

MG-SWUBR/L
Solid Carbide Bars for Internal Turning



Right hand tool shown

Designation	DCONMS	LF	OHN(1)	OHX(2)	WF	DMIN	MIID(3)		
MG 06-SWUBR/L-06	6.00	59.00	16.0	42.0	3.30	6.60	WBMT 020102L/R	SR 14-552	T-6/5
MG 08-SWUBR/L-06	8.00	72.00	20.0	56.0	4.30	8.70	WBMT 020102L/R	SR 14-552	T-6/5

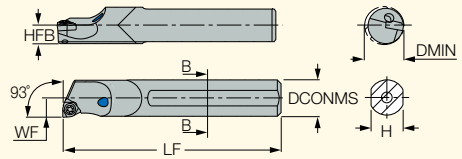
- Use right-hand WBMT 06...R inserts on left-hand tools and left-hand WBMT 06...L inserts on right-hand tools

(1) Minimum overhang in adjustment range
(2) Maximum overhang in adjustment range
(3) Master insert identification

For inserts, see pages: WBGT (264) • WBMT (264)
For holders, see page: SC-PICCO (420)

ISOTURN

A/E-SWUCR
Boring Bars Carrying WCGT Trigon Inserts for Small Diameters



Right hand tool shown

Designation	DCONMS	LF	H	HFB	WF	DMIN	Shank m.(1)	MIID(2)		
A06H SWUCR-02	6.00	100.00	5.4	2.7	3.30	6.60	S	WCGT 0201	SR 14-299	T-6/5
A08J SWUCR-02	8.00	110.00	7.2	3.6	4.25	8.70	S	WCGT 0201	SR 14-299	T-6/5
A10K SWUCR-02	10.00	125.00	9.0	4.5	5.20	10.90	S	WCGT 0201	SR 14-299	T-6/5
E06H SWUCR-02	6.00	100.00	5.4	2.7	3.30	6.60	C	WCGT 0201	SR 14-299	T-6/5
E08K SWUCR-02	8.00	125.00	7.2	3.6	4.30	8.70	C	WCGT 0201	SR 14-299	T-6/5
E10M SWUCR-02	10.00	150.00	9.0	4.5	5.20	10.90	C	WCGT 0201	SR 14-299	T-6/5

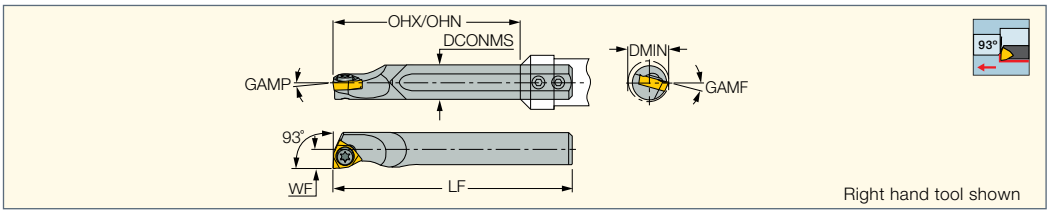
(1) S-Steel, C-Carbide
(2) Master insert identification

For inserts, see page: WCGT (264)

ISOTURN

MG-SWUCR

Solid Carbide Boring Bars
Carrying WCGT Trigon
Inserts for Small Diameters



Designation	DCONMS	LF	OHN(1)	OHX(2)	WF	GAMP(3)	GAMF(4)	DMIN	MIID(5)		
MG 06-SWUCR-02	6.00	60.00	16.0	42.0	3.30	0.0	15.0	6.60	WCGT 0201	SR 14-299	T-6/5
MG 08-SWUCR-02	8.00	75.70	20.0	56.0	4.30	0.0	12.0	8.80	WCGT 0201	SR 14-299	T-6/5

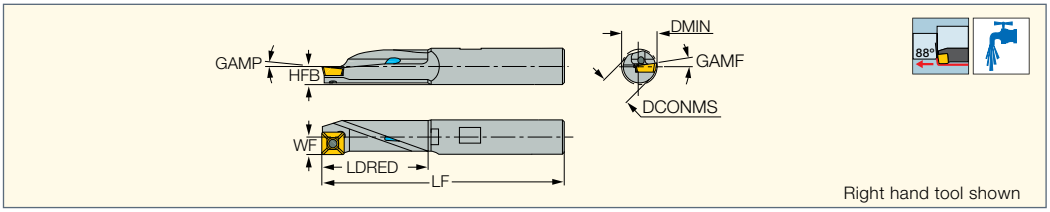
(1) Minimum overhang in adjustment range
(2) Maximum overhang in adjustment range
(3) Rake angle axial
(4) Rake angle radial
(5) Master insert identification

For inserts, see page: WCGT (264)
For holders, see page: SC-PICCO (420)

ISOTURN

A-SXFOR/L

Boring Bars with Coolant
Holes Carrying XOMT Inserts



Designation	DCONMS	LF	LDRED	HFB	WF	GAMP(1)	GAMF(2)	DMIN	MIID(3)		
A10J SXFOR/L-06	10.00	110.00	28.5	5.0	4.90	6.0	1.8	10.00	XOMT 0602	SR 34-508 M2.2X0.45	T-7/5
A12K SXFOR/L-06	12.00	125.00	28.5	5.0	4.90	6.0	1.8	10.00	XOMT 0602	SR 34-508 M2.2X0.45	T-7/5

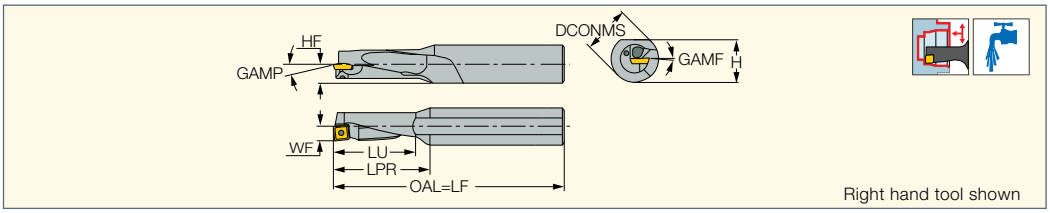
(1) Rake angle axial
(2) Rake angle radial
(3) Master insert identification

For inserts, see page: XOMT-DT (255)

MULTIFUNCTION TOOLS

A-SXFOR-DR

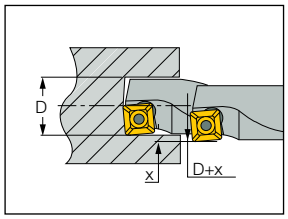
Boring and Drilling Bars
with Coolant Holes
Carrying XOMT Inserts



Designation	DCONMS	LF	LPR	LU	WF	HF	GAMP(1)	GAMF(2)	H	DCN(3)	MIID(4)
A1612M SXFOR-06DR	16.00	180.00	31.0	21.0	6.00	8.5	0.0	0.0	15.0	12.50	XOMT 06..

(1) Rake angle axial
(2) Rake angle radial
(3) Cutting diameter minimum
(4) Master insert identification

For inserts, see page: XOMT-DT (255)



Drilling Solid Material

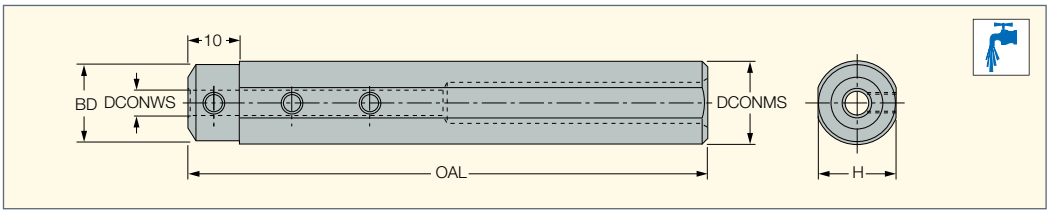
Range:
Dmin=12.5 mm
Dmax=14 mm
To achieve required diameter øD, position tool as shown at D + x (x=0.10) to compensate for tool deflection.
Use pecking cycle, pulling back 0.1 mm after each 1 mm of DOC.
Maximum feed for steel: 0.05 mm/rev;
For stainless steel: 0.03 mm/rev

Spare Parts

Designation			
A-SXFOR-DR	SR 34-508 M2.2X0.45	T-7/51	PL 16

ISOTURN

SBB
Holders for Small
Diameter Boring Bars



Designation	DCONMS	DCONWS	BD	H	OAL			
SBB D16-4	16.00	4.00	15.00	15.0	100.00	SR M4X4 DIN913	HW 2.0	PL 16*
SBB D16-5	16.00	5.00	15.00	15.0	100.00	SR M4X4 DIN913	HW 2.0	PL 16*
SBB D16-6	16.00	6.00	15.00	15.0	100.00	SR M4X4 DIN913	HW 2.0	PL 16*
SBB D16-7	16.00	7.00	15.00	15.0	100.00	SR M4X4 DIN913	HW 2.0	PL 16*
SBB D20-4	20.00	4.00	13.00	19.0	100.00	SR M4X4 DIN913	HW 2.0	PL 16*
SBB D20-5	20.00	5.00	14.00	19.0	100.00	SR M4X4 DIN913	HW 2.0	PL 16*
SBB D20-6	20.00	6.00	15.00	19.0	100.00	SR M4X4 DIN913	HW 2.0	PL 16*
SBB D20-7	20.00	7.00	16.00	19.0	100.00	SR M4X4 DIN913	HW 2.0	PL 16*
SBB D22-4	22.00	4.00	13.00	21.0	125.00	SR M4X4 DIN913	HW 2.0	PL 16*
SBB D22-5	22.00	5.00	14.00	21.0	125.00	SR M4X4 DIN913	HW 2.0	PL 16*
SBB D22-6	22.00	6.00	15.00	21.0	125.00	SR M4X4 DIN913	HW 2.0	PL 16*
SBB D22-7	22.00	7.00	16.00	21.0	125.00	SR M4X4 DIN913	HW 2.0	PL 16*
SBB D25-4	25.00	4.00	13.00	24.0	125.00	SR M4X4 DIN913	HW 2.0	
SBB D25-5	25.00	5.00	14.00	24.0	125.00	SR M4X4 DIN913	HW 2.0	
SBB D25-6	25.00	6.00	15.00	24.0	125.00	SR M4X4 DIN913	HW 2.0	
SBB D25-7	25.00	7.00	16.00	24.0	125.00	SR M4X4 DIN913	HW 2.0	

- Holders are suitable for right- and left-hand inserts, and boring bars

* Optional, to be ordered separately

For tools, see pages: A/E-SEXPR/L-03 (147) • A/E-SWUCR (156) • A/E/S-SCLCR/L (146) • E/S-SWUBR/L (155) • MG-SWUBR/L (156) • MG-SWUCR (157) • MGCH (470) • MGSIR/L (156)

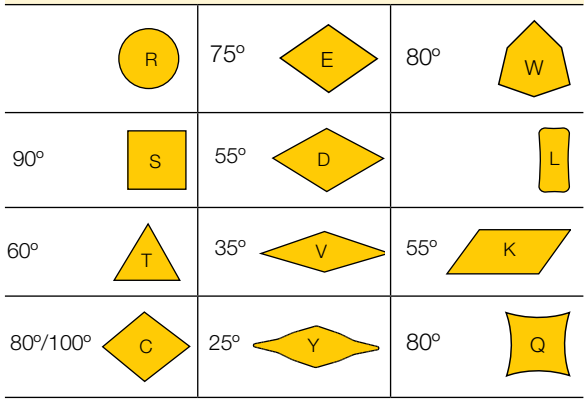


TURNING INSERTS

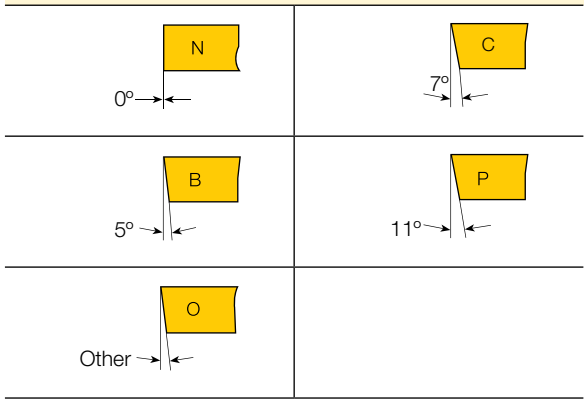


W	N	M	G	08	04	08	E	GN
1	2	3	4	5	6	7	8	9

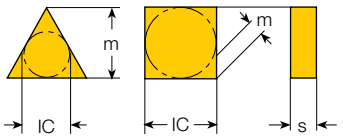
1. Shape



2. Clearance Angle



3. Tolerance

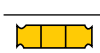


	m		s	IC	
E		±0.025	±0.025		±0.025
G		±0.025	±0.13		±0.025
M	from	±0.08	±0.13	from	±0.05
	to	±0.18(1)		to	±0.13(1)
U	from	±0.13	±0.13	from	±0.08
	to	±0.38(1)		to	±0.25(1)

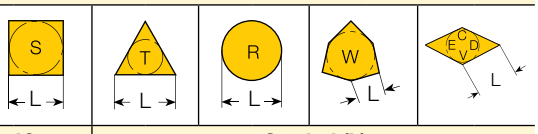
(1) Exact tolerance depends on insert size

IC	Tolerance in mm			
	On m		On IC	
	Class M	Class U	Class M	Class U
6.35	±0.08	±0.13	±0.05	±0.08
9.52	±0.08	±0.13	±0.05	±0.08
12.70	±0.13	±0.20	±0.08	±0.13
15.87	±0.15	±0.27	±0.10	±0.18
19.05	±0.15	±0.27	±0.10	±0.18
25.40	±0.18	±0.38	±0.13	±0.25

4. Type

	A	Without chipbreaker, with hole
	G	Chipbreaker on both sides, with hole
	M, S	Chipbreaker on one side, with hole
	R	Chipbreaker on one side, without hole
	B, W	Countersink on one side, with hole
	T, H	Chipbreaker on one side, with hole and countersink
	P	Neg./pos. on one or both sides, with hole
	Z, X	Special

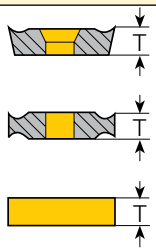
5. Cutting Edge Length



IC		Symbol (L)							
inch	mm	C	D	R	S	T	V	W	Q
5/32	3.97		04		03	06	06	02(1)	
7/32	5.56	05				09			
1/4	6.35	06	07			11	11		
9/32	7.15						12		
	8.00			08					
3/8	9.52	09	11		09	16	16	06	09
	10.00			10					
	12.00			12					
1/2	12.70	12	15		12	22	22	08	12
5/8	15.88	16			15	27			
	16.00			16					
3/4	19.05	19			19	33		13	
	20.00			20					
	25.00			25					
1	25.40				25				

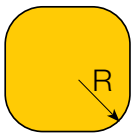
(1) WBMT 06...

6. Thickness



01	=	1.59 mm
T1	=	1.98 mm
02	=	2.38 mm
03	=	3.18 mm
T3	=	3.97 mm
04	=	4.76 mm
06	=	6.35 mm
07	=	7.94 mm

7. Corner Radius



02	=	0.2 mm
04	=	0.4 mm
08	=	0.8 mm
12	=	1.2 mm
16	=	1.6 mm
20	=	2.0 mm
24	=	2.4 mm

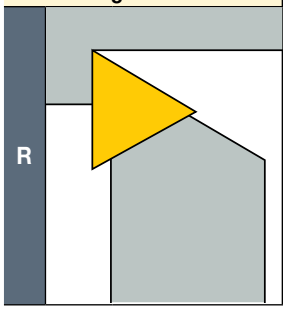
8. Cutting Edge (Optional)

	F	Sharp
	E	Honed (Rounded)
	T	Chamfered (Negative Land)
	S	Chamfered + Honed

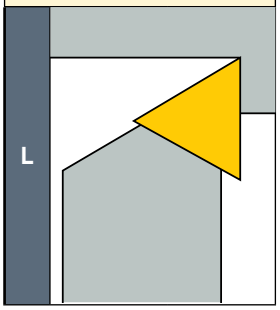
9. Chipformer Designation

SF	AS/AF	TF	NM
PF	../Z-RF/LF(1)	PP	TNM
NF	WF	GN	NR
SM	WG	NMS	RP
14	VL		

Right-hand



Left-hand



Selection Guide for Chipformers and Grades

ISO P-Steel

Negative

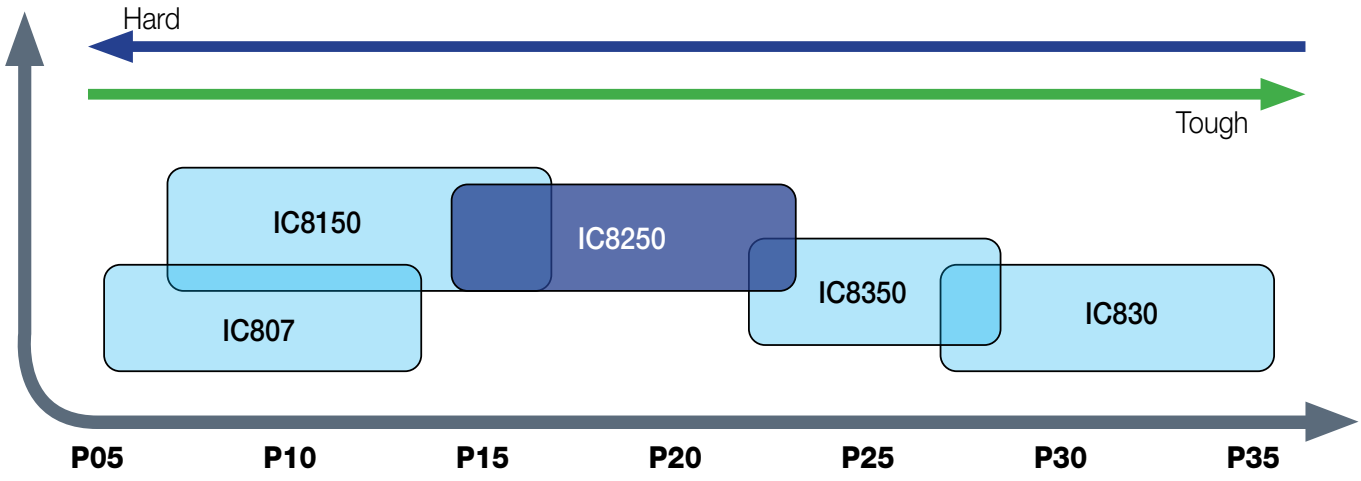
Finishing		Medium		Roughing		Heavy	
Tight		Tight		Tight		Tight	
	SF		M4PW		GN		H3P
	F3P		TF		**R3P**		**H4P**
	NF		**M3P**		NR		H5P
			GN				
Open		Open	PP	Open		Open	

Positive

Finishing		Medium	
Tight		Tight	
	F3P		SM
	PF		**M3P**
	SM		
Open	14	Open	

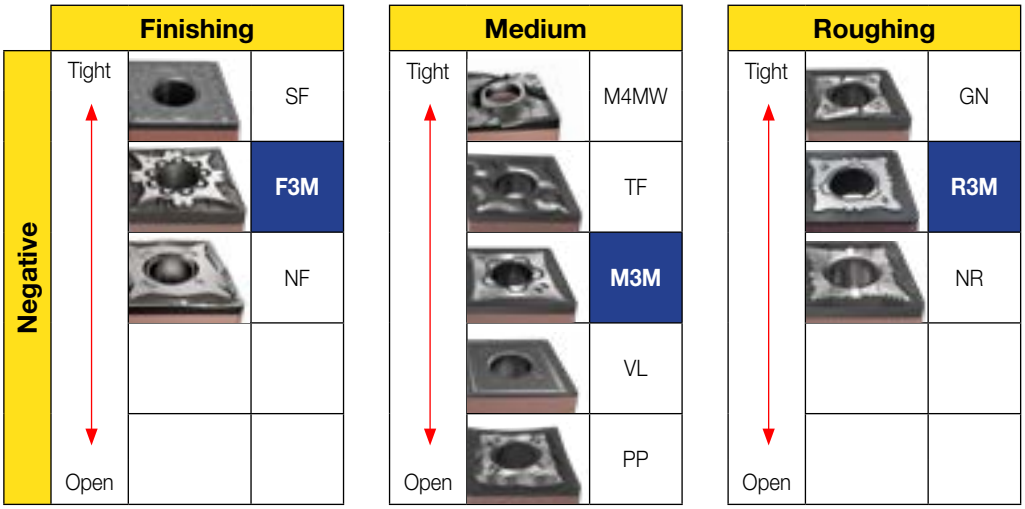
First Choice

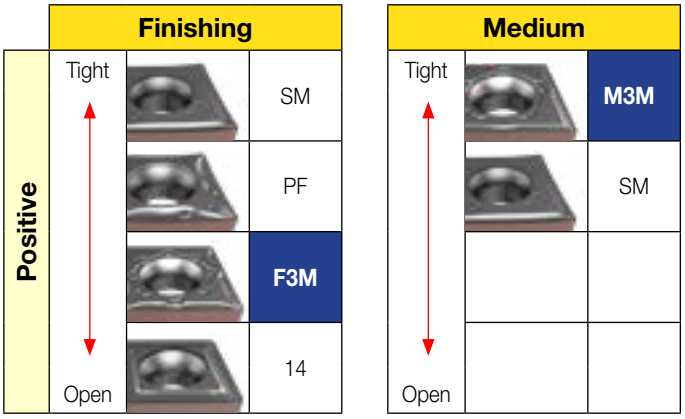
Recommended Carbide Grades



*For complete information regarding ISCAR's ceramic and CBN grades, please refer to ISCAR's catalog on the subject.

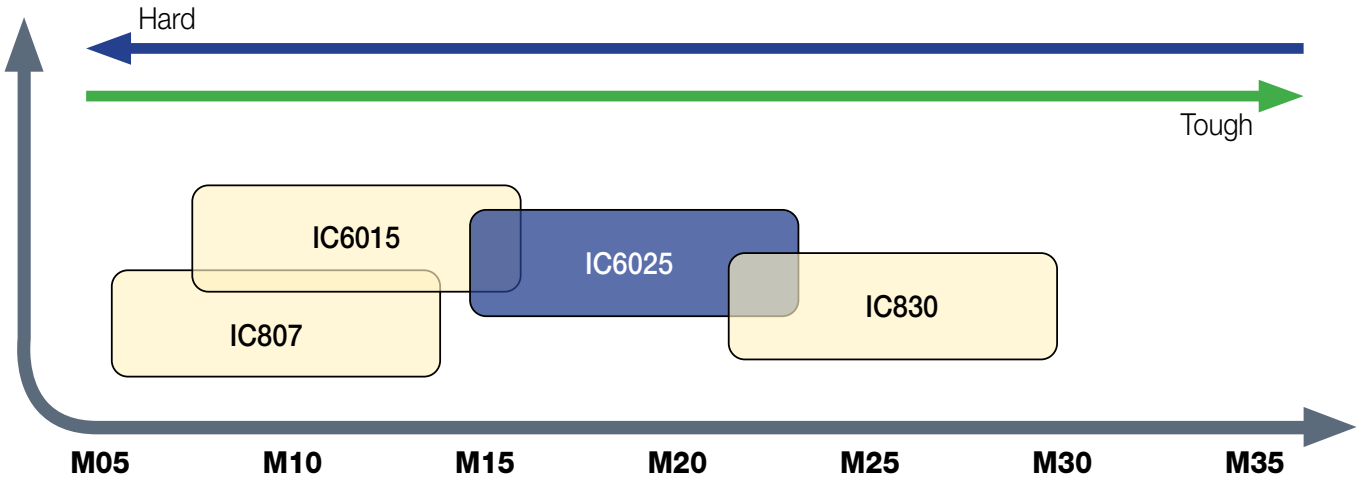
ISO M- Stainless Steel





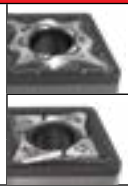
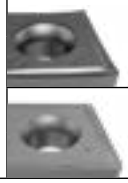
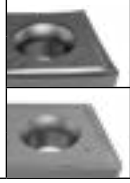
First Choice

Recommended Carbide Grades



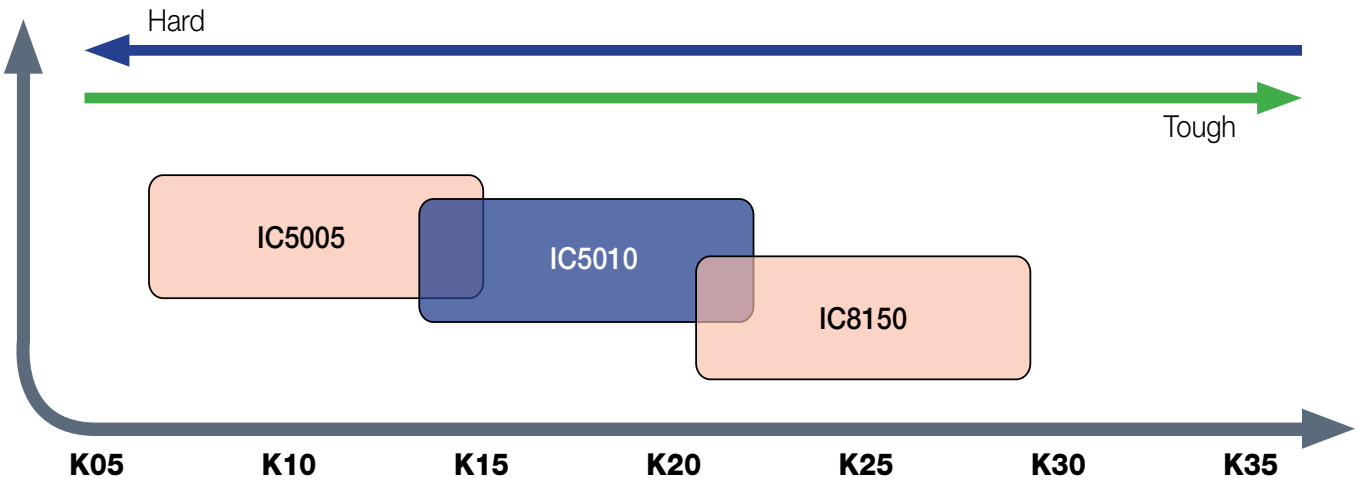
Selection Guide for Chipformers and Grades

ISO K-Cast Iron

	Finishing	Medium	Roughing
Negative	Tight ↕ Open  **M3P** / GN	Tight ↕ Open  GN / **A**	Tight ↕ Open  NR / **A**
Positive	Tight ↕ Open  **SM** / 14	Tight ↕ Open  **SM** / 14	

First Choice

Recommended Carbide Grades



*For complete information regarding ISCAR's ceramic and CBN grades, please refer to ISCAR's catalog on the subject.

Selection Guide for Chipformers and Grades

ISO S-High Temperature Alloys

Negative

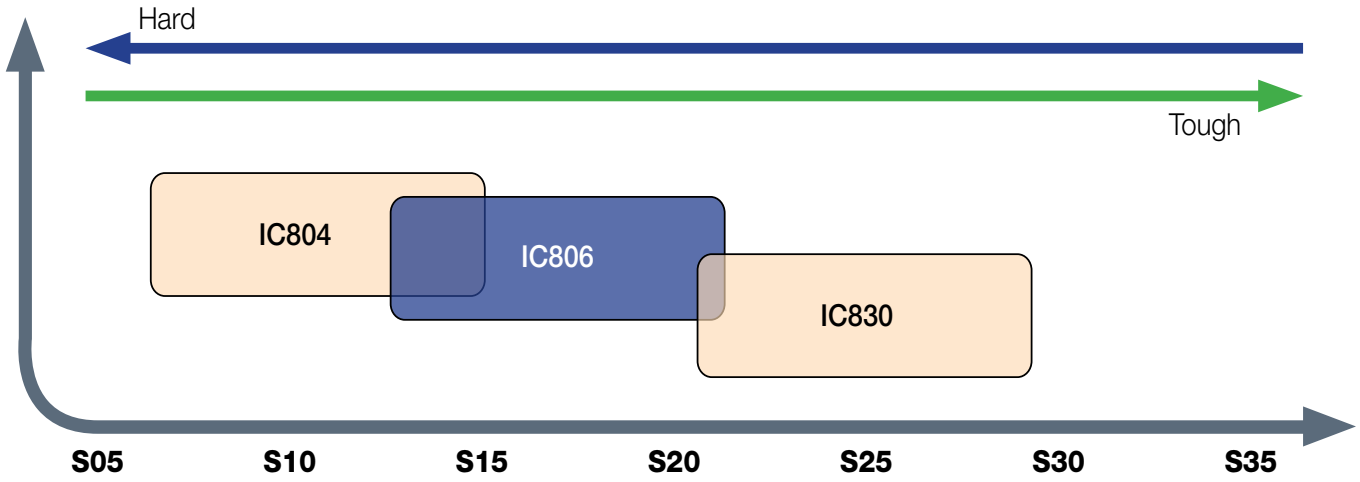
	Finishing	Medium
Tight	F3M	TF
	F3S	**M3M**
		EM-M
		VL
Open		PP

Positive

	Finishing	Medium
Tight	SM	**M3M**
	PF	SM
	F3M	
Open	14	

First Choice

Recommended Carbide Grades



*For complete information regarding ISCAR's ceramic and CBN grades, please refer to ISCAR's catalog on the subject.

Selection Guide for Chipformers and Grades

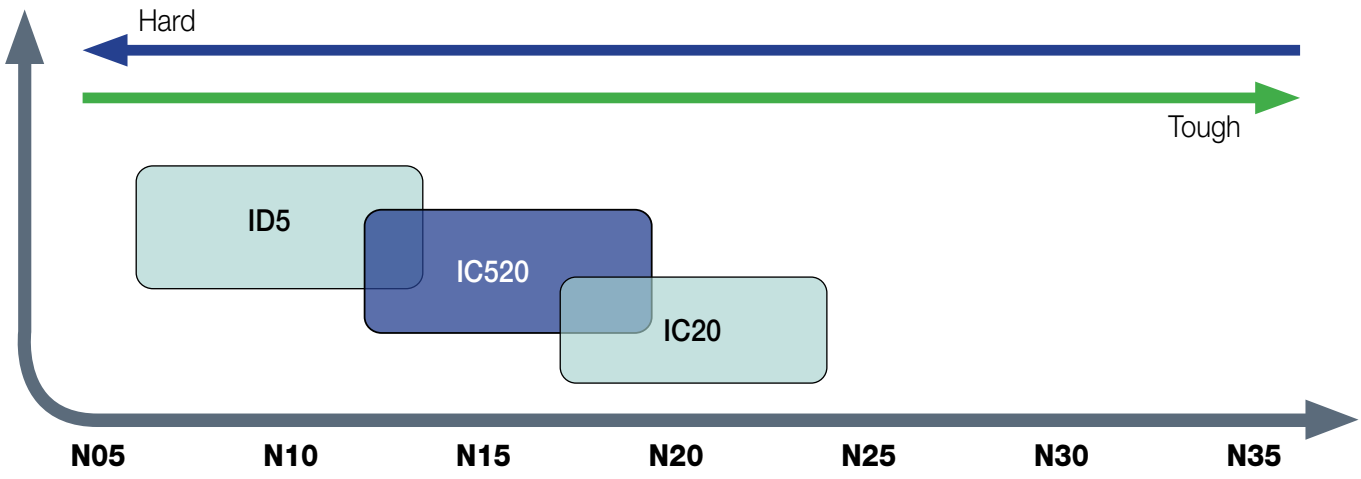
ISO N-Aluminum

	Finishing	Medium	Roughing
Negative	Tight ↕ Open	Tight ↕ Open	Tight ↕ Open
	 NF	 PP	 NMS12
	F3N	**M3N**	

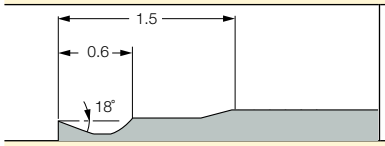
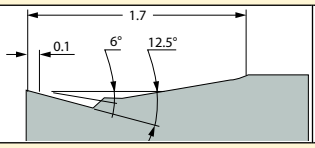
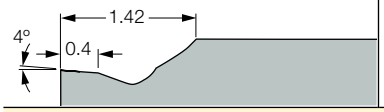
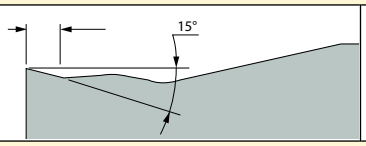
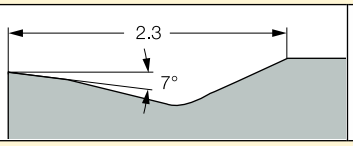
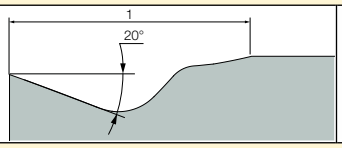
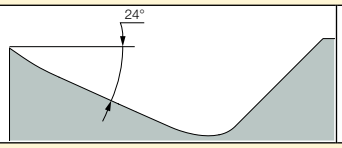
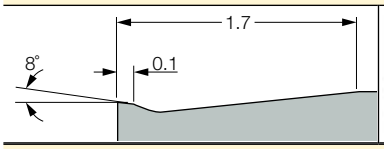
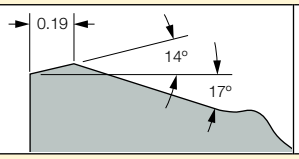
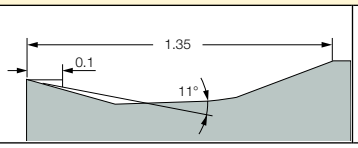
	Finishing
Positive	Tight ↕ Open
	 AS

First Choice

Recommended Carbide Grades

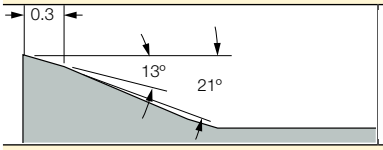


Chipformers
Negative Chipformers

SF Chipformer		
		A unique super finishing chipformer that controls chip flow at very low feeds and cutting depths. Designed to reduce crater wear.
F3P Chipformer		
		Double-sided insert with a positive rake angle to reduce cutting forces for finish machining on steel.
NF Chipformer		
		Double-sided for semi-finishing and finishing applications. Low cutting forces are due to a very sharp edge and positive rake.
F3M Chipformer		
		Double-sided insert with a positive rake angle for finish machining on stainless steel. Its unique deflector geometry with a wavy surface prevents chip hammering.
GN Chipformer		
		Double-sided for general applications. Secure cutting edge for medium and semi-roughing on steel and cast iron.
F3S Chipformer		
		Chipbreaker with positive rake angle for finish machining superalloys and exotic materials.
F3N Chipformer		
		Polished and extra sharp positive insert for machining aluminum and non-ferrous materials for finishing applications.
WF Chipformer		
		Wiper geometry for high feed finishing on soft and gummy materials. Small depths of cut.
M4PW Chipformer		
		Double-sided for roughing applications. Feed range: 0.25 mm/rev to 0.8 mm/rev. Depth of cut from 2.00 to 10.0 mm.
M3P Chipformer		
		Double-sided insert for medium machining on steel with a reinforced cutting edge to increase tool life.

Negative Chipformers

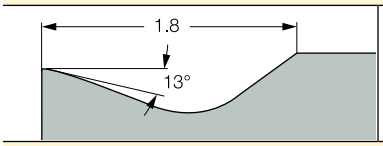
M4MW Chipformer





Chipformer for heavy machining applications on stainless steel. The inserts feature a very positive radial helical cutting edge and a positive rake angle.

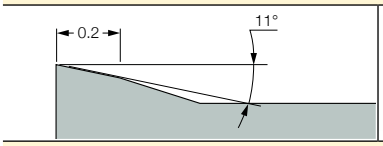
TF Chipformer





Double-sided positive rake angles to prevent strain hardening. The rake angle varies along the edge to a negative angle which prevents chipping. Special design reduces cratering. Used for carbon and alloy steel, stainless steel and high-temp alloys.

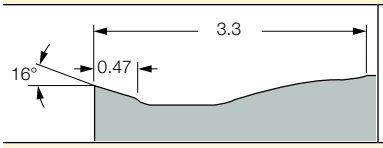
M3M Chipformer





Double-sided insert for medium machining on stainless steel with a reinforced cutting edge that prevents notch wear at tight radii to increase tool life.

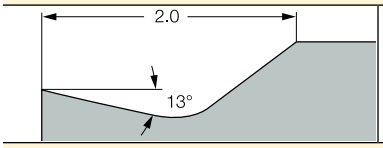
VL Chipformer





High positive rake and a special edge preparation used for rough and finish turning on high temperature alloys. Excellent performance on parts such as automotive valves.

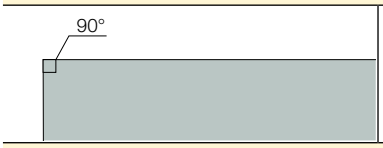
PP Chipformer





Double-sided, very positive rake, sharp- and positive radial edge for heat-resistant alloys, stainless steel, aluminum alloys and soft, low carbon steel.

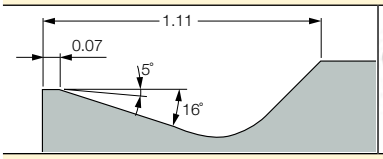
A Chipformer





Flat inserts, used for short chipping materials such as cast iron.

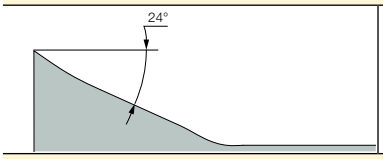
EM-M Chipformer





Double-sided sharp cutting edge with a 16º positive rake angle for machining high temperature alloys at a_p<3 mm.

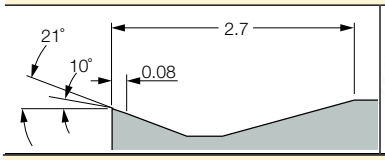
M3N Chipformer





Polished and extra sharp positive insert for machining aluminum and non-ferrous materials for medium applications.

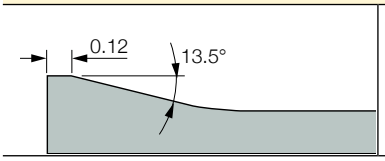
12 Chipformer





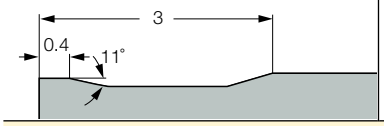
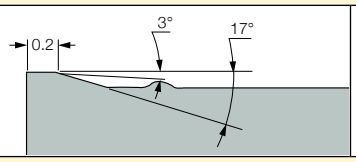
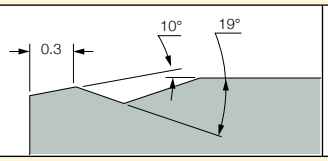
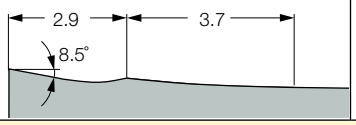
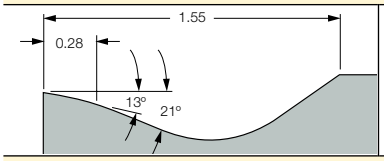
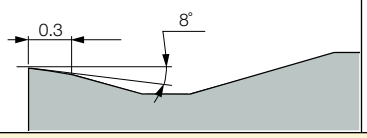
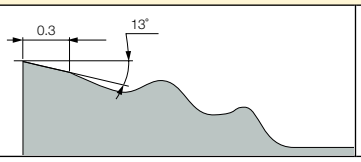
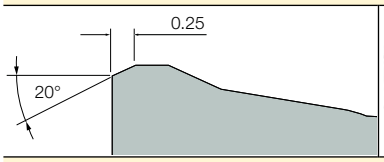
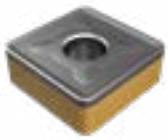
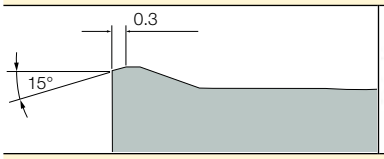
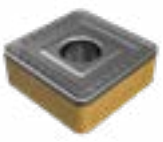
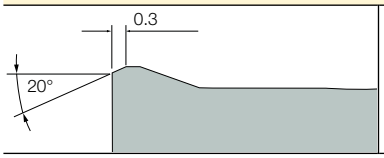
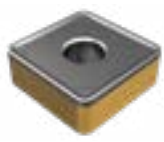
Single-sided for medium to rough machining on aluminum and soft materials.

R3P Chipformer



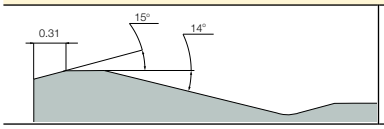


Chipbreaker for rough machining on steel with a positive rake angle and reinforced cutting edge for better performance and longer tool life.

NR Chipformer		
		Double-sided sharp cutting edge with a 13º positive rake angle for machining high temperature alloys at a_p < 6 mm.
R3M Chipformer		
		Double-sided insert for rough machining on stainless steel with a unique deflector geometry to improve chip control. Includes a wavy surface to prevent chip hammering.
T3P Chipformer		
		Double-sided 6˚ negative flank trigone insert for high feed turning on steel.
TNM Chipformer		
		Double-sided trigon for roughing applications. Feed ranges: from 0.25 to 0.65 mm/rev. Depth of cut from 2 to 7 mm.
EM-R Chipformer		
		Double-sided sharp cutting edge with a 13º positive rake angle for machining high temperature alloys at a_p < 6 mm.
HT/WG Chipformer		
		Double-sided for roughing applications. Feed range: 0.25 mm/rev to 0.8 mm/rev. Depth of cut from 2.00 to 10.0 mm.
HM Chipformer		
		Feed range: 0.08 mm/rev to 0.75 mm/rev. Depth of cut from 1.5 mm to 8.0 mm.
H3P Chipformer		
		• For heavy roughing applications • Low cutting force for low horse power machines • Excellent chip control due to changeable land and a flexible chip breaker
H4P Chipformer		
		• For heavy roughing applications • For large depth of cut and high feed • Strong cutting edge credit to a wide land and large land angle
H5P Chipformer		
		• For heavy roughing applications • For large depth of cut and high feed • Extremely strong cutting edge credit to a wide land and large land angle • Suitable for high cutting conditions

Negative Chipformers

H6P Chipformer

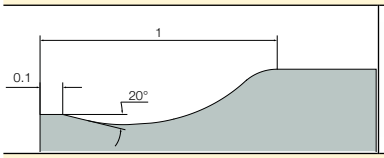




Tangential insert with 4 cutting edges for high metal removal on steel up to 35 mm DOC

Positive Chipformers

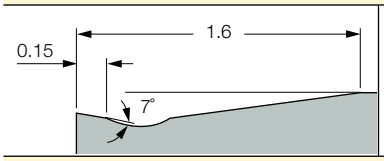
F3P Chipformer





Super finishing and finishing applications, mainly on positive inserts.
Feed range: 0.03-0.20 mm/rev. DOC 0.25-3.0 mm.

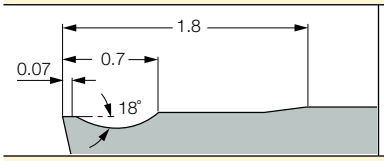
PF Chipformer





Super finishing and finishing applications, mainly on positive inserts.
Feed range: 0.03-0.20 mm/rev. DOC 0.25-3.0 mm.

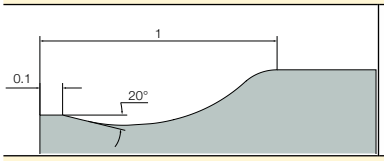
SM Chipformer





Finishing and boring applications. Feed range: 0.06-0.25 mm/rev. DOC 0.5-2.5 mm.

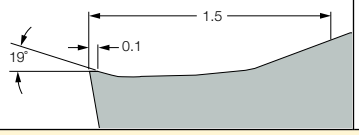
F3M Chipformer





Chipbreaker with positive rake angle for finishing machining of stainless steel, also suitable for superalloys and exotic materials.

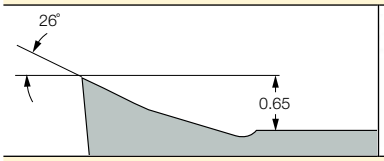
14 Chipformer





Semi-finishing and finishing. Medium feeds.

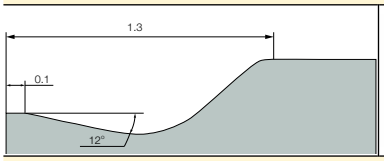
AS Chipformer





For general use machining on aluminum and soft materials.

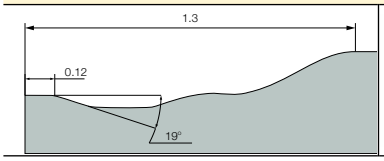
M3P Chipformer





Chipbreaker with reinforced cutting edge and positive rake angles for medium machining steel conditions.

M3M Chipformer

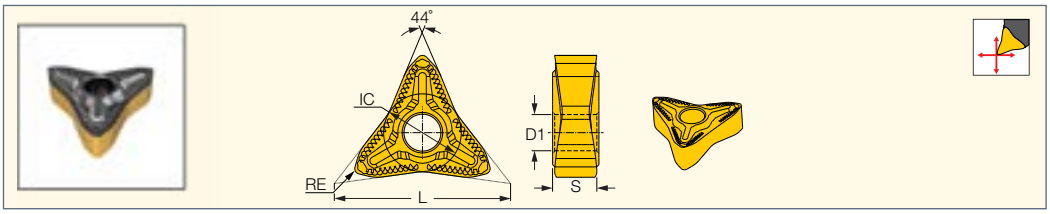




Chipbreaker with reinforced cutting edge and positive rake angles for medium machining stainless steel conditions.

QUICKTURN

Q6-MNMG-M3P-SL
High Feed Insert with Six Reinforced Cutting Edges and Negative Flank for Roughing Applications



Designation	Dimensions L	D1	IC	S	RE	Tough ↔ Hard IC8250	IC8150	IC807	Recommended Machining Data a_p (Forward machining) (mm)	a_p (Backward machining) (mm)	Feed turning (Forward machining)	Feed turning (Backward machining)
Q6-MNMG120608-M3P-SL	25.10	5.15	11.05	6.30	0.80	●	●	●	0.50-3.50	0.50-2.20	0.20-0.60	0.30-1.20

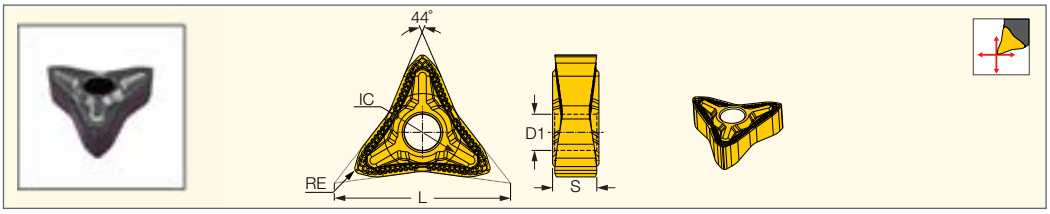
NEW

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: C#-Q6-DMXNN-SL-Y (8) • Q6-DMXNN-SL-JHP (8) • Q6-DMXNR/L-SL-JHP (8)

QUICKTURN

Q6-MNMG-M3M-SL
High Feed Insert with Six Reinforced Cutting Edges and Negative Flank for Roughing Applications



Designation	Dimensions L	D1	IC	S	RE	Tough ↔ Hard IC6025	IC6015	IC807	Recommended Machining Data a_p (Forward machining) (mm)	a_p (Backward machining) (mm)	Feed turning (Forward machining)	Feed turning (Backward machining)
Q6-MNMG120608-M3M-SL	25.10	5.15	11.05	6.30	0.80	●	●	●	0.50-3.50	0.50-2.20	0.20-0.60	0.30-1.00

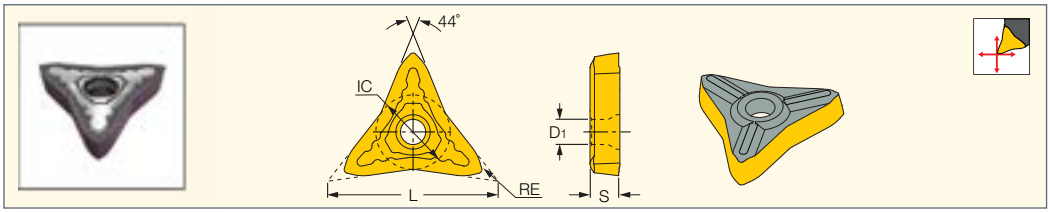
NEW

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: C#-Q6-DMXNN-SL-Y (8) • Q6-DMXNN-SL-JHP (8) • Q6-DMXNR/L-SL-JHP (8)

QUICKTLOCK

Q3-MCMT-R3M-SL
High Feed Inserts with 3 Reinforced Cutting Edges and a Positive Flank



Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC6025	IC6015	IC807	Recommended Machining Data a_p (Forward machining) (mm)	a_p (Backward machining) (mm)	Feed turning (Forward machining)	Feed turning (Backward machining)
Q3-MCMT160608-R3M-SL	36.60	16.00	6.15	0.80	5.40	●	●	●	1.50-6.00	0.50-4.00	0.30-0.60	0.20-1.00

NEW

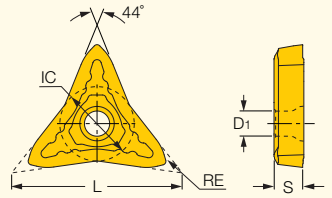
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

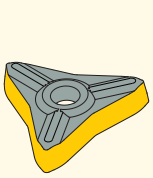
For tools, see pages: C#-Q3-SMXCN-SL-Y (10) • C#-Q3-SMXCR/L-SL (10) • Q3-SMXCN-SL-JHP (9) • Q3-SMXCR/L-SL-JHP (3)

QUICK T LOCK

Q3-MCMT-R3P-SL
High Feed Inserts with 3 Reinforced Cutting Edges and a Positive Flank









Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC8250	IC8150	IC5010	IC5005	IC807	Recommended Machining Data a_p (Forward machining) (mm)	a_p (Backward machining) (mm)	Feed turning (Forward machining)	Feed turning (Backward machining)
Q3-MCMT160608-R3P-SL	36.60	16.00	6.15	0.80	5.40	●	●	●	●	●	1.50-7.50	0.50-4.00	0.30-0.60	0.20-1.20

NEW

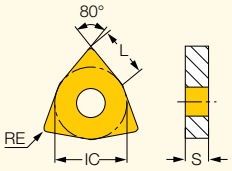
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

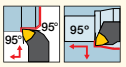
For tools, see pages: C#-Q3-SMXCN-SL-Y (10) • C#-Q3-SMXCR/L-SL (10) • Q3-SMXCN-SL-JHP (9) • Q3-SMXCR/L-SL-JHP (3)

MINI P TURN POSITIVE DOUBLE SIDED

WNGP-F2P
Double-Sided Trigon Inserts for Super Finish Machining Conditions on Alloyed Steel







Designation	Dimensions L	IC	S	RE	IC530N	Recommended Machining Data a_p (mm)	f (mm/rev)
WNGP 040302R/L-F2P	4.35	6.35	3.18	0.20	●	0.30-2.00	0.08-0.30
WNGP 040304R/L-F2P	4.35	6.35	3.18	0.40	●	0.30-2.00	0.08-0.30
WNGP 040308R/L-F2P	4.35	6.35	3.18	0.80	●	0.30-2.00	0.08-0.30

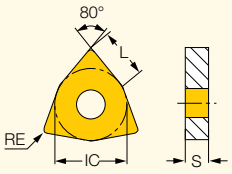
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

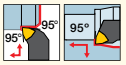
For tools, see pages: A/E-SWLNR/L-04 (135) • NQCH-SWLNR/L-S-JHP (11) • PWLNR/L-S (11)

ISOTURN

WNMG-F3P
Double-Sided Trigon Inserts for Semi-Finishing and Finishing Applications







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8250	IC8150	IC20N	IC520N	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
WNMG 060404-F3P	6.52	9.52	4.76	0.40	●	●	●	●	●	●	0.50-2.50	0.07-0.25
WNMG 060408-F3P	6.52	9.52	4.76	0.80	●	●	●	●	●	●	0.90-3.00	0.08-0.25
WNMG 060412-F3P	6.52	9.52	4.76	1.20	●	●	●			●	1.30-3.00	0.10-0.25
WNMG 080404-F3P	8.70	12.70	4.76	0.40	●	●	●			●	0.50-3.50	0.07-0.25
WNMG 080408-F3P	8.70	12.70	4.76	0.80	●	●	●			●	0.90-3.50	0.08-0.25
WNMG 080412-F3P	8.70	12.70	4.76	1.20	●	●	●			●	1.30-3.50	0.10-0.25

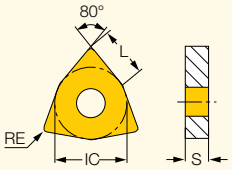
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

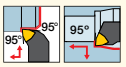
For tools, see pages: A-PWLNR/L-X/G (138) • A/S-MWLNR/L-W (136) • A/S-PWLNR/L (137) • C#-MULNR/L-MW (20) • C#-PWLNR/L-08-JHP (13) • C#-PWLNR/L-X (17) • C#-PWLNR/L-X-JHP (18) • DWLNR/L (13) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • MWLNR/L-W (22) • PWLNR/L (12) • PWLNR/L-08-JHP (12) • PWLNR/L-X (14) • PWLNR/L-X-JHP (15) • PWLNR/L-X-JHP-MC (16)• S-DWLNR/L (130) • S-MULNR-MW (139) • DWLNR/L-JHP-MC (14)

ISOTURN

WNMG-M3P
Double-Sided Trigon Inserts for Medium Machining Conditions on Steel







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8250	IC8150	IC5010	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
WNMG 06T304-M3P	6.52	9.52	3.97	0.40	●	●				0.45-2.50	0.10-0.45
WNMG 06T308-M3P	6.52	9.52	3.97	0.80	●	●	●			0.50-3.00	0.15-0.50
WNMG 06T312-M3P	6.52	9.52	3.97	1.20	●	●				0.80-3.00	0.18-0.60
WNMG 060404-M3P	6.52	9.52	4.76	0.40	●	●	●		●	0.45-2.50	0.10-0.45
WNMG 060408-M3P	6.52	9.52	4.76	0.80	●	●	●		●	0.50-3.00	0.15-0.50
WNMG 060412-M3P	6.52	9.52	4.76	1.20	●		●		●	0.80-3.00	0.18-0.60
WNMG 080404-M3P	8.70	12.70	4.76	0.40	●	●	●		●	0.40-3.50	0.10-0.45
WNMG 080408-M3P	8.70	12.70	4.76	0.80	●	●	●	●	●	0.50-4.00	0.15-0.50
WNMG 080412-M3P	8.70	12.70	4.76	1.20	●	●	●	●	●	0.80-4.00	0.18-0.60
WNMG 080416-M3P	8.70	12.70	4.76	1.60	●	●			●	1.00-4.00	0.23-0.65

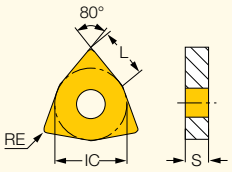
• For user guide and cutting speed recommendations, see pages 160-170,274-278

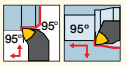
For tools, see pages: A-PWLNR/L-X/G (138) • A/S-MWLNR/L-W (136) • A/S-PWLNR/L (137) • C#-MULNR/L-MW (20) • C#-PWLNR/L-08-JHP (13) • C#-PWLNR/L-X (17) • C#-PWLNR/L-X-JHP (18) • DWLNR/L (13) • E-PWLNR/L-HEAD (138) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • MWLNR/L-W (22) • PWLNR/L (12) • PWLNR/L-08-JHP (12) • PWLNR/L-X (14) • PWLNR/L-X-JHP (15) • PWLNR/L-X-JHP-MC (16) • S-DWLNR/L (130) • S-MULNR-MW (139) • DWLNR/L-JHP-MC (14)

ISOTURN

WNMG-CERMET
Double-Sided Trigon Cermet Grade Inserts for Semi-Finishing and Finishing Applications





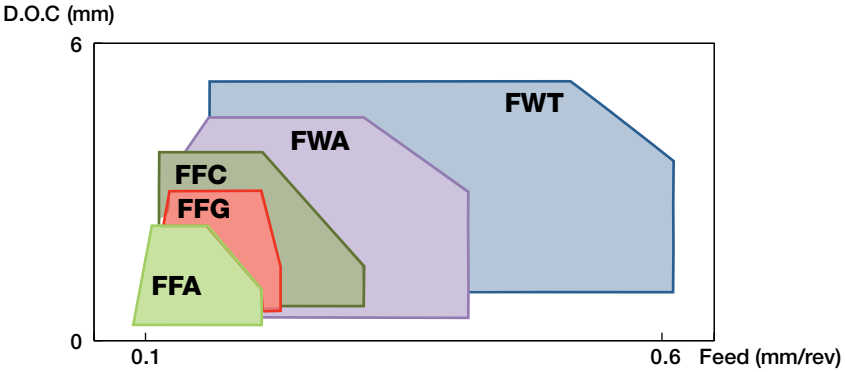


Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC20N	IC520N	Recommended Machining Data a_p (mm)	f (mm/rev)
WNMG 06T304-FFC	6.52	9.52	3.97	0.40	●	●	1.00-2.50	0.05-0.25
WNMG 06T304-FFG	6.52	9.52	3.97	0.40		●	1.00-2.50	0.05-0.25
WNMG 06T304-FWA (1)	6.52	9.52	3.97	0.40		●	0.50-3.00	0.12-0.50
WNMX 060404-FWA (1)	6.52	9.52	4.76	0.40		●	0.50-3.00	0.12-0.50
WNMG 080404-FFC	8.70	12.70	4.76	0.40		●	1.50-2.50	0.05-0.25
WNMG 080408-FFC	8.70	12.70	4.76	0.80		●	1.00-2.50	0.05-0.25

• For user guide and cutting speed recommendations, see pages 160-170,274-278

(1) Insert with wiper geometry

For tools, see pages: A/S-MWLNR/L-W (136) • A/S-PWLNR/L (137) • C#-MULNR/L-MW (20) • C#-PWLNR/L-08-JHP (13) • DWLNR/L (13) • E-PWLNR/L-HEAD (138) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • MWLNR/L-W (22) • PWLNR/L (12) • PWLNR/L-08-JHP (12) • PWLNR/L-X (14) • PWLNR/L-X-JHP (15) • S-DWLNR/L (130) • S-MULNR-MW (139) • DWLNR/L-JHP-MC (14)

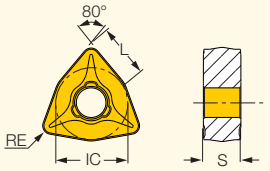


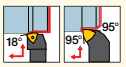
DOVEIQTURN HEAVY DUTY LINE

WOMG-10-T3P-IQ

Double-Sided 6° Negative Side Flank Trigon Inserts for High Feed Turning of Steel







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8350	IC8250	IC8150	Recommended Machining Data a_p (mm)(2)	f (mm/rev)(1)
WOMG 100716-T3P-IQ	10.86	15.88	7.94	1.60	●	●	●	1.00-2.80	1.50-3.00

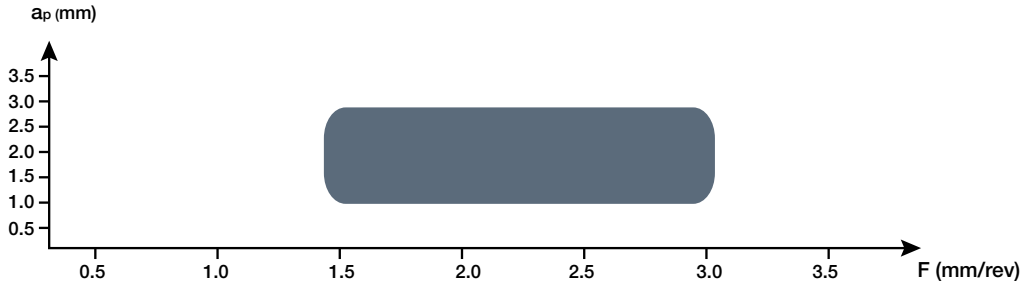
- The specified machining recommendations in the above table are valid only for PWXOR/L-TF-IQ tools. For PWLOR/L-IQ tools: a_p= 3-7 mm, ft= 0.3-0.8 mm/rev.
- For user guide, see pages 160-170,274-278

(1) Fast feed cutting condition. For 95° app. See more info.

(2) Fast feed cutting condition. For 95° app. See more info.

For tools, see pages: PWLOR/L-IQ (23) • PWXOR/L-TF-IQ (24)

Application Range on PWXOR/L-TF-IQ Tools

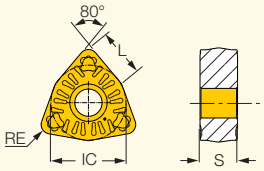


DOVEIQTURN HEAVY DUTY LINE

WOMG-13-R3P-IQ

Double-Sided 7° Negative Side Flank Trigon Inserts for Heavy Turning of Steel







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
WOMG 130612-R3P-IQ	13.03	19.05	6.35	1.20	●	●	3.50-8.00	0.30-0.80
WOMG 130616-R3P-IQ	13.03	19.05	6.35	1.60	●	●	4.00-8.00	0.40-0.85
WOMG 130624-R3P-IQ	13.03	19.05	6.35	2.40	●	●	4.00-8.00	0.40-1.00

- For user guide and cutting speed recommendations, see pages 160-170,274-278

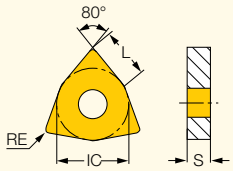
For tools, see pages: C#-PWLOR/L-IQ (23) • PWLOR/L-IQ (23)

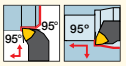
MINIPTURN POSITIVE DOUBLE SIDED

WNGP-F2M

Double-Sided Trigon Inserts for Super Finish Machining Conditions on Stainless Steel







Designation	Dimensions L	IC	S	RE	IC908	Recommended Machining Data a_p (mm)	f (mm/rev)
WNGP 040302R/L-F2M	4.35	6.35	3.18	0.20	●	0.30-2.00	0.08-0.30
WNGP 040304R/L-F2M	4.35	6.35	3.18	0.40	●	0.30-2.00	0.08-0.30
WNGP 040308R/L-F2M	4.35	6.35	3.18	0.80	●	0.30-2.00	0.08-0.30

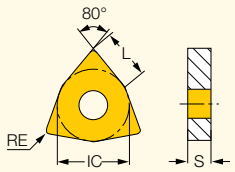
- For user guide and cutting speed recommendations, see pages 160-170,274-278

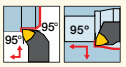
For tools, see pages: A/E-SWLNR/L-04 (135) • NQCH-SWLNR/L-S-JHP (11) • PWLNR/L-S (11)

ISOTURN

WNMG-F3M
Double-Sided Trigon
Inserts for Stainless Steel
Finishing Applications







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC706	IC830	IC6025	IC6015	IC806	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
WNMG 060404-F3M	6.52	9.52	4.76	0.40	●	●	●	●	●	●	0.10-1.50	0.05-0.30
WNMG 060408-F3M	6.52	9.52	4.76	0.80	●	●	●	●	●	●	0.10-1.50	0.10-0.40
WNMG 060412-F3M	6.52	9.52	4.76	1.20	●		●	●	●	●	0.20-2.50	0.15-0.50
WNMG 080404-F3M	8.70	12.70	4.76	0.40	●	●	●	●	●	●	0.10-1.50	0.05-0.30
WNMG 080408-F3M	8.70	12.70	4.76	0.80	●	●	●	●	●	●	0.10-1.50	0.10-0.40
WNMG 080412-F3M	8.70	12.70	4.76	1.20		●	●	●	●	●	0.20-2.50	0.15-0.50

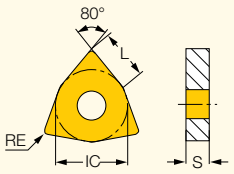
- For user guide and cutting speed recommendations, see pages 160-170,274-278

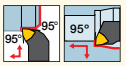
For tools, see pages: A-PWLNR/L-X/G (138) • A/S-MWLNR/L-W (136) • A/S-PWLNR/L (137) • C#-MULNR/L-MW (20) • C#-PWLNR/L-08-JHP (13)
• C#-PWLNR/L-X (17) • C#-PWLNR/L-X-JHP (18) • DWLNR/L (13) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20)
• HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • MWLNR/L-W (22) • PWLNR/L (12) • PWLNR/L-08-JHP (12) • PWLNR/L-X (14) • PWLNR/L-X-JHP (15)
• PWLNR/L-X-JHP-MC (16) • S-DWLNR/L (130) • S-MULNR-MW (139) • DWLNR/L-JHP-MC (14)

ISOTURN

WNMG-M3M
Double-Sided Trigon Inserts
for Machining Stainless
and Low Carbon Steel







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC706	IC830	IC6025	IC6015	IC806	IC1017	IC807	IC804	Recommended Machining Data a_p (mm)	f (mm/rev)
WNMG 060404-M3M	6.52	9.52	4.76	0.40	●	●	●	●	●	●	●		0.50-3.50	0.12-0.40
WNMG 060408-M3M	6.52	9.52	4.76	0.80	●	●	●	●	●		●		0.50-3.50	0.15-0.50
WNMG 060412-M3M	6.52	9.52	4.76	1.20	●	●	●	●	●		●		0.50-3.50	0.20-0.60
WNMG 080404-M3M	8.70	12.70	4.76	1.60		●					●		0.50-5.00	0.12-0.40
WNMG 080408-M3M	8.70	12.70	4.76	0.40	●	●	●	●	●		●	●	0.50-5.00	0.15-0.50
WNMG 080412-M3M	8.70	12.70	4.76	0.80	●	●	●	●	●		●		0.50-5.00	0.20-0.60
WNMG 080416-M3M	8.70	12.70	4.76	1.20							●		0.50-5.00	0.25-0.70

- For user guide and cutting speed recommendations, see pages 160-170,274-278

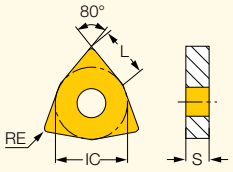
For tools, see pages: A-PWLNR/L-X/G (138) • A/S-MWLNR/L-W (136) • A/S-PWLNR/L (137) • C#-MULNR/L-MW (20) • C#-PWLNR/L-08-JHP (13)
• C#-PWLNR/L-X (17) • C#-PWLNR/L-X-JHP (18) • DWLNR/L (13) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20)
• HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • MWLNR/L-W (22) • PWLNR/L (12) • PWLNR/L-08-JHP (12) • PWLNR/L-X (14) • PWLNR/L-X-JHP (15)
• PWLNR/L-X-JHP-MC (16) • S-DWLNR/L (130) • S-MULNR-MW (139) • DWLNR/L-JHP-MC (14)

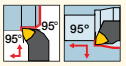
ISOTURN

WNMG-F3S

Double-Sided 80° Trigon Inserts for Titanium and Heat Resistant Materials Finishing Applications







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC706	IC806	IC804	Recommended Machining Data a_p (mm)	f (mm/rev)
WNMG 060404-F3S	6.52	9.52	4.76	0.40	●	●	●	0.10-1.50	0.05-0.30
WNMG 060408-F3S	6.52	9.52	4.76	0.80	●	●	●	0.10-1.50	0.10-0.35
WNMG 080404-F3S	8.70	12.70	4.76	0.40	●	●	●	0.10-1.50	0.05-0.30
WNMG 080408-F3S	8.70	12.70	4.76	0.80	●	●	●	0.10-1.50	0.10-0.35

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

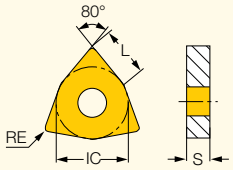
For tools, see pages: A-PWLNR/L-X/G (138) • A/S-MWLNR/L-W (136) • A/S-PWLNR/L (137) • C#-MULNR/L-MW (20) • C#-PWLNR/L-08-JHP (13) • C#-PWLNR/L-X (17) • C#-PWLNR/L-X-JHP (18) • DWLNR/L (13) • DWLNR/L-JHP-MC (14) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • MWLNR/L-W (22) • PWLNR/L (12) • PWLNR/L-08-JHP (12) • PWLNR/L-X (14) • PWLNR/L-X-JHP (15) • PWLNR/L-X-JHP-MC (16) • S-DWLNR/L (130) • S-MULNR-MW (139)

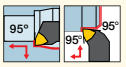
ISOTURN

WNMG-SF

Double-Sided Trigon Inserts for Super Finishing







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC530N	IC520N	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
WNMG 06T302-SF	6.52	9.52	3.97	0.20	●				0.30-1.50	0.02-0.15
WNMG 06T304-SF	6.52	9.52	3.97	0.40	●	●	●	●	0.30-1.50	0.05-0.15

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

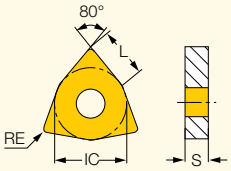
For tools, see pages: A/S-MWLNR/L-W (136) • A/S-PWLNR/L (137) • DWLNR/L (13) • E-PWLNR/L-HEAD (138) • MWLNR/L-W (22) • PWLNR/L (12)

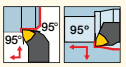
ISOTURN

WNMG-NF

Double-Sided Trigon Inserts for Semi-Finishing and Finishing Applications







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8350	IC8250	IC908	IC30N	IC530N	IC10	IC8150	IC20	IC20N	IC520N	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
WNMG 06T301-NF	6.52	9.52	3.97	0.10			●										0.20-1.00	0.05-0.15
WNMG 06T302-NF	6.52	9.52	3.97	0.20	●	●		●	●	●	●		●		●	●	0.30-1.50	0.08-0.17
WNMG 06T304-NF	6.52	9.52	3.97	0.40	●	●		●	●	●	●	●	●	●	●	●	0.40-2.50	0.07-0.25
WNMG 06T308-NF	6.52	9.52	3.97	0.80	●	●				●	●	●	●				0.60-3.00	0.08-0.25
WNMG 060402-NF	6.52	9.52	4.76	0.20											●	●	0.30-3.00	0.05-0.20
WNMG 060404-NF	6.52	9.52	4.76	0.40		●									●	●	0.60-3.00	0.08-0.25
WNMG 060408-NF	6.52	9.52	4.76	0.80							●						0.80-3.00	0.08-0.25
WNMG 080404-NF	8.70	12.70	4.76	0.40		●			●				●				0.40-3.50	0.07-0.25
WNMG 080408-NF	8.70	12.70	4.76	0.80		●			●		●						0.80-3.50	0.08-0.25
WNMG 080412-NF	8.70	12.70	4.76	1.20							●						1.20-3.50	0.08-0.25

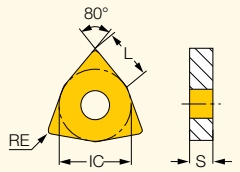
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

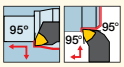
For tools, see pages: A-PWLNR/L-X/G (138) • A/S-MWLNR/L-W (136) • A/S-PWLNR/L (137) • C#-MULNR/L-MW (20) • C#-PWLNR/L-08-JHP (13) • C#-PWLNR/L-X (17) • C#-PWLNR/L-X-JHP (18) • DWLNR/L (13) • E-PWLNR/L-HEAD (138) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • MWLNR/L-W (22) • PWLNR/L (12) • PWLNR/L-08-JHP (12) • PWLNR/L-X (14) • PWLNR/L-X-JHP (15) • PWLNR/L-X-JHP-MC (16) • S-DWLNR/L (130) • S-MULNR-MW (139) • DWLNR/L-JHP-MC (14)

ISOTURN

WNMG-VL
Double-Sided Trigon Inserts with a Chipformer for High Temperature Alloys and Stainless Steel Valves







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC908	IC806	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
WNMG 06T308-VL	6.52	9.52	3.97	0.80	●			0.50-3.00	0.07-0.25
WNMG 080404-VL	8.70	12.70	4.76	0.40		●	●	0.30-3.00	0.05-0.15
WNMG 080408-VL	8.70	12.70	4.76	0.80	●	●		0.50-4.00	0.10-0.25
WNMG 080412-VL	8.70	12.70	4.76	1.20	●			1.00-4.50	0.12-0.25

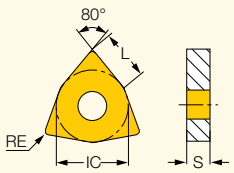
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

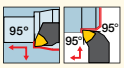
For tools, see pages: A/S-MWLNR/L-W (136) • A/S-PWLNR/L (137) • C#-MULNR/L-MW (20) • C#-PWLNR/L-08-JHP (13) • DWLNR/L (13) • E-PWLNR/L-HEAD (138) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • MWLNR/L-W (22) • PWLNR/L (12) • PWLNR/L-08-JHP (12) • PWLNR/L-X (14) • PWLNR/L-X-JHP (15) • S-DWLNR/L (130) • S-MULNR-MW (139) • DWLNR/L-JHP-MC (14)

ISOTURN

WNMG-WG
Double-Sided Trigon Wiper Inserts for High Surface Finish at High Feed Turning







Designation	Dimensions IC	L	S	RE	Tough ↔ Hard IC8250	IC530N	IC8150	IC20N	IC520N	IC428	IC5005	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
WNMG 06T304-WG	9.52	6.52	3.97	0.40	●	●	●	●	●					0.40-3.00	0.10-0.35
WNMG 06T308-WG	9.52	6.52	3.97	0.80	●		●		●			●	●	0.60-3.50	0.10-0.50
WNMG 060404-WG	9.52	6.52	4.76	0.40	●	●	●					●		0.40-3.00	0.10-0.35
WNMG 060408-WG	9.52	6.52	4.76	0.80	●		●					●		0.60-3.50	0.10-0.50
WNMG 080408-WG	12.70	8.70	4.76	0.80	●	●	●		●	●	●	●	●	1.00-3.50	0.10-0.50
WNMG 080412-WG	12.70	8.70	4.76	1.20	●		●			●	●			1.20-4.00	0.30-0.80

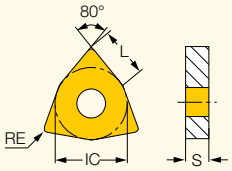
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

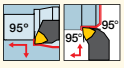
For tools, see pages: A-PWLNR/L-X/G (138) • A/S-MWLNR/L-W (136) • A/S-PWLNR/L (137) • C#-MULNR/L-MW (20) • C#-PWLNR/L-08-JHP (13) • C#-PWLNR/L-X (17) • C#-PWLNR/L-X-JHP (18) • DWLNR/L (13) • E-PWLNR/L-HEAD (138) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • MWLNR/L-W (22) • PWLNR/L (12) • PWLNR/L-08-JHP (12) • PWLNR/L-X (14) • PWLNR/L-X-JHP (15) • PWLNR/L-X-JHP-MC (16) • S-DWLNR/L (130) • S-MULNR-MW (139) • DWLNR/L-JHP-MC (14)

ISOTURN

WNMG-WF
Double-Sided Trigon Wiper Inserts for Finishing Operations at High Feeds







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC530N	IC8150	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
WNMG 060402-WF	6.52	9.52	4.76	0.20				●	0.20-3.00	0.05-0.25
WNMG 060404-WF	6.52	9.52	4.76	0.40			●	●	0.50-3.00	0.05-0.30
WNMG 060408-WF	6.52	9.52	4.76	0.80				●	0.80-3.50	0.07-0.30
WNMG 080408-WF	8.70	12.70	4.76	0.80	●	●			0.80-3.50	0.07-0.35
WNMG 080412-WF	8.70	12.70	4.76	1.20		●			0.80-3.50	0.07-0.35

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

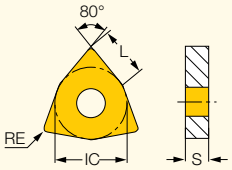
For tools, see pages: A-PWLNR/L-X/G (138) • A/S-MWLNR/L-W (136) • A/S-PWLNR/L (137) • C#-MULNR/L-MW (20) • C#-PWLNR/L-08-JHP (13) • C#-PWLNR/L-X (17) • C#-PWLNR/L-X-JHP (18) • DWLNR/L (13) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • MWLNR/L-W (22) • PWLNR/L (12) • PWLNR/L-08-JHP (12) • PWLNR/L-X (14) • PWLNR/L-X-JHP (15) • PWLNR/L-X-JHP-MC (16) • S-DWLNR/L (130) • S-MULNR-MW (139) • DWLNR/L-JHP-MC (14)

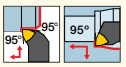
ISOTURN

WNMG-PP

Double-Sided Trigon Inserts for Machining Very Ductile Materials under Medium Cutting Conditions







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC28	IC830	IC8350	IC6025	IC8250	IC30N	IC530N	IC10	IC6015	IC8150	IC520M	IC20	IC20N	IC806	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
WNMG 06T304-PP	6.52	9.52	3.97	0.40			●		●		●	●		●					●	●	1.00-3.00	0.14-0.30
WNMG 06T308-PP	6.52	9.52	3.97	0.80		●	●		●					●					●	●	1.00-3.00	0.14-0.30
WNMG 060404-PP	6.52	9.52	4.76	0.40			●		●										●	●	1.00-3.00	0.14-0.30
WNMG 060408-PP	6.52	9.52	4.76	0.80			●												●	●	1.00-3.00	0.14-0.30
WNMG 080404-PP	8.70	12.70	4.76	0.40		●	●	●	●			●	●	●					●	●	1.00-3.50	0.14-0.30
WNMG 080408-PP	8.70	12.70	4.76	0.80	●	●	●	●	●			●	●	●	●		●	●	●	●	1.00-4.00	0.14-0.30
WNMG 080412-PP	8.70	12.70	4.76	1.20					●	●						●					1.50-5.00	0.18-0.40

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

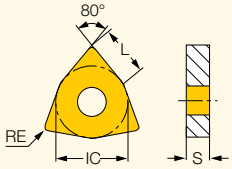
For tools, see pages: A-PWLNR/L-X/G (138) • A/S-MWLNR/L-W (136) • A/S-PWLNR/L (137) • C#-MULNR/L-MW (20) • C#-PWLNR/L-08-JHP (13) • C#-PWLNR/L-X (17) • C#-PWLNR/L-X-JHP (18) • DWLNR/L (13) • E-PWLNR/L-HEAD (138) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • MWLNR/L-W (22) • PWLNR/L (12) • PWLNR/L-08-JHP (12) • PWLNR/L-X (14) • PWLNR/L-X-JHP (15) • PWLNR/L-X-JHP-MC (16) • S-DWLNR/L (130) • S-MULNR-MW (139) • DWLNR/L-JHP-MC (14)

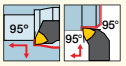
ISOTURN

WNMG-TF

Double-Sided Trigon Inserts for Machining a Wide Range of Materials under Medium Cutting Conditions







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8350	IC6025	IC8250	IC908	IC6015	IC8150	IC520M	IC20	IC20N	IC5010	IC806	IC1017	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
WNMG 06T304-TF	6.52	9.52	3.97	0.40	●			●					●					●	●	1.00-3.00	0.12-0.35
WNMG 06T308-TF	6.52	9.52	3.97	0.80	●			●			●		●	●		●	●	●	●	1.00-3.00	0.12-0.35
WNMG 06T312-TF	6.52	9.52	3.97	1.20														●	●	1.00-4.00	0.15-0.40
WNMG 060404-TF	6.52	9.52	4.76	0.40				●										●	●	1.00-3.00	0.12-0.35
WNMG 060408-TF	6.52	9.52	4.76	0.80	●			●			●							●	●	1.00-3.00	0.12-0.35
WNMG 060412-TF	6.52	9.52	4.76	1.20														●	●	1.00-4.00	0.15-0.35
WNMG 080404-TF	8.70	12.70	4.76	0.40	●		●	●		●	●		●			●	●	●	●	1.00-4.00	0.12-0.35
WNMG 080408-TF	8.70	12.70	4.76	0.80	●	●	●	●	●	●	●	●	●		●	●		●	●	1.00-4.00	0.12-0.35
WNMG 080412-TF	8.70	12.70	4.76	1.20	●		●	●	●	●	●		●					●	●	1.50-4.50	0.15-0.40

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

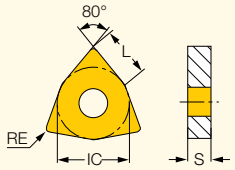
For tools, see pages: A-PWLNR/L-X/G (138) • A/S-MWLNR/L-W (136) • A/S-PWLNR/L (137) • C#-MULNR/L-MW (20) • C#-PWLNR/L-08-JHP (13) • C#-PWLNR/L-X (17) • C#-PWLNR/L-X-JHP (18) • DWLNR/L (13) • E-PWLNR/L-HEAD (138) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • MWLNR/L-W (22) • PWLNR/L (12) • PWLNR/L-08-JHP (12) • PWLNR/L-X (14) • PWLNR/L-X-JHP (15) • PWLNR/L-X-JHP-MC (16) • S-DWLNR/L (130) • S-MULNR-MW (139) • DWLNR/L-JHP-MC (14)

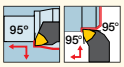
ISOTURN

WNMG-GN

Double-Sided Trigon Inserts
for General Applications







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC928	IC8350	IC6025	IC8250	IC6015	IC8150	IC20	IC5010	IC5005	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
WNMG 06T304-GN	6.52	9.52	3.97	0.40	●				●		●	●					1.00-3.50	0.14-0.40
WNMG 06T308-GN	6.52	9.52	3.97	0.80	●		●		●		●						1.00-3.50	0.16-0.45
WNMG 06T312-GN	6.52	9.52	3.97	1.20					●								1.50-4.00	0.18-0.45
WNMG 060404-GN	6.52	9.52	4.76	0.40					●								1.00-3.50	0.14-0.40
WNMG 060408-GN	6.52	9.52	4.76	0.80					●								1.00-3.50	0.16-0.45
WNMG 060412-GN	6.52	9.52	4.76	1.20							●						1.50-4.00	0.18-0.45
WNMG 080404-GN	8.70	12.70	4.76	0.40	●				●		●		●	●			1.00-4.50	0.14-0.40
WNMG 080408-GN	8.70	12.70	4.76	0.80	●	●	●	●	●	●	●	●	●	●	●	●	1.00-4.50	0.16-0.45
WNMG 080412-GN	8.70	12.70	4.76	1.20	●		●		●		●		●	●			1.50-4.50	0.22-0.50
WNMG 080416-GN	8.70	12.70	4.76	1.60					●								2.00-6.00	0.25-0.60
WNMG 130612-GN	13.03	19.05	6.35	1.20			●										2.50-5.50	0.30-0.50
WNMG 130616-GN	13.03	19.05	6.35	1.60					●								2.50-6.00	0.30-0.50

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

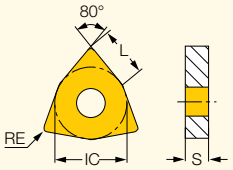
For tools, see pages: A-PWLNR/L-X/G (138) • A/S-MWLNR/L-W (136) • A/S-PWLNR/L (137) • C#-MULNR/L-MW (20) • C#-PWLNR/L-08-JHP (13) • C#-PWLNR/L-X (17) • C#-PWLNR/L-X-JHP (18) • DWLNR/L (13) • E-PWLNR/L-HEAD (138) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • MWLNR/L-W (22) • PWLNR/L (12) • PWLNR/L-08-JHP (12) • PWLNR/L-X (14) • PWLNR/L-X-JHP (15) • PWLNR/L-X-JHP-MC (16) • S-DWLNR/L (130) • S-MULNR-MW (139) • DWLNR/L-JHP-MC (14)

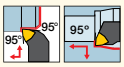
ISOTURN

WNMM-NM

Single-Sided Trigon Inserts
for Roughing Applications







Designation	Dimensions L	IC	S	RE	IC8250	Recommended Machining Data a_p (mm)	f (mm/rev)
WNMM 080408-NM	8.70	12.70	4.76	0.80	●	1.50-5.00	0.20-0.50

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

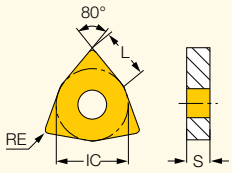
For tools, see pages: A/S-MWLNR/L-W (136) • A/S-PWLNR/L (137) • C#-MULNR/L-MW (20) • C#-PWLNR/L-08-JHP (13) • DWLNR/L (13) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • MWLNR/L-W (22) • PWLNR/L (12) • PWLNR/L-08-JHP (12) • PWLNR/L-X (14) • PWLNR/L-X-JHP (15) • PWLNR/L-X-JHP-MC (16) • S-DWLNR/L (130) • S-MULNR-MW (139) • DWLNR/L-JHP-MC (14)

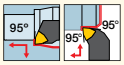
ISOTURN

WNMG-NR

Double-Sided Trigon Inserts
with a Special Chipformer
for Heavy Machining







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8250	IC8150	IC5010	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
WNMG 080408-NR	8.70	12.70	4.76	0.80	●		●	●	●	1.00-5.00	0.18-0.50
WNMG 080412-NR	8.70	12.70	4.76	1.20	●	●	●	●	●	2.00-5.00	0.23-0.55
WNMG 080416-NR	8.70	12.70	4.76	1.60	●	●				2.00-5.00	0.30-0.60

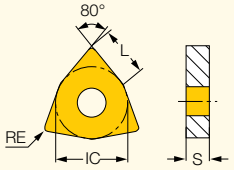
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

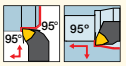
For tools, see pages: A/S-MWLNR/L-W (136) • A/S-PWLNR/L (137) • C#-MULNR/L-MW (20) • C#-PWLNR/L-08-JHP (13) • DWLNR/L (13) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • MWLNR/L-W (22) • PWLNR/L (12) • PWLNR/L-08-JHP (12) • PWLNR/L-X (14) • PWLNR/L-X-JHP (15) • PWLNR/L-X-JHP-MC (16) • S-DWLNR/L (130) • S-MULNR-MW (139) • DWLNR/L-JHP-MC (14)

ISOTURN

WNMG-TNM
Double-Sided Trigon Inserts for Semi-Roughing and Roughing Applications







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8350	IC8250	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
WNMG 080408-TNM	8.70	12.70	4.76	0.80			●			2.00-4.50	0.25-0.45
WNMG 080412-TNM	8.70	12.70	4.76	1.20			●			2.00-4.50	0.25-0.45
WNMG 130612-TNM	13.03	19.05	6.35	1.20		●	●	●	●	2.50-7.00	0.25-0.65
WNMG 130616-TNM	13.03	19.05	6.35	1.60		●	●			2.50-7.00	0.25-0.65
WNMG 130624-TNM	13.03	19.05	6.35	2.40	●		●			3.00-7.00	0.30-0.65

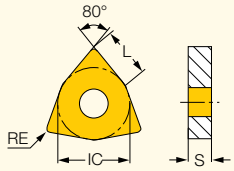
- This inserts should be used with SEAT IWSN 635M3 only! • For user guide and cutting speed recommendations, see pages 160-170,274-278

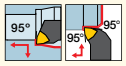
For tools, see pages: A/S-MWLNR/L-W (136) • A/S-PWLNR/L (137) • C#-MULNR/L-MW (20) • C#-PWLNR/L-08-JHP (13) • DWLNR/L (13)
• HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • MWLNR/L-13W (22)
• MWLNR/L-W (22) • PWLNR/L (12) • PWLNR/L-08-JHP (12) • PWLNR/L-X (14) • PWLNR/L-X-JHP (15) • PWLNR/L-X-JHP-MC (16) • S-DWLNR/L (130)
• S-MULNR-MW (139) • DWLNR/L-JHP-MC (14)

ISOTURN

WNMA/WNMA-WG
Double-Sided Trigon Inserts for Short Chipping Materials such as Cast Iron







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8150	IC5010	IC428	IC5005	Recommended Machining Data a_p (mm)	f (mm/rev)
WNMA 06T304	6.52	9.52	3.97	0.40		●	●	●	0.50-2.00	0.03-0.30
WNMA 06T308	6.52	9.52	3.97	0.80		●	●	●	1.00-3.00	0.03-0.40
WNMA 06T312	6.52	9.52	3.97	1.20			●		1.50-3.50	0.03-0.45
WNMA 060404	6.52	9.52	4.76	0.40		●		●	1.00-3.00	0.03-0.50
WNMA 060408	6.52	9.52	4.76	0.80		●	●	●	1.00-3.00	0.03-0.50
WNMA 060412	6.52	9.52	4.76	1.20		●		●	1.00-3.00	0.03-0.50
WNMA 080408	8.70	12.70	4.76	0.80	●	●	●	●	1.00-4.00	0.03-0.48
WNMA 080408-WG	8.70	12.70	4.76	0.80			●		1.00-3.50	0.10-0.60
WNMA 080412	8.70	12.70	4.76	1.20		●	●	●	1.50-4.00	0.03-0.55
WNMA 080416	8.70	12.70	4.76	1.60		●		●	2.00-5.00	0.03-0.55
WNMA 130616	13.03	19.05	6.35	1.60			●	●	3.00-8.00	0.03-0.80

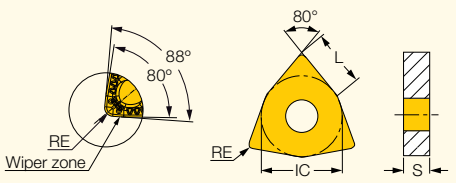
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A-PWLNR/L-X/G (138) • A/S-MWLNR/L-W (136) • A/S-PWLNR/L (137) • C#-MULNR/L-MW (20) • C#-PWLNR/L-08-JHP (13)
• C#-PWLNR/L-X (17) • C#-PWLNR/L-X-JHP (18) • DWLNR/L (13) • E-PWLNR/L-HEAD (138) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20)
• HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • MWLNR/L-13W (22) • MWLNR/L-W (22) • PWLNR/L (12) • PWLNR/L-08-JHP (12) • PWLNR/L-X (14)
• PWLNR/L-X-JHP (15) • PWLNR/L-X-JHP-MC (16) • S-DWLNR/L (130) • S-MULNR-MW (139) • DWLNR/L-JHP-MC (14)

HELITURN LD

WNMX-M3/4PW
Double-Sided Trigon Inserts with High Helical Cutting Edge for High Metal Removal Rates





Designation	Dimensions IC	RE	S	L	Tough ↔ Hard IC830	IC8250	IC8150	IC520N	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
WNMX 060604-M3PW	9.52	0.40	4.41	6.50	●	●	●			1.00-4.00	0.20-0.50
WNMX 060608-M3PW	9.52	0.80	4.41	6.50	●	●	●	●	●	1.50-4.00	0.25-0.60
WNMX 080708-M4PW	12.70	0.80	6.78	8.70		●	●		●	1.50-5.00	0.25-0.60
WNMX 080712-M4PW	12.70	1.20	6.78	8.70		●	●			2.00-5.00	0.30-0.80
WNMX 080716-M4PW	12.70	1.60	6.78	8.70		●	●			2.00-5.00	0.30-1.00

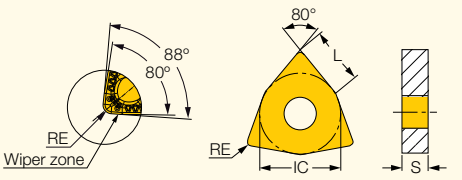
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A-PWLNR/L-X/G (138) • C#-PWLNR/L-X (17) • C#-PWLNR/L-X-JHP (18) • DWLNR/L (13) • DWLNR/L-JHP-MC (14) • PWLNR/L-X (14) • PWLNR/L-X-JHP (15) • PWLNR/L-X-JHP-MC (16)

HELITURN LD

WNMX-M3/4MW
Double-Sided Trigon Inserts for Machining Stainless Steel, High Temperature Alloys and Soft, Low Carbon Steel





Designation	Dimensions IC	RE	S	L	Tough ↔ Hard IC830	IC6025	IC8250	IC6015	IC8150	IC806	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
WNMX 060604-M3MW	9.52	0.40	4.41	6.50	●	●		●				0.80-4.00	0.15-0.50
WNMX 060608-M3MW	9.52	0.80	4.41	6.50	●	●		●				1.00-5.00	0.20-0.60
WNMX 080704-M4MW	12.70	0.40	6.78	8.70		●	●	●	●	●	●	0.80-5.00	0.15-0.50
WNMX 080708-M4MW	12.70	0.80	6.78	8.70		●	●	●	●	●	●	1.00-5.00	0.20-0.60
WNMX 080712-M4MW	12.70	1.20	6.78	8.70		●		●		●	●	1.20-5.00	0.25-0.70

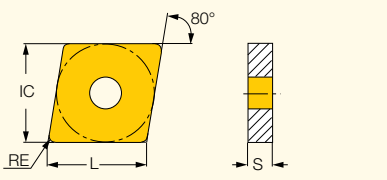
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A-PWLNR/L-X/G (138) • C#-PWLNR/L-X (17) • C#-PWLNR/L-X-JHP (18) • DWLNR/L (13) • DWLNR/L-JHP-MC (14) • PWLNR/L-X (14) • PWLNR/L-X-JHP (15) • PWLNR/L-X-JHP-MC (16)

ISOTURN

CNMG-F3P
Double-Sided 80° Rhombic Inserts for Semi-Finishing and Finishing Applications





Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC6025	IC8250	IC8150	IC20N	IC520N	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMG 090404-F3P	9.67	9.52	4.76	0.40	●		●	●	●	●	●	0.50-3.50	0.07-0.25
CNMG 090408-F3P	9.67	9.52	4.76	0.80	●		●	●	●	●	●	0.90-3.50	0.08-0.25
CNMG 120404-F3P	12.90	12.70	4.76	0.40	●	●	●	●			●	0.50-3.50	0.07-0.25
CNMG 120408-F3P	12.90	12.70	4.76	0.80	●		●	●		●	●	0.90-3.50	0.08-0.25
CNMG 120412-F3P	12.90	12.70	4.76	1.20	●		●	●			●	1.30-3.50	0.10-0.25

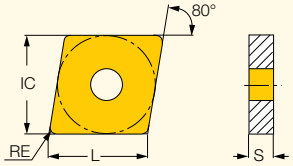
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

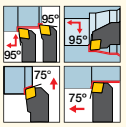
For tools, see pages: A/S-PCLNR/L (133) • A/S-PCLNR/L-X/G (134) • C#-MULNR/L-MW (20) • C#-PCLNR/L-12-JHP (26) • C#-PCLNR/L-X (30) • C#-PCLNR/L-X-JHP (31) • DCBNR/L (33) • DCLNR/L (32) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • PCBNR/L (27) • PCLNR/L (24) • PCLNR/L-12-JHP (25) • PCLNR/L-PAD-JHP (25) • PCLNR/L-X (27) • PCLNR/L-X-JHP (28) • PCLNR/L-X-JHP-MC (29) • S-DCLNR/L (131) • S-MULNR-MW (139) • AVC-PCLNR/L (124) • DCLNR/L-JHP-MC (32)

ISOTURN

CNMG-M3P
Double-Sided 80° Rhombic Inserts for Medium Machining Conditions on Steel







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8250	IC8150	IC5010	IC5005	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMG 090404-M3P	9.67	9.52	4.76	0.40	●	●	●			●	0.40-4.00	0.10-0.30
CNMG 090408-M3P	9.67	9.52	4.76	0.80	●	●	●			●	0.50-4.50	0.15-0.50
CNMG 120404-M3P	12.90	12.70	4.76	0.40	●	●	●			●	0.40-5.50	0.10-0.30
CNMG 120408-M3P	12.90	12.70	4.76	0.80	●	●	●	●	●	●	0.50-5.50	0.15-0.50
CNMG 120412-M3P	12.90	12.70	4.76	1.20	●	●	●			●	0.80-5.50	0.18-0.60
CNMG 160612-M3P	16.12	15.88	6.35	1.20	●	●	●			●	0.80-7.20	0.18-0.60
CNMG 160616-M3P	16.12	15.88	6.35	1.60	●	●	●			●	0.80-7.20	0.18-0.60
CNMG 190608-M3P	19.30	19.05	6.35	0.80	●	●				●	0.50-8.60	0.15-0.50
CNMG 190612-M3P	19.30	19.05	6.35	1.20	●	●				●	0.80-8.60	0.18-0.60

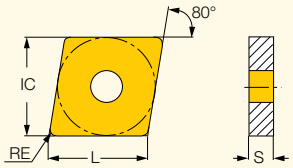
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

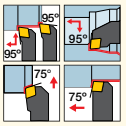
For tools, see pages: A/S-PCLNR/L (133) • A/S-PCLNR/L-X/G (134) • C#-MULNR/L-MW (20) • C#-PCLNR/L-12-JHP (26) • C#-PCLNR/L-X (30) • C#-PCLNR/L-X-JHP (31) • DCBNR/L (33) • DCLNR/L (32) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MCLNR/L (26) • MULNR/L-12MW (19) • PCBNR/L (27) • PCLNR/L (24) • PCLNR/L-12-JHP (25) • PCLNR/L-PAD-JHP (25) • PCLNR/L-X (27) • PCLNR/L-X-JHP (28) • PCLNR/L-X-JHP-MC (29) • S-DCLNR/L (131) • S-MULNR-MW (139) • AVC-PCLNR/L (124) • DCLNR/L-JHP-MC (32)

ISOTURN

CNMG-R3P
Double-Sided 80° Rhombic Inserts with a Chipformer for Rough Machining







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8250	IC8150	IC5010	IC5005	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMG 160608-R3P	16.12	15.88	6.35	0.80	●	●	●	●	●	●	1.50-6.00	0.25-0.50
CNMG 160612-R3P	16.12	15.88	6.35	1.20	●	●	●	●	●	●	2.00-7.00	0.30-0.60
CNMG 160616-R3P	16.12	15.88	6.35	1.60	●	●	●	●	●	●	2.50-7.00	0.30-0.70
CNMG 160624-R3P	16.12	15.88	6.35	2.40		●	●				2.50-7.00	0.30-0.70
CNMG 190608-R3P	19.34	19.05	6.35	0.80	●	●	●			●	3.00-8.00	0.30-0.70
CNMG 190612-R3P	19.34	19.05	6.35	1.20	●	●	●			●	3.00-8.00	0.30-0.80
CNMG 190616-R3P	19.34	19.05	6.35	1.60	●	●	●	●	●	●	3.00-8.00	0.30-0.80
CNMG 190624-R3P	19.34	19.05	6.35	2.40	●	●	●		●	●	3.00-8.00	0.30-0.80

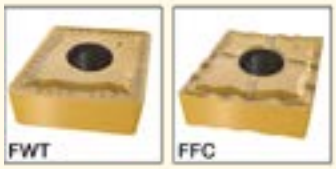
NEW

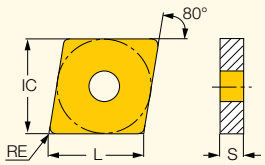
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

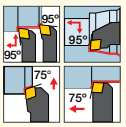
For tools, see pages: A/S-PCLNR/L (133) • A/S-PCLNR/L-X/G (134) • C#-PCLNR/L-X (30) • DCBNR/L (33) • DCLNR/L (32) • MCLNR/L (26) • PCBNR/L (27) • PCLNR/L (24) • PCLNR/L-X (27)

ISOTURN

CNMG-CERMET
Double-Sided 80° Rhombic
Cermet Grade Inserts
for Semi-Finishing and
Finishing Applications



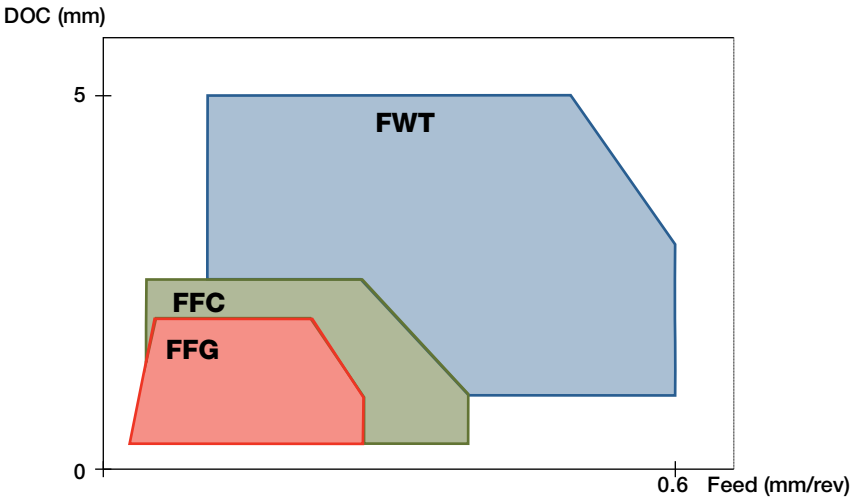




Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC20N	IC520N	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMG 120402-FFG	12.90	12.70	4.76	0.20		●	0.40-3.50	0.07-0.25
CNMG 120404-FFC	12.90	12.70	4.76	0.40	●	●	0.50-3.50	0.07-0.25
CNMG 120408-FFC	12.90	12.70	4.76	0.80	●		1.00-2.50	0.05-0.25
CNMG 120408-FWT	12.90	12.70	4.76	0.80		●	1.00-5.00	0.15-0.60

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A/S-PCLNR/L (133) • A/S-PCLNR/L-X/G (134) • C#-MULNR/L-MW (20) • C#-PCLNR/L-12-JHP (26) • C#-PCLNR/L-X (30)
• C#-PCLNR/L-X-JHP (31) • DCBNR/L (33) • DCLNR/L (32) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21)
• MULNR/L-12MW (19) • PCBNR/L (27) • PCLNR/L (24) • PCLNR/L-12-JHP (25) • PCLNR/L-X (27) • PCLNR/L-X-JHP (28) • PCLNR/L-X-JHP-MC (29)
• S-DCLNR/L (131) • S-MULNR-MW (139) • DCLNR/L-JHP-MC (32)

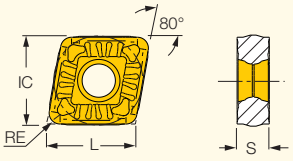


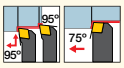
DOVEIQTURN HEAVY DUTY LINE

COMG-R3P-IQ

Double-Sided 7° Negative Side Flank 80° Rhombic Inserts for Heavy Turning of Steel







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
COMG 160608-R3P-IQ	16.12	15.88	6.35	0.80	●	●	2.00-9.00	0.25-0.50
COMG 160612-R3P-IQ	16.12	15.88	6.35	1.20	●	●	2.00-9.00	0.30-0.60
COMG 160616-R3P-IQ	16.12	15.88	6.35	1.60	●	●	2.00-9.00	0.30-0.70
COMG 190612-R3P-IQ	19.34	19.05	6.35	1.20	●	●	3.00-12.00	0.30-0.80
COMG 190616-R3P-IQ	19.34	19.05	6.35	1.60	●	●	3.50-12.00	0.35-0.90
COMG 190624-R3P-IQ	19.34	19.05	6.35	2.40	●	●	3.50-12.00	0.35-0.90
COMG 250924-R3P-IQ	25.79	25.40	9.52	2.40	●	●	4.00-15.00	0.40-1.00

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: C#-PCLOR/L-IQ (34) • PCBOR/L-IQ (34) • PCLOR/L-IQ (33)





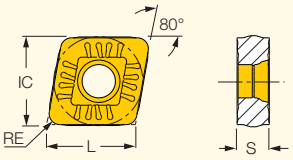
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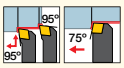
DOVEIQTURN HEAVY DUTY LINE

COMM-R3P-IQ

Single-Sided 7° Negative Side Flank 80° Rhombic Inserts for Heavy Turning of Steel







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
COMM 190624-R3P-IQ	19.34	19.05	6.35	2.40	●	●	3.50-12.00	0.35-1.20

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

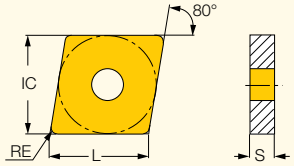
For tools, see pages: C#-PCLOR/L-IQ (34) • PCBOR/L-IQ (34) • PCLOR/L-IQ (33)

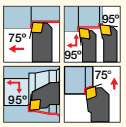
ISOTURN

CNMG-F3M

Double-sided 80° Rhombic Inserts for Stainless Steel Finishing Applications







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC706	IC830	IC6025	IC6015	IC806	IC1017	IC807	IC4	IC804	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMG 090404-F3M	9.67	9.52	4.76	0.40	●	●	●	●	●		●			0.10-1.50	0.05-0.30
CNMG 090408-F3M	9.67	9.52	4.76	0.80	●	●	●	●	●		●			0.10-1.50	0.10-0.40
CNMG 120404-F3M	12.90	12.70	4.76	0.40	●	●	●	●	●	●	●			0.10-1.50	0.05-0.30
CNMG 120408-F3M	12.90	12.70	4.76	0.80	●	●	●	●	●		●		●	0.10-1.50	0.10-0.40
CNMG 120412-F3M	12.90	12.70	4.76	1.20	●	●	●	●	●		●	●	●	0.20-2.00	0.15-0.50

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

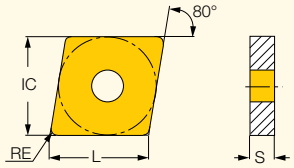
For tools, see pages: A/S-PCLNR/L (133) • A/S-PCLNR/L-X/G (134) • C#-MULNR/L-MW (20) • C#-PCLNR/L-12-JHP (26) • C#-PCLNR/L-X (30) • C#-PCLNR/L-X-JHP (31) • DCBNR/L (33) • DCLNR/L (32) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • PCBNR/L (27) • PCLNR/L (24) • PCLNR/L-12-JHP (25) • PCLNR/L-PAD-JHP (25) • PCLNR/L-X (27) • PCLNR/L-X-JHP (28) • PCLNR/L-X-JHP-MC (29) • S-DCLNR/L (131) • S-MULNR-MW (139) • AVC-PCLNR/L (124) • DCLNR/L-JHP-MC (32)

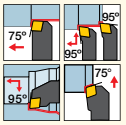
ISOTURN

CNMG-M3M

Double-Sided 80° Rhombic Inserts for Machining Stainless and Low Carbon Steel







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC706	IC830	IC6025	IC6015	IC806	IC1017	IC807	IC804	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMG 090404-M3M	9.67	9.52	4.76	0.40	●	●	●	●	●		●		0.40-4.00	0.12-0.40
CNMG 090408-M3M	9.67	9.52	4.76	0.80	●	●	●	●	●		●		0.50-4.50	0.15-0.50
CNMG 120404-M3M	12.90	12.70	4.76	0.40		●					●		0.50-5.00	0.15-0.50
CNMG 120408-M3M	12.90	12.70	4.76	0.80	●	●	●	●	●		●	●	0.50-5.00	0.15-0.50
CNMG 120412-M3M	12.90	12.70	4.76	1.20	●	●	●	●	●	●	●	●	0.50-5.00	0.20-0.60
CNMG 120416-M3M	12.90	12.70	4.76	1.60	●	●	●	●	●				0.50-5.00	0.25-0.70
CNMG 160608-M3M	16.12	15.88	6.35	0.80	●	●	●	●	●				0.50-7.00	0.15-0.50
CNMG 160612-M3M	16.12	15.88	6.35	1.20	●	●	●	●	●		●		0.50-7.00	0.20-0.60
CNMG 160616-M3M	16.12	15.88	6.35	1.60	●	●	●	●	●		●		0.50-7.00	0.25-0.70
CNMG 190608-M3M	19.34	19.05	6.35	0.80		●	●	●			●		3.00-10.00	0.30-0.70
CNMG 190612-M3M	19.34	19.05	6.35	1.20		●	●	●			●		3.00-10.00	0.35-0.80

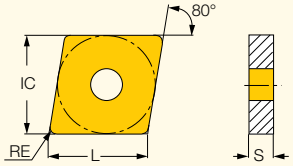
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

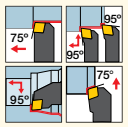
For tools, see pages: A/S-PCLNR/L (133) • A/S-PCLNR/L-X/G (134) • C#-MULNR/L-MW (20) • C#-PCLNR/L-12-JHP (26) • C#-PCLNR/L-X (30) • C#-PCLNR/L-X-JHP (31) • DCBNR/L (33) • DCLNR/L (32) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MCLNR/L (26) • MULNR/L-12MW (19) • PCBNR/L (27) • PCLNR/L (24) • PCLNR/L-12-JHP (25) • PCLNR/L-PAD-JHP (25) • PCLNR/L-X (27) • PCLNR/L-X-JHP (28) • PCLNR/L-X-JHP-MC (29) • S-DCLNR/L (131) • S-MULNR-MW (139) • AVC-PCLNR/L (124) • DCLNR/L-JHP-MC (32)

ISOTURN

CNMG-R3M
Double-Sided 80° Rhombic Inserts for Rough Machining of Stainless and Low Carbon Steel







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC6025	IC806	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMG 160612-R3M	16.12	15.88	6.35	1.20	●	●		2.00-9.00	0.30-0.90
CNMG 160616-R3M	16.12	15.88	6.35	1.60	●	●		2.00-10.00	0.40-1.00
CNMG 160624-R3M	16.12	15.88	6.35	2.40		●		2.00-11.00	0.50-1.20
CNMG 190612-R3M	19.34	19.05	6.35	1.20	●	●	●	2.00-9.00	0.30-0.90
CNMG 190616-R3M	19.34	19.05	6.35	1.60	●	●	●	2.00-10.00	0.40-1.00
CNMG 190624-R3M	19.34	19.05	6.35	2.40	●	●		2.00-11.00	0.50-1.20

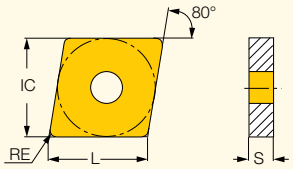
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

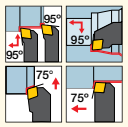
For tools, see pages: A/S-PCLNR/L (133) • C#-PCLNR/L-X (30) • DCBNR/L (33) • DCLNR/L (32) • MCLNR/L (26) • PCBNR/L (27) • PCLNR/L (24) • PCLNR/L-X (27) • A/S-PCLNR/L-X/G (134)

ISOTURN

CNMG-F3S
Double-Sided 80° Rhombic Inserts for Titanium and Heat Resistant Materials for Finishing Applications







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC706	IC806	IC1017	IC804	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMG 090404-F3S	9.67	9.52	4.76	0.40	●	●		●	0.10-1.50	0.05-0.30
CNMG 090408-F3S	9.67	9.52	4.76	0.80	●	●		●	0.10-1.50	0.05-0.30
CNMG 120404-F3S	12.90	12.70	4.76	0.40	●	●	●	●	0.10-1.50	0.05-0.30
CNMG 120408-F3S	12.90	12.70	4.76	0.80	●	●	●	●	0.10-1.50	0.05-0.30

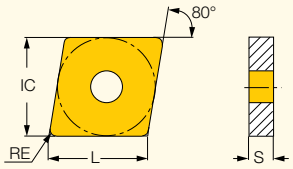
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

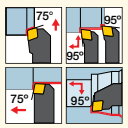
For tools, see pages: A/S-PCLNR/L (133) • A/S-PCLNR/L-X/G (134) • AVC-PCLNR/L (124) • C#-MULNR/L-MW (20) • C#-PCLNR/L-12-JHP (26) • C#-PCLNR/L-X (30) • C#-PCLNR/L-X-JHP (31) • DCBNR/L (33) • DCLNR/L (32) • DCLNR/L-JHP-MC (32) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • PCBNR/L (27) • PCLNR/L (24) • PCLNR/L-12-JHP (25) • PCLNR/L-PAD-JHP (25) • PCLNR/L-X (27) • PCLNR/L-X-JHP (28) • PCLNR/L-X-JHP-MC (29) • S-DCLNR/L (131) • S-MULNR-MW (139)

ISOTURN

CNMG-VL
Double-Sided 80° Rhombic Inserts with a Chipformer for High Temperature Alloys and Stainless Steel Valves







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC806	IC1017	IC804	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMG 120404-VL	12.90	12.70	4.76	0.40	●	●		0.30-3.00	0.05-0.15
CNMG 120408-VL	12.90	12.70	4.76	0.80	●		●	0.50-4.00	0.10-0.25

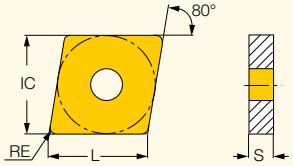
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

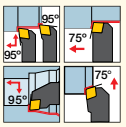
For tools, see pages: A/S-PCLNR/L (133) • C#-MULNR/L-MW (20) • C#-PCLNR/L-12-JHP (26) • C#-PCLNR/L-X (30) • C#-PCLNR/L-X-JHP (31) • DCBNR/L (33) • DCLNR/L (32) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • PCBNR/L (27) • PCLNR/L (24) • PCLNR/L-12-JHP (25) • PCLNR/L-X (27) • PCLNR/L-X-JHP (28) • PCLNR/L-X-JHP-MC (29) • S-DCLNR/L (131) • S-MULNR-MW (139) • A/S-PCLNR/L-X/G (134) • DCLNR/L-JHP-MC (32)

ISOTURN

CNMG/CNGG-SF
Double-Sided 80° Rhombic Inserts for Super-Finishing; Controls Chip Flow at Very Low Feeds and Depths of Cut







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC6015	IC520N	IC428	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMG 120402-SF	12.90	12.70	4.76	0.20		●	●		0.30-2.00	0.03-0.25
CNMG 120404-SF	12.90	12.70	4.76	0.40	●				0.30-2.00	0.05-0.25
CNGG 120401-SF	12.90	12.70	4.76	0.10				●	0.20-1.50	0.03-0.15
CNGG 120402-SF	12.90	12.70	4.76	0.20				●	0.30-2.00	0.03-0.20
CNGG 120404-SF	12.90	12.70	4.76	0.40				●	0.30-2.00	0.03-0.20

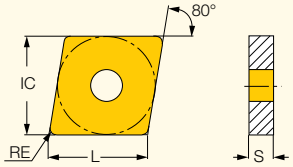
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

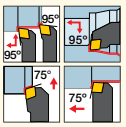
For tools, see pages: A/S-PCLNR/L (133) • C#-MULNR/L-MW (20) • C#-PCLNR/L-12-JHP (26) • C#-PCLNR/L-X (30) • C#-PCLNR/L-X-JHP (31)
• DCBNR/L (33) • DCLNR/L (32) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19)
• PCBNR/L (27) • PCLNR/L (24) • PCLNR/L-12-JHP (25) • PCLNR/L-X (27) • PCLNR/L-X-JHP (28) • PCLNR/L-X-JHP-MC (29) • S-DCLNR/L (131)
• S-MULNR-MW (139) • A/S-PCLNR/L-X/G (134) • DCLNR/L-JHP-MC (32)

ISOTURN

CNMG-NF
Double-Sided 80° Rhombic Inserts for Semi-Finishing and Finishing Applications







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8250	IC530N	IC6015	IC8150	IC20N	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMG 120404-NF	12.90	12.70	4.76	0.40	●	●	●	●	●	●	●	0.40-3.50	0.08-0.25
CNMG 120408-NF	12.90	12.70	4.76	0.80	●		●	●	●	●	●	0.80-3.50	0.08-0.25

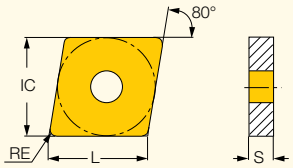
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

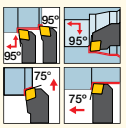
For tools, see pages: A/S-PCLNR/L (133) • C#-MULNR/L-MW (20) • C#-PCLNR/L-12-JHP (26) • C#-PCLNR/L-X (30) • C#-PCLNR/L-X-JHP (31)
• DCBNR/L (33) • DCLNR/L (32) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19)
• PCBNR/L (27) • PCLNR/L (24) • PCLNR/L-12-JHP (25) • PCLNR/L-X (27) • PCLNR/L-X-JHP (28) • PCLNR/L-X-JHP-MC (29) • S-DCLNR/L (131)
• S-MULNR-MW (139) • A/S-PCLNR/L-X/G (134) • DCLNR/L-JHP-MC (32)

ISOTURN

CNMG-WF
Double-Sided 80° Rhombic Wiper Inserts for Finishing Operations at High Feeds







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMG 120408-WF	12.90	12.70	4.76	0.80	●	●	0.80-3.50	0.10-0.35

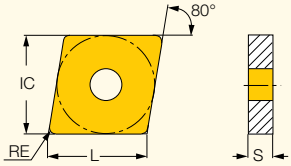
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

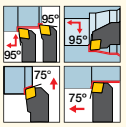
For tools, see pages: A/S-PCLNR/L (133) • C#-MULNR/L-MW (20) • C#-PCLNR/L-12-JHP (26) • C#-PCLNR/L-X (30) • C#-PCLNR/L-X-JHP (31)
• DCBNR/L (33) • DCLNR/L (32) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19)
• PCBNR/L (27) • PCLNR/L (24) • PCLNR/L-12-JHP (25) • PCLNR/L-X (27) • PCLNR/L-X-JHP (28) • PCLNR/L-X-JHP-MC (29) • S-DCLNR/L (131)
• S-MULNR-MW (139) • A/S-PCLNR/L-X/G (134) • DCLNR/L-JHP-MC (32)

ISOTURN

CNMG-WG/NRW
Double-Sided 80° Rhombic Wiper Inserts for High Feed Turning and High Surface Finish







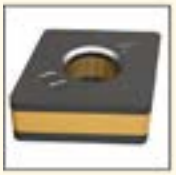
Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8250	IC8150	IC520N	IC428	IC5005	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMG 120408-WG	12.90	12.70	4.76	0.80	●	●	●	●	●	●	●	0.80-3.50	0.10-0.50
CNMG 120412-WG	12.90	12.70	4.76	1.20	●	●						1.50-4.00	0.30-0.80
CNMG 120416-NRW	12.90	12.70	4.76	1.60	●	●						2.00-4.50	0.30-0.80

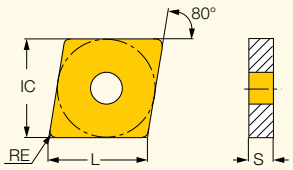
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

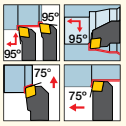
For tools, see pages: A/S-PCLNR/L (133) • C#-MULNR/L-MW (20) • C#-PCLNR/L-12-JHP (26) • C#-PCLNR/L-X (30) • C#-PCLNR/L-X-JHP (31) • DCBNR/L (33) • DCLNR/L (32) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • PCBNR/L (27) • PCLNR/L (24) • PCLNR/L-12-JHP (25) • PCLNR/L-X (27) • PCLNR/L-X-JHP (28) • PCLNR/L-X-JHP-MC (29) • S-DCLNR/L (131) • S-MULNR-MW (139) • A/S-PCLNR/L-X/G (134) • DCLNR/L-JHP-MC (32)

ISOTURN

CNMA
Double-Sided 80° Rhombic Inserts for Short Chipping Materials such as Cast Iron







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8150	IC20	IC5010	IC428	IC5005	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMA 120416	12.90	12.70	4.76	1.60			●	●	●			2.00-6.00	0.30-0.60
CNMA 120404	12.90	12.70	4.76	0.40			●	●	●			1.00-4.00	0.03-0.34
CNMA 120408	12.90	12.70	4.76	0.80	●	●	●	●	●			1.00-4.00	0.05-0.43
CNMA 120408F (1)	12.90	12.70	4.76	0.80						●	●	1.00-4.00	0.05-0.50
CNMA 120412	12.90	12.70	4.76	1.20	●	●	●	●	●			1.50-4.50	0.08-0.60
CNMA 160612	16.12	15.88	6.35	1.20			●		●			2.00-10.00	0.10-0.80
CNMA 160616	16.12	15.88	6.35	1.60			●		●			2.00-10.00	0.30-0.60
CNMA 190612	19.30	19.05	6.35	1.20		●		●	●			2.00-10.00	0.10-0.80
CNMA 190616	19.30	19.05	6.35	1.60					●			2.50-10.00	0.30-1.00

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

(1) Sharp edge

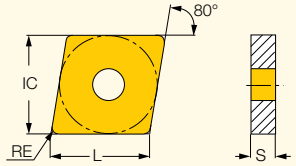
For tools, see pages: A/S-PCLNR/L (133) • A/S-PCLNR/L-X/G (134) • C#-MULNR/L-MW (20) • C#-PCLNR/L-12-JHP (26) • C#-PCLNR/L-X (30) • C#-PCLNR/L-X-JHP (31) • DCBNR/L (33) • DCLNR/L (32) • DCLNR/L-JHP-MC (32) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MCLNR/L (26) • MULNR/L-12MW (19) • PCBNR/L (27) • PCLNR/L (24) • PCLNR/L-12-JHP (25) • PCLNR/L-X (27) • PCLNR/L-X-JHP (28) • PCLNR/L-X-JHP-MC (29) • S-DCLNR/L (131) • S-MULNR-MW (139)

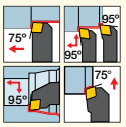
ISOTURN

CNMG/CNGG-PP

Double-Sided 80° Rhombic Inserts for Machining Very Ductile Materials under Medium Cutting Conditions







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC28	IC830	IC8350	IC6025	IC8250	IC10	IC6015	IC8150	IC428	IC806	IC807	IC907	IC804	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMG 120404-PP	12.90	12.70	4.76	0.40		●	●	●	●	●	●				●	●		1.00-4.00	0.14-0.30
CNMG 120408-PP	12.90	12.70	4.76	0.80	●	●	●	●	●	●	●	●	●	●	●	●		1.00-4.00	0.14-0.30
CNMG 120412-PP	12.90	12.70	4.76	1.20					●						●	●		1.50-4.00	0.18-0.40
CNMG 190612-PP	19.30	19.05	6.35	1.20											●	●		2.00-8.00	0.30-0.60
CNGG 120401-PP	12.90	12.70	4.76	0.10												●		0.40-2.00	0.05-0.20
CNGG 120402-PP	12.90	12.70	4.76	0.20												●		0.40-2.50	0.08-0.25
CNGG 120404-PP	12.90	12.70	4.76	0.40												●		0.80-3.00	0.10-0.30
CNGG 120408-PP	12.90	12.70	4.76	0.80										●		●	●	1.00-4.00	0.10-0.30
CNGG 120412-PP	12.90	12.70	4.76	1.20										●				1.00-4.00	0.10-0.30
CNGG 190612-PP	19.30	19.05	6.35	1.20												●		2.00-9.00	0.30-0.60

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

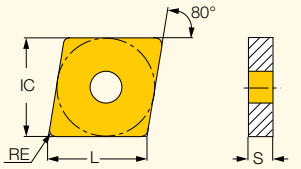
For tools, see pages: A/S-PCLNR/L (133) • A/S-PCLNR/L-X/G (134) • C#-MULNR/L-MW (20) • C#-PCLNR/L-12-JHP (26) • C#-PCLNR/L-X (30) • C#-PCLNR/L-X-JHP (31) • DCBNR/L (33) • DCLNR/L (32) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MCLNR/L (26) • MULNR/L-12MW (19) • PCBNR/L (27) • PCLNR/L (24) • PCLNR/L-12-JHP (25) • PCLNR/L-X (27) • PCLNR/L-X-JHP (28) • PCLNR/L-X-JHP-MC (29) • S-DCLNR/L (131) • S-MULNR-MW (139) • DCLNR/L-JHP-MC (32)

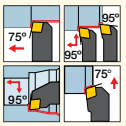
ISOTURN

CNMG/CNGG-TF

Double-Sided 80° Rhombic Inserts for Machining a Wide Range of Materials under Medium Cutting Conditions







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8350	IC6025	IC8250	IC908	IC6015	IC8150	IC20	IC20N	IC806	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMG 090304-TF	9.70	9.52	3.18	0.40				●			●						1.00-3.00	0.12-0.35
CNMG 090308-TF	9.70	9.52	3.18	0.80	●			●			●						1.00-4.00	0.12-0.35
CNMG 120404-TF	12.90	12.70	4.76	0.40	●		●	●		●		●		●	●	●	1.00-4.00	0.12-0.35
CNMG 120408-TF	12.90	12.70	4.76	0.80	●	●	●	●	●	●	●	●	●	●	●	●	1.00-4.00	0.12-0.35
CNMG 120412-TF	12.90	12.70	4.76	1.20	●		●	●	●	●	●	●		●	●	●	1.50-4.50	0.15-0.40
CNMG 160608-TF	16.12	15.88	6.35	0.80											●	●	1.00-6.00	0.12-0.35
CNMG 160612-TF	16.12	15.88	6.35	1.20				●									1.50-6.00	0.15-0.45
CNMG 190612-TF	19.30	19.05	6.35	1.20				●									1.50-6.50	0.20-0.55
CNGG 120408-TF	12.96	12.70	4.76	0.80												●	1.00-4.00	0.12-0.35

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

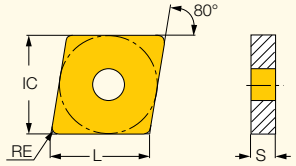
For tools, see pages: A/S-PCLNR/L (133) • A/S-PCLNR/L-X/G (134) • C#-MULNR/L-MW (20) • C#-PCLNR/L-12-JHP (26) • C#-PCLNR/L-X (30) • C#-PCLNR/L-X-JHP (31) • DCBNR/L (33) • DCLNR/L (32) • DCLNR/L-JHP-MC (32) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MCLNR/L (26) • MULNR/L-12MW (19) • PCBNR/L (27) • PCLNR/L (24) • PCLNR/L-12-JHP (25) • PCLNR/L-PAD-JHP (25) • PCLNR/L-X (27) • PCLNR/L-X-JHP (28) • PCLNR/L-X-JHP-MC (29) • S-DCLNR/L (131) • S-MULNR-MW (139)

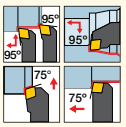
ISOTURN

CNMG-GN

Double-Sided 80° Rhombic Inserts for General Applications







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8350	IC6025	IC8250	IC6015	IC8150	IC20	IC5010	IC428	IC5005	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMG 120404-GN	12.90	12.70	4.76	0.40	●	●		●		●	●		●				1.00-4.00	0.14-0.40
CNMG 120408-GN	12.90	12.70	4.76	0.80	●	●	●	●	●	●	●	●		●	●	●	1.00-4.50	0.16-0.45
CNMG 120412-GN	12.90	12.70	4.76	1.20	●	●		●		●			●	●	●	●	1.50-5.00	0.22-0.50
CNMG 160612-GN	16.12	15.88	6.35	1.20	●			●		●		●					2.00-7.00	0.22-0.60
CNMG 160616-GN	16.12	15.88	6.35	1.60				●									2.00-7.00	0.22-0.75
CNMG 190608-GN	19.30	19.05	6.35	0.80				●									1.50-8.00	0.20-0.70
CNMG 190612-GN	19.30	19.05	6.35	1.20	●	●		●		●							2.00-7.98	0.25-0.70

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

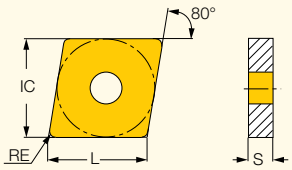
For tools, see pages: A/S-PCLNR/L (133) • A/S-PCLNR/L-X/G (134) • C#-MULNR/L-MW (20) • C#-PCLNR/L-12-JHP (26) • C#-PCLNR/L-X (30) • C#-PCLNR/L-X-JHP (31) • DCBNR/L (33) • DCLNR/L (32) • DCLNR/L-JHP-MC (32) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MCLNR/L (26) • MULNR/L-12MW (19) • PCBNR/L (27) • PCLNR/L (24) • PCLNR/L-12-JHP (25) • PCLNR/L-X (27) • PCLNR/L-X-JHP (28) • PCLNR/L-X-JHP-MC (29) • S-DCLNR/L (131) • S-MULNR-MW (139)

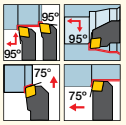
ISOTURN

CNMG-NR

Double-Sided 80° Rhombic Inserts with a Special Chipformer for Heavy Machining







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8350	IC6025	IC8250	IC6015	IC8150	IC5010	IC428	IC5005	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMG 120408-NR	12.90	12.70	4.76	0.80		●	●	●	●	●	●	●	●	●	●	1.00-5.00	0.15-0.50
CNMG 120412-NR	12.90	12.70	4.76	1.20	●	●		●		●	●		●			1.00-5.00	0.23-0.55
CNMG 120416-NR	12.90	12.70	4.76	1.60						●						1.00-5.00	0.30-0.60
CNMG 160608-NR	16.12	15.88	6.35	0.80		●		●								1.50-6.00	0.25-0.50
CNMG 160612-NR	16.12	15.88	6.35	1.20		●		●						●	●	2.00-7.00	0.30-0.60
CNMG 160616-NR	16.12	15.88	6.35	1.60	●	●		●		●		●	●	●	●	2.50-7.00	0.30-0.70
CNMG 190608-NR	19.30	19.05	6.35	0.80		●		●								3.50-8.00	0.30-0.72
CNMG 190612-NR	19.30	19.05	6.35	1.20		●		●						●	●	3.50-8.00	0.30-0.80
CNMG 190616-NR	19.30	19.05	6.35	1.60	●	●		●		●				●	●	4.00-10.00	0.40-0.85
CNMG 190624-NR	19.30	19.05	6.35	2.40				●								4.00-10.00	0.40-1.20
CNMG 190624-R3P	19.30	19.05	6.35	2.40							●					4.00-10.00	0.40-1.20
CNMG 250924-NR	25.79	25.40	9.52	2.40				●								6.00-12.00	0.40-1.20

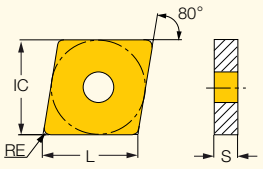
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

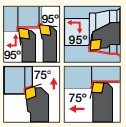
For tools, see pages: A/S-PCLNR/L (133) • C#-MULNR/L-MW (20) • C#-PCLNR/L-12-JHP (26) • C#-PCLNR/L-X (30) • C#-PCLNR/L-X-JHP (31) • DCBNR/L (33) • DCLNR/L (32) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MCLNR/L (26) • MULNR/L-12MW (19) • PCBNR/L (27) • PCLNR/L (24) • PCLNR/L-12-JHP (25) • PCLNR/L-X (27) • PCLNR/L-X-JHP (28) • PCLNR/L-X-JHP-MC (29) • S-DCLNR/L (131) • S-MULNR-MW (139) • A/S-PCLNR/L-X/G (134) • DCLNR/L-JHP-MC (32)

ISOTURN

CNMG-MR
Double-Sided 80° Rhombic Inserts for Rough Turning on Stainless Steel and Soft Materials







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8350	IC8250	IC8150	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMG 160612-MR	16.12	15.88	6.35	1.20	●		●	●	2.00-10.00	0.30-0.90
CNMG 190612-MR	19.03	19.05	6.35	1.20	●	●	●	●	2.00-10.00	0.30-0.90

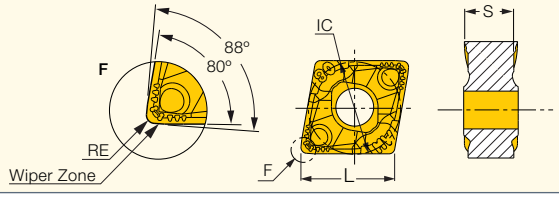
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

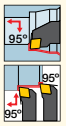
For tools, see pages: C#-PCLNR/L-X (30) • DCBNR/L (33) • DCLNR/L (32) • MCLNR/L (26) • PCBNR/L (27) • PCLNR/L (24) • PCLNR/L-X (27)
• A/S-PCLNR/L-X/G (134)

HELITURN LD

CNMX-M3/4PW
Double-Sided 80° Rhombic Inserts with a High Helical Cutting Edge for High Metal Removal Rates







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8350	IC8250	IC8150	IC20N	IC520N	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMX 090604-M3PW	9.67	9.52	4.40	0.40	●		●	●					1.00-4.50	0.20-0.50
CNMX 090608-M3PW	9.67	9.52	4.40	0.80	●		●	●	●	●			1.50-5.00	0.25-0.60
CNMX 120708-M4PW	12.90	12.70	6.78	0.80		●	●	●			●	●	1.50-6.00	0.25-0.60
CNMX 120712-M4PW	12.90	12.70	6.78	1.20		●	●	●			●	●	2.00-6.00	0.30-0.80
CNMX 120716-M4PW	12.90	12.70	6.78	1.60		●	●	●			●	●	2.00-6.00	0.30-1.00
CNMX 160712-M4PW	16.12	15.88	6.40	1.20			●	●			●		2.00-8.00	0.30-0.80
CNMX 160716-M4PW	16.12	15.88	6.40	1.60			●	●			●		2.00-8.00	0.30-1.00

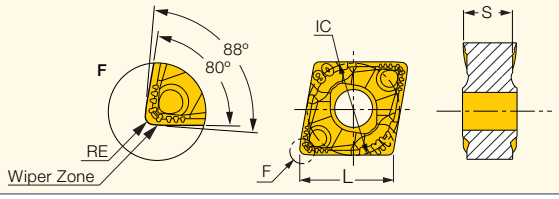
- PCLNR/L...X and A..-PCLNR/L-X are most recommended as they were designed especially for this insert
- For user guide and cutting speed recommendations, see pages 160-170,274-278

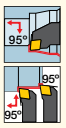
For tools, see pages: A/S-PCLNR/L-X/G (134) • C#-PCLNR/L-X (30) • C#-PCLNR/L-X-JHP (31) • DCLNR/L (32) • DCLNR/L-JHP-MC (32)
• PCLNR/L-X (27) • PCLNR/L-X-JHP (28) • PCLNR/L-X-JHP-MC (29)

HELITURN LD

CNMX-M3/4MW
Double-Sided 80° Rhombic Inserts with a High Helical Cutting Edge for High Metal Removal Rates on Stainless Steel







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC6025	IC6015	IC8150	IC806	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMX 090604-M3MW	9.67	9.52	4.40	0.40	●	●	●				0.80-4.00	0.15-0.45
CNMX 090608-M3MW	9.67	9.52	4.40	0.80	●	●	●				1.00-5.00	0.20-0.60
CNMX 120704-M4MW	12.90	12.70	6.78	0.40			●		●	●	0.80-5.00	0.15-0.45
CNMX 120708-M4MW	12.90	12.70	6.78	0.80	●	●	●	●	●	●	1.00-6.00	0.20-0.60
CNMX 120712-M4MW	12.90	12.70	6.78	1.20		●	●	●	●	●	2.00-6.00	0.30-0.80

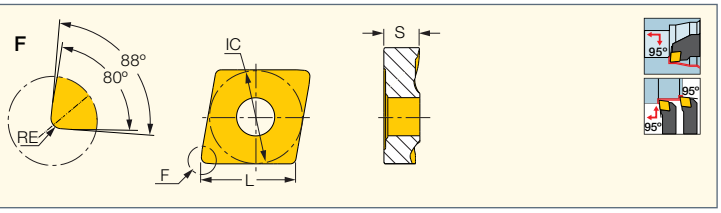
- PCLNR/L...X and A..-PCLNR/L-X are most recommended as they were designed especially for this insert
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A/S-PCLNR/L-X/G (134) • C#-PCLNR/L-X (30) • C#-PCLNR/L-X-JHP (31) • DCLNR/L (32) • DCLNR/L-JHP-MC (32)
• PCLNR/L-X (27) • PCLNR/L-X-JHP (28) • PCLNR/L-X-JHP-MC (29)

HELITURN LD

CNMM-M4PW
Very Positive Radial Insert with a Helical Cutting Edge and Positive Rake for Heavy Machining Applications





Designation	Dimensions IC	S	RE	L	Tough ↔ Hard IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMM 120408-M4PW	12.70	4.76	0.80	12.90	●	●	1.50-5.00	0.24-0.59

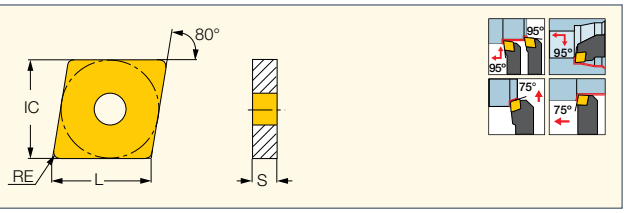
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A/S-PCLNR/L (133) • C#-MULNR/L-MW (20) • C#-PCLNR/L-12-JHP (26) • C#-PCLNR/L-X (30) • C#-PCLNR/L-X-JHP (31) • DCBNR/L (33) • DCLNR/L (32) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • PCBNR/L (27) • PCLNR/L (24) • PCLNR/L-12-JHP (25) • PCLNR/L-X (27) • PCLNR/L-X-JHP (28) • PCLNR/L-X-JHP-MC (29) • S-DCLNR/L (131) • S-MULNR-MW (139) • DCLNR/L-JHP-MC (32)

ISOTURN

CNMM-R3P
Single-Sided 80° Rhombic Inserts for Rough Turning Applications on Steel





Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMM 120408-R3P	12.90	12.70	4.76	0.80	●	●	●	0.70-7.50	0.20-0.55
CNMM 120412-R3P	12.90	12.70	4.76	1.20	●	●	●	1.00-7.50	0.25-0.70
CNMM 120416-R3P	12.90	12.70	4.76	1.60	●	●	●	1.50-7.50	0.30-0.90
CNMM 160608-R3P	16.12	15.88	6.35	0.80	●	●	●	2.00-9.50	0.20-0.55
CNMM 160612-R3P	16.12	15.88	6.35	1.20	●	●	●	2.00-9.50	0.30-0.70
CNMM 160616-R3P	16.12	15.88	6.35	1.60	●	●	●	2.00-9.50	0.30-0.90
CNMM 190612-R3P	19.34	19.05	6.35	1.20	●	●	●	3.00-12.00	0.25-0.80
CNMM 190616-R3P	19.34	19.05	6.35	1.60	●	●	●	3.50-12.00	0.30-0.90
CNMM 190624-R3P	19.34	19.05	6.35	2.40	●	●	●	3.50-12.00	0.30-1.20
CNMM 250924-R3P	25.79	25.40	9.52	2.40	●	●	●	4.00-15.00	0.40-1.20

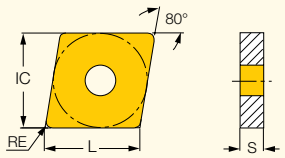
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

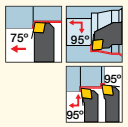
For tools, see pages: A/S-PCLNR/L (133) • C#-MULNR/L-MW (20) • C#-PCLNR/L-12-JHP (26) • C#-PCLNR/L-X (30) • C#-PCLNR/L-X-JHP (31) • DCBNR/L (33) • DCLNR/L (32) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MCLNR/L (26) • MULNR/L-12MW (19) • PCBNR/L (27) • PCLNR/L (24) • PCLNR/L-12-JHP (25) • PCLNR/L-X (27) • PCLNR/L-X-JHP (28) • PCLNR/L-X-JHP-MC (29) • S-DCLNR/L (131) • S-MULNR-MW (139) • A/S-PCLNR/L-X/G (134) • DCLNR/L-JHP-MC (32)

ISOTURN

CNMM-H3P
Single-Sided 80° Rhombic Insert with a Strong Cutting Edge for Extra Rough Turning







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMM 190624-H3P	19.34	19.05	6.35	2.40	•	•	4.00-9.00	0.55-1.20
CNMM 250924-H3P	25.79	25.40	9.52	2.40	•	•	5.00-12.00	0.55-1.30

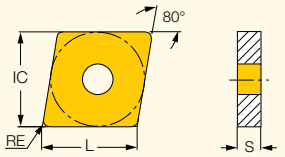
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

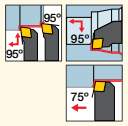
For tools, see pages: A/S-PCLNR/L (133) • DCBNR/L (33) • DCLNR/L (32) • MCLNR/L (26) • PCBNR/L (27) • PCLNR/L (24) • PCLNR/L-X (27)

ISOTURN

CNMM-H4P
Single-Sided 80° Rhombic Insert with a Strong Cutting Edge for Extra Rough Turning







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMM 190624-H4P	19.34	19.05	6.35	2.40	•	•	4.00-12.00	0.50-1.10
CNMM 250924-H4P	25.79	25.40	9.52	2.40	•	•	5.00-15.00	0.55-1.50

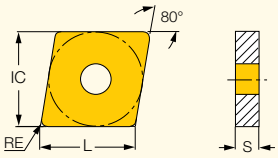
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

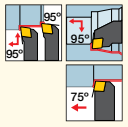
For tools, see pages: A/S-PCLNR/L (133) • DCBNR/L (33) • DCLNR/L (32) • MCLNR/L (26) • PCBNR/L (27) • PCLNR/L (24) • PCLNR/L-X (27)

ISOTURN

CNMM-H5P
Single-Sided 80° Rhombic Insert with a Strong Cutting Edge for Extra Rough Turning







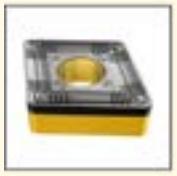
Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMM 250924-H5P	25.79	25.40	9.52	2.40	•	•	5.00-15.00	0.55-1.50

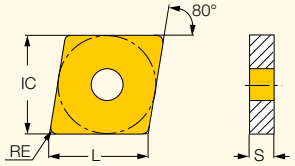
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

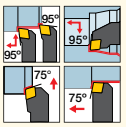
For tools, see pages: PCLNR/L (24) • PCLNR/L-X (27)

ISOTURN

CNMM-NR
Single-Sided 80° Rhombic Inserts for Rough Turning Applications







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8150	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMM 190616-NR	19.03	19.05	6.35	1.60	●	●	2.00-10.00	0.40-1.00

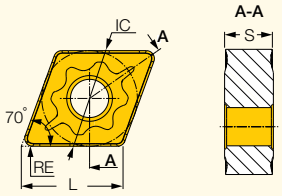
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: DCBNR/L (33) • DCLNR/L (32) • MCLNR/L (26) • PCBNR/L (27) • PCLNR/L (24) • PCLNR/L-X (27)

NEOTURN ISOTURNING

XNMG-F3P
Double-Sided 70° Rhombic Inserts for Semi-Finishing and Finishing Applications







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8250	IC8150	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
XNMG 090404-F3P	10.14	9.52	4.76	0.40	●	●	●	●	0.50-3.50	0.07-0.25
XNMG 090408-F3P	10.14	9.52	4.76	0.80	●	●	●	●	0.90-3.50	0.08-0.25
XNMG 120404-F3P	13.52	12.70	4.76	0.40	●	●	●	●	0.50-3.50	0.07-0.25
XNMG 120408-F3P	13.52	12.70	4.76	0.80	●	●	●	●	0.90-3.50	0.08-0.25

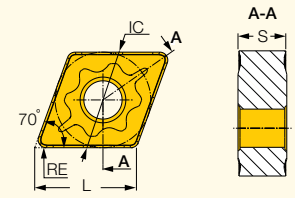
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: AVC-PXJNR/L (125) • DXJNR/L-X-JHP-MC (35)

NEOTURN ISOTURNING

XNMG-M3P
Double-Sided 70° Rhombic Inserts for Medium Machining Conditions on Steel







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8250	IC8150	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
XNMG 090404-M3P	10.14	9.52	4.76	0.40	●	●	●	●	0.50-3.00	0.10-0.35
XNMG 090408-M3P	10.14	9.52	4.76	0.80	●		●	●	0.80-3.00	0.10-0.35
XNMG 120404-M3P	13.52	12.70	4.76	0.40	●	●	●	●	0.50-4.00	0.10-0.40
XNMG 120408-M3P	13.52	12.70	4.76	0.80	●	●	●	●	0.80-4.00	0.10-0.40

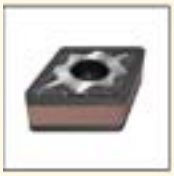
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

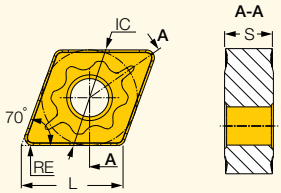
For tools, see pages: AVC-PXJNR/L (125) • DXJNR/L-X-JHP-MC (35)

NEOTURN ISOTURNING

XNMG-F3M

Double-sided 70° Rhombic Inserts for Stainless Steel Finishing Applications







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC706	IC830	IC6025	IC6015	IC806	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
XNMG 090404-F3M	10.14	9.52	4.76	0.40	●	●	●	●	●	●	0.40-1.50	0.07-0.25
XNMG 090408-F3M	10.14	9.52	4.76	0.80	●	●	●	●	●	●	0.50-1.50	0.10-0.25
XNMG 120404-F3M	13.52	12.70	4.76	0.40	●	●	●	●	●	●	0.40-1.50	0.07-0.25
XNMG 120408-F3M	13.52	12.70	4.76	0.80	●	●	●	●	●	●	0.50-1.50	0.10-0.25

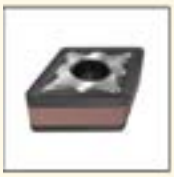
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

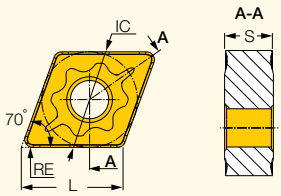
For tools, see pages: AVC-PXJNR/L (125) • DXJNR/L-X-JHP-MC (35)

NEOTURN ISOTURNING

XNMG-M3M

Double-Sided 70° Rhombic Inserts for Machining Stainless and Low Carbon Steel







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC706	IC830	IC6025	IC6015	IC806	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
XNMG 090404-M3M	10.14	9.52	4.76	0.40	●	●	●	●	●	●	0.50-3.00	0.10-0.40
XNMG 090408-M3M	10.14	9.52	4.76	0.80	●	●	●	●	●	●	0.80-3.00	0.10-0.40
XNMG 120404-M3M	13.52	12.70	4.76	0.40	●	●	●	●	●	●	0.50-4.00	0.10-0.40
XNMG 120408-M3M	13.52	12.70	4.76	0.80	●	●	●	●	●	●	0.80-4.00	0.10-0.40

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

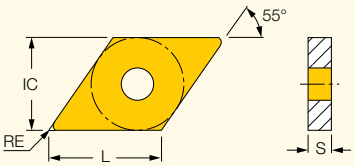
For tools, see pages: AVC-PXJNR/L (125) • DXJNR/L-X-JHP-MC (35)

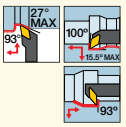
MINIPTURN POSITIVE DOUBLE SIDED

DNGP-F2P

Double-Sided 55° Rhombic Inserts for Semi-Finishing and Finishing Applications on Alloyed Steel







Designation	Dimensions L	IC	S	RE	IC530N	Recommended Machining Data a_p (mm)	f (mm/rev)
DNGP 070302R/L-F2P	7.70	6.35	3.18	0.20	●	0.30-2.00	0.08-0.30
DNGP 070304R/L-F2P	7.70	6.35	3.18	0.40	●	0.30-2.00	0.08-0.30
DNGP 070308R/L-F2P	7.70	6.35	3.18	0.80	●	0.30-2.00	0.08-0.30

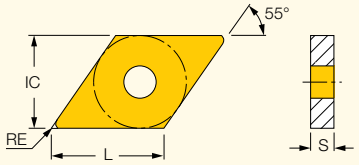
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A/E-SDXNR/L-07 (140) • A/E-SDZNR/L-07 (141) • NQCH-SDJNR/L-S-JHP (36) • PDJNR/L-S (35) • SBTT/L/A-SDJNR/L07-JHP (419)

ISOTURN

DNMG-F3P
Double-Sided 55° Rhombic Inserts for Semi-Finishing and Finishing on Steel





Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8250	IC8150	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
DNMG 110404-F3P	11.63	9.52	4.76	0.40	●	●	●	●	0.80-3.00	0.07-0.25
DNMG 110408-F3P	11.63	9.52	4.76	0.80	●	●	●	●	0.80-3.50	0.08-0.25
DNMG 110412-F3P	11.63	9.52	4.76	1.20	●	●	●	●	1.40-4.00	0.10-0.25
DNMG 150404-F3P	15.50	12.70	4.76	0.40	●	●	●	●	0.80-3.00	0.07-0.25
DNMG 150408-F3P	15.50	12.70	4.76	0.80	●	●	●	●	0.80-3.50	0.08-0.25
DNMG 150412-F3P	15.50	12.70	4.76	1.20	●	●	●	●	1.40-4.00	0.10-0.25
DNMG 150604-F3P	15.50	12.70	6.35	0.40	●	●	●	●	0.80-3.00	0.07-0.25
DNMG 150608-F3P	15.50	12.70	6.35	0.80	●	●	●	●	0.80-3.50	0.08-0.25
DNMG 150612-F3P	15.50	12.70	6.35	1.20	●	●	●	●	1.40-4.00	0.10-0.25

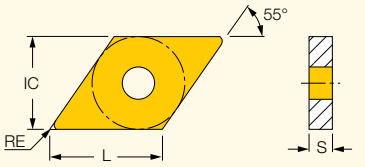
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A/S-PDUNR/L (140) • AVC-DDUNR/L-VH (128) • C#-DDJNR/L (40) • C#-PDJNR/L-JHP (38) • DDJNR/L (39) • HSK A63WH-DDJNR/L (40) • HSK A63WH-DDNNN (41) • PDJNR/L (36) • PDJNR/L-JHP (37) • PDJNR/L-JHP-MC (37) • PDJNR/L-PAD-JHP (38) • S-DDUNR/L (139) • AVC-DDUNR/L (126) • DDJNR/L-JHP-MC (39)

ISOTURN

DNMG-M3P
Double-Sided 55° Rhombic Inserts for Medium Machining Conditions on Steel





Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8250	IC8150	IC5010	IC5005	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
DNMG 110408-M3P	11.63	9.52	4.76	0.80	●	●	●			●	0.50-5.00	0.15-0.50
DNMG 110412-M3P	11.63	9.52	4.76	1.20	●		●			●	0.80-5.00	0.18-0.60
DNMG 150408-M3P	15.50	12.70	4.76	0.80	●	●	●	●	●	●	0.50-6.00	0.15-0.50
DNMG 150412-M3P	15.50	12.70	4.76	1.20	●					●	0.80-6.00	0.18-0.60
DNMG 150608-M3P	15.50	12.70	6.35	0.80	●	●	●			●	0.50-6.00	0.15-0.50
DNMG 150612-M3P	15.50	12.70	6.35	1.20	●	●	●			●	0.80-6.00	0.18-0.60

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

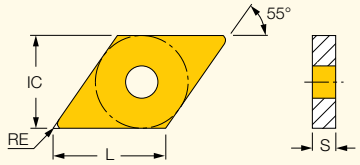
For tools, see pages: A/S-PDUNR/L (140) • AVC-DDUNR/L (126) • AVC-DDUNR/L-VH (128) • C#-DDJNR/L (40) • C#-PDJNR/L-JHP (38) • DDJNR/L (39) • HSK A63WH-DDJNR/L (40) • HSK A63WH-DDNNN (41) • PDJNR/L (36) • PDJNR/L-JHP (37) • PDJNR/L-JHP-MC (37) • PDJNR/L-PAD-JHP (38) • S-DDUNR/L (139) • DDJNR/L-JHP-MC (39)

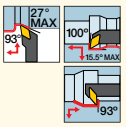
MINIPTURN POSITIVE DOUBLE SIDED

DNGP-F2M

Double-Sided 55° Rhombic Inserts for Semi-Finishing and Finishing on Stainless Steel







Designation	Dimensions L	IC	S	RE	IC908	Recommended Machining Data a_p (mm)	f (mm/rev)
DNGP 070302R/L-F2M	7.70	6.35	3.18	0.20	●	0.30-2.00	0.08-0.30
DNGP 070304R/L-F2M	7.70	6.35	3.18	0.40	●	0.30-2.00	0.08-0.30
DNGP 070308R/L-F2M	7.70	6.35	3.18	0.80	●	0.30-2.00	0.08-0.30

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

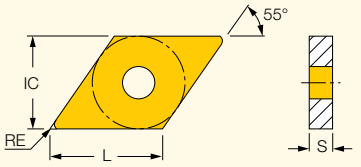
For tools, see pages: A/E-SDXNR/L-07 (140) • A/E-SDZNR/L-07 (141) • NQCH-SDJNR/L-S-JHP (36) • PDJNR/L-S (35) • SBTT/L/A-SDJNR/L07-JHP (419)

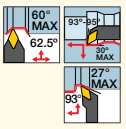
ISOTURN

DNMG-F3M

Double-Sided 55° Rhombic Inserts for Finish on Turning Stainless and Low Carbon Steel







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC706	IC830	IC6025	IC6015	IC806	IC1017	IC807	IC804	Recommended Machining Data a_p (mm)	f (mm/rev)
DNMG 110404-F3M	11.63	9.52	4.76	0.40	●	●	●	●	●		●		0.10-1.50	0.05-0.32
DNMG 110408-F3M	11.63	9.52	4.76	0.80	●	●	●	●	●		●		0.10-1.50	0.10-0.42
DNMG 110412-F3M	11.63	9.52	4.76	1.20			●	●	●		●		0.15-2.00	0.15-0.52
DNMG 150404-F3M	15.50	12.70	4.76	0.40	●	●	●	●	●	●	●	●	0.10-1.50	0.05-0.30
DNMG 150408-F3M	15.50	12.70	4.76	0.80	●	●	●	●	●		●		0.10-1.50	0.10-0.40
DNMG 150412-F3M	15.50	12.70	4.76	1.20			●	●	●		●		0.20-2.50	0.15-0.50
DNMG 150604-F3M	15.50	12.70	6.35	0.40	●	●	●	●	●		●		0.10-1.50	0.05-0.30
DNMG 150608-F3M	15.50	12.70	6.35	0.80	●	●	●	●	●	●	●		0.10-1.50	0.10-0.40
DNMG 150612-F3M	15.50	12.70	6.35	1.20	●	●	●	●	●		●		0.20-2.50	0.15-0.50

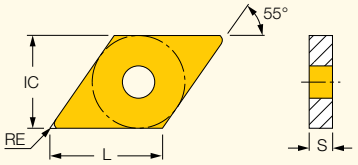
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

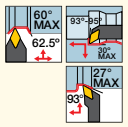
For tools, see pages: A/S-PDUNR/L (140) • AVC-DDUNR/L-VH (128) • C#-DDJNR/L (40) • C#-PDJNR/L-JHP (38) • DDJNR/L (39) • HSK A63WH-DDJNR/L (40) • HSK A63WH-DDNNN (41) • PDJNR/L (36) • PDJNR/L-JHP (37) • PDJNR/L-JHP-MC (37) • PDJNR/L-PAD-JHP (38) • S-DDUNR/L (139) • AVC-DDUNR/L (126) • DDJNR/L-JHP-MC (39)

ISOTURN

DNMG-M3M
Double-Sided 55° Rhombic Inserts for Machining Stainless and Low Carbon Steel







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC706	IC830	IC6025	IC6015	IC806	IC807	IC804	Recommended Machining Data a_p (mm)	f (mm/rev)
DNMG 110404-M3M	11.63	9.52	4.76	0.40	●	●	●	●	●	●		0.50-3.50	0.12-0.40
DNMG 110408-M3M	11.63	9.52	4.76	0.80	●	●	●	●	●	●		0.50-4.00	0.15-0.50
DNMG 110412-M3M	11.63	9.52	4.76	1.20		●	●	●	●	●		0.50-4.00	0.20-0.60
DNMG 150408-M3M	15.50	12.70	4.76	0.80	●	●	●	●	●	●	●	0.50-5.00	0.15-0.50
DNMG 150412-M3M	15.50	12.70	4.76	1.20		●	●	●	●	●		0.50-5.00	0.20-0.60
DNMG 150608-M3M	15.50	12.70	6.35	0.80	●	●	●	●	●	●		0.50-5.00	0.15-0.50
DNMG 150612-M3M	15.50	12.70	6.35	1.20		●	●	●	●	●		0.50-5.00	0.20-0.60

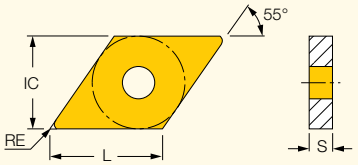
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

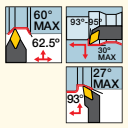
For tools, see pages: A/S-PDUNR/L (140) • AVC-DDUNR/L-VH (128) • C#-DDJNR/L (40) • C#-PDJNR/L-JHP (38) • DDJNR/L (39) • HSK A63WH-DDJNR/L (40) • HSK A63WH-DDNNN (41) • PDJNR/L (36) • PDJNR/L-JHP (37) • PDJNR/L-JHP-MC (37) • PDJNR/L-PAD-JHP (38) • S-DDUNR/L (139) • AVC-DDUNR/L (126) • DDJNR/L-JHP-MC (39)

ISOTURN

DNMG-F3S
Double-Sided 55° Rhombic Inserts for Titanium and Heat Resistant Materials for Finishing Applications







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC706	IC806	IC804	Recommended Machining Data a_p (mm)	f (mm/rev)
DNMG 110404-F3S	11.63	9.52	4.76	0.40	●	●	●	0.10-1.50	0.05-0.32
DNMG 110408-F3S	11.63	9.52	4.76	0.80	●	●	●	0.10-1.50	0.10-0.40
DNMG 150404-F3S	15.50	12.70	4.76	0.40	●	●	●	0.10-1.50	0.05-0.32
DNMG 150408-F3S	15.50	12.70	4.76	0.80	●	●	●	0.10-1.50	0.10-0.40
DNMG 150604-F3S	15.50	12.70	6.35	0.40	●	●	●	0.10-1.50	0.05-0.32
DNMG 150608-F3S	15.50	12.70	6.35	0.80	●	●	●	0.10-1.50	0.10-0.40

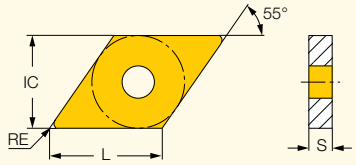
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A/S-PDUNR/L (140) • AVC-DDUNR/L (126) • AVC-DDUNR/L-VH (128) • C#-DDJNR/L (40) • C#-PDJNR/L-JHP (38) • DDJNR/L (39) • DDJNR/L-JHP-MC (39) • HSK A63WH-DDJNR/L (40) • HSK A63WH-DDNNN (41) • PDJNR/L (36) • PDJNR/L-JHP (37) • PDJNR/L-JHP-MC (37) • PDJNR/L-PAD-JHP (38) • S-DDUNR/L (139)

ISOTURN

DNMG-CERMET
Double-Sided 55° Rhombic Cermet Grade Inserts for Semi-Finishing and Finishing Applications

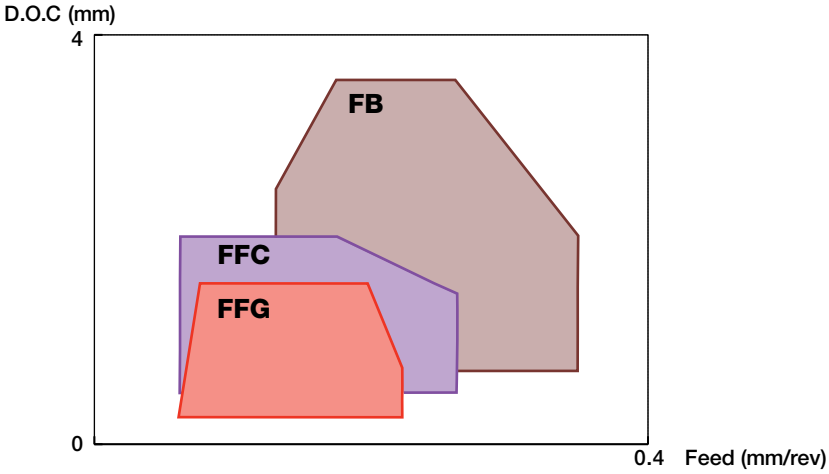




Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC20N	IC520N	Recommended Machining Data a_p (mm)	f (mm/rev)
DNMG 110402-FFC	11.63	9.52	4.76	0.20	●		0.40-2.50	0.05-0.20
DNMG 110404-FFC	11.63	9.52	4.76	0.40		●	0.80-3.00	0.07-0.25
DNMG 110404-FFG	11.63	9.52	4.76	0.40		●	0.70-2.00	0.07-0.22
DNMG 110408-FFC	11.63	9.52	4.76	0.80	●	●	1.00-3.50	0.08-0.25
DNMG 150404-FFC	15.50	12.70	4.76	0.40		●	0.80-3.00	0.07-0.25
DNMG 150604-FB	15.50	12.70	6.35	0.40	●		0.50-3.00	0.07-0.23
DNMG 150604-FFC	15.50	12.70	6.35	0.40		●	0.80-3.00	0.08-0.25

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

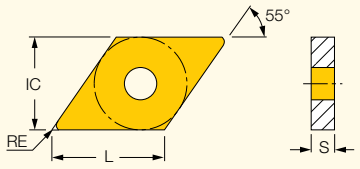
For tools, see pages: A/S-PDUNR/L (140) • C#-DDJNR/L (40) • C#-PDJNR/L-JHP (38) • DDJNR/L (39) • HSK A63WH-DDJNR/L (40) • HSK A63WH-DDNNN (41) • PDJNR/L (36) • PDJNR/L-JHP (37) • PDJNR/L-JHP-MC (37) • PDJNR/L-PAD-JHP (38) • S-DDUNR/L (139) • DDJNR/L-JHP-MC (39)



ISOTURN

DNMG/DNGG-SF
Double-Sided 55° Rhombic Inserts for Super Finishing; Controls Chip Flow at Very Low Feeds and Depths of Cut





Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC530N	IC520N	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
DNMG 110404-SF	11.63	9.52	4.76	0.40	●	●		0.50-3.00	0.05-0.25
DNGG 150401-SF	15.50	12.70	4.76	0.10			●	0.25-2.00	0.03-0.15
DNGG 150402-SF	15.50	12.70	4.76	0.20			●	0.40-2.50	0.05-0.20

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

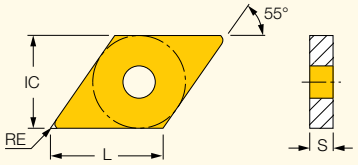
For tools, see pages: A/S-PDUNR/L (140) • C#-DDJNR/L (40) • C#-PDJNR/L-JHP (38) • DDJNR/L (39) • HSK A63WH-DDJNR/L (40) • HSK A63WH-DDNNN (41) • PDJNR/L (36) • PDJNR/L-JHP (37) • PDJNR/L-JHP-MC (37) • PDJNR/L-PAD-JHP (38) • AVC-DDUNR/L (126) • DDJNR/L-JHP-MC (39)

ISOTURN

DNMG-NF

Double-Sided 55° Rhombic Inserts for Semi-Finishing and Finishing Applications





Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8350	IC8250	IC530N	IC8150	IC20N	IC520N	IC5010	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
DNMG 110402-NF	11.63	9.52	4.76	0.20		•	•		•	•			•	•	0.40-2.50	0.07-0.18
DNMG 110404-NF	11.63	9.52	4.76	0.40	•		•		•	•	•	•	•	•	0.80-3.00	0.07-0.25
DNMG 110408-NF	11.63	9.52	4.76	0.80	•		•	•	•	•			•	•	1.00-3.50	0.08-0.25
DNMG 150404-NF	15.50	12.70	4.76	0.40			•	•					•	•	0.80-3.50	0.07-0.25
DNMG 150408-NF	15.50	12.70	4.76	0.80			•		•						1.00-3.50	0.08-0.25
DNMG 150604-NF	15.50	12.70	6.35	0.40			•	•					•	•	0.80-3.50	0.07-0.25

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

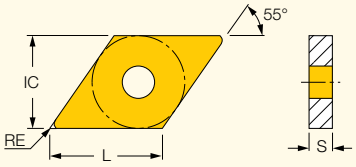
For tools, see pages: A/S-PDUNR/L (140) • AVC-DDUNR/L-VH (128) • C#-DDJNR/L (40) • C#-PDJNR/L-JHP (38) • DDJNR/L (39) • HSK A63WH-DDJNR/L (40) • HSK A63WH-DDNNN (41) • PDJNR/L (36) • PDJNR/L-JHP (37) • PDJNR/L-JHP-MC (37) • PDJNR/L-PAD-JHP (38) • S-DDUNR/L (139) • AVC-DDUNR/L (126) • DDJNR/L-JHP-MC (39)

ISOTURN

DNMG-WG

Double-Sided 55° Rhombic Wiper Inserts for High Surface Finish at High Feed Turning





Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8250	IC5010	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
DNMG 150408-WG	15.50	12.70	4.76	0.80	•			1.00-2.50	0.20-0.50
DNMG 150608-WG	15.50	12.70	6.35	0.80	•		•	1.00-2.50	0.18-0.40
DNMG 150612-WG	15.50	12.70	6.35	1.20	•	•		1.00-3.00	0.20-0.80

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

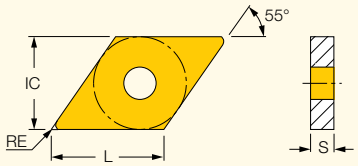
For tools, see pages: A/S-PDUNR/L (140) • AVC-DDUNR/L-VH (128) • C#-DDJNR/L (40) • C#-PDJNR/L-JHP (38) • DDJNR/L (39) • HSK A63WH-DDNNN (41) • PDJNR/L (36) • PDJNR/L-JHP (37) • PDJNR/L-JHP-MC (37) • AVC-DDUNR/L (126) • DDJNR/L-JHP-MC (39)

ISOTURN

DNMG-PF

Double-Sided 55° Rhombic Inserts for Finishing Applications on Alloyed and Stainless Steel





Designation	Dimensions L	IC	S	RE	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
DNMG 110408-PF	11.63	9.52	4.76	0.80	•	0.30-3.00	0.07-0.30
DNMG 150612-PF	15.50	12.70	6.35	1.20	•	1.00-4.00	0.10-0.30

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

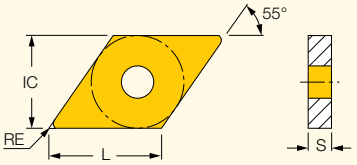
For tools, see pages: A/S-PDUNR/L (140) • AVC-DDUNR/L-VH (128) • C#-DDJNR/L (40) • C#-PDJNR/L-JHP (38) • DDJNR/L (39) • HSK A63WH-DDJNR/L (40) • HSK A63WH-DDNNN (41) • PDJNR/L (36) • PDJNR/L-JHP (37) • PDJNR/L-JHP-MC (37) • PDJNR/L-PAD-JHP (38) • S-DDUNR/L (139) • AVC-DDUNR/L (126) • DDJNR/L-JHP-MC (39)

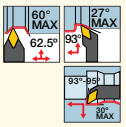
ISOTURN

DNMG/DNGG-PP

55° Double-Sided Rhombic Inserts for Machining Very Ductile Materials under Medium Cutting Conditions







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8350	IC6025	IC8250	IC10	IC6015	IC8150	IC20	IC806	IC807	IC907	IC804	Recommended Machining Data a_p (mm)	f (mm/rev)
DNMG 110404-PP	11.63	9.52	4.76	0.40				●				●					0.40-3.00	0.12-0.30
DNMG 110408-PP	11.63	9.52	4.76	0.80	●			●	●		●						1.00-3.50	0.12-0.30
DNMG 150408-PP	15.50	12.70	4.76	0.80	●			●				●					1.00-4.00	0.12-0.30
DNMG 150604-PP	15.50	12.70	6.35	0.40										●	●		0.50-4.00	0.12-0.30
DNMG 150608-PP	15.50	12.70	6.35	0.80	●	●	●	●		●		●		●	●		1.00-3.50	0.12-0.30
DNGG 150604-PP	15.50	12.70	6.35	0.40											●		0.50-4.00	0.12-0.30
DNGG 150608-PP	15.50	12.70	6.35	0.80									●		●	●	1.00-4.00	0.12-0.30

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

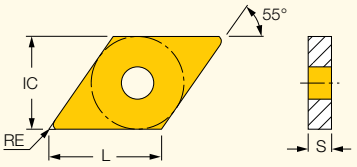
For tools, see pages: A/S-PDUNR/L (140) • AVC-DDUNR/L (126) • AVC-DDUNR/L-VH (128) • C#-DDJNR/L (40) • C#-PDJNR/L-JHP (38) • DDJNR/L (39) • HSK A63WH-DDJNR/L (40) • HSK A63WH-DDNNN (41) • PDJNR/L (36) • PDJNR/L-JHP (37) • PDJNR/L-JHP-MC (37) • PDJNR/L-PAD-JHP (38) • S-DDUNR/L (139) • DDJNR/L-JHP-MC (39)

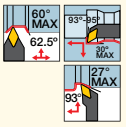
ISOTURN

DNMG-VL

Double-Sided 55° Rhombic Inserts with a Chipformer for High Temperature Alloys and Stainless Steel Valves







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC908	IC806	IC1017	Recommended Machining Data a_p (mm)	f (mm/rev)
DNMG 110404-VL	11.63	9.52	4.76	0.40	●	●	●	0.50-3.50	0.10-0.25
DNMG 110408-VL	11.63	9.52	4.76	0.80	●	●		0.50-3.50	0.10-0.25
DNMG 150404-VL	15.50	12.70	4.76	0.40		●		0.50-3.50	0.10-0.25
DNMG 150408-VL	15.50	12.70	4.76	0.80	●	●		0.50-3.50	0.10-0.25

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

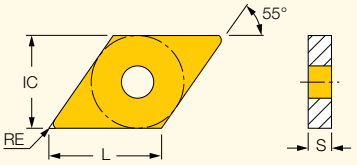
For tools, see pages: A/S-PDUNR/L (140) • C#-DDJNR/L (40) • C#-PDJNR/L-JHP (38) • DDJNR/L (39) • HSK A63WH-DDJNR/L (40) • HSK A63WH-DDNNN (41) • PDJNR/L (36) • PDJNR/L-JHP (37) • PDJNR/L-JHP-MC (37) • PDJNR/L-PAD-JHP (38) • S-DDUNR/L (139) • AVC-DDUNR/L (126) • DDJNR/L-JHP-MC (39)

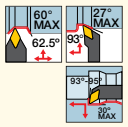
ISOTURN

DNMG/DNGG-TF

Double-Sided 55° Rhombic Inserts for Machining a Wide Range of Materials under Medium Cutting Conditions







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC6025	IC8250	IC530N	IC6015	IC8150	IC20	IC20N	IC806	IC1017	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
DNMG 110404-TF	11.63	9.52	4.76	0.40			●	●			●						1.00-3.00	0.12-0.30
DNMG 110412-TF	11.63	9.52	4.76	1.20			●										1.50-4.00	0.15-0.35
DNMG 150404-TF	15.50	12.70	4.76	0.40	●		●				●				●	●	1.00-3.00	0.15-0.30
DNMG 150408-TF	15.50	12.70	4.76	0.80	●	●	●		●	●	●		●		●	●	1.00-3.50	0.15-0.30
DNMG 150412-TF	15.50	12.70	4.76	1.20			●										1.50-4.00	0.12-0.40
DNMG 150604-TF	15.50	12.70	6.35	0.40		●	●		●	●	●	●			●	●	1.00-3.00	0.14-0.30
DNMG 150608-TF	15.50	12.70	6.35	0.80	●	●	●		●	●	●	●	●		●	●	1.00-3.50	0.15-0.30
DNMG 150612-TF	15.50	12.70	6.35	1.20	●	●	●		●	●	●		●	●	●	●	1.50-4.00	0.11-0.35
DNGG 150404-TF	15.50	12.70	4.76	0.40												●	1.00-3.00	0.15-0.30
DNGG 150408-TF	15.50	12.70	4.76	0.80												●	1.00-3.50	0.15-0.30

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

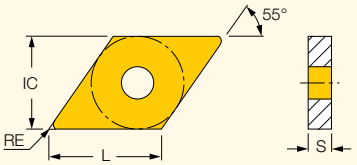
For tools, see pages: A/S-PDUNR/L (140) • AVC-DDUNR/L-VH (128) • C#-DDJNR/L (40) • C#-PDJNR/L-JHP (38) • DDJNR/L (39) • HSK A63WH-DDJNR/L (40) • HSK A63WH-DDNNN (41) • PDJNR/L (36) • PDJNR/L-JHP (37) • PDJNR/L-JHP-MC (37) • PDJNR/L-PAD-JHP (38) • S-DDUNR/L (139) • AVC-DDUNR/L (126) • DDJNR/L-JHP-MC (39)

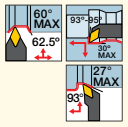
ISOTURN

DNMG-GN

Double-Sided 55° Rhombic Inserts for General Applications







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8350	IC8250	IC8150	IC20N	IC5010	IC428	IC5005	Recommended Machining Data a_p (mm)	f (mm/rev)
DNMG 110408-GN	11.63	9.52	4.76	0.80			●	●		●			1.00-4.00	0.18-0.38
DNMG 110412-GN	11.63	9.52	4.76	1.20			●	●					1.50-4.50	0.18-0.38
DNMG 150408-GN	15.50	12.70	4.76	0.80	●		●	●					1.00-4.00	0.18-0.22
DNMG 150412-GN	15.50	12.70	4.76	1.20	●	●	●	●		●			1.50-5.00	0.18-0.43
DNMG 150608-GN	15.50	12.70	6.35	0.80	●	●	●	●	●		●	●	1.00-4.00	0.18-0.38
DNMG 150612-GN	15.50	12.70	6.35	1.20	●		●	●			●	●	1.50-5.00	0.18-0.43

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

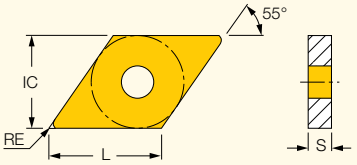
For tools, see pages: A/S-PDUNR/L (140) • AVC-DDUNR/L-VH (128) • C#-DDJNR/L (40) • C#-PDJNR/L-JHP (38) • DDJNR/L (39) • HSK A63WH-DDJNR/L (40) • HSK A63WH-DDNNN (41) • PDJNR/L (36) • PDJNR/L-JHP (37) • PDJNR/L-JHP-MC (37) • PDJNR/L-PAD-JHP (38) • S-DDUNR/L (139) • AVC-DDUNR/L (126) • DDJNR/L-JHP-MC (39)

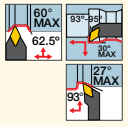
ISOTURN

DNMG-NR

Double-Sided 55° Rhombic Inserts with a Special Chipformer for Heavy Machining







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
DNMG 150612-NR	15.50	12.70	6.35	1.20	●	●	2.00-6.00	0.23-0.50
DNMG 150616-NR	15.50	12.70	6.35	1.60	●	●	2.00-6.00	0.25-0.50

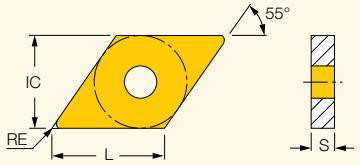
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

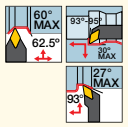
For tools, see pages: A/S-PDUNR/L (140) • AVC-DDUNR/L-VH (128) • C#-DDJNR/L (40) • C#-PDJNR/L-JHP (38) • DDJNR/L (39) • HSK A63WH-DDJNR/L (40) • HSK A63WH-DDNNN (41) • PDJNR/L (36) • PDJNR/L-JHP (37) • PDJNR/L-JHP-MC (37) • S-DDUNR/L (139) • AVC-DDUNR/L (126) • DDJNR/L-JHP-MC (39)

ISOTURN

DNMA
Double-Sided 55° Rhombic Inserts for Short Chipping Materials such as Cast Iron







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC5010	IC428	IC5005	Recommended Machining Data a_p (mm)	f (mm/rev)
DNMA 150412	15.50	12.70	4.76	1.20		●	●	1.50-4.00	0.05-0.40
DNMA 150608	15.50	12.70	6.35	0.80	●	●	●	1.50-4.00	0.03-0.40
DNMA 150612	15.50	12.70	6.35	1.20	●	●	●	1.50-4.00	0.05-0.40

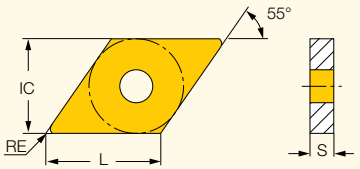
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

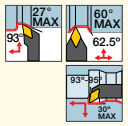
For tools, see pages: A/S-PDUNR/L (140) • AVC-DDUNR/L-VH (128) • C#-DDJNR/L (40) • C#-PDJNR/L-JHP (38) • DDJNR/L (39) • HSK A63WH-DDJNR/L (40) • HSK A63WH-DDNNN (41) • PDJNR/L (36) • PDJNR/L-JHP (37) • PDJNR/L-JHP-MC (37) • S-DDUNR/L (139) • AVC-DDUNR/L (126) • DDJNR/L-JHP-MC (39)

ISOTURN

DNMM-R3P
Single-Sided 55° Rhombic Inserts for Rough Turning Applications on Steel







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8250	Recommended Machining Data a_p (mm)	f (mm/rev)
DNMM 150608-R3P	15.50	12.70	6.35	0.80	●	●	0.70-6.00	0.20-0.55
DNMM 150612-R3P	15.50	12.70	6.35	1.20	●	●	1.00-6.00	0.25-0.70
DNMM 150616-R3P	15.50	12.70	6.35	1.60	●	●	1.50-6.00	0.32-0.90

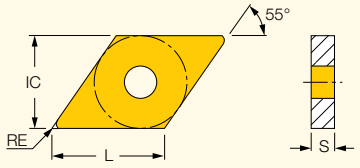
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

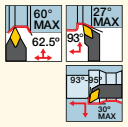
For tools, see pages: A/S-PDUNR/L (140) • AVC-DDUNR/L-VH (128) • C#-DDJNR/L (40) • C#-PDJNR/L-JHP (38) • DDJNR/L (39) • HSK A63WH-DDJNR/L (40) • HSK A63WH-DDNNN (41) • PDJNR/L (36) • PDJNR/L-JHP (37) • PDJNR/L-JHP-MC (37) • S-DDUNR/L (139) • AVC-DDUNR/L (126) • DDJNR/L-JHP-MC (39)

ISOTURN

DNMM-NM
Single-Sided 55° Rhombic Inserts for Roughing Applications







Designation	Dimensions L	IC	S	RE	IC8250	Recommended Machining Data a_p (mm)	f (mm/rev)
DNMM 150612-NM	15.50	12.70	6.35	1.20	●	1.50-4.50	0.25-0.40

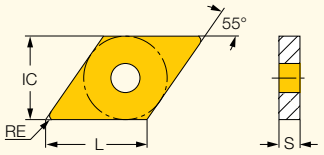
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

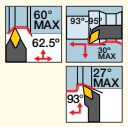
For tools, see pages: A/S-PDUNR/L (140) • AVC-DDUNR/L-VH (128) • C#-DDJNR/L (40) • C#-PDJNR/L-JHP (38) • DDJNR/L (39) • HSK A63WH-DDJNR/L (40) • HSK A63WH-DDNNN (41) • PDJNR/L (36) • PDJNR/L-JHP (37) • PDJNR/L-JHP-MC (37) • S-DDUNR/L (139) • AVC-DDUNR/L (126) • DDJNR/L-JHP-MC (39)

HELITURN LD

DNMX-M3P
Double-Sided 55° Rhombic Inserts with High Helical Cutting Edge for High Metal Removal Rates







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8350	IC6025	IC8250	IC6015	IC8150	IC806	IC1017	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
DNMX 150608-M3P	15.50	12.70	6.35	0.80	●		●	●	●	●	●	●	●	2.00-7.00	0.25-0.50
DNMX 150612-M3P	15.50	12.70	6.35	1.20	●	●	●	●	●	●	●		●	2.50-7.00	0.30-0.60
DNMX 150616-M3P	15.50	12.70	6.35	1.60	●			●		●				2.50-5.50	0.30-0.60

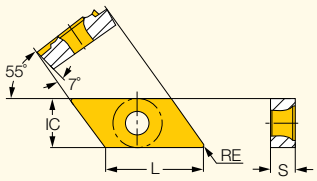
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

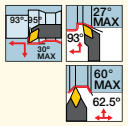
For tools, see pages: A/S-PDUNR/L (140) • C#-DDJNR/L (40) • C#-PDJNR/L-JHP (38) • DDJNR/L (39) • HSK A63WH-DDJNR/L (40) • HSK A63WH-DDNNN (41) • PDJNR/L (36) • PDJNR/L-JHP (37) • PDJNR/L-JHP-MC (37) • S-DDUNR/L (139) • DDJNR/L-JHP-MC (39)

ISOTURN

KNMX
55° Parallelogram Profiling Inserts







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8250	IC8150	IC5010	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
KNMX 160405-LP	19.72	9.52	4.76	0.50	●	●		●		1.00-4.00	0.10-0.40
KNMX 160405-RP	19.72	9.52	4.76	0.50	●	●		●	●	1.00-4.00	0.10-0.40
KNMX 160410-LP	19.72	9.52	4.76	1.00		●	●	●	●	1.50-4.00	0.15-0.45
KNMX 160410-RP	19.72	9.52	4.76	1.00	●	●			●	1.50-4.00	0.15-0.45

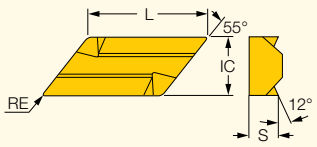
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

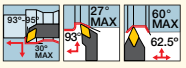
For tools, see pages: CKJNR/L (41) • CKNNR/L (42) • SKJNR/L (41)

ISOTURN

KNUX
55° Parallelogram Profiling Inserts







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8250	IC9025	IC8150	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
KNUX 160405 L11	19.72	9.52	4.76	0.50		●	●	●	1.00-4.00	0.10-0.40
KNUX 160405 R11	19.72	9.52	4.76	0.50	●	●	●	●	1.00-4.00	0.10-0.40
KNUX 160405 L12	19.72	9.52	4.76	0.50			●		1.50-4.00	0.10-0.40
KNUX 160405 R12	19.72	9.52	4.76	0.50	●				1.50-4.00	0.10-0.40
KNUX 160410 L11	19.72	9.52	4.76	1.00			●		1.50-4.00	0.15-0.45
KNUX 160410 R11	19.72	9.52	4.76	1.00	●		●		1.50-4.00	0.15-0.45
KNUX 160410 R12	19.72	9.52	4.76	1.00			●		1.50-4.00	0.15-0.45

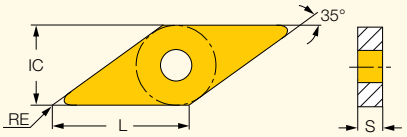
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

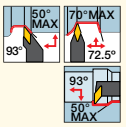
For tools, see pages: CKJNR/L (41) • CKNNR/L (42)

ISOTURN

VNMG-F3P
Double-Sided 35° Rhombic Inserts for Semi-Finishing and Finishing Applications on Steel







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8250	IC8150	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
VNMG 12T302-F3P	12.40	7.15	3.89	0.20	●	●	●	●	0.40-2.00	0.08-0.20
VNMG 12T304-F3P	12.40	7.15	3.89	0.40	●	●	●	●	0.70-2.00	0.08-0.20
VNMG 160404-F3P	16.60	9.52	4.76	0.40	●	●	●	●	0.70-2.00	0.07-0.24
VNMG 160408-F3P	16.60	9.52	4.76	0.80	●	●	●	●	1.00-3.00	0.08-0.24

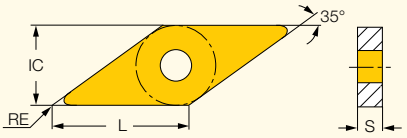
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

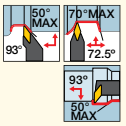
For tools, see pages: A-SVUNR/L (141) • AVC-DVUNR/L (127) • C#-SVJNR/L-F (42) • HSK A63WH-SVVNN-F (44) • MVJNR/L (43) • MVVNN (45) • SVANR/L-FS (42) • SVJNR/L-F (42) • SVVNN-F (43)

ISOTURN

VNMG-F3M
Double-Sided 35° Rhombic Inserts for Finishing on Stainless Steel







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC706	IC830	IC6025	IC6015	IC806	IC807	IC804	Recommended Machining Data a_p (mm)	f (mm/rev)
VNMG 12T302-F3M	12.40	7.15	3.97	0.20	●				●		●	0.10-1.50	0.03-0.20
VNMG 12T304-F3M	12.40	7.15	3.97	0.40	●				●		●	0.10-1.50	0.05-0.30
VNMG 12T308-F3M	12.40	7.15	3.97	0.80	●				●		●	0.10-1.50	0.05-0.30
VNMG 160404-F3M	16.60	9.52	4.76	0.40		●	●	●		●		0.10-1.50	0.05-0.30
VNMG 160408-F3M	16.60	9.52	4.76	0.80		●	●	●		●		0.10-1.50	0.05-0.30

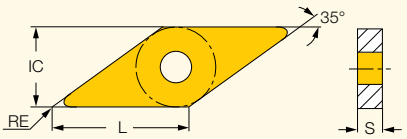
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

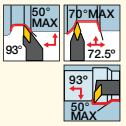
For tools, see pages: A-SVUNR/L (141) • AVC-DVUNR/L (127) • C#-SVJNR/L-F (42) • HSK A63WH-SVVNN-F (44) • MVJNR/L (43) • MVVNN (45) • SVANR/L-FS (42) • SVJNR/L-F (42) • SVVNN-F (43)

ISOTURN

VNMG-M3M
Double-Sided 35° Rhombic Inserts for Machining Stainless and Low Carbon Steel







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC706	IC830	IC6025	IC6015	IC806	IC807	IC4	IC804	Recommended Machining Data a_p (mm)	f (mm/rev)
VNMG 12T304-M3M	12.40	7.15	3.89	0.40	●				●	●			0.40-2.00	0.08-0.20
VNMG 12T308-M3M	12.40	7.15	3.89	0.80	●	●	●	●	●	●			0.70-2.00	0.08-0.20
VNMG 160404-M3M	16.60	9.52	4.76	0.40	●	●	●	●	●				0.70-3.00	0.07-0.20
VNMG 160408-M3M	16.60	9.52	4.76	0.80	●	●	●	●	●		●	●	0.70-3.50	0.08-0.30

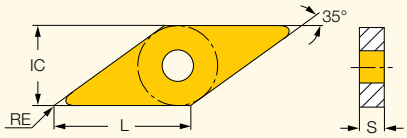
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

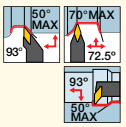
For tools, see pages: A-SVUNR/L (141) • AVC-DVUNR/L (127) • C#-SVJNR/L-F (42) • HSK A63WH-SVVNN-F (44) • MVJNR/L (43) • MVVNN (45) • SVANR/L-FS (42) • SVJNR/L-F (42) • SVVNN-F (43)

ISOTURN

VNMG-F3S
Double-Sided 35° Rhombic Inserts for Titanium and Heat Resistant Materials for Finishing Applications







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC706	IC806	IC804	Recommended Machining Data a_p (mm)	f (mm/rev)
VNMG 160402-F3S	12.40	7.15	3.97	0.20	•	•	•	0.10-1.50	0.05-0.20
VNMG 160404-F3S	12.40	7.15	3.97	0.40	•	•	•	0.10-1.50	0.05-0.30
VNMG 160408-F3S	12.40	7.15	3.97	0.80	•	•	•	0.10-1.50	0.05-0.30

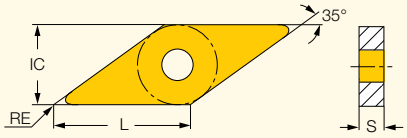
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

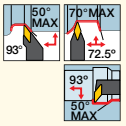
For tools, see pages: A-SVUNR/L (141) • C#-SVJNR/L-F (42) • HSK A63WH-SVVNN-F (44) • SVANR/L-FS (42) • SVJNR/L-F (42) • SVVNN-F (43)

ISOTURN

VNMG-SF
Double-Sided 35° Rhombic Inserts for Super Finishing







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC908	IC570	Recommended Machining Data a_p (mm)	f (mm/rev)
VNMG 12T302-SF	12.40	7.15	3.97	0.20	•	•	0.30-2.00	0.03-0.20
VNMG 12T304-SF	12.40	7.15	3.97	0.40	•	•	0.50-3.00	0.05-0.25

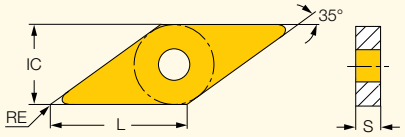
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

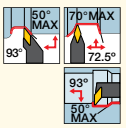
For tools, see pages: A-SVUNR/L (141) • C#-SVJNR/L-F (42) • HSK A63WH-SVVNN-F (44) • SVANR/L-FS (42) • SVJNR/L-F (42) • SVVNN-F (43)

ISOTURN

VNMG-FNF-CERMET
Double-Sided 35° Rhombic Cermet Inserts for Semi-Finishing and Finishing Applications







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC20N	IC520N	Recommended Machining Data a_p (mm)	f (mm/rev)
VNMG 12T302-FNF	12.40	7.15	4.00	0.20	•		0.50-3.00	0.07-0.23
VNMG 12T304-FNF	12.40	7.15	4.00	0.40		•	0.50-3.00	0.07-0.23

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

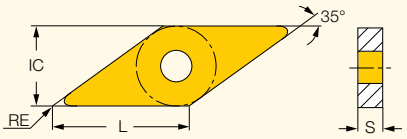
For tools, see pages: A-SVUNR/L (141) • C#-SVJNR/L-F (42) • HSK A63WH-SVVNN-F (44) • SVANR/L-FS (42) • SVJNR/L-F (42) • SVVNN-F (43)

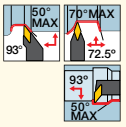
ISOTURN

VNMG/VNGG-NF

Double-Sided 35° Rhombic Inserts for Semi-Finishing and Finishing Applications







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8350	IC6025	IC8250	IC530N	IC10	IC6015	IC8150	IC20	IC20N	IC5010	IC428	IC5005	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
VNMG 12T302-NF	12.40	7.15	3.97	0.20	●		●	●		●	●			●				●	●	0.40-2.50	0.07-0.18
VNMG 12T304-NF	12.40	7.15	3.97	0.40	●	●	●	●	●	●	●	●		●		●		●	●	0.70-2.00	0.07-0.24
VNMG 12T308-NF	12.40	7.15	3.97	0.80	●	●	●	●		●	●	●		●	●	●	●	●	●	1.00-3.00	0.08-0.24
VNMG 160404-NF	16.60	9.52	4.76	0.40	●		●	●			●	●						●	●	0.70-2.50	0.07-0.24
VNMG 160408-NF	16.60	9.52	4.76	0.80				●					●							1.00-3.00	0.08-0.25
VNGG 12T302-NF	12.40	7.15	3.90	0.20															●	0.40-2.50	0.05-0.17
VNGG 12T304-NF	12.40	7.15	3.90	0.40															●	0.50-3.00	0.05-0.25

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

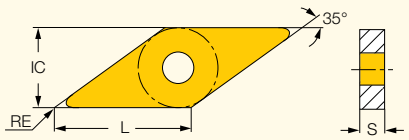
For tools, see pages: A-SVUNR/L (141) • AVC-DVUNR/L (127) • C#-SVJNR/L-F (42) • HSK A63WH-SVVNN-F (44) • MVJNR/L (43) • MVVNN (45) • SVANR/L-FS (42) • SVJNR/L-F (42) • SVVNN-F (43)

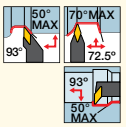
ISOTURN

VNMM-PP

Single-Sided 35° Rhombic Inserts for Machining Very Ductile Materials under Medium Cutting Conditions







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8250	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
VNMM 12T304-PP	12.40	7.15	3.97	0.40	●	●	0.80-2.50	0.12-0.20
VNMM 12T308-PP	12.40	7.15	3.97	0.80	●	●	1.00-2.50	0.12-0.25

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

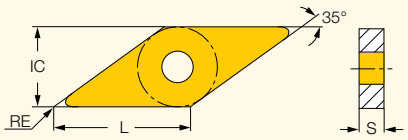
For tools, see pages: A-SVUNR/L (141) • C#-SVJNR/L-F (42) • HSK A63WH-SVVNN-F (44) • SVANR/L-FS (42) • SVJNR/L-F (42) • SVVNN-F (43)

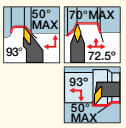
ISOTURN

VNMG-TF

Double-Sided 35° Rhombic Inserts for Machining a Wide Range of Materials at Medium Cutting Conditions







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC6025	IC8250	IC6015	IC8150	IC806	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
VNMG 160408-TF	16.60	9.52	4.76	0.80	●	●	●	●	●	●	●	●	1.00-3.50	0.10-0.30
VNMG 160412-TF	16.60	9.52	4.76	1.20							●	●	1.00-4.00	0.12-0.38

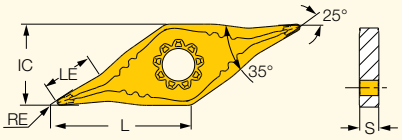
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

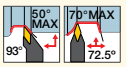
For tools, see pages: AVC-DVUNR/L (127) • MVJNR/L (43) • MVVNN (45)

ISOTURN

YNMG-F3P
Double-Sided 25° Corner Inserts for Internal and External Deep and Narrow Profiling and Undercutting







Designation	Dimensions L	IC	LE	S	RE	Tough ↔ Hard IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
YNMG 160404-F3P	16.60	9.52	5.7	4.76	0.40	●	●	0.40-3.00	0.03-0.12
YNMG 160408-F3P	16.60	9.52	5.3	4.76	0.80	●	●	0.90-4.00	0.05-0.15

• Use IYSN 322 seat for these inserts • For user guide, see pages 160-170, 274-278

For tools, see pages: MVJNR/L (43) • MVVNN (45)

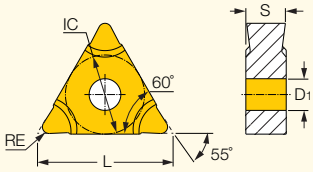


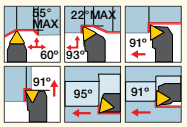
LOGIQ6TURN FINISH

D6NMG-F3P

Double-Sided Triangular Inserts with 55° Corner Angle and a Positive Rake Angle, for Finishing ISO-P Materials







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC830	IC8250	IC8150	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
D6NMG 160404-F3P	16.47	9.52	4.76	0.40	3.81	●	●	●	●	0.50-2.50	0.05-0.25
D6NMG 160408-F3P	16.47	9.52	4.76	0.80	3.81	●	●	●	●	0.80-2.50	0.07-0.25

NEW

- The LOGIQ-6-TURN inserts fit standard holders also suitable for TNMG inserts
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

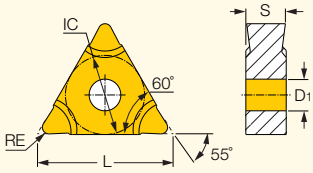
For tools, see pages: A-PTFNR/L-X/G (142) • AVC-PTLNR/L (125) • DTGNR/L (50) • MTENN-W (49) • MTJNR/L-W (49) • PTFNR/L (48) • PTGNR/L (45) • PTGNR/L-X (46) • PTGNR/L-X-JHP (47) • PTGNR/L-X-JHP-MC (47) • S-MTLNR/L-W (143) • S-PTFNR/L (143)

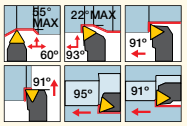
LOGIQ6TURN FINISH

D6NMG-M3P

Double-Sided Triangular Inserts with 55° Corner Angle and a Positive Rake Angle, for Semi-Finishing and Finishing ISO-P







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC830	IC8250	IC8150	IC5010	IC5005	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
D6NMG 160404-M3P	16.47	9.52	4.76	0.40	3.81	●	●	●	●	●	●	0.50-2.50	0.05-0.25
D6NMG 160408-M3P	16.47	9.52	4.76	0.80	3.81	●	●	●	●	●	●	0.80-2.50	0.07-0.25
D6NMG 160412-M3P	16.47	9.52	4.76	1.20	3.81	●	●	●			●	1.00-2.50	0.08-0.25

NEW

- The LOGIQ-6-TURN inserts fit standard holders also suitable for TNMG inserts
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

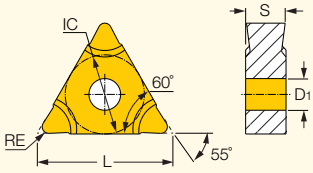
For tools, see pages: A-PTFNR/L-X/G (142) • AVC-PTLNR/L (125) • DTGNR/L (50) • MTENN-W (49) • MTJNR/L-W (49) • PTFNR/L (48) • PTGNR/L (45) • PTGNR/L-X (46) • PTGNR/L-X-JHP (47) • PTGNR/L-X-JHP-MC (47) • S-MTLNR/L-W (143) • S-PTFNR/L (143)

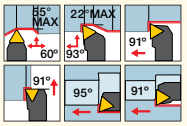
LOGIQ6TURN FINISH

D6NMG-M3M

Double-Sided Triangular Inserts with 55° Corner Angle and a Positive Rake Angle, for Semi-Finishing and Finishing ISO-M







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC706	IC830	IC6025	IC6015	IC806	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
D6NMG 160404-M3M	16.47	9.52	4.76	0.40	3.81	●	●	●	●	●	●	0.50-2.50	0.05-0.25
D6NMG 160408-M3M	16.47	9.52	4.76	0.80	3.81	●	●	●	●	●	●	0.80-2.50	0.07-0.25
D6NMG 160412-M3M	16.47	9.52	4.76	1.20	3.81			●	●			1.00-2.50	0.08-0.25

NEW

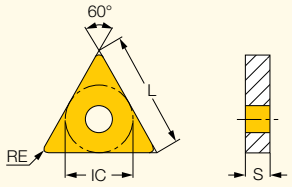
- The LOGIQ-6-TURN inserts fit standard holders also suitable for TNMG inserts
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

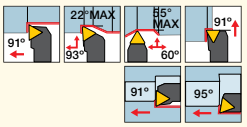
For tools, see pages: A-PTFNR/L-X/G (142) • AVC-PTLNR/L (125) • DTGNR/L (50) • MTENN-W (49) • MTJNR/L-W (49) • PTFNR/L (48) • PTGNR/L (45) • PTGNR/L-X (46) • PTGNR/L-X-JHP (47) • PTGNR/L-X-JHP-MC (47) • S-MTLNR/L-W (143) • S-PTFNR/L (143)

ISOTURN

TNMG-F3P
Double-Sided Triangular Inserts for Semi-Finishing and Finishing Applications







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8250	IC8150	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
TNMG 160404-F3P	16.50	9.52	4.76	0.40	●	●	●	●	0.50-2.00	0.07-0.25
TNMG 160408-F3P	16.50	9.52	4.76	0.80	●	●	●	●	0.90-3.00	0.08-0.25
TNMG 160412-F3P	16.50	9.52	4.76	1.20	●	●	●	●	1.30-4.00	0.10-0.25
TNMG 220408-F3P	22.00	12.70	4.76	0.80	●	●	●	●	0.90-3.00	0.08-0.25
TNMG 220412-F3P	22.00	12.70	4.76	1.20	●	●	●	●	1.30-4.00	0.10-0.25

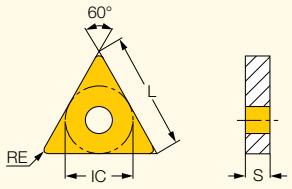
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

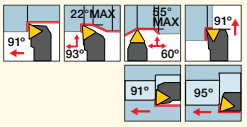
For tools, see pages: A-PTFNR/L-X/G (142) • AVC-PTLNR/L (125) • C#-DTGNR/L (50) • DTGNR/L (50) • MTENN-W (49) • MTJNR/L-W (49) • NQCH-PTJNR/L-S-JHP (48) • PTFNR/L (48) • PTGNR/L (45) • PTGNR/L-X (46) • PTGNR/L-X-JHP (47) • PTGNR/L-X-JHP-MC (47) • S-MTLNR/L-W (143) • S-PTFNR/L (143)

ISOTURN

TNMG-M3P
Double-Sided Triangular Inserts for Medium Machining Conditions on Steel







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8250	IC8150	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
TNMG 160404-M3P	16.50	9.52	4.76	0.40	●	●	●	●	0.40-5.00	0.10-0.30
TNMG 160408-M3P	16.50	9.52	4.76	0.80	●	●	●	●	0.50-5.00	0.15-0.50
TNMG 160412-M3P	16.50	9.52	4.76	1.20	●	●	●	●	0.80-5.00	0.18-0.60
TNMG 220408-M3P	22.00	12.70	4.76	0.80	●	●	●	●	0.50-6.60	0.15-0.50
TNMG 220412-M3P	22.00	12.70	4.76	1.20	●		●	●	0.80-6.60	0.18-0.60
TNMG 220416-M3P	22.00	12.70	4.76	1.60	●	●	●	●	1.00-6.60	0.23-0.65

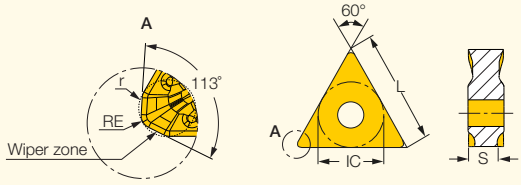
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A-PTFNR/L-X/G (142) • AVC-PTLNR/L (125) • C#-DTGNR/L (50) • DTGNR/L (50) • MTENN-W (49) • MTJNR/L-W (49) • NQCH-PTJNR/L-S-JHP (48) • PTFNR/L (48) • PTGNR/L (45) • PTGNR/L-X (46) • PTGNR/L-X-JHP (47) • PTGNR/L-X-JHP-MC (47) • S-MTLNR/L-W (143) • S-PTFNR/L (143)

HELITURN LD

TNMX-M3/4PW
Double-Sided Triangular Inserts with High Helical Cutting Edge for High Metal Removal Rates on Steel







Designation	Dimensions L	IC	S	r	RE	Tough ↔ Hard IC830	IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
TNMX 160604-M3PW	16.50	9.52	4.40	0.40	0.20	●	●	●	2.00-5.00	0.25-0.40
TNMX 160608-M3PW	16.50	9.52	4.40	0.80	0.40	●	●	●	2.50-5.50	0.30-0.50
TNMX 220712-M4PW	22.00	12.70	7.40	1.20	0.60		●	●	3.00-6.00	0.35-0.60
TNMX 220716-M4PW	22.00	12.70	7.40	1.60	1.10		●	●	3.50-6.50	0.40-0.70

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

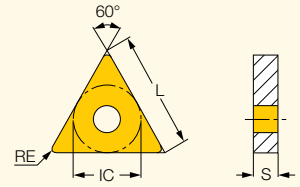
For tools, see pages: A-PTFNR/L-X/G (142) • PTGNR/L-X (46) • PTGNR/L-X-JHP (47) • PTGNR/L-X-JHP-MC (47)

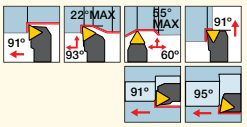
ISOTURN

TNMG-F3M

Double-Sided Triangular Inserts for Finish Turning on Stainless and Low Carbon Steel







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC706	IC830	IC6025	IC6015	IC20N	IC520N	IC806	IC807	IC804	Recommended Machining Data a_p (mm)	f (mm/rev)
TNMG 160404-F3M	16.50	9.52	4.76	0.40	●	●	●	●	●	●	●	●		0.10-1.50	0.05-0.32
TNMG 160408-F3M	16.50	9.52	4.76	0.80	●	●	●	●	●	●	●	●	●	0.10-1.50	0.10-0.42
TNMG 160412-F3M	16.50	9.52	4.76	1.20		●	●	●			●	●		0.15-2.00	0.15-0.52
TNMG 220404-F3M	22.00	12.70	4.76	0.40	●	●	●	●			●	●		0.10-1.50	0.05-0.32
TNMG 220408-F3M	22.00	12.70	4.76	0.80	●	●	●	●			●	●		0.10-1.50	0.10-0.42
TNMG 220412-F3M	22.00	12.70	4.76	1.20			●	●			●	●		0.15-2.00	0.15-0.52

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

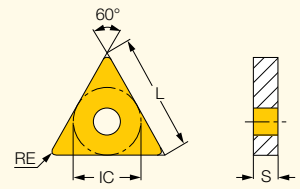
For tools, see pages: A-PTFNR/L-X/G (142) • AVC-PTLNR/L (125) • C#-DTGNR/L (50) • DTGNR/L (50) • MTENN-W (49) • MTJNR/L-W (49) • NQCH-PTJNR/L-S-JHP (48) • PTFNR/L (48) • PTGNR/L (45) • PTGNR/L-X (46) • PTGNR/L-X-JHP (47) • PTGNR/L-X-JHP-MC (47) • S-MTLNR/L-W (143) • S-PTFNR/L (143)

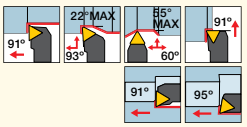
ISOTURN

TNMG-M3M

Double-Sided Triangular Inserts for Machining Stainless and Low Carbon Steel







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC706	IC830	IC5500	IC6025	IC6015	IC807	IC804	Recommended Machining Data a_p (mm)	f (mm/rev)
TNMG 160404-M3M	16.50	9.52	4.76	0.40	●	●				●		0.50-4.00	0.15-0.50
TNMG 160408-M3M	16.50	9.52	4.76	0.80	●	●	●	●	●	●	●	0.50-4.00	0.15-0.50
TNMG 160412-M3M	16.50	9.52	4.76	1.20		●		●	●	●		0.50-4.00	0.20-0.60
TNMG 220408-M3M	22.00	12.70	4.76	0.80	●	●		●	●	●		0.50-5.00	0.15-0.50
TNMG 220412-M3M	22.00	12.70	4.76	1.20		●		●	●	●		0.50-5.00	0.20-0.60
TNMG 220416-M3M	22.00	12.70	4.76	1.60		●		●	●	●		0.50-5.00	0.30-0.65

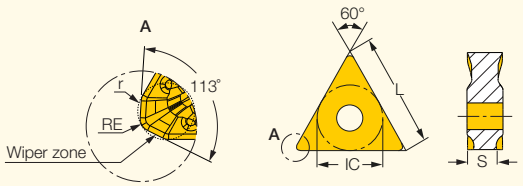
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A-PTFNR/L-X/G (142) • AVC-PTLNR/L (125) • C#-DTGNR/L (50) • DTGNR/L (50) • MTENN-W (49) • MTJNR/L-W (49) • NQCH-PTJNR/L-S-JHP (48) • PTFNR/L (48) • PTGNR/L (45) • PTGNR/L-X (46) • PTGNR/L-X-JHP (47) • PTGNR/L-X-JHP-MC (47) • S-MTLNR/L-W (143) • S-PTFNR/L (143)

HELITURN LD

TNMX-M3/4MW
Double-Sided Triangular Inserts with High Helical Cutting Edge for High Metal Removal Rates on Stainless Steel





Designation	Dimensions L	IC	S	r	RE	Tough ↔ Hard IC6025	IC6015	IC806	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
TNMX 220704-M4MW	22.00	12.70	7.94	0.40	0.20	●	●	●	●	2.00-5.00	0.12-0.40
TNMX 220708-M4MW	22.00	12.70	7.94	0.80	0.40	●		●	●	2.50-5.50	0.15-0.50
TNMX 220712-M4MW	22.00	12.70	7.94	1.20	0.60	●	●	●	●	3.00-6.00	0.18-0.50

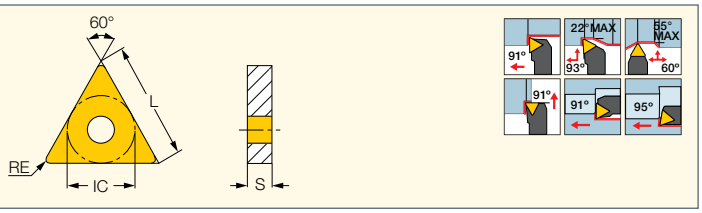
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: PTGNR/L-X (46)

ISOTURN

TNMG-F3S
Double-Sided 60° Triangular Inserts for Titanium and Heat Resistant Materials for Finishing Applications





Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC706	IC806	IC804	Recommended Machining Data a_p (mm)	f (mm/rev)
TNMG 160404-F3S	16.50	9.52	4.76	0.40	●	●	●	0.10-1.50	0.05-0.32
TNMG 160408-F3S	16.50	9.52	4.76	0.80	●	●	●	0.10-1.50	0.10-0.40
TNMG 220404-F3S	22.00	12.70	4.76	0.40	●	●	●	0.10-1.50	0.05-0.32
TNMG 220408-F3S	22.00	12.70	4.76	0.80	●	●	●	0.10-1.50	0.10-0.40

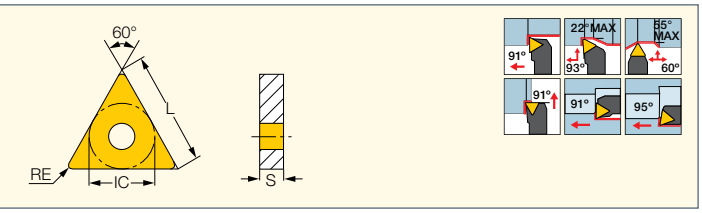
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A-PTFNR/L-X/G (142) • AVC-PTLNR/L (125) • C#-DTGNR/L (50) • DTGNR/L (50) • MTENN-W (49) • MTJNR/L-W (49) • NQCH-PTJNR/L-S-JHP (48) • PTFNR/L (48) • PTGNR/L (45) • PTGNR/L-X (46) • PTGNR/L-X-JHP (47) • PTGNR/L-X-JHP-MC (47) • S-MTLNR/L-W (143) • S-PTFNR/L (143)

ISOTURN

TNMG-FFG-CERMET
Double-Sided Triangular Cermet Inserts for Semi-Finishing and Finishing Applications on Steel and Cast Iron





Designation	Dimensions L	IC	S	RE	IC520N	Recommended Machining Data a_p (mm)	f (mm/rev)
TNMG 160404-FFG	16.50	9.52	4.76	0.40	●	0.50-2.00	0.07-0.25
TNMG 160408-FFG	16.50	9.52	4.76	0.80	●	0.90-2.50	0.08-0.25

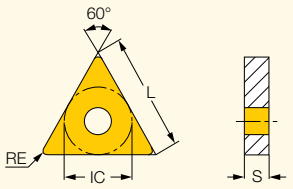
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

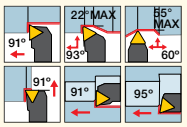
For tools, see pages: A-PTFNR/L-X/G (142) • AVC-PTLNR/L (125) • DTGNR/L (50) • MTENN-W (49) • MTJNR/L-W (49) • NQCH-PTJNR/L-S-JHP (48) • PTFNR/L (48) • PTGNR/L (45) • PTGNR/L-X (46) • PTGNR/L-X-JHP (47) • PTGNR/L-X-JHP-MC (47) • S-MTLNR/L-W (143) • S-PTFNR/L (143)

ISOTURN

TNMG-SF
Triangular Double-Sided Inserts for Super Finishing; Controls Chip Flow at Very Low Feeds and Depths of Cut







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8250	IC530N	IC520N	Recommended Machining Data a_p (mm)	f (mm/rev)
TNMG 160404-SF	16.50	9.52	4.76	0.40		●	●	0.40-2.00	0.04-0.25
TNMG 160408-SF	16.50	9.52	4.76	0.80	●	●		1.00-3.00	0.06-0.30

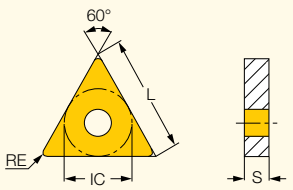
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

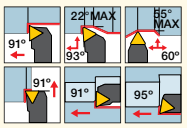
For tools, see pages: A-PTFNR/L-X/G (142) • AVC-PTLNR/L (125) • DTGNR/L (50) • MTENN-W (49) • MTJNR/L-W (49)
• NQCH-PTJNR/L-S-JHP (48) • PTFNR/L (48) • PTGNR/L (45) • PTGNR/L-X (46) • PTGNR/L-X-JHP (47) • PTGNR/L-X-JHP-MC (47) • S-MTLNR/L-W (143)
• S-PTFNR/L (143)

ISOTURN

TNMG-PF
Triangular Double-Sided Inserts for Finishing on Alloyed and Stainless Steel







Designation	Dimensions L	IC	S	RE	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
TNMG 160408-PF	16.50	9.52	4.76	0.80	●	0.80-3.00	0.08-0.30

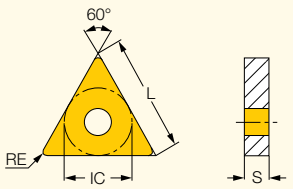
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

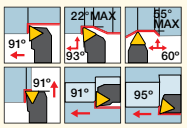
For tools, see pages: A-PTFNR/L-X/G (142) • AVC-PTLNR/L (125) • DTGNR/L (50) • MTENN-W (49) • MTJNR/L-W (49)
• NQCH-PTJNR/L-S-JHP (48) • PTFNR/L (48) • PTGNR/L (45) • PTGNR/L-X (46) • PTGNR/L-X-JHP (47) • PTGNR/L-X-JHP-MC (47) • S-MTLNR/L-W (143)
• S-PTFNR/L (143)

ISOTURN

TNMG-TF
Double-Sided Triangular Inserts for Machining a Wide Range of Materials under Medium Cutting Conditions







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8250	IC908	IC6015	IC8150	IC20	IC20N	IC806	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
TNMG 160304-TF	16.50	9.52	3.18	0.40		●									1.00-3.00	0.12-0.30
TNMG 160308-TF	16.50	9.52	3.18	0.80										●	1.00-3.00	0.12-0.30
TNMG 160404-TF	16.50	9.52	4.76	0.40	●	●		●	●	●		●	●	●	1.00-3.00	0.12-0.30
TNMG 160408-TF	16.50	9.52	4.76	0.80	●	●	●	●	●		●	●	●	●	1.00-3.00	0.12-0.30
TNMG 160412-TF	16.50	9.52	4.76	1.20		●			●				●	●	1.00-5.00	0.12-0.40
TNMG 220404-TF	22.00	12.70	4.76	0.40	●	●			●				●	●	1.00-3.50	0.14-0.35
TNMG 220408-TF	22.00	12.70	4.76	0.80		●			●			●	●	●	1.00-4.00	0.15-0.40
TNMG 220412-TF	22.00	12.70	4.76	1.20		●							●	●	1.00-4.50	0.18-0.40

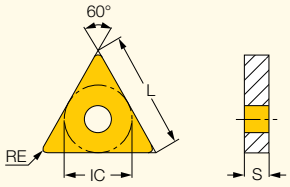
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

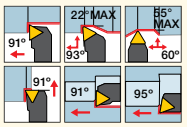
For tools, see pages: A-PTFNR/L-X/G (142) • AVC-PTLNR/L (125) • C#-DTGNR/L (50) • DTGNR/L (50) • MTENN-W (49)
• MTJNR/L-W (49) • NQCH-PTJNR/L-S-JHP (48) • PTFNR/L (48) • PTGNR/L (45) • PTGNR/L-X (46) • PTGNR/L-X-JHP (47) • PTGNR/L-X-JHP-MC (47)
• S-MTLNR/L-W (143) • S-PTFNR/L (143)

ISOTURN

TNMG-VL
Double-Sided Triangular Inserts with a Chipformer for High Temperature Alloys and Stainless Steel Valves







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC908	IC806	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
TNMG 160404-VL	16.50	9.52	4.76	0.40		●			0.80-3.50	0.10-0.25
TNMG 160408-VL	16.50	9.52	4.76	0.80	●	●	●	●	0.80-3.50	0.10-0.25

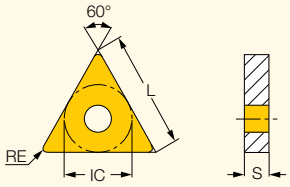
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

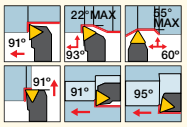
For tools, see pages: A-PTFNR/L-X/G (142) • AVC-PTLNR/L (125) • DTGNR/L (50) • MTENN-W (49) • MTJNR/L-W (49) • NQCH-PTJNR/L-S-JHP (48) • PTFNR/L (48) • PTGNR/L (45) • PTGNR/L-X (46) • PTGNR/L-X-JHP (47) • PTGNR/L-X-JHP-MC (47) • S-MTLNR/L-W (143) • S-PTFNR/L (143)

ISOTURN

TNMG/TNGG-PP
Double-Sided Triangular Inserts for Machining Very Ductile Materials under Medium Cutting Conditions







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8350	IC8250	IC8150	IC20	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
TNGG 160402-PP	16.50	9.52	4.76	0.20						●	0.50-1.50	0.05-0.25
TNMG 160404-PP	16.50	9.52	4.76	0.40		●	●		●		0.50-3.00	0.13-0.30
TNMG 160408-PP	16.50	9.52	4.76	0.80	●		●	●	●		1.00-3.00	0.12-0.30
TNMG 220404-PP	22.00	12.70	4.76	0.40	●		●				0.50-3.50	0.14-0.32
TNMG 220408-PP	22.00	12.70	4.76	0.80			●	●	●		1.00-3.50	0.14-0.32

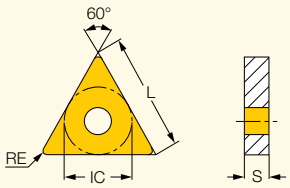
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

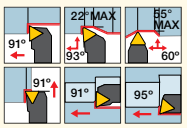
For tools, see pages: A-PTFNR/L-X/G (142) • AVC-PTLNR/L (125) • C#-DTGNR/L (50) • DTGNR/L (50) • MTENN-W (49) • MTJNR/L-W (49) • PTFNR/L (48) • PTGNR/L (45) • PTGNR/L-X (46) • PTGNR/L-X-JHP (47) • PTGNR/L-X-JHP-MC (47) • S-MTLNR/L-W (143) • S-PTFNR/L (143)

ISOTURN

TNMG-NF
Double-Sided Triangular Inserts for Semi-Finishing and Finishing Applications







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
TNMG 110304-NF	11.00	6.35	3.18	0.40	●		0.40-2.00	0.07-0.25
TNMG 160408-NF	16.50	9.52	4.76	0.80	●	●	1.00-3.00	0.08-0.25

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

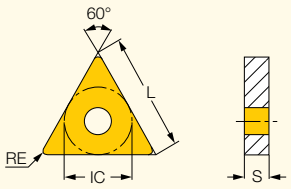
For tools, see pages: A-PTFNR/L-X/G (142) • AVC-PTLNR/L (125) • DTGNR/L (50) • MTENN-W (49) • MTJNR/L-W (49) • NQCH-PTJNR/L-S-JHP (48) • PTFNR/L (48) • PTGNR/L (45) • PTGNR/L-X (46) • PTGNR/L-X-JHP (47) • PTGNR/L-X-JHP-MC (47) • S-MTLNR/L-W (143) • S-PTFNR/L (143)

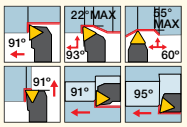
ISOTURN

TNMG-GN

Double-Sided Triangular Inserts for General Applications







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8350	IC8250	IC8150	IC20	IC5010	IC428	IC5005	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
TNMG 160404-GN	16.50	9.52	4.76	0.40							●	●			1.00-3.00	0.12-0.30
TNMG 160408-GN	16.50	9.52	4.76	0.80	●	●	●	●	●	●	●	●	●	●	1.00-3.50	0.18-0.39
TNMG 160412-GN	16.50	9.52	4.76	1.20			●	●				●			1.50-4.00	0.18-0.43
TNMG 220408-GN	22.00	12.70	4.76	0.80	●	●	●	●							1.00-4.00	0.18-0.40
TNMG 220412-GN	22.00	12.70	4.76	1.20	●	●	●								1.50-4.50	0.18-0.45
TNMG 220416-GN	22.00	12.70	4.76	1.60			●								2.00-5.00	0.25-0.45
TNMG 270612-GN	27.50	15.88	6.35	1.20	●		●								2.00-6.00	0.25-0.45

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

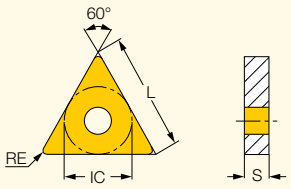
For tools, see pages: A-PTFNR/L-X/G (142) • AVC-PTLNR/L (125) • C#-DTGNR/L (50) • DTGNR/L (50) • MTENN-W (49) • MTJNR/L-W (49) • NQCH-PTJNR/L-S-JHP (48) • PTFNR/L (48) • PTGNR/L (45) • PTGNR/L-X (46) • PTGNR/L-X-JHP (47) • PTGNR/L-X-JHP-MC (47) • S-MTLNR/L-W (143) • S-PTFNR/L (143)

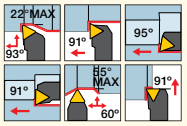
ISOTURN

TNMM-NR

Single-Sided Triangular Inserts with a Special Chipformer for Heavy Machining







Designation	Dimensions L	IC	S	RE	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
TNMM 220416-NR	22.00	12.70	4.76	1.60	●	2.50-6.00	0.30-0.50

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

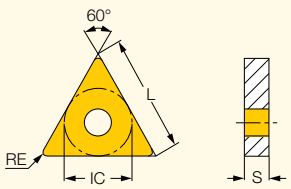
For tools, see pages: C#-DTGNR/L (50) • DTGNR/L (50) • MTENN-W (49) • MTJNR/L-W (49) • NQCH-PTJNR/L-S-JHP (48) • PTFNR/L (48) • PTGNR/L (45) • PTGNR/L-X (46) • S-MTLNR/L-W (143) • S-PTFNR/L (143)

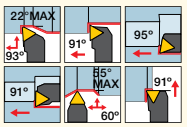
ISOTURN

TNMA

Double-Sided Triangular Inserts with no Chipformer for Short Chipping Materials







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC20	IC5010	IC428	IC5005	Recommended Machining Data a_p (mm)	f (mm/rev)
TNMA 160404	16.50	9.52	4.76	0.40		●	●	●	0.50-3.00	0.05-0.21
TNMA 160408	16.50	9.52	4.76	0.80	●	●	●	●	1.00-4.00	0.05-0.25
TNMA 160412	16.50	9.52	4.76	1.20		●	●	●	1.50-4.50	0.10-0.29
TNMA 160416	16.50	9.52	4.76	1.60		●			1.50-4.50	0.10-0.40
TNMA 220408	22.00	12.70	4.76	0.80	●		●	●	1.50-5.00	0.05-0.33
TNMA 220412	22.00	12.70	4.76	1.20		●	●	●	1.50-5.00	0.10-0.33
TNMA 220416	22.00	12.70	4.76	1.60				●	1.50-5.00	0.10-0.37

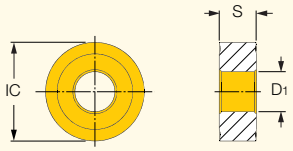
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A-PTFNR/L-X/G (142) • AVC-PTLNR/L (125) • C#-DTGNR/L (50) • DTGNR/L (50) • MTENN-W (49) • MTJNR/L-W (49) • NQCH-PTJNR/L-S-JHP (48) • PTFNR/L (48) • PTGNR/L (45) • PTGNR/L-X (46) • PTGNR/L-X-JHP (47) • PTGNR/L-X-JHP-MC (47) • S-MTLNR/L-W (143) • S-PTFNR/L (143)

ISOTURN

RNMG
Double-Sided Round Negative Insert for Medium and Rough Profiling







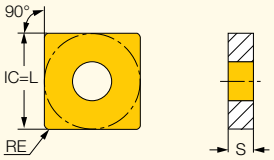
Designation	Dimensions IC	S	D1	Tough ↔ Hard IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
RNMG 120400	12.70	4.76	5.15	●	●	2.00-5.00	0.30-0.60

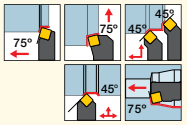
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

ISOTURN

SNMG-F3P
Double-Sided Square Inserts for Semi-Finishing and Finishing on Steel







Designation	Dimensions IC	S	RE	Tough ↔ Hard IC830	IC8250	IC8150	IC20N	IC520N	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
SNMG 090404-F3P	9.52	4.76	0.40	●	●	●	●		●	0.50-3.50	0.07-0.25
SNMG 090408-F3P	9.52	4.76	0.80	●			●	●	●	0.90-3.50	0.08-0.25
SNMG 120408-F3P	12.70	4.76	0.80	●	●	●			●	0.90-3.50	0.08-0.25
SNMG 120412-F3P	12.70	4.76	1.20	●	●	●			●	0.90-3.50	0.10-0.25

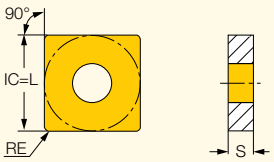
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

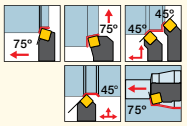
For tools, see pages: A-PSKNR/L-09 (152) • C#-MULNR/L-MW (20) • DSBNR/L (52) • DSDNN (50) • DSKNR/L (51) • DSSNR/L (51) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • PSBNR/L (56) • PSBNR/L-JHP-MC (57) • PSDNN (53) • PSDNN-JHP (53) • PSKNR/L (54) • PSSNR/L (54) • PSSNR/L-JHP (55) • PSSNR/L-JHP-MC (55)

ISOTURN

SNMG-M3P
Double-Sided Square Inserts for Medium Machining Conditions on Steel







Designation	Dimensions IC	S	RE	Tough ↔ Hard IC830	IC8250	IC8150	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
SNMG 090404-M3P	9.52	4.76	0.40	●	●	●	●	0.50-3.50	0.15-0.50
SNMG 090408-M3P	9.52	4.76	0.80	●	●	●	●	0.50-3.50	0.15-0.55
SNMG 120408-M3P	12.70	4.76	0.80	●	●	●	●	0.50-6.00	0.15-0.50
SNMG 120412-M3P	12.70	4.76	1.20	●		●	●	0.80-6.00	0.18-0.60
SNMG 150612-M3P	15.88	6.35	1.20	●	●		●	0.80-7.50	0.18-0.60
SNMG 150616-M3P	15.88	6.35	1.60	●		●	●	1.20-7.50	0.20-0.70

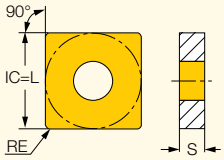
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

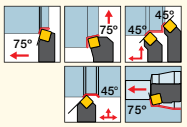
For tools, see pages: A-PSKNR/L-09 (152) • C#-MULNR/L-MW (20) • DSBNR/L (52) • DSDNN (50) • DSKNR/L (51) • DSSNR/L (51) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • PSBNR/L (56) • PSBNR/L-JHP-MC (57) • PSDNN (53) • PSDNN-JHP (53) • PSKNR/L (54) • PSSNR/L (54) • PSSNR/L-JHP (55) • PSSNR/L-JHP-MC (55)

ISOTURN

SNMG-R3P
Double-Sided Square Inserts with Chipformer for Rough Machining







Designation	Dimensions IC	S	RE	Tough ↔ Hard IC830	IC8250	IC8150	IC5010	IC5005	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
SNMG 120408-R3P	12.70	4.76	0.80		●	●				2.00-5.00	0.20-0.60
SNMG 120412-R3P	12.70	4.76	1.20		●		●	●		2.00-5.00	0.30-0.70
SNMG 120416-R3P	12.70	4.76	1.60		●	●				2.50-6.00	0.30-0.70
SNMG 150608-R3P	15.88	6.35	0.80	●	●	●	●	●	●	2.50-8.00	0.30-0.70
SNMG 150612-R3P	15.88	6.35	1.20	●	●	●	●	●	●	2.50-8.00	0.30-0.70
SNMG 150616-R3P	15.88	6.35	1.20	●	●	●	●	●		2.50-8.00	0.30-0.70
SNMG 190612-R3P	19.05	6.35	1.20	●	●	●	●	●	●	3.00-8.00	0.40-0.70
SNMG 190616-R3P	19.05	6.35	1.60		●	●	●	●	●	3.50-10.00	0.40-0.70

NEW

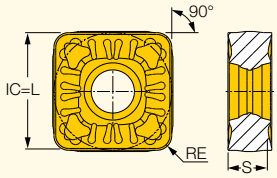
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

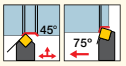
For tools, see pages: DSBNR/L (52) • DSDNN (50) • DSSNR/L (51) • PSBNR/L (56) • PSDNN (53) • PSSNR/L (54)

DOVEIQTURN HEAVY DUTY LINE

SOMG-R3P-IQ
Double-Sided 7° Negative Side Flank Square Inserts for Heavy Turning on Steel







Designation	Dimensions IC	S	RE	Tough ↔ Hard IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
SOMG 150612-R3P-IQ	15.88	6.35	1.20	●	●	2.00-9.00	0.30-0.60
SOMG 150616-R3P-IQ	15.88	6.35	1.60	●	●	2.00-9.00	0.30-0.70
SOMG 190612-R3P-IQ	19.05	6.35	1.20	●	●	3.00-12.00	0.30-0.80
SOMG 190616-R3P-IQ	19.05	6.35	1.60	●	●	3.50-12.00	0.35-0.85
SOMG 190624-R3P-IQ	19.05	6.35	2.40	●	●	3.50-12.00	0.40-1.00
SOMG 250924-R3P-IQ	25.40	9.52	2.40	●	●	4.00-15.00	0.40-1.00

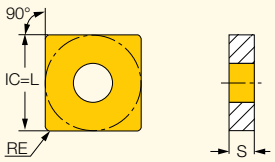
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: PSBOR/L-IQ (56) • PSDON-IQ (52)

ISOTURN

SNMG-F3M
Double-Sided Square Inserts for Stainless Steel Finishing Applications





Designation	Dimensions IC	S	RE	Tough ↔ Hard IC830	IC6025	IC6015	IC806	IC807	IC804	Recommended Machining Data a_p (mm)	f (mm/rev)
SNMG 090404-F3M	9.52	4.76	0.40		●	●	●	●		0.50-3.50	0.05-0.30
SNMG 090408-F3M	9.52	4.76	0.80	●			●	●		0.50-3.50	0.05-0.30
SNMG 120404-F3M	12.70	4.76	0.40	●			●	●		0.90-3.50	0.10-0.40
SNMG 120408-F3M	12.70	4.76	0.80	●	●	●	●	●	●	0.90-3.50	0.10-0.40
SNMG 120412-F3M	12.70	4.76	1.20	●	●	●	●	●		0.90-3.50	0.10-0.40

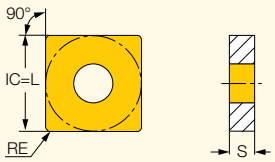
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A-PSKNR/L-09 (152) • C#-MULNR/L-MW (20) • DSBNR/L (52) • DSDNN (50) • DSKNR/L (51) • DSSNR/L (51) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • PSBNR/L (56) • PSBNR/L-JHP-MC (57) • PSDNN (53) • PSDNN-JHP (53) • PSKNR/L (54) • PSSNR/L (54) • PSSNR/L-JHP (55) • PSSNR/L-JHP-MC (55)

ISOTURN

SNMG-M3M
Double-Sided Square Inserts with a Special Chipformer for Heavy Machining





Designation	Dimensions IC	S	RE	Tough ↔ Hard IC706	IC830	IC6025	IC6015	IC806	IC1017	IC807	IC804	Recommended Machining Data a_p (mm)	f (mm/rev)
SNMG 090404-M3M	9.52	4.76	0.40		●					●		0.50-4.50	0.15-0.50
SNMG 090408-M3M	9.52	4.76	0.80		●	●	●			●		0.50-4.50	0.15-0.50
SNMG 120408-M3M	12.70	4.76	0.80		●	●	●			●	●	0.50-5.00	0.15-0.50
SNMG 120412-M3M	12.70	4.76	1.20	●	●	●	●	●	●	●		0.50-5.00	0.20-0.60
SNMG 120416-M3M	12.70	4.76	1.60		●	●	●					0.50-5.00	0.25-0.70
SNMG 150612-M3M	15.88	6.35	1.20		●	●	●			●		0.50-8.00	0.10-0.60
SNMG 150616-M3M	15.88	6.35	1.60		●	●	●			●		0.50-8.00	0.10-0.65
SNMG 190612-M3M	19.05	6.35	1.20			●	●					0.10-9.50	0.10-0.60
SNMG 190616-M3M	19.05	6.35	1.60			●	●					0.10-9.50	0.10-0.65

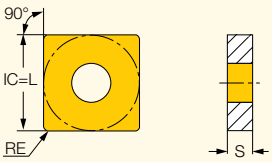
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

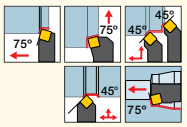
For tools, see pages: A-PSKNR/L-09 (152) • C#-MULNR/L-MW (20) • DSBNR/L (52) • DSDNN (50) • DSKNR/L (51) • DSSNR/L (51) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • PSBNR/L (56) • PSBNR/L-JHP-MC (57) • PSDNN (53) • PSDNN-JHP (53) • PSKNR/L (54) • PSSNR/L (54) • PSSNR/L-JHP (55) • PSSNR/L-JHP-MC (55)

ISOTURN

SNMG-R3M
Double-Sided 90° Square Inserts for Rough Machining on Stainless and Low Carbon Steel







Designation	Dimensions IC	S	RE	Tough ↔ Hard IC830	IC806	IC1017	Recommended Machining Data a_p (mm)	f (mm/rev)
SNMG 190612 R3M	19.05	6.35	1.20		●		2.00-11.00	0.30-0.90
SNMG 190616-R3M	19.05	6.35	1.60	●	●	●	2.00-11.00	0.30-0.90

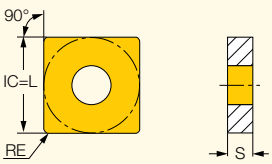
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

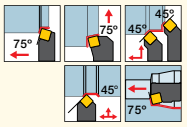
For tools, see pages: DSBNR/L (52) • DSDNN (50) • DSSNR/L (51) • PSBNR/L (56) • PSDNN (53) • PSSNR/L (54)

ISOTURN

SNMG-F3S
Double-Sided 90° Rhombic Inserts for Titanium and Heat Resistant Materials for Finishing Applications







Designation	Dimensions IC	S	RE	Tough ↔ Hard IC806	IC804	Recommended Machining Data a_p (mm)	f (mm/rev)
SNMG 090404-F3S	9.52	4.76	0.40	●	●	0.10-1.50	0.05-0.35
SNMG 090408-F3S	9.52	4.76	0.80	●	●	0.10-1.50	0.05-0.35
SNMG 120404-F3S	12.70	4.76	0.40	●	●	0.10-1.50	0.05-0.35
SNMG 120408-F3S	12.70	4.76	0.80	●	●	0.10-1.50	0.05-0.35

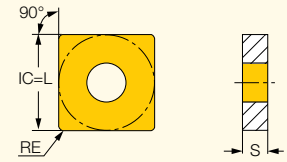
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

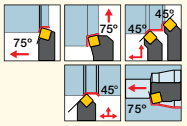
For tools, see pages: A-PSKNR/L-09 (152) • C#-MULNR/L-MW (20) • DSBNR/L (52) • DSDNN (50) • DSKNR/L (51) • DSSNR/L (51) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • PSBNR/L (56) • PSBNR/L-JHP-MC (57) • PSDNN (53) • PSDNN-JHP (53) • PSKNR/L (54) • PSSNR/L (54) • PSSNR/L-JHP (55) • PSSNR/L-JHP-MC (55)

ISOTURN

SNMG-VL
Double-Sided Square Inserts with a Chipformer for High Temperature Alloys and Stainless Steel Valves







Designation	Dimensions IC	S	RE	Tough ↔ Hard IC806	IC1017	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
SNMG 120404-VL	12.70	4.76	0.40	●			1.00-5.00	0.10-0.25
SNMG 120408-VL	12.70	4.76	0.80	●	●	●	1.00-5.00	0.10-0.25

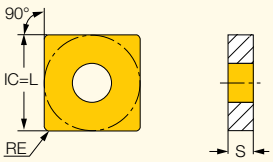
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

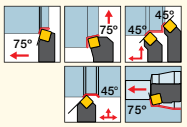
For tools, see pages: C#-MULNR/L-MW (20) • DSBNR/L (52) • DSDNN (50) • DSKNR/L (51) • DSSNR/L (51) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • PSBNR/L (56) • PSDNN (53) • PSDNN-JHP (53) • PSKNR/L (54) • PSSNR/L (54) • PSSNR/L-JHP (55) • PSSNR/L-JHP-MC (55)

ISOTURN

SNMG-PP
Double-Sided Square Inserts for Machining Very Ductile Materials at Medium Cutting Conditions







Designation	Dimensions IC	S	RE	IC830	Recommended Machining Data a_p (mm)	f (mm/rev)
SNMG 120408-PP	12.70	4.76	0.80	●	1.00-4.00	0.14-0.30

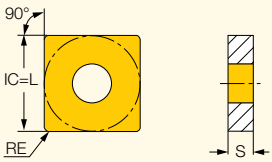
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

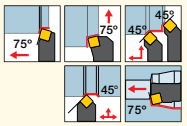
For tools, see pages: C#-MULNR/L-MW (20) • DSBNR/L (52) • DSDNN (50) • DSKNR/L (51) • DSSNR/L (51) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • PSBNR/L (56) • PSDNN (53) • PSDNN-JHP (53) • PSKNR/L (54) • PSSNR/L (54) • PSSNR/L-JHP (55) • PSSNR/L-JHP-MC (55)

ISOTURN

SNMG-TF
Double-Sided Square Inserts for Machining a Wide Range of Materials under Medium Cutting Conditions







Designation	Dimensions IC	S	RE	Tough ↔ Hard IC830	IC8250	IC6015	IC8150	IC20	IC806	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
SNMG 090304-TF	9.52	3.17	0.40		●							0.80-3.00	0.10-0.30
SNMG 120404-TF	12.70	4.76	0.40		●						●	1.00-4.00	0.12-0.35
SNMG 120408-TF	12.70	4.76	0.80	●	●	●			●	●	●	1.00-4.00	0.13-0.35
SNMG 120412-TF	12.70	4.76	1.20	●	●		●	●		●	●	1.50-4.00	0.15-0.40

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

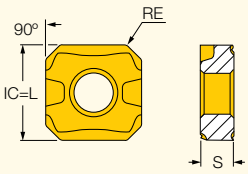
For tools, see pages: C#-MULNR/L-MW (20) • DSBNR/L (52) • DSDNN (50) • DSKNR/L (51) • DSSNR/L (51) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • PSBNR/L (56) • PSBNR/L-JHP-MC (57) • PSDNN (53) • PSDNN-JHP (53) • PSKNR/L (54) • PSSNR/L (54) • PSSNR/L-JHP (55) • PSSNR/L-JHP-MC (55)

ISOTURN

SNMG-EM-M/R

Double-Sided Square Inserts
for Medium Machining on
High Temperature Alloys







Designation	Dimensions IC	S	RE	Tough ↔ Hard IC806	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
SNMG 120408-EM-M	12.70	4.76	0.80	•		1.00-3.00	0.20-0.40
SNMG 120408-EM-R	12.70	4.76	0.80	•	•	3.00-6.00	0.25-0.50

- Requires the use of RST 443R/L SET - seat when used on DSSNR/L tools and TSN 423-PIN SET seat when used on PSSNR/L-JHP and PSDNN-JHP tools
- For user guide and cutting speed recommendations, see pages 160-170,274-278

For tools, see pages: DSDNN (50) • DSSNR/L (51) • PSSNR/L-JHP-MC (55) • PSDNN (53) • PSDNN-JHP (53) • PSSNR/L (54) • PSSNR/L-JHP (55)

The inserts have 4 cutting edges (2 on each side) with truncated radii – a configuration which facilitates heat transfer from the cutting area. The two edges without chipbreakers (flat) are not used.

Toolholders

These inserts require the use of **RST 443R/L SET** - special seat when used on DSSNR/L tools and **TSN 423-PIN SET** seat when used on PSSNR/L-JHP and PSDNN–JHP tools. The standard seats should be replaced with the special ones which have a pin whose purpose is to prevent using the non-working flat cutting corners.



Correct insert position



Wrong positioning

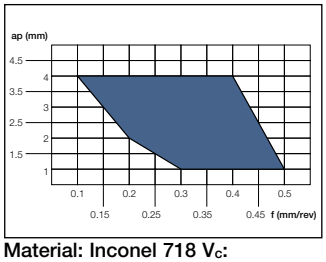


Orientation pin

Advantages

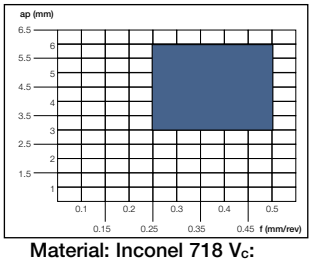
- Increased cutting speed (due to better heat transfer)
- Reduced notch wear (due to 45° approach angle)
- Increased feed (the 45° approach angle produces a thin chip)
- Increased productivity of up to 50%
- Ability to machine in two directions with the same tool, longitudinal and face turning

Chipbreaking Range SNMG 120408-EM-M



Material: Inconel 718 V_c: 50 m/min With coolant

Chipbreaking Range SNMG 120408-EM-R



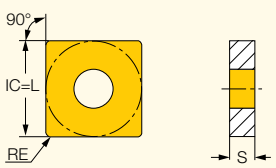
Material: Inconel 718 V_c: 50 m/min With coolant

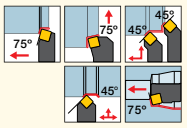
ISOTURN

SNMG-GN

Double-Sided Square Inserts
for General Applications







Designation	Dimensions IC	S	RE	Tough ↔ Hard IC830	IC8350	IC8250	IC8150	IC20	IC5010	IC428	IC5005	Recommended Machining Data a_p (mm)	f (mm/rev)
SNMG 120408-GN	12.70	4.76	0.80		•	•	•	•	•	•	•	1.00-5.00	0.20-0.45
SNMG 120412-GN	12.70	4.76	1.20				•					1.40-5.00	0.25-0.50
SNMG 150612-GN	15.88	6.35	1.20	•		•		•				2.00-7.00	0.30-0.60
SNMG 190612-GN	19.05	6.35	1.20	•	•							2.00-7.00	0.30-0.60
SNMG 190616-GN	19.05	6.35	1.60	•								2.00-9.00	0.30-0.65

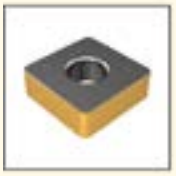
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

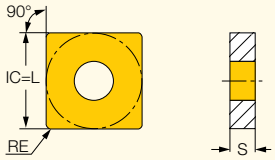
For tools, see pages: C#-MULNR/L-MW (20) • DSBNR/L (52) • DSDNN (50) • DSKNR/L (51) • DSSNR/L (51) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • PSBNR/L (56) • PSDNN (53) • PSDNN-JHP (53) • PSKNR/L (54) • PSSNR/L (54) • PSSNR/L-JHP (55) • PSSNR/L-JHP-MC (55)

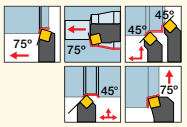
ISOTURN

SNMA

Double-Sided Square Inserts
Without a Chipformer for
Short Chipping Materials







Designation	Dimensions IC	S	RE	Tough ↔ Hard IC20	IC5010	IC428	IC5005	Recommended Machining Data a_p (mm)	f (mm/rev)
SNMA 120408	12.70	4.76	0.80	●	●	●	●	1.50-5.00	0.05-0.50
SNMA 120412	12.70	4.76	1.20	●	●	●	●	1.50-5.00	0.10-0.50
SNMA 120416	12.70	4.76	1.60		●	●	●	2.00-6.00	0.10-0.60
SNMA 190612	19.05	6.35	1.20	●	●		●	2.00-7.00	0.10-0.60
SNMA 190616	19.05	6.35	1.60		●	●		2.50-10.00	0.10-0.60

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

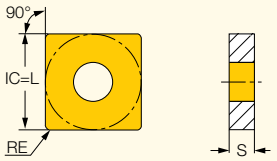
For tools, see pages: C#-MULNR/L-MW (20) • DSBNR/L (52) • DSDNN (50) • DSKNR/L (51) • DSSNR/L (51) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • PSBNR/L (56) • PSDNN (53) • PSDNN-JHP (53) • PSKNR/L (54) • PSSNR/L (54) • PSSNR/L-JHP (55) • PSSNR/L-JHP-MC (55)

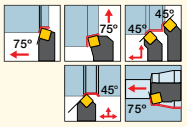
ISOTURN

SNMG-NR

Double-Sided Square Inserts
with a Special Chipformer
for Heavy Machining







Designation	Dimensions IC	S	RE	Tough ↔ Hard IC830	IC8350	IC8250	IC8150	IC5010	IC428	IC5005	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
SNMG 120412-NR	12.70	4.76	1.20			●			●	●			2.00-5.00	0.30-0.70
SNMG 120416-NR	12.70	4.76	1.60		●	●	●						2.50-6.00	0.30-0.70
SNMG 150608-NR	15.88	6.35	0.80			●							2.50-8.00	0.30-0.70
SNMG 150612-NR	15.88	6.35	1.20		●	●							2.50-8.00	0.30-0.70
SNMG 150616-NR	15.88	6.35	1.60			●	●	●		●			2.50-8.00	0.30-0.70
SNMG 190612-NR	19.05	6.35	1.20			●					●	●	3.00-8.00	0.40-0.70
SNMG 190616-NR	19.05	6.35	1.60	●	●	●	●						3.50-10.00	0.40-0.70
SNMG 190616-R3P	19.05	6.35	1.60	●									3.50-10.00	0.40-0.70
SNMG 250724-NR	25.40	7.94	2.40		●								5.00-15.00	0.40-1.00
SNMG 250924-NR	25.40	9.52	2.40	●	●	●							5.00-15.00	0.40-1.00

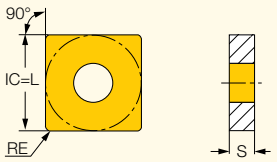
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

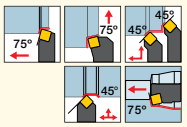
For tools, see pages: C#-MULNR/L-MW (20) • DSBNR/L (52) • DSDNN (50) • DSKNR/L (51) • DSSNR/L (51) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • PSBNR/L (56) • PSDNN (53) • PSDNN-JHP (53) • PSKNR/L (54) • PSSNR/L (54) • PSSNR/L-JHP (55) • PSSNR/L-JHP-MC (55)

ISOTURN

SNMM-R3P
Single-Sided Square Inserts for Rough Turning Applications







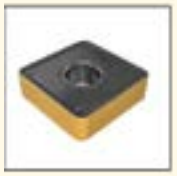
Designation	Dimensions IC	S	RE	Tough ↔ Hard IC830	IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
SNMM 120408-R3P	12.70	4.76	0.80	•	•	•	0.70-7.50	0.20-0.55
SNMM 120412-R3P	12.70	4.76	1.20	•	•	•	1.00-7.50	0.25-0.70
SNMM 120416-R3P	12.70	4.76	1.60	•	•		2.00-7.50	0.30-0.90
SNMM 150612-R3P	15.88	6.35	1.20	•	•	•	2.00-9.50	0.30-0.70
SNMM 150616-R3P	15.88	6.35	1.60	•	•	•	2.50-9.50	0.30-0.90
SNMM 190612-R3P	19.05	6.35	1.20	•	•	•	3.00-12.00	0.25-0.80
SNMM 190616-R3P	19.05	6.35	1.60	•	•	•	3.50-12.00	0.30-0.90
SNMM 190624-R3P	19.05	6.35	2.40	•	•	•	3.50-12.00	0.30-1.20
SNMM 250924-R3P	25.40	9.52	2.40	•	•	•	4.00-15.00	0.40-1.20

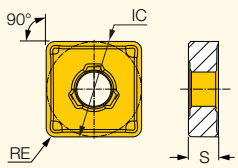
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

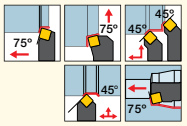
For tools, see pages: C#-MULNR/L-MW (20) • DSBNR/L (52) • DSDNN (50) • DSKNR/L (51) • DSSNR/L (51) • HSK A63WH-MULNR-J12MWX2 (21) • HSK A63WH-MULNR/L-MW (20) • HSK A63WH-MUMNN-MW (21) • MULNR/L-12MW (19) • PSBNR/L (56) • PSDNN (53) • PSDNN-JHP (53) • PSKNR/L (54) • PSSNR/L (54) • PSSNR/L-JHP (55) • PSSNR/L-JHP-MC (55)

ISOTURN

SNMM-R4P
Single-Sided Square Inserts for Heavy Turning Applications







Designation	Dimensions IC	S	RE	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
SNMM 250724-R4P	25.40	9.52	2.40	•	4.00-17.00	0.60-1.30

NEW

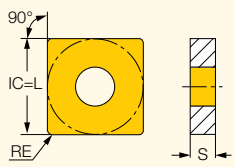
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

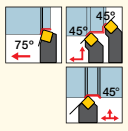
For tools, see pages: PSBNR/L (56) • PSDNN (53) • PSSNR/L (54)

ISOTURN

SNMM-H3P
Single-Sided Square Inserts with a Strong Cutting Edge for Extra Rough Turning







Designation	Dimensions IC	RE	S	Tough ↔ Hard IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
SNMM 190624-H3P	19.05	2.40	6.35	•	•	4.00-9.00	0.55-1.20
SNMM 250924-H3P	25.40	2.40	9.52	•	•	5.00-12.00	0.55-1.30

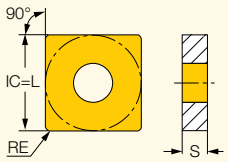
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

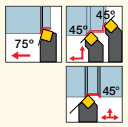
For tools, see pages: DSBNR/L (52) • DSDNN (50) • DSSNR/L (51) • PSBNR/L (56) • PSDNN (53) • PSSNR/L (54)

ISOTURN

SNMM-H4P
Single-Sided Square Inserts
with a Strong Cutting Edge
for Extra Rough Turning







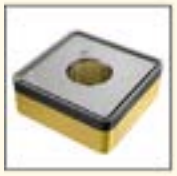
Designation	Dimensions IC	RE	S	Tough ↔ Hard IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
SNMM 190624-H4P	19.05	2.40	6.35	●	●	4.00-12.00	0.50-1.10
SNMM 250924-H4P	25.40	2.40	9.52	●	●	5.00-15.00	0.55-1.50

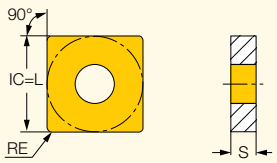
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

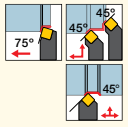
For tools, see pages: DSBNR/L (52) • DSDNN (50) • DSSNR/L (51) • PSBNR/L (56) • PSDNN (53) • PSSNR/L (54)

ISOTURN

SNMM-H5P
Single-Sided Square Insert
with a Strong Cutting Edge
for Extra Rough Turning







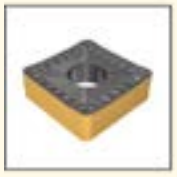
Designation	Dimensions IC	RE	S	Tough ↔ Hard IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
SNMM 250924-H5P	25.40	2.40	9.52	●	●	3.60-16.00	0.60-1.50

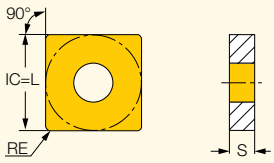
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

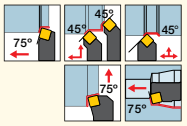
For tools, see pages: PSBNR/L (56) • PSDNN (53) • PSSNR/L (54)

ISOTURN

SNMM-NM
Single-Sided Square Inserts
for Roughing Applications







Designation	Dimensions IC	S	RE	Tough ↔ Hard IC830	IC8250	Recommended Machining Data a_p (mm)	f (mm/rev)
SNMM 190616-NM	19.05	6.35	1.60	●	●	2.50-10.00	0.30-0.70

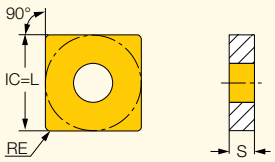
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

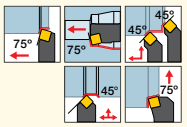
For tools, see pages: DSBNR/L (52) • DSDNN (50) • DSSNR/L (51) • PSBNR/L (56) • PSDNN (53) • PSSNR/L (54)

ISOTURN

SNMM-NR
Single-Sided Square Inserts with a Special Chipformer for Roughing Machining







Designation	Dimensions IC	S	RE	Tough ↔ Hard IC8350	IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
SNMM 190616-NR	19.05	6.35	1.60		●		2.50-8.00	0.35-1.00
SNMM 250724-NR	25.40	7.94	2.40	●	●	●	5.00-15.00	0.35-1.00

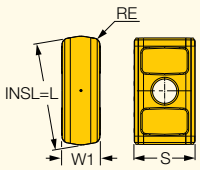
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: DSBNR/L (52) • DSDNN (50) • DSSNR/L (51) • PSBNR/L (56) • PSDNN (53) • PSSNR/L (54)

HEAVY SUPER TURN

LOMX-H6P
Tangential Inserts with 4 Cutting Edges for High Metal Removal of up to 35 mm D.O.C. on Steel







Designation	Dimensions W1	INSL	S	RE	Tough ↔ Hard IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
LOMX 402224-H6P	14.40	40.30	22.60	2.40	●	●	7.00-35.00	1.00-2.00

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see page: PLBOR/L (57)

Application Range H6P Chipformer

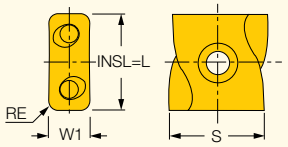


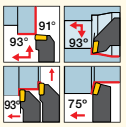
HELITURN TANGENTIAL LINE

LNMX-HT

Tangential Inserts with 4 Cutting Edges and a Positive Rake Angle for High Metal Removal Rates







Designation	Dimensions W1	INSL	S	RE	Tough ↔ Hard IC830	IC8350	IC8250	IC908	IC8150	IC428	IC5005	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
LNMX 110408L-HT	4.75	11.00	11.40	0.80	●	●	●	●	●	●			●	0.50-5.00	0.15-0.60
LNMX 110408R-HT	4.75	11.00	11.40	0.80	●	●	●	●	●	●		●	●	0.50-5.00	0.15-0.60
LNMX 110412L-HT	4.75	11.00	11.40	1.20			●	●	●	●				0.80-5.00	0.20-0.80
LNMX 110412R-HT	4.75	11.00	11.40	1.20	●		●	●	●	●				0.80-5.00	0.20-0.80
LNMX 150608L-HT	6.40	15.00	13.40	0.80	●		●	●	●	●	●		●	1.00-6.00	0.25-0.60
LNMX 150608R-HT	6.40	15.00	13.40	0.80	●	●	●	●	●	●	●	●	●	1.00-6.00	0.25-0.60
LNMX 150612L-HT	6.40	15.00	13.40	1.20		●	●	●	●	●			●	1.50-7.00	0.30-0.80
LNMX 150612R-HT	6.40	15.00	13.40	1.20	●	●	●	●	●	●	●		●	1.50-7.00	0.30-0.80
LNMX 150616L-HT	6.40	15.00	13.40	1.60	●		●	●	●	●	●			2.00-8.00	0.30-1.00
LNMX 150616R-HT	6.40	15.00	13.40	1.60		●	●	●	●	●			●	2.00-8.00	0.30-1.00
LNMX 221016R/L-HT	9.40	22.00	20.00	1.60		●	●		●					4.00-15.00	0.30-1.00
LNMX 221024R/L-HT	9.40	22.00	20.00	2.40		●	●		●					5.00-15.00	0.30-1.10

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

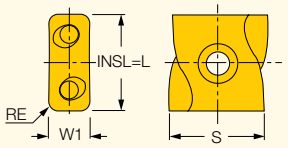
For tools, see pages: C#-SLANR/L-TANG (60) • PLANR/L-TANG (58) • S-PLANR-TANG (132) • S-SLANR/L-TANG (131) • SLANR/L-15-TANG-JHP (60) • SLANR/L-TANG (59) • SLBNR/L-TANG (61) • SLFNR/L-TANG (61)

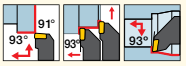
HELITURN TANGENTIAL LINE

LNMX-HM

Tangential Inserts with a Positive Rake Angle for High Metal Removal on Soft and Ductile Materials







Designation	Dimensions INSL	W1	S	RE	Tough ↔ Hard IC6025	IC8250	IC6015	IC806	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
LNMX 110408L-HM	11.00	4.75	11.40	0.80	●		●		●		1.00-5.00	0.10-0.40
LNMX 110408R-HM	11.00	4.75	11.40	0.80		●	●		●		1.00-5.00	0.10-0.40
LNMX 110412L-HM	11.00	4.75	11.40	1.20		●					1.00-5.00	0.10-0.40
LNMX 110412R-HM	11.00	4.75	11.40	1.20			●				1.00-5.00	0.10-0.40
LNMX 150608L-HM	15.00	6.40	13.40	0.80		●		●		●	1.00-6.00	0.10-0.50
LNMX 150608R-HM	15.00	6.40	13.40	0.80		●		●	●	●	1.00-6.00	0.10-0.50
LNMX 150612L-HM	15.00	6.40	13.40	1.20		●		●		●	1.50-7.00	0.15-0.70
LNMX 150612R-HM	15.00	6.40	13.40	1.20		●		●	●	●	1.50-7.00	0.15-0.70

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

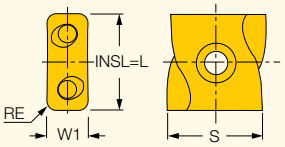
For tools, see pages: C#-SLANR/L-TANG (60) • PLANR/L-TANG (58) • S-PLANR-TANG (132) • S-SLANR/L-TANG (131) • SLANR/L-15-TANG-JHP (60) • SLANR/L-TANG (59) • SLFNR/L-TANG (61)

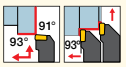
HELITURN TANGENTIAL LINE

LNMX-WG

Tangentially Clamped Inserts with a Wiper Corner Design for High Production Cutting and Excellent Surface Finish







Designation	Dimensions INSL	W1	S	RE	IC8250	Recommended Machining Data a_p (mm)	f (mm/rev)
LNMX 150612R/L-WG	15.00	6.40	13.40	1.20	●	1.50-7.00	0.30-0.80

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

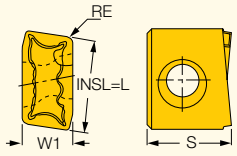
For tools, see pages: C#-SLANR/L-TANG (60) • PLANR/L-TANG (58) • S-PLANR-TANG (132) • S-SLANR/L-TANG (131) • SLANR/L-15-TANG-JHP (60) • SLANR/L-TANG (59) • SLFNR/L-TANG (61)

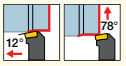
FEEDTURN

LNMX-HF

Tangentially Clamped Rough Turning Inserts for High Feed (up to 2.4 mm/Rev)







Designation	Dimensions W1	INSL	S	RE	Tough ↔ Hard IC830	IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
LNMX 1608L-HF	8.50	16.00	14.00	1.20		●	●	0.50-2.40	1.50-2.40
LNMX 1608R-HF	8.50	16.00	14.00	1.20	●	●	●	0.50-2.40	1.50-2.40

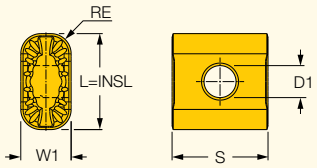
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

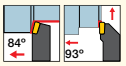
ISOTURN

LNMX 19/30

Tangentially Clamped Inserts for Railroad Wheel Re-Turning







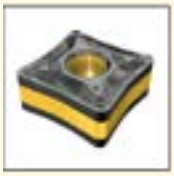
Designation	Dimensions W1	INSL	S	RE	D1	Tough ↔ Hard IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
LNMX 191940-F3P	10.00	19.05	19.05	4.00	6.35		●	0.20-1.50	0.20-0.60
LNMX 191940-WF	10.00	19.05	19.05	4.00	6.35	●	●	1.00-3.50	0.25-1.00
LNMX 191940-WM	10.00	19.05	19.05	4.00	6.35	●	●	1.50-5.00	0.40-1.50
LNMX 191940-WKR	10.00	19.05	19.05	4.00	6.35		●	3.00-6.00	0.30-1.50
LNMX 301940-WM	12.00	30.00	19.05	4.00	6.35		●	3.00-7.00	0.70-1.70
LNMX 301940-WR	12.00	30.00	19.05	4.00	6.35	●	●	3.00-12.00	0.80-1.90
LNMX 301940-WKR	12.00	30.00	19.05	4.00	6.35		●	5.00-12.00	0.50-1.90

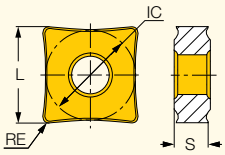
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

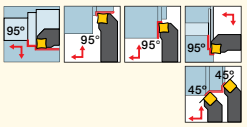
For tools, see page: PRWR/L (62)

ISOTURN

QNMG-NF
Double-Sided Inserts with Four 80° Corners for Finishing Applications







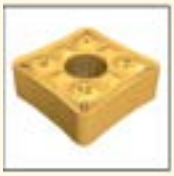
Designation	Dimensions L	IC	S	RE	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
QNMG 120408-NF	13.33	12.70	4.76	0.80	●	0.80-3.00	0.08-0.25

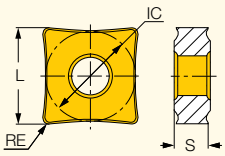
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

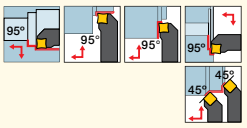
For tools, see pages: PQFNR/L (64) • PQLNR/L (63) • PQSNR/L (64) • S-PQFNR/L (132) • S-PQLNR/L (133)

ISOTURN

QNMG-TF
Double-Sided Inserts with Four 80° Corners for General Applications







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
QNMG 090404-TF	10.32	9.52	4.76	0.40	●	●	●	1.00-4.00	0.12-0.35
QNMG 090408-TF	10.32	9.52	4.76	0.80	●	●	●	1.00-4.00	0.12-0.35
QNMG 120404-TF	13.41	12.70	4.76	0.40	●	●		1.00-4.00	0.12-0.35
QNMG 120408-TF	13.33	12.70	4.76	0.80	●	●	●	1.00-4.00	0.12-0.35
QNMG 120412-TF	13.25	12.70	4.76	1.20			●	1.50-4.50	0.15-0.40

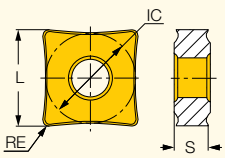
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

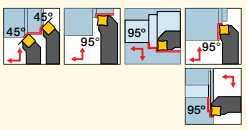
For tools, see pages: PQFNR/L (64) • PQLNR/L (63) • PQSNR/L (64) • S-PQFNR/L (132) • S-PQLNR/L (133)

ISOTURN

QNMG-PP
Double-Sided Inserts with Four 80° Corners for General Applications







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8250	Recommended Machining Data a_p (mm)	f (mm/rev)
QNMG 090408-PP	10.32	9.52	4.76	0.80	●		1.00-4.00	0.14-0.30
QNMG 120408-PP	13.33	12.70	4.76	0.80	●	●	1.00-4.00	0.14-0.30

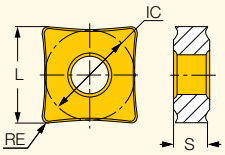
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

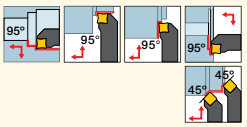
For tools, see pages: PQFNR/L (64) • PQLNR/L (63) • PQSNR/L (64) • S-PQFNR/L (132) • S-PQLNR/L (133)

ISOTURN

QNMG-GN
Double-Sided Inserts with Four 80° Corners for General Applications







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8250	IC8150	IC428	Recommended Machining Data a_p (mm)	f (mm/rev)
QNMG 090408-GN	10.32	9.52	4.76	0.80	•		•		1.00-4.50	0.16-0.45
QNMG 120408-GN	13.33	12.70	4.76	0.80	•	•	•	•	1.00-4.50	0.16-0.45
QNMG 120412-GN	13.25	12.70	4.76	1.20	•	•	•	•	1.50-5.00	0.22-0.50

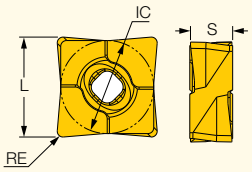
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

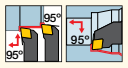
For tools, see pages: PQFNR/L (64) • PQLNR/L (63) • PQSNR/L (64) • S-PQFNR/L (132) • S-PQLNR/L (133)

LOGIQ4TURN

CXMG-F3P
80° Double-Sided and Double-Positive Inserts with a Positive Rake for Finishing on Alloyed Steel







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8150	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
CXMG 090401-F3P	10.40	9.35	4.66	0.10		•	0.20-2.00	0.02-0.15
CXMG 090402-F3P	10.40	9.35	4.66	0.20	•	•	0.30-2.00	0.03-0.15
CXMG 090404-F3P	10.40	9.35	4.66	0.40	•		0.40-2.00	0.05-0.25
CXMG 12T504-F3P	13.83	12.50	5.80	0.40	•	•	0.40-2.00	0.05-0.25
CXMG 12T508-F3P	13.75	12.50	5.80	0.80	•	•	0.80-2.00	0.05-0.25

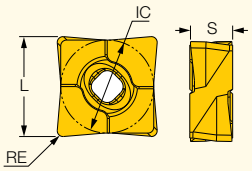
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

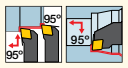
For tools, see pages: A-PCLXR/L (129) • AVC-PCLXR/L (124) • NQCH-PCLXR/L-S-JHP (67) • PCLXR/L (65) • PCLXR/L-JHP (65) • PCLXR/L-JHP-MC (67) • PCLXR/L-S (66) • PCLXR/L-S-JHP (66) • SBTT-PCLXR/L09-JHP (418)

LOGIQ4TURN

CXMG-M3P
80° Double-Sided and Double-Positive Inserts with a Positive Rake for Medium Machining on Alloyed Steel







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8250	IC8150	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
CXMG 090408-M3P	10.32	9.35	4.65	0.80	•	•	•	0.80-3.00	0.10-0.50
CXMG 12T508-M3P	13.75	12.50	5.80	0.80	•	•	•	0.80-5.00	0.10-0.50
CXMG 12T512-M3P	13.68	12.50	5.80	1.20	•	•	•	1.20-5.00	0.10-0.50

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

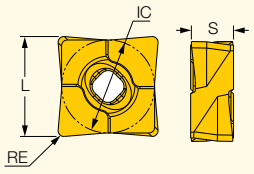
For tools, see pages: A-PCLXR/L (129) • AVC-PCLXR/L (124) • NQCH-PCLXR/L-S-JHP (67) • PCLXR/L (65) • PCLXR/L-JHP (65) • PCLXR/L-JHP-MC (67) • PCLXR/L-S (66) • PCLXR/L-S-JHP (66) • SBTT-PCLXR/L09-JHP (418)

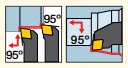
LOGIQ4TURN

CXMG-F3M

80° Double-Sided and Double-Positive Inserts with a Positive Rake for Finishing on Stainless Steel and H.T.A.







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC706	IC6025	IC6015	IC806	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
CXMG 090401-F3M	10.40	9.35	4.66	0.10					●	0.20-2.00	0.02-0.15
CXMG 090402-F3M	10.40	9.35	4.66	0.20	●		●	●	●	0.30-2.00	0.03-0.15
CXMG 090404-F3M	10.40	9.35	4.66	0.40	●	●	●	●	●	0.40-2.00	0.05-0.25
CXMG 12T504-F3M	13.83	12.50	5.80	0.40	●	●		●	●	0.40-2.00	0.05-0.25
CXMG 12T508-F3M	13.75	12.50	5.80	0.80	●	●		●	●	0.80-2.00	0.05-0.25

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

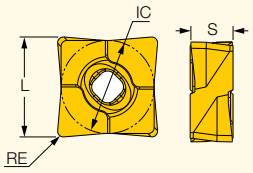
For tools, see pages: A-PCLXR/L (129) • AVC-PCLXR/L (124) • NQCH-PCLXR/L-S-JHP (67) • PCLXR/L (65) • PCLXR/L-JHP (65) • PCLXR/L-JHP-MC (67) • PCLXR/L-S (66) • PCLXR/L-S-JHP (66) • SBTT-PCLXR/L09-JHP (418)

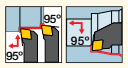
LOGIQ4TURN

CXMG-M3M

80° Double-Sided and Double-Positive Inserts with a Positive Rake for Medium Machining on Stainless Steel and H.T.A.







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC706	IC6025	IC806	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
CXMG 090408-M3M	10.32	9.35	4.66	0.80	●	●	●	●	0.80-3.00	0.15-0.50
CXMG 12T508-M3M	13.75	12.50	5.80	0.80	●	●	●	●	0.80-5.00	0.15-0.50
CXMG 12T512-M3M	13.68	12.50	5.80	1.20		●	●	●	1.20-5.00	0.15-0.50

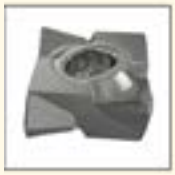
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

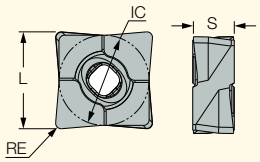
For tools, see pages: A-PCLXR/L (129) • AVC-PCLXR/L (124) • NQCH-PCLXR/L-S-JHP (67) • PCLXR/L (65) • PCLXR/L-JHP (65) • PCLXR/L-JHP-MC (67) • PCLXR/L-S (66) • PCLXR/L-S-JHP (66) • SBTT-PCLXR/L09-JHP (418)

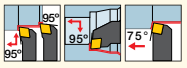
LOGIQ4TURN

CXGG-M3N-P

CXGG 80° Double-Sided and Double-Positive Polished Rhombic Inserts







Designation	Dimensions L	IC	S	RE	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
CXGG 090404-M3N-P	10.40	9.35	4.66	0.40	●	0.30-3.00	0.10-0.50
CXGG 090402-M3N-P	10.44	9.35	4.66	0.20	●	0.15-3.00	0.05-0.50
CXGG 12T508-M3N-P	13.75	12.50	5.80	0.80	●	0.50-5.00	0.15-0.50
CXGG 12T504-M3N-P	13.83	12.50	5.80	0.40	●	0.30-5.00	0.10-0.50

NEW

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

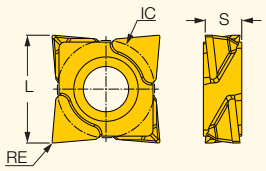
For tools, see pages: A-PCLXR/L (129) • AVC-PCLXR/L (124) • NQCH-PCLXR/L-S-JHP (67) • PCLXR/L (65) • PCLXR/L-JHP (65) • PCLXR/L-JHP-MC (67) • PCLXR/L-S (66) • PCLXR/L-S-JHP (66)

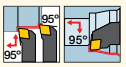
LOGIQ4TURN

CXMU-F3P

80° Double-Sided and Double-Positive Inserts with a Positive Rake for Finishing Alloyed Steel







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8250	IC1008	IC8150	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
CXMU 060202-F3P	7.00	6.34	2.38	0.20	●	●	●	●	0.30-2.00	0.05-0.25
CXMU 060204-F3P	6.96	6.34	2.38	0.40	●	●	●	●	0.50-2.00	0.05-0.25
CXMU 060208-F3P	6.88	6.34	2.38	0.80	●	●	●	●	0.80-2.00	0.07-0.25

NEW

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

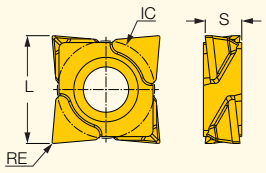
For tools, see pages: A/E-SCLXR/L-06X (130) • AVC-SCLXR/L-06X (121) • NQCH-SCLXR/L-JHP (69) • SCLXR/L 06X (68) • SCLXR/L 06X-JHP (68) • SCLXR/L 06XS (68) • SCLXR/L 06XS-JHP-MC (69)

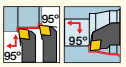
LOGIQ4TURN

CXMU-F3M

80° Double-Sided and Double-Positive Inserts with a Positive Rake for Finishing Stainless Steel and H.T.A.





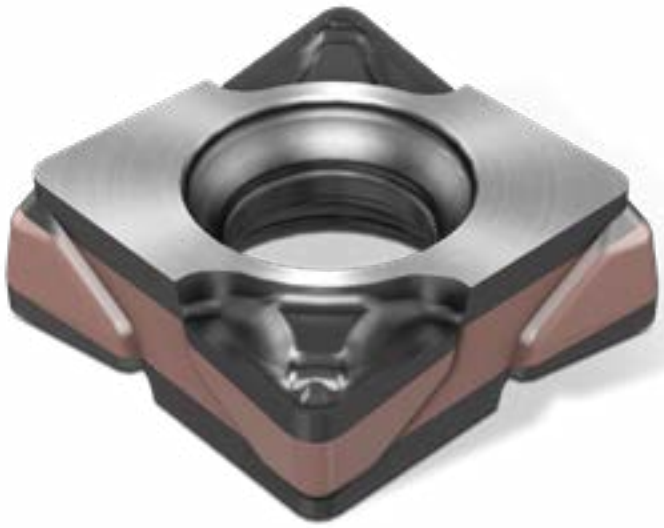


Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC706	IC6025	IC1008	IC6015	IC806	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
CXMU 060202-F3M	7.00	6.34	2.38	0.20	●	●	●	●	●	●	0.30-2.00	0.05-0.25
CXMU 060204-F3M	6.96	6.34	2.38	0.40	●	●	●	●	●	●	0.50-2.00	0.05-0.25
CXMU 060208-F3M	6.88	6.34	2.38	0.80	●	●	●	●	●	●	0.80-2.00	0.07-0.25

NEW

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

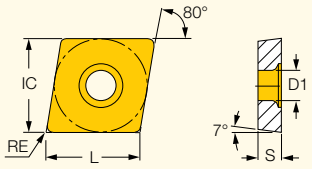
For tools, see pages: A/E-SCLXR/L-06X (130) • AVC-SCLXR/L-06X (121) • NQCH-SCLXR/L-JHP (69) • SCLXR/L 06X (68) • SCLXR/L 06X-JHP (68) • SCLXR/L 06XS (68) • SCLXR/L 06XS-JHP-MC (69)



ISOTURN

CCGT-F1P
80° Rhombic Inserts with a Positive Flank for Very Low Finish Turning Conditions on Steel



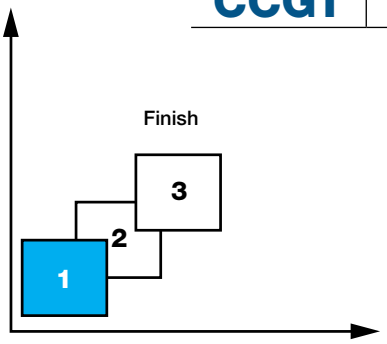


Designation	Dimensions L	IC	S	RE	D1	IC908	Recommended Machining Data a_p (mm)	f (mm/rev)
CCGT 03X101-F1P	3.60	3.57	1.39	0.10	1.90	●	0.10-0.50	0.01-0.05
CCGT 03X102-F1P	3.60	3.57	1.39	0.20	1.90	●	0.10-0.50	0.02-0.10
CCGT 03X104-F1P	3.60	3.57	1.39	0.40	1.90	●	0.10-0.50	0.05-0.15
CCGT 04T101-F1P	4.40	4.37	1.79	0.10	2.30	●	0.10-0.50	0.01-0.05
CCGT 04T102-F1P	4.40	4.37	1.79	0.20	2.30	●	0.10-0.50	0.02-0.10
CCGT 04T104-F1P	4.40	4.37	1.79	0.40	2.30	●	0.10-0.50	0.05-0.15

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A/E/S-SCLCR/L (146) • PICIN-A-SCLCR/L (464) • PICIN-SCLCR/L (464)

ISO Standard Designation				-	1	2	3
CCGT	04	T1	04	-	F	1	P



1. Application	
F	Finishing

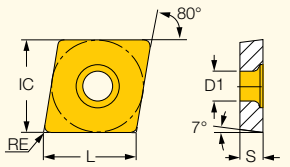
2. Chip Load	
1	For super finish
2	For low range
3	For general range

3. Workpiece Material Group	
P	Steel
M	Stainless Steel
K	Cast Iron
N	Nonferrous & Aluminum
S	High Temperature Alloys

SWISSTURN

CCGT-F1M-12P
80° Rhombic Inserts with a 7° Positive Flank for Finish Turning on Soft Materials and High-Temp. Alloys.





Designation	Dimensions L	IC	S	RE	D1	IC1008	Recommended Machining Data a_p (mm)	f (mm/rev)
CCGT 0602005-F1M-12P	6.45	6.35	2.38	0.05	2.80	●	0.04-2.50	0.03-0.18
CCGT 060201-F1M-12P	6.45	6.35	2.38	0.10	2.80	●	0.07-2.50	0.03-0.18
CCGT 060202-F1M-12P	6.45	6.35	2.38	0.20	2.80	●	0.15-2.50	0.03-0.18
CCGT 060204-F1M-12P	6.45	6.35	2.38	0.40	2.80	●	0.30-2.50	0.03-0.18
CCGT 09T3005-F1M-12P	9.67	9.52	3.97	0.05	4.40	●	0.04-4.50	0.03-0.18
CCGT 09T301-F1M-12P	9.67	9.52	3.97	0.10	4.40	●	0.07-4.50	0.03-0.18
CCGT 09T302-F1M-12P	9.67	9.52	3.97	0.20	4.40	●	0.15-4.50	0.03-0.18
CCGT 09T304-F1M-12P	9.67	9.52	3.97	0.40	4.40	●	0.30-4.50	0.03-0.18

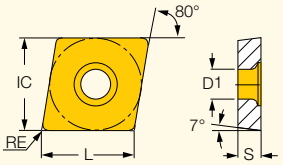
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A/E/S-SCLCR/L (146) • AVC-SCLCR/L (121) • C#-SCLCR/L-JHP (71) • E-SCLCR/L-HEAD (145) • NQCH-SCACR/L-S-JHP (72) • PCLCR/L-S (72) • PCLCR/L-S-JHP (73) • PCLCR/L-S-JHP-MC (73) • SBTT#-SCLCR/L-JHP (418) • SCACR/L-S (72) • SCLCR-PAD (71) • SCLCR/L (70) • SCLCR/L-PAD-JHP (71)

SWISSTURN

CCGT-F1M-20P
80° Rhombic Inserts with a 7° Positive Flank for Semi-Finish and Finish Turning on Soft Materials and High-Temp. Alloys.







Designation	Dimensions L	IC	S	RE	D1	IC1008	Recommended Machining Data a_p (mm)	f (mm/rev)
CCGT 0602005-F1M-20P	6.45	6.35	2.38	0.05	2.80	●	0.04-4.00	0.03-0.15
CCGT 060201-F1M-20P	6.45	6.35	2.38	0.10	2.80	●	0.07-4.00	0.03-0.15
CCGT 060202-F1M-20P	6.45	6.35	2.38	0.20	2.80	●	0.15-4.00	0.03-0.15
CCGT 060204-F1M-20P	6.45	6.35	2.38	0.40	2.80	●	0.30-4.00	0.03-0.15
CCGT 09T3005-F1M-20P	9.67	9.52	3.97	0.05	4.40	●	0.04-4.00	0.03-0.15
CCGT 09T301-F1M-20P	9.67	9.52	3.97	0.10	4.40	●	0.07-4.00	0.03-0.15
CCGT 09T302-F1M-20P	9.67	9.52	3.97	0.20	4.40	●	0.15-4.00	0.03-0.15
CCGT 09T304-F1M-20P	9.67	9.52	3.97	0.40	4.40	●	0.30-4.00	0.03-0.15

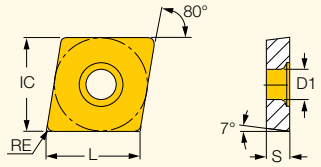
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A/E/S-SCLCR/L (146) • AVC-SCLCR/L (121) • C#-SCLCR/L-JHP (71) • E-SCLCR/L-HEAD (145) • NQCH-SCACR/L-S-JHP (72) • PCLCR/L-S (72) • PCLCR/L-S-JHP (73) • PCLCR/L-S-JHP-MC (73) • SBTT#-SCLCR/L-JHP (418) • SCACR/L-S (72) • SCLCR-PAD (71) • SCLCR/L (70) • SCLCR/L-PAD-JHP (71)

ISOTURN

CCMT-F3P
80° Rhombic Positive Flank Inserts for Semi-Finishing and Finishing Turning of Steel







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC8250	IC8150	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
CCMT 060202-F3P	6.30	6.35	2.38	0.20	2.80	●	●	●	0.06-1.70	0.03-0.12
CCMT 060204-F3P	6.30	6.35	2.38	0.40	2.80	●	●	●	0.10-1.70	0.05-0.18
CCMT 09T302-F3P	9.70	9.52	3.97	0.20	4.40	●	●	●	0.08-2.00	0.04-0.16
CCMT 09T304-F3P	9.70	9.52	3.97	0.40	4.40	●	●	●	0.11-2.00	0.06-0.25
CCMT 09T308-F3P	9.70	9.52	3.97	0.80	4.40	●	●	●	0.15-2.00	0.08-0.32
CCMT 120404-F3P	12.90	12.70	4.76	0.40	5.50	●	●	●	0.11-2.00	0.06-0.25

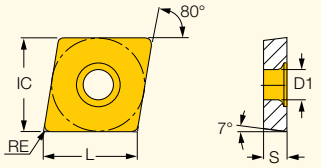
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A/E/S-SCLCR/L (146) • C#-SCLCR/L-JHP (71) • E-SCLCR/L-HEAD (145) • NQCH-SCACR/L-S-JHP (72) • PCLCR/L-S (72) • PCLCR/L-S-JHP (73) • PCLCR/L-S-JHP-MC (73) • SBTT#-SCLCR/L-JHP (418) • SCACR/L-S (72) • SCLCR-PAD (71) • SCLCR/L (70) • SCLCR/L-PAD-JHP (71)

ISOTURN

CCMT-F3PW
80° Rhombic Inserts with a 7° Positive Flank and a Wiper Near the Corner for High Feed Finishing







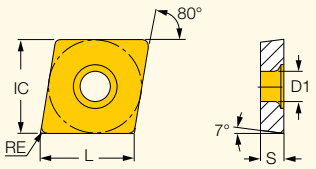
Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC8250	IC8150	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
CCMT 060202-F3PW	6.45	6.35	2.38	0.20	2.80	●	●	●	0.30-2.00	0.10-0.30
CCMT 060204-F3PW	6.45	6.35	2.38	0.40	2.80	●	●	●	0.40-2.00	0.10-0.30
CCMT 09T302-F3PW	9.70	9.52	3.97	0.20	4.40	●	●	●	0.30-3.00	0.10-0.30
CCMT 09T304-F3PW	9.70	9.52	3.97	0.40	4.40	●	●	●	0.40-3.00	0.10-0.30

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

ISOTURN

CCMT-M3P
80° Rhombic Positive Flank Inserts for Medium Machining Conditions on Steel







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC8250	IC8150	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
CCMT 060204-M3P	6.30	6.35	2.38	0.40	2.80	●	●	●	0.50-2.00	0.10-0.25
CCMT 060208-M3P	6.30	6.35	2.38	0.80	2.80	●	●	●	1.00-4.00	0.10-0.30
CCMT 09T304-M3P	9.70	9.52	3.97	0.40	4.40	●	●	●	0.50-3.00	0.10-0.20
CCMT 09T308-M3P	9.70	9.52	3.97	0.80	4.40	●	●	●	1.00-4.00	0.10-0.30
CCMT 120404-M3P	12.90	12.70	4.76	0.40	5.50	●	●	●	0.50-3.00	0.10-0.20
CCMT 120408-M3P	12.90	12.70	4.76	0.80	5.50	●	●	●	1.00-4.00	0.15-0.40
CCMT 120412-M3P	12.90	12.70	4.76	1.20	5.50	●	●	●	1.30-5.00	0.15-0.40

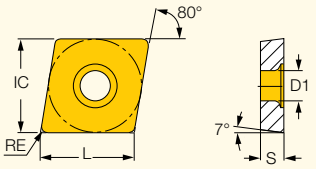
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A/E/S-SCLCR/L (146) • C#-SCLCR/L-JHP (71) • E-SCLCR/L-HEAD (145) • NQCH-SCACR/L-S-JHP (72) • PCLCR/L-S (72) • PCLCR/L-S-JHP (73) • SBTT#-SCLCR/L-JHP (418) • SCACR/L-S (72) • SCLCR-PAD (71) • SCLCR/L (70) • SCLCR/L-PAD-JHP (71) • AVC-SCLCR/L (121) • PCLCR/L-S-JHP-MC (73)

ISOTURN

CCMT-F3M
80° Rhombic Positive Flank Inserts for Stainless Steel Finishing Applications







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC6025	IC6015	IC806	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
CCMT 060202-F3M	6.30	6.35	2.38	0.20	2.80	●	●	●	●	0.06-1.70	0.03-0.12
CCMT 060204-F3M	6.30	6.35	2.38	0.40	2.80	●	●	●	●	0.10-1.70	0.05-0.18
CCMT 060208-F3M	6.30	6.35	2.38	0.80	2.80	●	●	●	●	0.12-1.70	0.08-0.22
CCMT 09T302-F3M	9.70	9.52	3.97	0.20	4.40	●	●	●	●	0.08-2.00	0.04-0.16
CCMT 09T304-F3M	9.70	9.52	3.97	0.40	4.40	●	●	●	●	0.11-2.00	0.06-0.25
CCMT 09T308-F3M	9.70	9.52	3.97	0.80	4.40	●	●	●	●	0.15-2.00	0.08-0.32
CCMT 120402-F3M	12.90	12.70	4.76	0.20	5.50	●	●	●	●	0.11-2.00	0.06-0.18
CCMT 120404-F3M	12.90	12.70	4.76	0.40	5.50	●	●	●	●	0.15-2.00	0.08-0.25
CCMT 120408-F3M	12.90	12.70	4.76	0.80	5.50	●	●	●	●	0.18-2.00	0.10-0.32

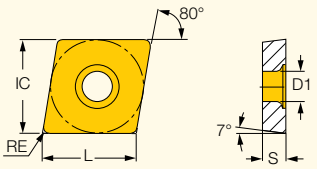
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A/E/S-SCLCR/L (146) • C#-SCLCR/L-JHP (71) • E-SCLCR/L-HEAD (145) • NQCH-SCACR/L-S-JHP (72) • PCLCR/L-S (72) • PCLCR/L-S-JHP (73) • SBTT#-SCLCR/L-JHP (418) • SCACR/L-S (72) • SCLCR-PAD (71) • SCLCR/L (70) • SCLCR/L-PAD-JHP (71) • AVC-SCLCR/L (121) • PCLCR/L-S-JHP-MC (73)

ISOTURN

CCMT-M3M
80° Rhombic Positive Flank Inserts for Machining Stainless and Low Carbon Steel







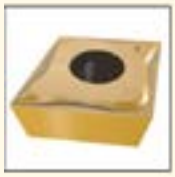
Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC6025	IC6015	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
CCMT 060204-M3M	6.30	6.35	2.38	0.40	2.80	●	●	●	0.40-2.50	0.07-0.23
CCMT 060208-M3M	6.30	6.35	2.38	0.80	2.80	●	●	●	0.80-2.50	0.10-0.25
CCMT 09T304-M3M	9.70	9.52	3.97	0.40	4.40	●	●	●	0.40-3.00	0.07-0.25
CCMT 09T308-M3M	9.70	9.52	3.97	0.80	4.40	●	●	●	0.80-3.00	0.10-0.30
CCMT 120404-M3M	12.90	12.70	4.76	0.40	5.50	●	●	●	0.40-3.50	0.10-0.30
CCMT 120408-M3M	12.90	12.70	4.76	0.80	5.50	●	●	●	0.80-3.50	0.12-0.34
CCMT 120412-M3M	12.90	12.70	4.76	1.20	5.50	●	●	●	1.20-3.50	0.14-0.40

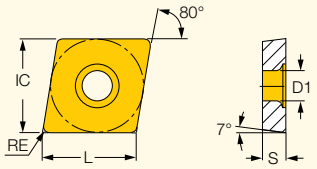
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

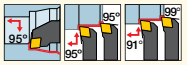
For tools, see pages: A/E/S-SCLCR/L (146) • C#-SCLCR/L-JHP (71)
• E-SCLCR/L-HEAD (145) • NQCH-SCACR/L-S-JHP (72) • PCLCR/L-S (72) • PCLCR/L-S-JHP (73) • SBTT#-SCLCR/L-JHP (418) • SCACR/L-S (72) • SCLCR-PAD (71)
• SCLCR/L (70) • SCLCR/L-PAD-JHP (71) • AVC-SCLCR/L (121) • PCLCR/L-S-JHP-MC (73)

ISOTURN

CCMT-CERMET
Single-Sided 80° Rhombic Cermet Grade Inserts for Semi-Finishing and Finishing Applications



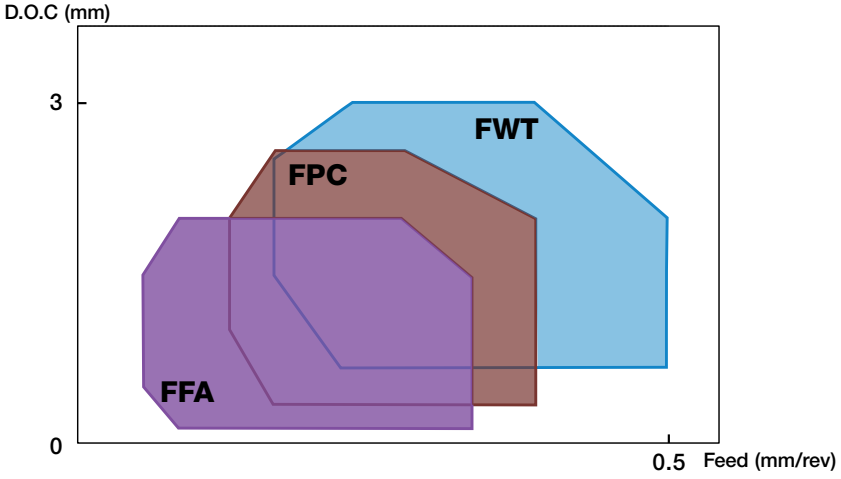




Designation	Dimensions L	IC	S	RE	D1	IC520N	Recommended Machining Data a_p (mm)	f (mm/rev)
CCMT 09T302-FFA	9.70	9.52	3.97	0.20	4.40	●	0.03-2.00	0.04-0.15
CCMT 09T304-FPC	9.70	9.52	3.97	0.40	4.40	●	0.50-2.50	0.03-0.20
CCMT 09T308-FPC	9.70	9.52	3.97	0.80	4.40	●	0.50-2.80	0.03-0.22

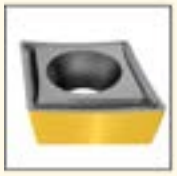
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

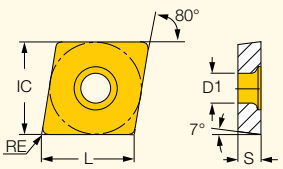
For tools, see pages: A/E/S-SCLCR/L (146) • C#-SCLCR/L-JHP (71) • E-SCLCR/L-HEAD (145) • NQCH-SCACR/L-S-JHP (72) • PCLCR/L-S (72) • PCLCR/L-S-JHP (73)
• PCLCR/L-S-JHP-MC (73) • SBTT#-SCLCR/L-JHP (426) • SCACR/L-S (72) • SCLCR-PAD (71) • SCLCR/L (70) • SCLCR/L-PAD-JHP (71)

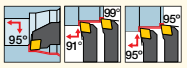


ISOTURN

CCMT/CCGT-SM
Single-Sided Turning Inserts for Semi-Finishing and Finishing on Soft Materials and Exotic Alloys







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC6025	IC8250	IC6015	IC8150	IC20	IC5010	IC428	IC5005	IC806	IC1017	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
CCGT 060201-SM	6.45	6.35	2.38	0.10	2.80												●	0.25-2.00	0.05-0.20
CCGT 060202-SM	6.45	6.35	2.38	0.20	2.80												●	0.25-2.00	0.05-0.25
CCMT 060202-SM	6.45	6.35	2.38	0.20	2.80		●		●					●				0.25-2.00	0.05-0.25
CCMT 060204-SM	6.45	6.35	2.38	0.40	2.80	●	●	●	●					●		●	●	0.50-2.50	0.07-0.25
CCMT 060208-SM	6.45	6.35	2.38	0.80	2.80	●		●								●	●	0.50-2.50	0.07-0.25
CCMT 09T302-SM	9.70	9.52	3.97	0.20	4.40	●	●	●						●	●	●	●	0.50-2.50	0.06-0.25
CCMT 09T304-SM	9.70	9.52	3.97	0.40	4.40	●	●		●	●	●	●	●	●		●	●	0.50-2.50	0.06-0.25
CCMT 09T308-SM	9.70	9.52	3.97	0.80	4.40	●	●	●	●		●		●	●		●	●	0.50-3.00	0.07-0.25
CCMT 120404-SM	12.90	12.70	4.76	0.40	5.50		●		●					●		●	●	0.70-3.50	0.07-0.25
CCMT 120408-SM	12.90	12.70	4.76	0.80	5.50	●	●	●	●							●	●	0.70-3.50	0.07-0.30

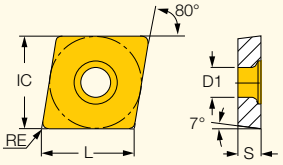
• For user guide and cutting speed recommendations, see pages 160-170, 274-278.

For tools, see pages: A/E/S-SCLCR/L (146) • AVC-SCLCR/L (121) • C#-SCLCR/L-JHP (71)• E-SCLCR/L-HEAD (145) • NQCH-SCACR/L-S-JHP (72) • PCLCR/L-S (72) • PCLCR/L-S-JHP (73) • PCLCR/L-S-JHP-MC (73) • SBTT#-SCLCR/L-JHP (418) • SCACR/L-S (72) • SCLCR-PAD (71) • SCLCR/L (70) • SCLCR/L-PAD-JHP (71)

ISOTURN

CCMT-PF
80° Rhombic Inserts with a Positive Flank for Semi-Finishing and Finishing on Soft Materials and Exotic Alloys







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC830	IC6025	IC6015	IC806	IC1017	IC807	IC907	IC804	Recommended Machining Data a_p (mm)	f (mm/rev)
CCMT 060202-PF	6.45	6.35	2.38	0.20	2.85	●	●	●			●	●	●	0.20-2.50	0.04-0.25
CCMT 060204-PF	6.45	6.35	2.38	0.40	2.85	●	●	●	●		●	●		0.40-2.50	0.04-0.30
CCMT 09T302-PF	9.70	9.52	3.97	0.20	4.40	●			●	●	●	●	●	0.50-3.00	0.05-0.30
CCMT 09T304-PF	9.70	9.52	3.97	0.40	4.40	●	●	●	●	●	●	●	●	0.50-3.50	0.05-0.35

• For user guide and cutting speed recommendations, see pages 160-170, 274-278.

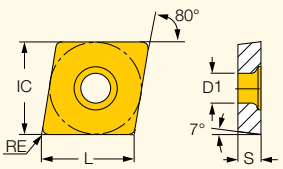
For tools, see pages: A/E/S-SCLCR/L (146) • C#-SCLCR/L-JHP (71) • E-SCLCR/L-HEAD (145) • NQCH-SCACR/L-S-JHP (72) • PCLCR/L-S (72) • PCLCR/L-S-JHP (73) • SBTT#-SCLCR/L-JHP (418) • SCACR/L-S (72) • SCLCR-PAD (71) • SCLCR/L (70) • SCLCR/L-PAD-JHP (71) • AVC-SCLCR/L (121) • PCLCR/L-S-JHP-MC (73)

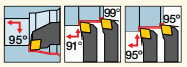
ISOTURN

CCMT-14

80° Rhombic Inserts with a 7° Positive Flank for Semi-Finish and Finish Turning







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC830	IC8250	IC20	IC428	IC5005	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
CCMT 060204-14	6.30	6.35	2.38	0.40	2.80	●		●	●	●	●	●	0.50-2.50	0.14-0.25
CCMT 09T304-14	9.70	9.52	3.97	0.40	4.40		●				●	●	0.50-3.00	0.14-0.25
CCMT 09T308-14	9.70	9.52	3.97	0.80	4.40	●	●	●	●	●			0.80-3.00	0.14-0.30
CCMT 120408-14	12.90	12.70	4.76	0.80	5.50	●		●					0.80-3.00	0.14-0.30

• For user guide and cutting speed recommendations, see pages 160-170, 274-278.

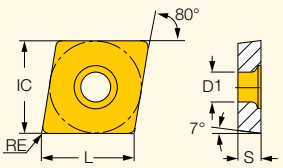
For tools, see pages: A/E/S-SCLCR/L (146) • AVC-SCLCR/L (121) • C#-SCLCR/L-JHP (71) • E-SCLCR/L-HEAD (145) • NQCH-SCACR/L-S-JHP (72) • PCLCR/L-S (72) • PCLCR/L-S-JHP (73) • PCLCR/L-S-JHP-MC (73) • SBTT#-SCLCR/L-JHP (418) • SCACR/L-S (72) • SCLCR-PAD (71) • SCLCR/L (70) • SCLCR/L-PAD-JHP (71)

ISOTURN

CCMT/CCGT

80° Rhombic Inserts with a 7° Positive Flank for Semi-Finish and Finish Turning







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC8250	IC30N	IC20	IC20N	IC520N	Recommended Machining Data a_p (mm)	f (mm/rev)
CCGT 060202	6.45	6.35	2.38	0.20	2.80		●				0.50-2.00	0.10-0.20
CCGT 060202L [1]	6.45	6.35	2.38	0.20	2.80		●	●			0.50-2.00	0.10-0.20
CCGT 060204	6.45	6.35	2.38	0.40	2.80		●				0.50-2.00	0.10-0.20
CCGT 060204L [1]	6.45	6.35	2.38	0.40	2.80		●				0.50-2.00	0.10-0.20
CCMT 060202	6.45	6.35	2.38	0.20	2.80	●			●		0.50-2.00	0.10-0.20
CCMT 060204	6.45	6.35	2.38	0.40	2.80		●		●	●	0.50-2.00	0.12-0.22
CCMT 09T302	9.70	9.52	3.97	0.20	4.40				●	●	0.50-2.50	0.12-0.25
CCMT 09T304	9.70	9.52	3.97	0.40	4.40				●	●	0.50-2.50	0.12-0.25
CCMT 09T308	9.70	9.52	3.97	0.80	4.40				●	●	0.80-3.00	0.14-0.25

• Use left-hand inserts for left-hand external tools and for right-hand internal tools

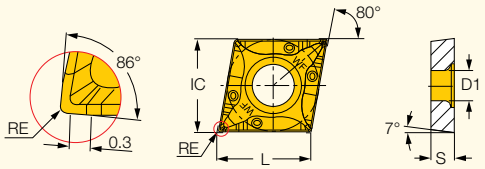
[1] Left-hand insert

For tools, see pages: A/E/S-SCLCR/L (146) • AVC-SCLCR/L (121) • C#-SCLCR/L-JHP (71) • E-SCLCR/L-HEAD (145) • NQCH-SCACR/L-S-JHP (72) • PCLCR/L-S (72) • PCLCR/L-S-JHP (73) • PCLCR/L-S-JHP-MC (73) • SBTT#-SCLCR/L-JHP (418) • SCACR/L-S (72) • SCLCR-PAD (71) • SCLCR/L (70) • SCLCR/L-PAD-JHP (71)

ISOTURN

CCET-WF
80° Rhombic Inserts with a 7° Positive Flank and a Wiper Near the Corner for High Feed Finishing





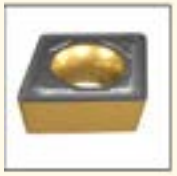
Designation	Dimensions L	IC	S	RE	D1	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
CCET 0602005-WF	6.30	6.35	2.38	0.05	2.80	●	0.05-2.00	0.01-0.20
CCET 09T3005-WF	9.50	9.52	3.97	0.05	4.40	●	0.05-2.00	0.01-0.20

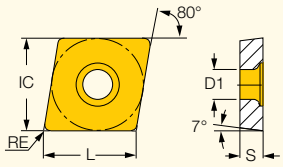
• For user guide and cutting speed recommendations, see pages 160-170,274-278

For tools, see pages: A/E/S-SCLCR/L (146) • AVC-SCLCR/L (121) • C#-SCLCR/L-JHP (71) • E-SCLCR/L-HEAD (145) • NQCH-SCACR/L-S-JHP (72) • PCLCR/L-S (72) • PCLCR/L-S-JHP (73) • PCLCR/L-S-JHP-MC (73) • SBTT#-SCLCR/L-JHP (418) • SCACR/L-S (72) • SCLCR-PAD (71) • SCLCR/L (70) • SCLCR/L-PAD-JHP (71)

ISOTURN

CCMT-WG
80° Rhombic Inserts with a 7° Positive Flank and a Wiper Near the Corner for High Feed Finishing





Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC8250	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
CCMT 060204-WG	6.30	6.35	2.38	0.40	2.80		●	●	0.40-2.00	0.10-0.35
CCMT 09T304-WG	9.70	9.52	3.97	0.40	4.40	●			0.40-2.00	0.14-0.30
CCMT 09T308-WG	9.70	9.52	3.97	0.80	4.40	●			0.50-2.50	0.20-0.38
CCMT 120408-WG	12.90	12.70	4.76	0.80	5.50	●			0.50-3.00	0.20-0.36

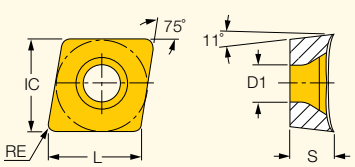
• For user guide and cutting speed recommendations, see pages 160-170, 274-278.

For tools, see pages: A/E/S-SCLCR/L (146) • AVC-SCLCR/L (121) • C#-SCLCR/L-JHP (71) • E-SCLCR/L-HEAD (145) • PCLCR/L-S (72) • PCLCR/L-S-JHP (73) • PCLCR/L-S-JHP-MC (73) • SBTT#-SCLCR/L-JHP (418) • SCLCR-PAD (71) • SCLCR/L (70) • SCLCR/L-PAD-JHP (71)

ISOTURN

EPGT-F1P
75° Rhombic Inserts with a Positive Flank for Very Low Finish Turning Conditions on Steel





Designation	Dimensions L	IC	S	RE	D1	IC908	Recommended Machining Data a_p (mm)	f (mm/rev)
EPGT 03X101-F1P	3.70	3.57	1.39	0.10	1.90	●	0.10-0.50	0.01-0.05
EPGT 03X102-F1P	3.70	3.57	1.39	0.20	1.90	●	0.10-0.50	0.02-0.10
EPGT 03X104-F1P	3.70	3.57	1.39	0.40	1.90	●	0.10-0.50	0.05-0.15

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

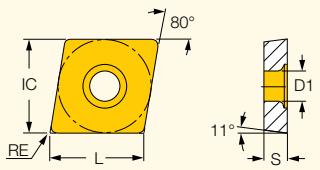
For tools, see page: A/E-SEXPR/L-03 (147)

ISOTURN

CPGT-SM

80° Rhombic Inserts with an 11° Positive Flank for Semi-Finishing and Finish Turning on Soft Materials and Exotic Alloys







Designation	Dimensions L	IC	S	RE	D1	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
CPGT 060201-SM	6.45	6.35	2.38	0.10	2.80	●	0.25-2.00	0.05-0.20
CPGT 060202-SM	6.45	6.35	2.38	0.20	2.80	●	0.25-2.00	0.05-0.30
CPGT 060204-SM	6.45	6.35	2.38	0.40	2.80	●	0.50-3.00	0.10-0.35
CPGT 09T301-SM	9.67	9.52	3.97	0.10	4.40	●	0.25-2.00	0.05-0.25
CPGT 09T302-SM	9.67	9.52	3.97	0.20	4.40	●	0.50-2.50	0.10-0.30
CPGT 09T304-SM	9.67	9.52	3.97	0.40	4.40	●	0.60-3.50	0.10-0.35

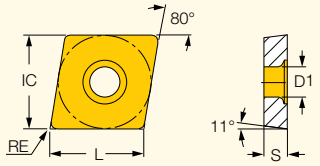
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

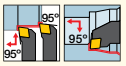
ISOTURN

CPMT-PF

80° Rhombic Inserts with a Positive Flank for Semi-Finishing and Finishing on Soft Materials and Exotic Alloys







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC830	IC6025	IC6015	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
CPMT 060204-PF	6.30	6.35	2.38	0.40	2.80	●	●	●	●	●	0.50-2.50	0.04-0.30
CPMT 060208-PF	6.30	6.35	2.38	0.80	2.80	●			●	●	0.50-2.50	0.08-0.30
CPMT 09T304-PF	9.50	9.52	3.97	0.40	4.40	●			●	●	0.50-3.00	0.05-0.35
CPMT 09T308-PF	9.50	9.52	3.97	0.80	4.40	●	●	●	●	●	0.50-3.50	0.10-0.35

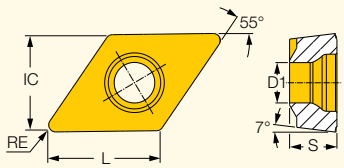
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

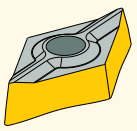


T-LOCK

DCMT-F3P-SL
55° Rhombic Inserts with a Positive Flank with a Locating Bottom Ridge for Semi-Finishing and Finishing on Steel





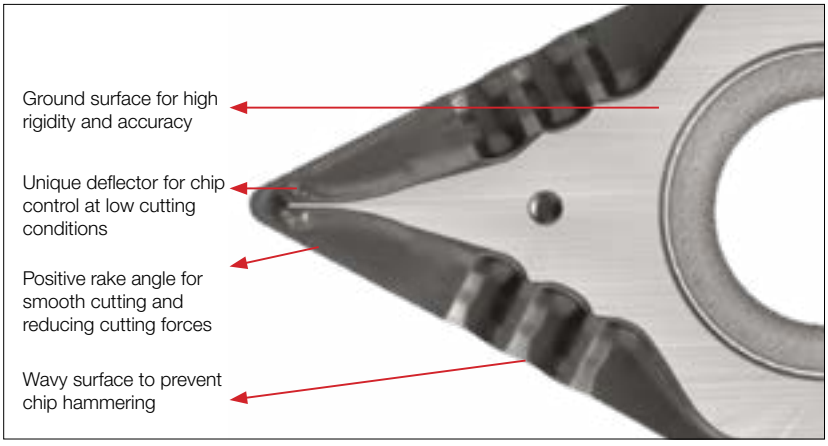


Bottom view

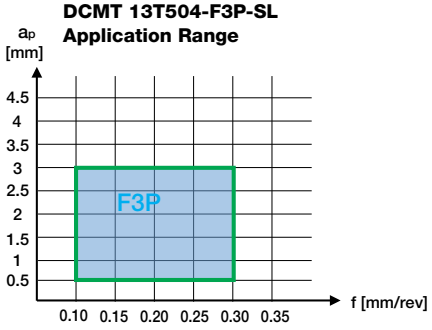
Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
DCMT 13T504-F3P-SL	13.40	11.00	5.11	0.40	4.50	●	●	0.50-3.00	0.05-0.25
DCMT 13T508-F3P-SL	13.40	11.00	5.11	0.80	4.50	●	●	0.90-3.50	0.10-0.25

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A-SDUCR/L-13-SL (147) • AVC-SDJCN-Y (101) • C#-SDJCN-13-Y (100) • C#-SDJCR/L-13-SL-JHP (75) • C#-SDNCN-13-SL-JHP (83) • HSK A63WH-SDJCN-13-Y (99) • SDACR/L-S-SL-JHP (81) • SDJCR-SL-PAD-JHP (74) • SDJCR/L-13-SL (74) • SDNCN-13-SL (83)



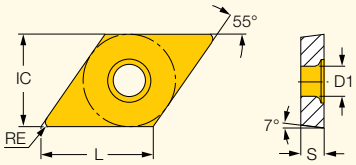
DCMT 13T504-F3P-SL Application Range

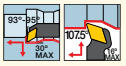


ISOTURN

DCMT-F3P
55° Rhombic Inserts with a Positive Flank for Semi-Finishing and Finish Turning on Steel







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC830	IC8250	IC8150	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
DCMT 070202-F3P	7.70	6.35	2.38	0.20	2.80	●	●	●	●	0.06-1.50	0.03-0.12
DCMT 070204-F3P	7.70	6.35	2.38	0.40	2.80	●	●	●	●	0.08-1.50	0.05-0.18
DCMT 11T302-F3P	11.60	9.52	3.97	0.20	4.40	●	●	●	●	0.08-2.00	0.04-0.16
DCMT 11T304-F3P	11.60	9.52	3.97	0.40	4.40	●	●	●	●	0.11-2.00	0.06-0.25
DCMT 11T308-F3P	11.60	9.52	3.97	0.80	4.40	●	●	●	●	0.15-2.00	0.08-0.32

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

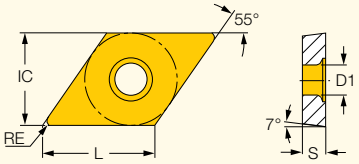
For tools, see pages: A/E/S-SDUCR/L (148) • AVC-SDUCR/L (122) • AVC-SDUCR/L-VH (128) • C#-SDJCR-JHP (78) • C#-SDJCR/L (77) • C#-SDNCN (84) • E-SDUCR/L-HEAD (148) • NQCH-SDACR/L-S-JHP (79) • NQCH-SDJCR/L-S-JHP (76) • NQCH-SDNCN-S-JHP (84) • NQCH-Y-SDJCR-S-JHP (77) • PDACR/L-S (74) • PDACR/L-S-JHP (82) • PDACR/L-S-JHP-MC (82) • SBTT#-SDJCR/L-JHP (415) • SBTT-SDNCN-JHP (415) • SDACR/L-S (79) • SDHCR/L-S (79) • SDJCR-PAD (78) • SDJCR/L (75) • SDJCR/L-JHP-MC (76) • SDJCR/L-PAD-JHP (78) • SDNCN (83) • Y-SDJCR-S (76) • Y-SDJCR-S-JHP (77)

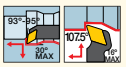
ISOTURN

DCMT-M3P

55° Rhombic Positive Flank Inserts, for Medium Machining Conditions on Steel







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC8250	IC8150	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
DCMT 070204-M3P	7.70	6.35	2.38	0.40	2.80	●	●	●	0.50-2.50	0.10-0.30
DCMT 070208-M3P	7.70	6.35	2.38	0.80	2.80	●	●	●	0.80-2.50	0.10-0.30
DCMT 11T304-M3P	11.60	9.52	3.97	0.40	4.40	●	●	●	0.50-3.00	0.10-0.30
DCMT 11T308-M3P	11.60	9.52	3.97	0.80	4.40	●	●	●	0.80-3.00	0.10-0.30
DCMT 11T312-M3P	11.60	9.52	3.97	1.20	4.40	●	●	●	1.00-3.50	0.10-0.30

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

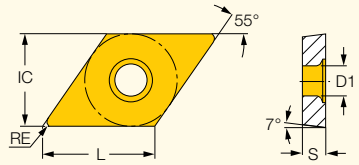
For tools, see pages: A/E/S-SDUCR/L (148) • AVC-SDUCR/L (122) • AVC-SDUCR/L-VH (128) • C#-SDJCR-JHP (78) • C#-SDJCR/L (77) • C#-SDNCN (84) • E-SDUCR/L-HEAD (148) • NQCH-SDACR/L-S-JHP (79) • NQCH-SDNCN-S-JHP (84) • NQCH-Y-SDJCR-S-JHP (77) • PDACR/L-S (74) • PDACR/L-S-JHP (82) • SBTT#-SDJCR/L-JHP (415) • SBTT-SDNCN-JHP (415) • SDACR/L-S (79) • SDHCR/L-S (79) • SDJCR-PAD (78) • SDJCR/L-PAD-JHP (78) • SDNCN (83) • PDACR/L-S-JHP-MC (82)

ISOTURN

DCMT-M3M

55° Rhombic Positive Flank Inserts for Machining Stainless and Low Carbon Steel







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC6025	IC6015	IC806	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
DCMT 070204-M3M	7.70	6.35	2.38	0.40	2.80	●	●		●		0.40-2.50	0.07-0.23
DCMT 070208-M3M	7.70	6.35	2.38	0.80	2.80	●	●		●		0.80-2.50	0.10-0.25
DCMT 11T304-M3M	11.60	9.52	3.97	0.40	4.40	●	●		●		0.40-3.00	0.07-0.25
DCMT 11T308-M3M	11.60	9.52	3.97	0.80	4.40	●	●	●	●	●	0.80-3.00	0.10-0.30

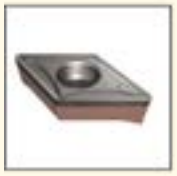
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

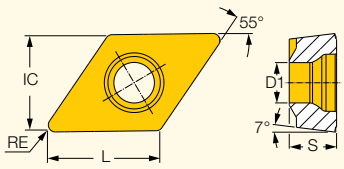
For tools, see pages: A/E/S-SDUCR/L (148) • AVC-SDUCR/L (122) • AVC-SDUCR/L-VH (128) • C#-SDJCR-JHP (78) • C#-SDJCR/L (77) • C#-SDNCN (84) • E-SDUCR/L-HEAD (148) • NQCH-SDACR/L-S-JHP (79) • NQCH-SDJCR/L-S-JHP (76) • NQCH-SDNCN-S-JHP (84) • NQCH-Y-SDJCR-S-JHP (77) • PDACR/L-S (74) • PDACR/L-S-JHP (82) • SBTT#-SDJCR/L-JHP (415) • SBTT-SDNCN-JHP (415) • SDACR/L-S (79) • SDHCR/L-S (79) • SDJCR-PAD (78) • SDJCR/L (75) • SDJCR/L-JHP-MC (76) • SDJCR/L-PAD-JHP (78) • SDNCN (83) • Y-SDJCR-S (76) • Y-SDJCR-S-JHP (77) • PDACR/L-S-JHP-MC (82)

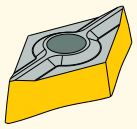
T-LOCK

DCMT-M3M-SL

55° Rhombic Inserts with a Positive Flank and Locating Bottom Ridge for Machining Stainless and Low Carbon Steel







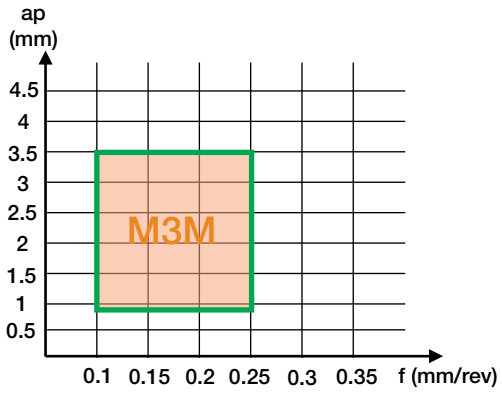
Bottom view

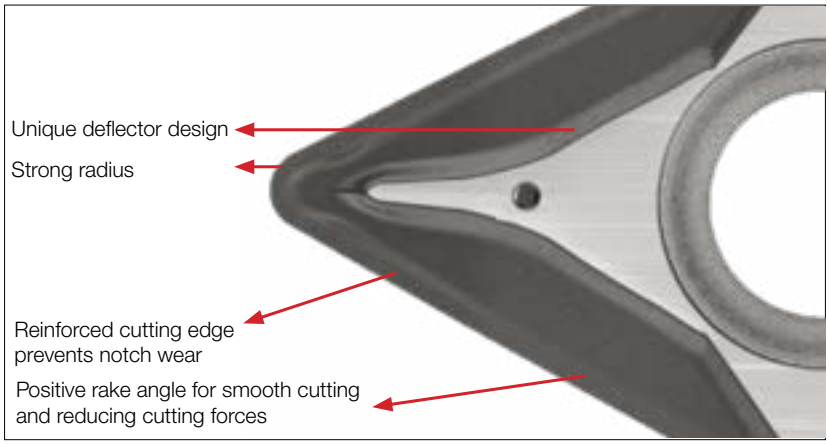
Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC6025	IC6015	Recommended Machining Data a_p (mm)	f (mm/rev)
DCMT 13T508-M3M-SL	13.40	11.00	5.11	0.80	4.50	•	•	0.90-3.50	0.10-0.25
DCMT 13T512-M3M-SL	13.40	11.00	5.11	1.20	4.50	•	•	0.90-3.50	0.15-0.30

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A-SDUCR/L-13-SL (147) • AVC-SDJCN-Y (101) • C#-SDJCN-13-Y (100) • C#-SDJCR/L-13-SL-JHP (75) • C#-SDNCN-13-SL-JHP (83) • HSK A63WH-SDJCN-13-Y (99) • SDACR/L-S-SL-JHP (81) • SDJCR-SL-PAD-JHP (74) • SDJCR/L-13-SL (74) • SDNCN-13-SL (83)

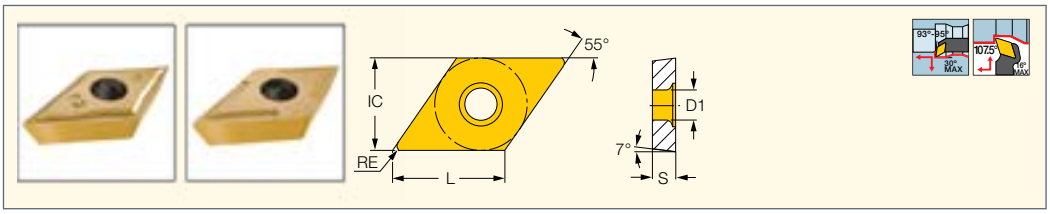
DCMT 13T508-M3M-SL Application Range





ISOTURN

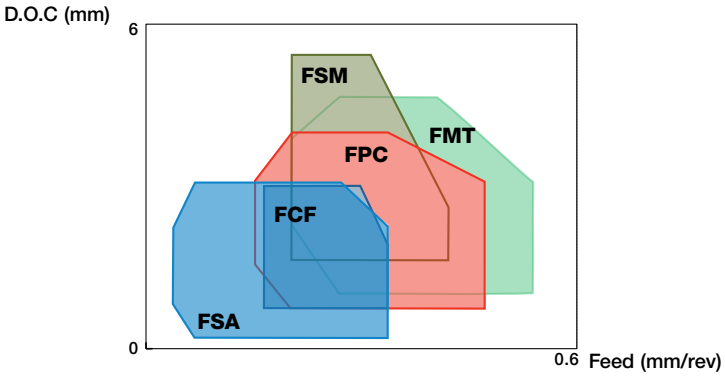
DCMT-CERMET
Single-Sided 55° Rhombic Cermet Grade Inserts for Semi-Finishing and Finishing Applications



Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC20N	IC520N	Recommended Machining Data a_p (mm)	f (mm/rev)
DCGT 11T302-FSA	11.60	9.52	3.97	0.20	4.40	●		0.30-2.00	0.02-0.15
DCGT 11T304-FSA	11.60	9.52	3.97	0.40	4.40	●		0.40-2.00	0.03-0.15
DCMT 11T302-FCF	11.60	9.52	3.97	0.20	4.40		●	0.50-2.50	0.07-0.22
DCMT 11T302-FSM	11.60	9.52	3.97	0.20	4.40		●	0.50-3.00	0.05-0.22
DCMT 11T304-FPC	11.60	9.52	3.97	0.40	4.40	●	●	0.50-2.70	0.04-0.25
DCMT 11T304-FSM	11.60	9.52	3.97	0.40	4.40		●	0.50-3.00	0.07-0.25
DCMT 11T308-FPC	11.60	9.52	3.97	0.80	4.40		●	0.50-2.70	0.04-0.25
DCMT 11T312-FMT	11.60	9.52	3.97	1.20	4.40		●	1.50-5.00	0.15-0.50

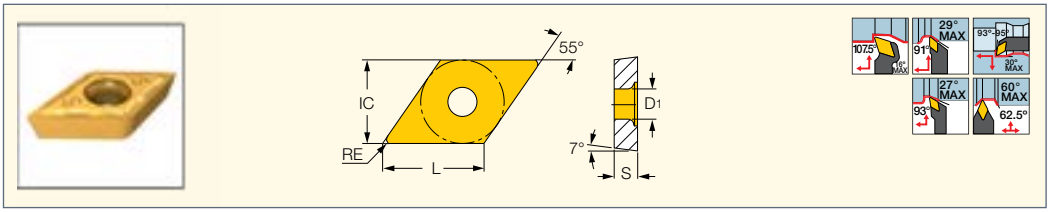
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A/E/S-SDUCR/L (148) • AVC-SDUCR/L (122) • AVC-SDUCR/L-VH (128) • C#-SDJCR-JHP (78) • C#-SDJCR/L (77) • C#-SDNCN (84) • NQCH-SDACR/L-S-JHP (79) • NQCH-SDJCR/L-S-JHP (76) • NQCH-SDNCN-S-JHP (84) • NQCH-Y-SDJCR-S-JHP (77) • PDACR/L-S (74) • PDACR/L-S-JHP (82) • PDACR/L-S-JHP-MC (82) • SBTT#-SDJCR/L-JHP (415) • SBTT-SDNCN-JHP (415) • SDACR/L-S (79) • SDHCR/L-S (79) • SDJCR/L (75) • SDJCR/L-JHP-MC (76) • SDJCR/L-PAD-JHP (78) • SDNCN (83) • Y-SDJCR-S (76) • Y-SDJCR-S-JHP (77)



SWISSTURN

DCGT-F1M-12P
55° Rhombic Inserts with a 7° Positive Flank for Finish Turning on Soft Materials and High-Temp. Alloys.



Designation	Dimensions L	IC	S	RE	D1	IC1008	Recommended Machining Data a_p (mm)	f (mm/rev)
DCGT 0702005-F1M-12P	7.75	6.35	2.38	0.05	2.80	●	0.04-4.50	0.03-0.18
DCGT 070201-F1M-12P	7.75	6.35	2.38	0.10	2.80	●	0.07-4.50	0.03-0.18
DCGT 070202-F1M-12P	7.75	6.35	2.38	0.20	2.80	●	0.15-4.50	0.03-0.18
DCGT 070204-F1M-12P	7.75	6.35	2.38	0.40	2.80	●	0.30-4.50	0.03-0.18
DCGT 11T3005-F1M-12P	11.63	9.52	3.97	0.05	4.40	●	0.04-4.50	0.03-0.18
DCGT 11T301-F1M-12P	11.63	9.52	3.97	0.10	4.40	●	0.07-4.50	0.03-0.18
DCGT 11T302-F1M-12P	11.63	9.52	3.97	0.20	4.40	●	0.15-4.50	0.03-0.18
DCGT 11T304-F1M-12P	11.63	9.52	3.97	0.40	4.40	●	0.30-4.50	0.03-0.18

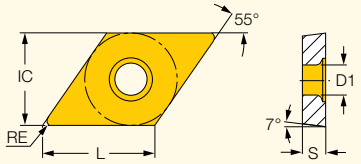
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

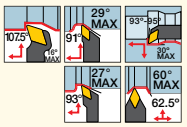
For tools, see pages: A/E/S-SDUCR/L (148) • AVC-SDUCR/L (122) • AVC-SDUCR/L-VH (128) • C#-SDJCR-JHP (78) • C#-SDJCR/L (77) • C#-SDNCN (84) • E-SDUCR/L-HEAD (148) • NQCH-SDACR/L-S-JHP (79) • NQCH-SDJCR/L-S-JHP (76) • NQCH-SDNCN-S-JHP (84) • NQCH-Y-SDJCR-S-JHP (77) • PDACR/L-S (74) • PDACR/L-S-JHP (82) • PDACR/L-S-JHP-MC (82) • SBTT#-SDJCR/L-JHP (415) • SBTT-SDNCN-JHP (415) • SDACR/L-S (79) • SDHCR/L-S (79) • SDJCR-PAD (78) • SDJCR/L (75) • SDJCR/L-JHP-MC (76) • SDJCR/L-PAD-JHP (78) • SDNCN (83) • Y-SDJCR-S (76) • Y-SDJCR-S-JHP (77)

SWISSTURN

DCGT-F1M-20P
55° Rhombic Inserts with a 7° Positive Flank for Semi-Finish and Finish Turning on Soft Materials and High-Temp. Alloys.







Designation	Dimensions L	IC	S	RE	D1	IC1008	Recommended Machining Data a_p (mm)	f (mm/rev)
DCGT 0702005-F1M-20P	7.75	6.35	2.38	0.05	2.80	●	0.04-4.00	0.03-0.15
DCGT 070201-F1M-20P	7.75	6.35	2.38	0.10	2.80	●	0.07-4.00	0.03-0.15
DCGT 070202-F1M-20P	7.75	6.35	2.38	0.20	2.80	●	0.15-4.00	0.03-0.15
DCGT 070204-F1M-20P	7.75	6.35	2.38	0.40	2.80	●	0.30-4.00	0.03-0.15
DCGT 11T3005-F1M-20P	11.63	9.52	3.97	0.05	4.40	●	0.04-4.00	0.03-0.15
DCGT 11T301-F1M-20P	11.63	9.52	3.97	0.10	4.40	●	0.07-4.00	0.03-0.15
DCGT 11T302-F1M-20P	11.63	9.52	3.97	0.20	4.40	●	0.15-4.00	0.03-0.15
DCGT 11T304-F1M-20P	11.63	9.52	3.97	0.40	4.40	●	0.30-4.00	0.03-0.15

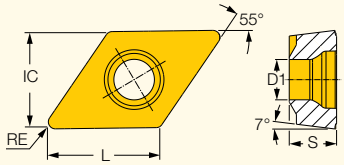
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

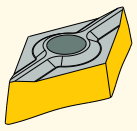
For tools, see pages: A/E/S-SDUCR/L (148) • AVC-SDUCR/L (122) • AVC-SDUCR/L-VH (128) • C#-SDJCR-JHP (78) • C#-SDJCR/L (77) • C#-SDNCN (84) • E-SDUCR/L-HEAD (148) • NQCH-SDACR/L-S-JHP (79) • NQCH-SDJCR/L-S-JHP (76) • NQCH-SDNCN-S-JHP (84) • NQCH-Y-SDJCR-S-JHP (77) • PDACR/L-S (74) • PDACR/L-S-JHP (82) • PDACR/L-S-JHP-MC (82) • SBTT#-SDJCR/L-JHP (415) • SBTT-SDNCN-JHP (415) • SDACR/L-S (79) • SDHCR/L-S (79) • SDJCR-PAD (78) • SDJCR/L (75) • SDJCR/L-JHP-MC (76) • SDJCR/L-PAD-JHP (78) • SDNCN (83) • Y-SDJCR-S (76) • Y-SDJCR-S-JHP (77)

T-LOCK

DCMT-PF-SL
55° Rhombic Inserts with a Positive Flank and Locating Bottom Ridge for Semi-Finishing and Finishing







Designation	Dimensions L	IC	S	RE	D1	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
DCMT 13T504-PF-SL	13.40	11.00	5.11	0.40	4.50	●	0.50-3.00	0.05-0.25
DCMT 13T508-PF-SL	13.40	11.00	5.11	0.80	4.50	●	0.70-3.00	0.05-0.25

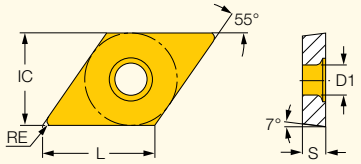
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A-SDUCR/L-13-SL (147) • AVC-SDJCN-Y (101) • C#-SDJCN-13-Y (100) • C#-SDJCR/L-13-SL-JHP (75) • C#-SDNCN-13-SL-JHP (83) • HSK A63WH-SDJCN-13-Y (99) • SDACR/L-S-SL-JHP (81) • SDJCR-SL-PAD-JHP (74) • SDJCR/L-13-SL (74) • SDNCN-13-SL (83)

ISOTURN

DCMT/DCGT-PF
55° Rhombic Inserts with a Positive Flank for Semi-Finish and Finishing on Soft Materials and Exotic Alloys





Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC830	IC6025	IC8250	IC908	IC6015	IC806	IC807	IC907	IC804	Recommended Machining Data a_p (mm)	f (mm/rev)
DCGT 070201-PF	7.70	6.35	2.38	0.10	2.80				●						0.30-3.00	0.02-0.25
DCGT 070202-PF	7.70	6.35	2.38	0.20	2.80				●						0.40-3.00	0.03-0.25
DCGT 070204-PF	7.70	6.35	2.38	0.40	2.80				●						0.50-3.00	0.05-0.25
DCMT 070201-PF	7.70	6.35	2.38	0.10	2.80							●	●		0.30-3.00	0.02-0.25
DCMT 070202-PF	7.70	6.35	2.38	0.20	2.80	●									0.40-3.00	0.03-0.25
DCMT 070204-PF	7.70	6.35	2.38	0.40	2.80	●									0.50-3.00	0.05-0.25
DCMT 070208-PF	7.70	6.35	2.38	0.80	2.80							●	●		0.70-3.00	0.08-0.25
DCGT 11T301-PF	11.60	9.52	3.97	0.10	4.40				●						0.30-3.00	0.03-0.25
DCGT 11T302-PF	11.60	9.52	3.97	0.20	4.40				●						0.40-3.00	0.04-0.25
DCGT 11T304-PF	11.60	9.52	3.97	0.40	4.40				●						0.50-3.00	0.05-0.25
DCGT 11T308-PF	11.60	9.52	3.97	0.80	4.40				●						0.70-3.00	0.10-0.25
DCMT 11T302-PF	11.60	9.52	3.97	0.20	4.40	●					●	●	●	●	0.30-3.00	0.04-0.25
DCMT 11T304-PF	11.60	9.52	3.97	0.40	4.40	●	●	●		●	●	●	●	●	0.50-3.00	0.05-0.25
DCMT 11T308-PF	11.60	9.52	3.97	0.80	4.40	●	●	●		●	●	●	●	●	0.70-3.00	0.10-0.25

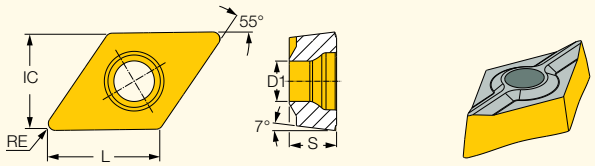
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A/E/S-SDUCR/L (148) • AVC-SDUCR/L (122) • AVC-SDUCR/L-VH (128) • C#-SDJCR-JHP (78) • C#-SDJCR/L (77) • C#-SDNCN (84) • E-SDUCR/L-HEAD (148) • NQCH-SDACR/L-S-JHP (79) • NQCH-SDJCR/L-S-JHP (76) • NQCH-SDNCN-S-JHP (84) • NQCH-Y-SDJCR-S-JHP (77) • PDACR/L-S (74) • PDACR/L-S-JHP (82) • SBTT#-SDJCR/L-JHP (415) • SBTT-SDNCN-JHP (415) • SDACR/L-S (79) • SDHCR/L-S (79) • SDJCR-PAD (78) • SDJCR/L (75) • SDJCR/L-JHP-MC (76) • SDJCR/L-PAD-JHP (78) • SDNCN (83) • Y-SDJCR-S (76) • Y-SDJCR-S-JHP (77) • PDACR/L-S-JHP-MC (82)

T-LOCK

DCMT-SM-SL
55° Rhombic Inserts with a Positive Flank and Locating Bottom Ridge for Semi-Finishing and Finishing





Designation	Dimensions L	IC	S	RE	D1	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
DCMT 13T504-SM-SL	13.40	11.00	5.11	0.40	4.50	●	0.50-2.50	0.07-0.27
DCMT 13T508-SM-SL	13.40	11.00	5.11	0.80	4.50	●	1.00-3.00	0.07-0.27

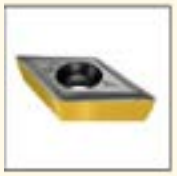
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

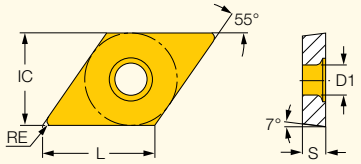
For tools, see pages: A-SDUCR/L-13-SL (147) • AVC-SDJCN-Y (101) • C#-SDJCN-13-Y (100) • C#-SDJCR/L-13-SL-JHP (75) • C#-SDNCN-13-SL-JHP (83) • HSK A63WH-SDJCN-13-Y (99) • SDACR/L-S-SL-JHP (81) • SDJCR-SL-PAD-JHP (74) • SDJCR/L-13-SL (74) • SDNCN-13-SL (83)

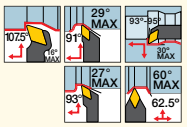
ISOTURN

DCMT/DCGT-SM

55° Rhombic Inserts with a 7° Positive Flank for Semi-Finishing and Finish Turning on Soft Materials and Exotic Alloys







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC8350	IC6025	IC8250	IC530N	IC6015	IC8150	IC520N	IC806	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
DCMT 070202-SM	7.70	6.35	2.38	0.20	2.80		●			●				●	●	0.50-2.00	0.04-0.20
DCMT 070204-SM	7.70	6.35	2.38	0.40	2.80		●	●		●	●		●	●	●	0.50-2.50	0.05-0.25
DCMT 070208-SM	7.70	6.35	2.38	0.80	2.80			●								0.50-3.00	0.07-0.25
DCGT 11T302-SM	11.60	9.52	3.97	0.20	4.40										●	0.50-2.50	0.05-0.25
DCGT 11T304-SM	11.60	9.52	3.97	0.40	4.40										●	0.50-2.50	0.05-0.25
DCMT 11T302-SM	11.60	9.52	3.97	0.20	4.40		●	●	●	●				●	●	0.50-2.50	0.05-0.25
DCMT 11T304-SM	11.60	9.52	3.97	0.40	4.40	●	●	●	●		●		●	●	●	0.50-2.50	0.07-0.25
DCMT 11T308-SM	11.60	9.52	3.97	0.80	4.40	●	●	●		●	●			●	●	1.00-3.00	0.07-0.25
DCMT 11T312-SM	11.60	9.52	3.97	1.20	4.40							●				1.00-3.50	0.10-0.28

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

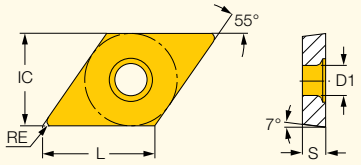
For tools, see pages: A/E/S-SDUCR/L (148) • AVC-SDUCR/L (122) • AVC-SDUCR/L-VH (128) • C#-SDJCR-JHP (78) • C#-SDJCR/L (77) • C#-SDNCN (84) • E-SDUCR/L-HEAD (148) • NQCH-SDACR/L-S-JHP (79) • NQCH-SDJCR/L-S-JHP (76) • NQCH-SDNCN-S-JHP (84) • NQCH-Y-SDJCR-S-JHP (77) • PDACR/L-S (74) • PDACR/L-S-JHP (82) • PDACR/L-S-JHP-MC (82) • SBTT#-SDJCR/L-JHP (415) • SBTT-SDNCN-JHP (415) • SDACR/L-S (79) • SDHCR/L-S (79) • SDJCR-PAD (78) • SDJCR/L (75) • SDJCR/L-JHP-MC (76) • SDJCR/L-PAD-JHP (78) • SDNCN (83) • Y-SDJCR-S (76) • Y-SDJCR-S-JHP (77)

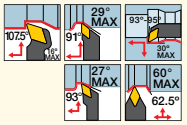
ISOTURN

DCMT/DCGT

55° Rhombic Inserts with a 7° Positive Clearance for Finishing Applications







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC830	IC8250	IC908	IC30N	IC530N	IC8150	IC20N	IC520N	Recommended Machining Data a_p (mm)	f (mm/rev)
DCGT 070201R [1]	7.70	6.35	2.38	0.10	2.80			●						0.25-1.50	0.05-0.15
DCGT 070202	7.70	6.35	2.38	0.20	2.80				●					0.50-2.00	0.08-0.20
DCGT 070204	7.70	6.35	2.38	0.40	2.80				●					0.80-2.50	0.10-0.25
DCMT 070202	7.70	6.35	2.38	0.20	2.80	●	●				●	●	●	0.50-2.00	0.08-0.20
DCMT 070204	7.70	6.35	2.38	0.40	2.80	●			●		●	●	●	0.50-2.00	0.08-0.22
DCGT 11T302	11.60	9.52	3.97	0.20	4.40				●					0.50-2.00	0.08-0.20
DCGT 11T304	11.60	9.52	3.97	0.40	4.40				●			●		1.00-2.50	0.12-0.25
DCMT 11T302	11.60	9.52	3.97	0.20	4.40				●	●		●	●	0.50-2.00	0.08-0.20
DCMT 11T304	11.60	9.52	3.97	0.40	4.40				●			●	●	0.50-2.00	0.12-0.25
DCMT 11T308	11.60	9.52	3.97	0.80	4.40	●						●	●	1.50-3.00	0.14-0.29

- Right-hand inserts for right-hand external tools and for left-hand internal tools • For user guide and cutting speed recommendations, see pages 160-170,274-278

[1] Right-hand insert

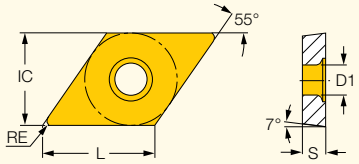
For tools, see pages: A/E/S-SDUCR/L (148) • AVC-SDUCR/L (122) • AVC-SDUCR/L-VH (128) • C#-SDJCR-JHP (78) • C#-SDJCR/L (77) • C#-SDNCN (84) • E-SDUCR/L-HEAD (148) • NQCH-SDACR/L-S-JHP (79) • NQCH-SDJCR/L-S-JHP (76) • NQCH-SDNCN-S-JHP (84) • NQCH-Y-SDJCR-S-JHP (77) • PDACR/L-S (74) • PDACR/L-S-JHP (82) • SBTT#-SDJCR/L-JHP (415) • SBTT-SDNCN-JHP (415) • SDACR/L-S (79) • SDHCR/L-S (79) • SDJCR-PAD (78) • SDJCR/L (75) • SDJCR/L-JHP-MC (76) • SDJCR/L-PAD-JHP (78) • SDNCN (83) • Y-SDJCR-S (76) • Y-SDJCR-S-JHP (77) • PDACR/L-S-JHP-MC (82)

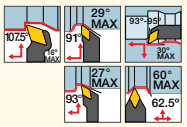
ISOTURN

DCMT-14

55° Rhombic Inserts with a Positive Flank for Semi-Finish and Finish Turning on Soft Materials and Exotic Alloys







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC830	IC8150	IC20	IC428	IC5005	Recommended Machining Data a_p (mm)	f (mm/rev)
DCMT 11T304-14	11.60	9.52	3.97	0.40	4.40	●	●	●			1.00-2.50	0.14-0.25
DCMT 11T308-14	11.60	9.52	3.97	0.80	4.40		●	●	●	●	1.50-3.00	0.14-0.29

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

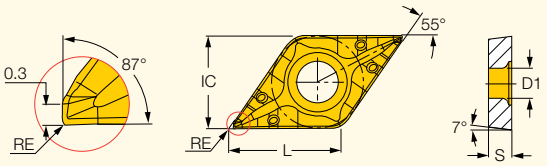
For tools, see pages: A/E/S-SDUCR/L (148) • AVC-SDUCR/L (122) • AVC-SDUCR/L-VH (128) • C#-SDJCR-JHP (78) • C#-SDJCR/L (77) • C#-SDNCN (84) • NQCH-SDACR/L-S-JHP (79) • NQCH-SDJCR/L-S-JHP (76) • NQCH-SDNCN-S-JHP (84) • NQCH-Y-SDJCR-S-JHP (77) • PDACR/L-S (74) • PDACR/L-S-JHP (82) • SBTT#-SDJCR/L-JHP (415) • SBTT-SDNCN-JHP (415) • SDACR/L-S (79) • SDHCR/L-S (79) • SDJCR/L (75) • SDJCR/L-JHP-MC (76) • SDJCR/L-PAD-JHP (78) • SDNCN (83) • Y-SDJCR-S (76) • Y-SDJCR-S-JHP (77) • PDACR/L-S-JHP-MC (82)

ISOTURN

DCET-WF

55° Rhombic Wiper Inserts for Finishing Operations at High Feeds







Right-hand shown

Designation	Dimensions L	IC	S	RE	D1	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
DCET 0702005R/L-WF	7.70	6.35	2.38	0.05	2.80	●	0.05-3.00	0.01-0.20
DCET 11T3005R/L-WF	11.60	9.52	3.97	0.05	4.40	●	0.05-3.00	0.01-0.20

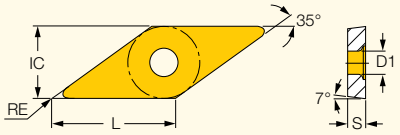
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

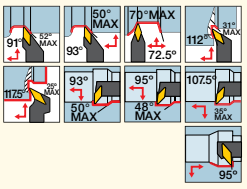
For tools, see pages: A/E/S-SDUCR/L (148) • AVC-SDUCR/L (122) • AVC-SDUCR/L-VH (128) • C#-SDJCR-JHP (78) • C#-SDJCR/L (77) • E-SDUCR/L-HEAD (148) • NQCH-SDACR/L-S-JHP (79) • NQCH-SDJCR/L-S-JHP (76) • NQCH-Y-SDJCR-S-JHP (77) • PDACR/L-S (74) • PDACR/L-S-JHP (82) • SDACR/L-S (79) • SDHCR/L-S (79) • SDJCR-PAD (78) • SDJCR/L (75) • SDJCR/L-JHP-MC (76) • SDJCR/L-PAD-JHP (78) • Y-SDJCR-S (76) • Y-SDJCR-S-JHP (77) • PDACR/L-S-JHP-MC (82)

ISOTURN

VCMT-F3P
35° Rhombic Positive Flank Inserts for Semi-Finishing and Finish Turning of Steel







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC8250	IC8150	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
VCMT 110302-F3P	11.10	6.35	3.18	0.20	2.80	●	●	●	0.06-1.70	0.03-0.14
VCMT 110304-F3P	11.10	6.35	3.18	0.40	2.80	●	●	●	0.10-1.70	0.05-0.20
VCMT 110308-F3P	11.10	6.35	3.18	0.80	2.80	●	●	●	0.13-1.70	0.07-0.28
VCMT 110312-F3P	11.10	6.35	3.18	1.20	2.80	●	●	●	0.13-1.70	0.08-0.33
VCMT 160402-F3P	16.60	9.52	4.76	0.20	4.40	●	●	●	0.07-1.80	0.04-0.15
VCMT 160404-F3P	16.60	9.52	4.76	0.40	4.40	●	●	●	0.10-1.80	0.05-0.20
VCMT 160408-F3P	16.60	9.52	4.76	0.80	4.40	●	●	●	0.14-1.80	0.07-0.29
VCMT 160412-F3P	16.60	9.52	4.76	1.20	4.40	●	●	●	0.14-1.80	0.09-0.34

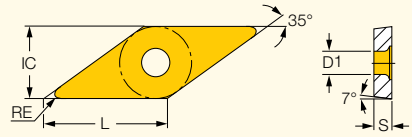
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

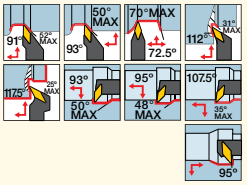
For tools, see pages: A/S-SVLBCR/L (150) • A/S-SVLFCR/L; A-SVUCR/L (149) • A/S-SVQCR/L (149) • AVC-SVLCR/L-VH (128) • AVC-SVMCR/L (124) • AVC-SVPCR/L (123) • AVC-SVQCR/L (123) • C#-SVJCR/L (87) • C#-SVJCR/L-JHP (87) • C#-SVVCN (91) • HSK A63WH-SVJCR/L (87) • NQCH-SVACR/L-S-JHP (89) • NQCH-SVJCR/L-S-JHP (85) • NQCH-SVVCN-S-JHP (512) • NQCH-Y-SVJCR-S-JHP (86) • PVACR/L-S (84) • PVACR/L-S-JHP (89) • PVACR/L-S-JHP-MC (90) • S/A-SVJCR/L (150) • SBTT#-SVJCR/L-JHP (416) • SBTT#-SVQCR/L-JHP (417) • SBTT#-SVUCR/L-JHP (416) • SBTT-SVVCN-JHP (416) • SVACR/L-S (88) • SVJCR-PAD (88) • SVJCR/L (511) • SVJCR/L-16-JHP (511) • SVJCR/L-PAD-JHP (88) • SVPCR/L-S (92) • SVVCN (511) • SVXCR/L (512) • Y-SVJCR-S (85) • Y-SVJCR-S-JHP (86) • AVC-SVLCR/L (123)

ISOTURN

VCMT-M3P
35° Rhombic Positive Flank Inserts, for Medium Machining Conditions on Steel







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC8250	IC8150	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
VCMT 110304-M3P	11.10	6.35	3.18	0.40	2.80	●	●	●	0.5-3.00	0.07-0.24
VCMT 110308-M3P	11.10	6.35	3.18	0.80	2.80	●	●	●	0.5-2.00	0.07-0.25
VCMT 160404-M3P	16.60	9.52	4.76	0.40	4.40	●	●	●	0.5-2.50	0.05-0.25
VCMT 160408-M3P	16.60	9.52	4.76	0.80	4.40		●	●	0.9-2.50	0.1-0.25
VCMT 160412-M3P	16.60	9.52	4.76	1.20	4.40	●	●	●	0.5-3.00	0.1-0.25

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

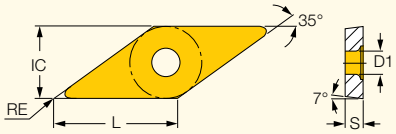
For tools, see pages: A/S-SVLBCR/L (150) • A/S-SVLFCR/L; A-SVUCR/L (149) • A/S-SVQCR/L (149) • AVC-SVLCR/L-VH (128) • AVC-SVMCR/L (124) • AVC-SVPCR/L (123) • AVC-SVQCR/L (123) • AVC-SVUCR/L (122) • C#-SVJCR/L (87) • C#-SVJCR/L-JHP (87) • C#-SVVCN (91) • HSK A63WH-SVJCR/L (87) • NQCH-SVACR/L-S-JHP (89) • NQCH-SVJCR/L-S-JHP (85) • NQCH-SVVCN-S-JHP (521) • NQCH-Y-SVJCR-S-JHP (86) • PVACR/L-S (84) • PVACR/L-S-JHP (89) • S/A-SVJCR/L (150) • SBTT#-SVJCR/L-JHP (424) • SBTT#-SVQCR/L-JHP (425) • SBTT#-SVUCR/L-JHP (424) • SBTT-SVVCN-JHP (424) • SVACR/L-S (88) • SVJCR-PAD (88) • SVJCR/L (520) • SVJCR/L-16-JHP (520) • SVJCR/L-PAD-JHP (88) • SVPCR/L-S (92) • SVVCN (520) • SVXCR/L (521) • Y-SVJCR-S (85) • Y-SVJCR-S-JHP (86) • AVC-SVLCR/L (123) • PVACR/L-S-JHP-MC (90)

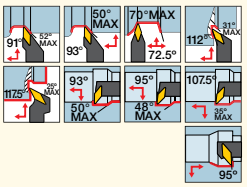
ISOTURN

VCMT-F3M

35° Rhombic Positive Flank Inserts for Stainless Steel Finishing Applications







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC6025	IC6015	IC806	IC1017	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
VCMT 110302-F3M	11.10	6.35	3.18	0.20	2.85	●	●	●		●	0.06-1.70	0.03-0.14
VCMT 110304-F3M	11.10	6.35	3.18	0.40	2.85	●	●	●		●	0.10-1.70	0.05-0.20
VCMT 110308-F3M	11.10	6.35	3.18	0.80	2.85	●	●	●		●	0.13-1.70	0.07-0.28
VCMT 160402-F3M	16.60	9.52	4.76	0.20	4.50	●	●	●		●	0.06-1.80	0.03-0.14
VCMT 160404-F3M	16.60	9.52	4.76	0.40	4.50	●	●	●	●	●	0.10-1.80	0.05-0.20
VCMT 160408-F3M	16.60	9.52	4.76	0.80	4.50	●	●	●		●	0.13-1.80	0.07-0.28

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

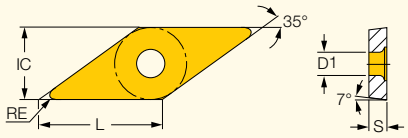
For tools, see pages: A/S-SVLBCR/L (150) • A/S-SVLFCR/L; A-SVUCR/L (149) • A/S-SVQCR/L (149) • AVC-SVLCR/L (123) • AVC-SVLCR/L-VH (128) • AVC-SVMCR/L (124) • AVC-SVPCR/L (123) • AVC-SVQCR/L (123) • AVC-SVUCR/L (122) • C#-SVJCR/L (87) • C#-SVJCR/L-JHP (87) • C#-SVVCN (91) • HSK A63WH-SVJCR/L (87) • NQCH-SVACR/L-S-JHP (89) • NQCH-SVJCR/L-S-JHP (85) • NQCH-SVVCN-S-JHP (512) • NQCH-Y-SVJCR-S-JHP (86) • PVACR/L-S (84) • PVACR/L-S-JHP (89) • PVACR/L-S-JHP-MC (90) • S/A-SVJCR/L (150) • SBTT#-SVJCR/L-JHP (416) • SBTT#-SVQCR/L-JHP (417) • SBTT#-SVUCR/L-JHP (416) • SBTT-SVVCN-JHP (416) • SVACR/L-S (88) • SVJCR-PAD (88) • SVJCR/L (511) • SVJCR/L-16-JHP (511) • SVJCR/L-PAD-JHP (88) • SVPCR/L-S (92) • SVVCN (511) • SVXCR/L (512) • Y-SVJCR-S (85) • Y-SVJCR-S-JHP (86)

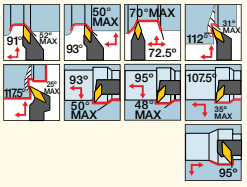
ISOTURN

VCMT-M3M

35° Rhombic Positive Flank Inserts for Machining Stainless and Low Carbon Steel







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC6025	IC6015	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
VCMT 160404-M3M	16.60	9.52	4.76	0.40	4.40	●	●	●	1.00-5.00	0.07-0.25
VCMT 160408-M3M	16.60	9.52	4.76	0.80	4.40	●	●	●	1.00-5.00	0.10-0.30
VCMT 160412-M3M	16.60	9.52	4.76	1.20	4.40	●	●	●	1.00-5.00	0.13-0.35

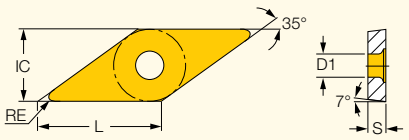
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

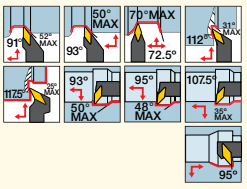
For tools, see pages: A/S-SVLBCR/L (150) • A/S-SVLFCR/L; A-SVUCR/L (149) • A/S-SVQCR/L (149) • AVC-SVLCR/L-VH (128) • AVC-SVMCR/L (124) • AVC-SVPCR/L (123) • AVC-SVQCR/L (123) • C#-SVJCR/L (87) • C#-SVJCR/L-JHP (87) • C#-SVVCN (91) • HSK A63WH-SVJCR/L (87) • NQCH-SVJCR/L-S-JHP (85) • SVJCR/L (511) • SVJCR/L-16-JHP (511) • SVVCN (511) • SVXCR/L (512) • AVC-SVLCR/L (123)

ISOTURN

VCMT-FPC-CERMET
35° Rhombic 7° Cermet Positive Flank Inserts for Semi-Finishing Turning of Steel and Automotive Components







Designation	Dimensions L	IC	S	RE	D1	IC520N	Recommended Machining Data a_p (mm)	f (mm/rev)
VCMT 160404-FPC	16.60	9.52	4.76	0.40	4.40	●	0.70-2.00	0.04-0.22
VCMT 160408-FPC	16.60	9.52	4.76	0.80	4.40	●	0.70-2.00	0.04-0.22

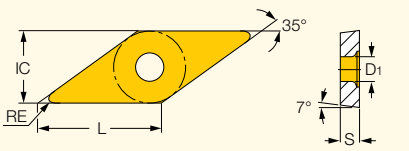
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

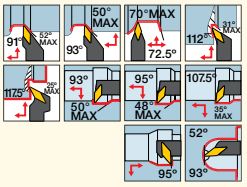
For tools, see pages: A/S-SVLBCR/L (150) • A/S-SVLFCR/L; A-SVUCR/L (149) • A/S-SVQCR/L (149) • AVC-SVLCR/L-VH (128) • AVC-SVMCR/L (124) • AVC-SVPCR/L (123) • AVC-SVQCR/L (123) • C#-SVJCR/L (87) • C#-SVJCR/L-JHP (87) • C#-SVVCN (91) • HSK A63WH-SVJCR/L (87) • NQCH-SVJCR/L-S-JHP (85) • SVJCR/L (511) • SVJCR/L-16-JHP (511) • SVVCN (511) • SVXCR/L (512) • AVC-SVLCR/L (123)

SWISSTURN

VCGT-F1M-12P
35° Rhombic Inserts with a 7° Positive Flank for Finish Turning on Soft Materials and High-Temp. Alloys.







Designation	Dimensions L	IC	S	RE	D1	IC1008	Recommended Machining Data a_p (mm)	f (mm/rev)
VCGT 1103005-F1M-12P	11.07	6.35	3.18	0.05	2.90	●	0.04-4.50	0.03-0.18
VCGT 110301-F1M-12P	11.07	6.35	3.18	0.10	2.90	●	0.15-4.50	0.03-0.18
VCGT 110302-F1M-12P	11.07	6.35	3.18	0.20	2.90	●	0.04-4.00	0.03-0.15
VCGT 110304-F1M-12P	11.07	6.35	3.18	0.40	2.90	●	0.15-4.00	0.03-0.15

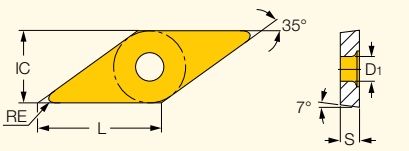
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

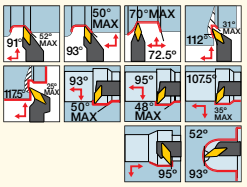
For tools, see pages: AVC-SVPCR/L (123) • AVC-SVQCR/L (123) • AVC-SVUCR/L (122) • C#-SVJCR/L (87) • C#-SVJCR/L-JHP (87) • NQCH-SVACR/L-S-JHP (89) • NQCH-SVJCR/L-S-JHP (85) • NQCH-SVVCN-S-JHP (512) • NQCH-Y-SVJCR-S-JHP (86) • PVACR/L-S (84) • PVACR/L-S-JHP (89) • PVACR/L-S-JHP-MC (90) • S/A-SVJCR/L (150) • SBTT#-SVJCR/L-JHP (416) • SBTT#-SVQCR/L-JHP (417) • SBTT#-SVUCR/L-JHP (416) • SBTT-SVVCN-JHP (416) • SVACR/L-S (88) • SVJCR-PAD (88) • SVJCR/L (511) • SVJCR/L-PAD-JHP (88) • SVPCR/L-S (92) • SVVCN (511) • Y-SVJCR-S (85) • Y-SVJCR-S-JHP (86)

SWISSTURN

VCGT-F1M-20P
35° Rhombic Inserts with a 7° Positive Flank for Semi-Finishing and Finish Turning on Soft Materials and High-Temp. Alloys.







Designation	Dimensions L	IC	S	RE	D1	IC1008	Recommended Machining Data a_p (mm)	f (mm/rev)
VCGT 1103005-F1M-20P	11.07	6.35	3.18	0.05	2.90	●	0.07-4.50	0.03-0.18
VCGT 110301-F1M-20P	11.07	6.35	3.18	0.10	2.90	●	0.30-4.50	0.03-0.18
VCGT 110302-F1M-20P	11.07	6.35	3.18	0.20	2.90	●	0.07-4.00	0.03-0.15
VCGT 110304-F1M-20P	11.07	6.35	3.18	0.40	2.90	●	0.30-4.00	0.03-0.15

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

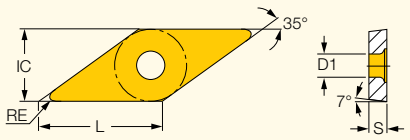
For tools, see pages: AVC-SVPCR/L (123) • AVC-SVQCR/L (123) • AVC-SVUCR/L (122) • C#-SVJCR/L (87) • C#-SVJCR/L-JHP (87) • NQCH-SVACR/L-S-JHP (89) • NQCH-SVJCR/L-S-JHP (85) • NQCH-SVVCN-S-JHP (512) • NQCH-Y-SVJCR-S-JHP (86) • PVACR/L-S (84) • PVACR/L-S-JHP (89) • PVACR/L-S-JHP-MC (90) • S/A-SVJCR/L (150) • SBTT#-SVJCR/L-JHP (416) • SBTT#-SVQCR/L-JHP (417) • SBTT#-SVUCR/L-JHP (416) • SBTT-SVVCN-JHP (416) • SVACR/L-S (88) • SVJCR-PAD (88) • SVJCR/L (511) • SVJCR/L-PAD-JHP (88) • SVPCR/L-S (92) • SVVCN (511) • Y-SVJCR-S (85) • Y-SVJCR-S-JHP (86)

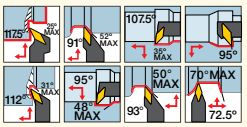
ISOTURN

VCGT-MD/PF

35° Rhombic Inserts with a Positive Flank for Semi-Finishing and Finishing on Soft Materials and Exotic Alloys







Designation	Dimensions L	IC	S	RE	D1	IC830	Recommended Machining Data a_p (mm)	f (mm/rev)
VCGT 110301-PF	11.10	6.35	3.18	0.10	2.90	●	0.20-2.50	0.03-0.25
VCGT 110302-PF	11.40	6.35	3.18	0.20	2.90	●	0.30-2.50	0.03-0.25
VCGT 110304-PF	11.40	6.35	3.18	0.40	2.90	●	0.50-3.00	0.05-0.25
VCGT 130304-PF	13.00	7.94	3.18	0.40	3.40	●	0.50-3.00	0.05-0.25

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

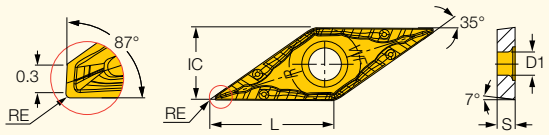
For tools, see pages: NQCH-SVACR/L-S-JHP (89) • SVACR/L-S (88)

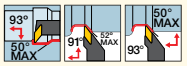
ISOTURN

VCET-WF

35° Rhombic Wiper Inserts for Finishing Operations at High Feeds







Right-hand shown

Designation	Dimensions L	IC	S	RE	D1	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
VCET 1103005R/L-WF	11.10	6.35	3.18	0.05	2.90	●	0.05-4.00	0.01-0.20

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

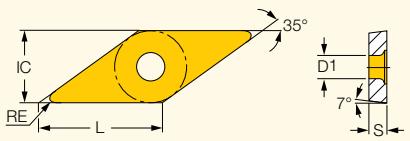
For tools, see pages: C#-SVJCR/L (87) • C#-SVJCR/L-JHP (87) • NQCH-SVACR/L-S-JHP (89) • NQCH-SVJCR/L-S-JHP (85) • NQCH-Y-SVJCR-S-JHP (86) • PVACR/L-S (84) • PVACR/L-S-JHP (89) • S/A-SVJCR/L (150) • SVACR/L-S (88) • SVJCR-PAD (88) • SVJCR/L (511) • SVJCR/L-PAD-JHP (88) • Y-SVJCR-S (85) • Y-SVJCR-S-JHP (86) • PVACR/L-S-JHP-MC (90)

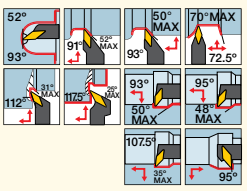
ISOTURN

VCMT-SM

35° Rhombic Inserts with a 7° Positive Flank for Semi-Finishing and Finish Turning on Soft Materials and Exotic Alloys







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC830	IC6025	IC8250	IC908	IC6015	IC8150	IC806	IC807	IC907	IC4	IC804	Recommended Machining Data a_p (mm)	f (mm/rev)
VCMT 110302-SM	11.10	6.35	3.18	0.20	2.90				●				●	●			0.20-2.50	0.04-0.20
VCMT 110304-SM	11.10	6.35	3.18	0.40	2.90		●		●	●		●	●	●			0.50-3.00	0.07-0.24
VCMT 110308-SM	11.10	6.35	3.18	0.80	2.90				●								0.50-2.00	0.07-0.25
VCMT 160402-SM	16.60	9.52	4.76	0.20	4.40		●			●			●	●			0.50-2.50	0.05-0.20
VCMT 160404-SM	16.60	9.52	4.76	0.40	4.40		●	●			●	●	●	●		●	0.50-2.50	0.05-0.25
VCMT 160408-SM	16.60	9.52	4.76	0.80	4.40	●	●	●		●	●	●	●	●	●	●	0.90-2.50	0.07-0.25
VCMT 160412-SM	16.60	9.52	4.76	1.20	4.40								●	●			0.50-3.00	0.10-0.25

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

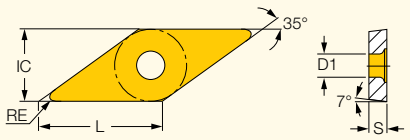
For tools, see pages: A/S-SVLBCR/L (150) • A/S-SVLFCR/L; A-SVUCR/L (149) • A/S-SVQCR/L (149) • AVC-SVLCR/L (123) • AVC-SVLCR/L-VH (128) • AVC-SVMCR/L (124) • AVC-SVPCR/L (123) • AVC-SVQCR/L (123) • AVC-SVUCR/L (122) • C#-SVJCR/L (87) • C#-SVJCR/L-JHP (87) • C#-SVVCN (91) • HSK A63WH-SVJCR/L (87) • NQCH-SVACR/L-S-JHP (89) • NQCH-SVJCR/L-S-JHP (85) • NQCH-SVVCN-S-JHP (512) • NQCH-Y-SVJCR-S-JHP (86) • PVACR/L-S (84) • PVACR/L-S-JHP (89) • PVACR/L-S-JHP-MC (90) • S/A-SVJCR/L (150) • SBTT#-SVJCR/L-JHP (416) • SBTT#-SVQCR/L-JHP (417) • SBTT#-SVUCR/L-JHP (416) • SBTT-SVVCN-JHP (416) • SVACR/L-S (88) • SVJCR-PAD (88) • SVJCR/L (511) • SVJCR/L-16-JHP (511) • SVJCR/L-PAD-JHP (88) • SVPCR/L-S (92) • SVVCN (511) • SVXCR/L (512) • Y-SVJCR-S (85) • Y-SVJCR-S-JHP (86)

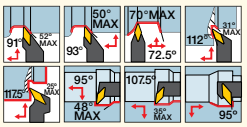
ISOTURN

VCMT-14

35° Rhombic Inserts with a 7° Positive Flank for Semi-Finish and Finish Turning on Soft Materials and Exotic Alloys







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC830	IC20	IC20N	IC520N	Recommended Machining Data a_p (mm)	f (mm/rev)
VCMT 160404-14	16.60	9.52	4.76	0.40	4.40	●	●	●	●	1.00-5.00	0.12-0.25
VCMT 160408-14	16.60	9.52	4.76	0.80	4.40	●	●		●	1.00-5.00	0.12-0.30

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A/S-SVLBCR/L (150) • A/S-SVLFCR/L; A-SVUCR/L (149) • A/S-SVQCR/L (149) • AVC-SVLCR/L (123) • AVC-SVLCR/L-VH (128) • AVC-SVPCR/L (123) • AVC-SVQCR/L (123) • C#-SVJCR/L (87) • C#-SVJCR/L-JHP (87) • C#-SVVCN (91) • HSK A63WH-SVJCR/L (87) • NQCH-SVJCR/L-S-JHP (85) • SVJCR/L (511) • SVJCR/L-16-JHP (511) • SVVCN (511) • SVXCR/L (512)

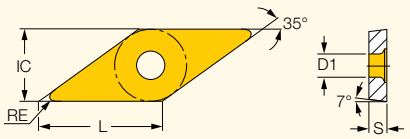
ISOTURN

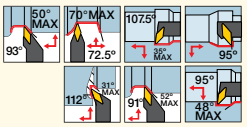
VCMW

35° Rhombic Inserts with a 7° Positive Flank for Short Chipping Materials such as Cast Iron



Tolerances:
IC= ±0.05
S= ±0.13





Designation	Dimensions L	IC	S	RE	D1	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
VCMW 160404	16.60	9.52	4.76	0.40	4.40	●	0.70-4.00	0.05-0.25
VCMW 160408	16.60	9.52	4.76	0.80	4.40	●	1.00-5.00	0.05-0.25

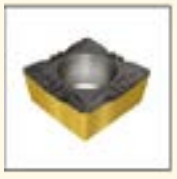
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

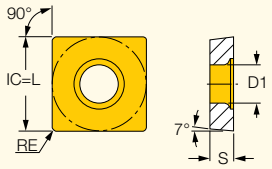
For tools, see pages: A/S-SVLBCR/L (150) • A/S-SVLFCR/L; A-SVUCR/L (149) • A/S-SVQCR/L (149) • AVC-SVLCR/L-VH (128) • AVC-SVPCR/L (123) • AVC-SVQCR/L (123) • C#-SVJCR/L (87) • C#-SVJCR/L-JHP (87) • C#-SVVCN (91) • HSK A63WH-SVJCR/L (87) • NQCH-SVJCR/L-S-JHP (85) • SVJCR/L (511) • SVJCR/L-16-JHP (511) • SVVCN (511) • SVXCR/L (512) • AVC-SVLCR/L (123)

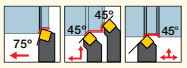
ISOTURN

SCMT-F3P

Square Positive Flank Inserts for Semi-Finishing and Finish Turning of Steel







Designation	Dimensions L	S	RE	D1	Tough ↔ Hard IC8250	IC8150	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
SCMT 09T304-F3P	9.52	3.97	0.40	4.40	●	●	●	0.11-2.00	0.06-0.25
SCMT 09T308-F3P	9.52	3.97	0.80	4.40	●	●	●	0.15-2.00	0.08-0.32

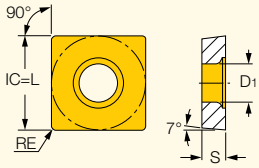
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

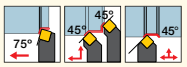
For tools, see pages: SSBCR/L (92) • SSSCR/L (92)

ISOTURN

SCMT-M3P
Square Positive Flank Inserts for Medium Machining Conditions on Steel







Designation	Dimensions L	S	RE	D1	Tough ↔ Hard IC8250	IC8150	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
SCMT 09T304-M3P	9.52	3.97	0.40	4.40	●	●	●	0.50-3.00	0.07-0.25
SCMT 09T308-M3P	9.52	3.97	0.80	4.40	●	●	●	0.50-3.00	0.10-0.30
SCMT 120404-M3P	12.70	4.76	0.40	5.50	●	●	●	0.50-3.50	0.10-0.25
SCMT 120408-M3P	12.70	4.76	0.80	5.50	●	●	●	1.00-4.00	0.10-0.30
SCMT 120412-M3P	12.70	4.76	1.20	5.50	●	●	●	1.20-4.00	0.12-0.34

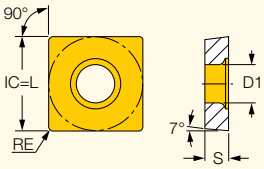
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

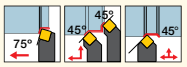
For tools, see pages: SSBCR/L (92) • SSSCR/L (92)

ISOTURN

SCMT-F3M
Square Positive Flank Inserts for Stainless Steel Finishing Applications







Designation	Dimensions L	S	RE	D1	Tough ↔ Hard IC6025	IC6015	IC806	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
SCMT 09T302-F3M	9.52	3.97	0.20	4.40	●	●	●	●	0.08-2.00	0.04-0.16
SCMT 09T304-F3M	9.52	3.97	0.40	4.40	●	●	●	●	0.11-2.00	0.06-0.25
SCMT 09T308-F3M	9.52	3.97	0.80	4.40	●	●	●	●	0.15-2.00	0.08-0.32
SCMT 120402-F3M	12.70	4.76	0.20	5.50	●	●	●	●	0.11-2.00	0.06-0.18
SCMT 120404-F3M	12.70	4.76	0.40	5.50	●	●	●	●	0.15-2.00	0.08-0.25
SCMT 120408-F3M	12.70	4.76	0.80	5.50	●	●	●	●	0.18-2.00	0.10-0.32

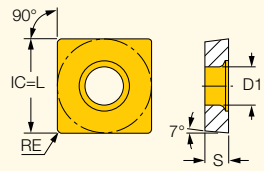
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

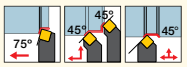
For tools, see pages: SSBCR/L (92) • SSSCR/L (92)

ISOTURN

SCMT-M3M
Square Positive Flank Inserts, for Machining Stainless and Low Carbon Steel







Designation	Dimensions L	S	RE	D1	Tough ↔ Hard IC6025	IC6015	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
SCMT 09T304-M3M	9.52	3.97	0.40	4.40	●	●	●	0.40-3.80	0.07-0.25
SCMT 09T308-M3M	9.52	3.97	0.80	4.40	●	●	●	0.80-3.80	0.10-0.30
SCMT 120404-M3M	12.70	4.76	0.40	5.50	●	●	●	0.40-4.00	0.10-0.25
SCMT 120408-M3M	12.70	4.76	0.80	5.50	●	●	●	0.80-4.00	0.12-0.34

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

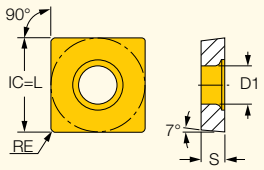
For tools, see pages: SSBCR/L (92) • SSSCR/L (92)

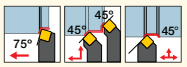
ISOTURN

SCMT-SM

Square Inserts with a 7° Positive Flank for Semi-Finishing and Finish Turning on Soft Materials and Exotic Alloys







Designation	Dimensions L	S	RE	D1	Tough ↔ Hard IC830	IC6025	IC8250	IC8150	IC5005	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
SCMT 09T304-SM	9.52	3.97	0.40	4.40			●	●		●	●	0.50-3.00	0.07-0.25
SCMT 09T308-SM	9.52	3.97	0.80	4.40	●	●	●	●	●	●	●	0.50-3.00	0.10-0.30
SCMT 120404-SM	12.70	4.76	0.40	5.50				●				0.50-3.50	0.10-0.25
SCMT 120408-SM	12.70	4.76	0.80	5.50			●	●		●	●	1.00-4.00	0.10-0.30

• For user guide and cutting speed recommendations, see pages 160-170, 274-278.

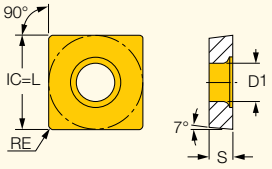
For tools, see pages: SSBCR/L (92) • SSSCR/L (92)

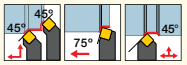
ISOTURN

SCMT-14

Square Inserts with a 7° Positive Flank for Semi-Finishing and Finish Turning on Soft Materials and Exotic Alloys







Designation	Dimensions L	S	RE	D1	Tough ↔ Hard IC8250	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
SCMT 09T304-14	9.52	3.97	0.40	4.40		●	●	1.00-3.50	0.12-0.30
SCMT 120404-14	12.70	4.76	0.40	5.50	●			1.00-4.00	0.12-0.30

• For user guide and cutting speed recommendations, see pages 160-170, 274-278.

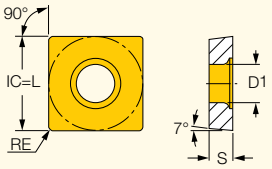
For tools, see pages: SSBCR/L (92) • SSSCR/L (92)

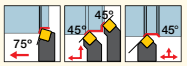
ISOTURN

SCMT-19

Square Inserts with a 7° Positive Flank for Semi-Roughing at Medium to High Feeds







Designation	Dimensions L	S	RE	D1	Tough ↔ Hard IC830	IC20	IC5005	IC807	IC907	Recommended Machining Data a_p (mm)	f_z (mm/rev)
SCMT 120408-19	12.70	4.76	0.80	5.50	●	●	●	●	●	3.00-8.00	0.08-0.15
SCMT 120412-19	12.70	4.76	1.20	5.50		●				3.00-8.00	0.08-0.15

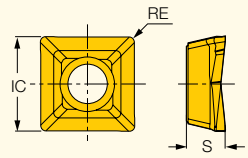
• For user guide and cutting speed recommendations, see pages 160-170, 274-278.

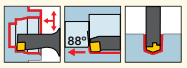
For tools, see pages: SSBCR/L (92) • SSSCR/L (92)

DRDRILLS

XOMT-DT
Inserts for DR Drills and Boring Bars







Designation	Dimensions IC	S	RE	Tough ↔ Hard IC28	IC328	IC250	IC350	IC908	IC520M
XOMT 060204-DT	6.16	2.56	0.40	●	●	●	●	●	●

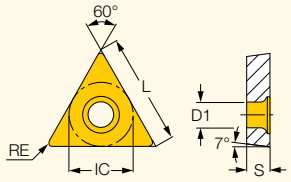
• Two cutting edges • For hard materials and interrupted cut

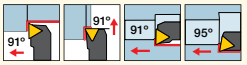
For tools, see pages: A-SXFOR-DR (157) • A-SXFOR/L (157)

ISOTURN

TCMT-F3P
Triangular Inserts with a Positive Flank for Semi-Finishing and Finish Turning on Steel







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC830	IC8250	IC8150	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
TCMT 090202-F3P	9.60	5.56	2.38	0.20	2.50	●	●	●	●	0.06-1.70	0.03-0.14
TCMT 090204-F3P	9.60	5.56	2.38	0.40	2.50	●	●	●	●	0.10-1.70	0.05-0.20
TCMT 110202-F3P	11.00	6.35	2.38	0.20	2.80	●	●	●	●	0.06-1.70	0.03-0.14
TCMT 110204-F3P	11.00	6.35	2.38	0.40	2.80	●	●	●	●	0.10-1.70	0.05-0.20
TCMT 110208-F3P	11.00	6.35	2.38	0.80	2.80	●	●	●	●	0.13-1.70	0.07-0.28
TCMT 16T304-F3P	16.50	9.52	3.97	0.40	4.40	●	●	●	●	0.10-1.70	0.05-0.20

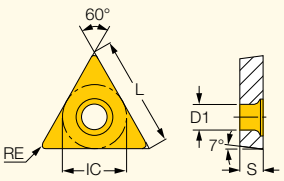
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

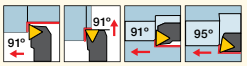
For tools, see pages: E-STFCR-HEAD (151) • S-MTLCR/L-W (151) • S-STFCR/L (151) • S-STLCR/L (152) • STFCR/L (92) • STGCR/L (93)

ISOTURN

TCMT-M3P
Triangular Inserts with a 7° Positive Flank for Medium Machining Turning on Steel







Designation	Dimensions L	S	RE	D1	IC	Tough ↔ Hard IC8250	IC8150	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
TCMT 110204-M3P	11.00	2.38	0.40	2.80	6.35	●	●	●	0.40-2.50	0.08-0.25
TCMT 110208-M3P	11.00	2.38	0.80	2.80	6.35	●	●	●	0.80-3.00	0.10-0.30
TCMT 16T304-M3P	16.50	3.97	0.40	4.40	9.52	●	●	●	0.40-3.00	0.08-0.25
TCMT 16T308-M3P	16.50	3.97	0.80	4.40	9.52	●	●	●	0.80-3.50	0.10-0.30
TCMT 16T312-M3P	16.50	3.97	1.20	4.40	9.52	●	●	●	0.80-3.50	0.12-0.35

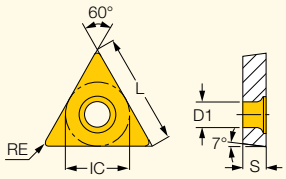
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

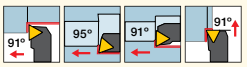
For tools, see pages: E-STFCR-HEAD (151) • S-MTLCR/L-W (151) • S-STFCR/L (151) • S-STLCR/L (152) • STFCR/L (92) • STGCR/L (93)

ISOTURN

TCMT-M3M
Triangular Positive Flank Inserts, for Machining Stainless and Low Carbon Steel







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC6025	IC6015	IC807	Recommended Machining Data a_p (mm)	f (mm/rev)
TCMT 110204-M3M	11.00	6.35	2.38	0.40	2.80	•	•	•	0.40-2.50	0.07-0.23
TCMT 110208-M3M	11.00	6.35	2.38	0.80	2.80	•	•	•	0.80-2.50	0.10-0.25
TCMT 16T304-M3M	16.50	9.52	3.97	0.40	4.40	•	•	•	0.40-3.00	0.07-0.25
TCMT 16T308-M3M	16.50	9.52	3.97	0.80	4.40	•	•	•	0.80-3.00	0.10-0.30

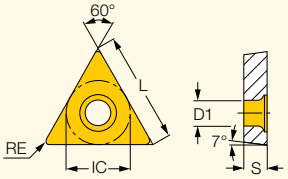
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

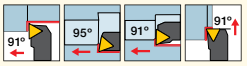
For tools, see pages: E-STFCR-HEAD (151) • S-MTLCR/L-W (151) • S-STFCR/L (151) • S-STLCR/L (152) • STFCR/L (92) • STGCR/L (93)

ISOTURN

TCMT-PF
Triangular Inserts with a Positive Flank for Semi-Finishing and Finishing on Soft Materials and Exotic Alloys







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
TCMT 110202-PF	11.00	6.35	2.38	0.20	2.85	•	•	0.20-3.00	0.05-0.25

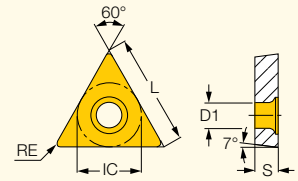
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

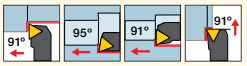
For tools, see pages: E-STFCR-HEAD (151) • S-STFCR/L (151) • S-STLCR/L (152) • STFCR/L (92) • STGCR/L (93)

ISOTURN

TCMT-SM
Triangular Inserts with a 7° Positive Flank for Semi-Finishing and Finish Turning on Soft Materials and Exotic Alloys







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC830	IC8350	IC8250	IC908	IC8150	IC5010	IC428	IC5005	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
TCMT 110204-SM	11.00	6.35	2.38	0.40	2.80		•	•	•	•	•		•	•	•	0.20-3.00	0.05-0.25
TCMT 110208-SM	11.00	6.35	2.38	0.80	2.80									•	•	0.50-2.50	0.07-0.25
TCMT 16T304-SM	16.50	9.52	3.97	0.40	4.40	•		•		•		•	•	•	•	0.50-3.00	0.06-0.25
TCMT 16T308-SM	16.50	9.52	3.97	0.80	4.40	•		•		•			•	•	•	0.50-3.00	0.08-0.28

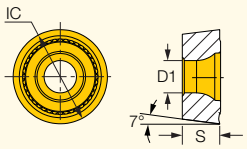
• For user guide and cutting speed recommendations, see pages 160-170, 274-278.

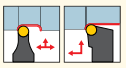
For tools, see pages: E-STFCR-HEAD (151) • S-MTLCR/L-W (151) • S-STFCR/L (151) • S-STLCR/L (152) • STFCR/L (92) • STGCR/L (93)

ISOTURN

RCMT-M3P
Round Inserts with a 7° Positive Flank for Medium Profiling on a Wide Range of Materials







Designation	Dimensions IC	S	D1	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
RCMT 1204M0-M3P-R	12.00	4.76	5.50	●	1.50-6.00	0.30-0.55
RCMT 1606M0-M3P-R	16.00	6.35	5.50	●	2.00-8.00	0.40-0.80

NEW

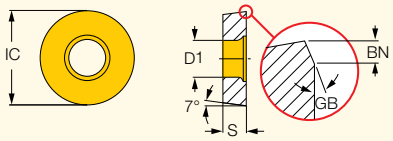
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

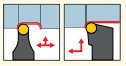
For tools, see pages: AVC-SRDCN-Y (103) • C#-SRDCN-16-Y (103) • C#-SRGCR-12-JHP (94) • C#-SRGCR/L (94) • HSK A63WH-SRDCN-Y (102) • SRDCN (94) • SRGCR-12-JHP (93) • SRGCR/L (93)

ISOTURN

RCMT-SR
Round Inserts with a 7° Positive Flank for Medium Profiling on a Wide Range of Materials







Designation	Dimensions IC	S	D1	GB	BN	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
RCMT 0803M0-SR	8.00	3.18	3.40	15.0	0.15	●	1.00-4.50	0.30-0.45
RCMT 1606M0-SR	16.00	6.35	5.50	15.0	0.18	●	2.00-8.00	0.40-0.60
RCMT 2507M0-SR	25.00	7.94	7.70	15.0	0.20	●	4.00-10.00	0.40-1.40

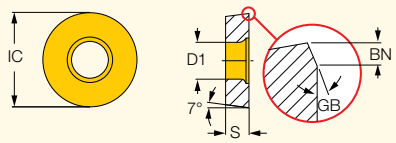
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

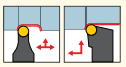
For tools, see pages: AVC-SRDCN-Y (103) • C#-SRDCN-16-Y (103) • HSK A63WH-SRDCN-Y (102) • SRDCN (94) • SRGCR/L (93)

ISOTURN

RCMT-14
Round Inserts with a 7° Positive Flank for Medium and Finish Profiling on a Wide Range of Materials







Designation	Dimensions IC	S	D1	GB	BN	Tough ↔ Hard IC354	IC8250	IC8150	IC20	IC5010	IC806	IC1017	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
RCMT 0803M0-14	8.00	3.18	3.40	15.0	0.15				●						1.00-4.00	0.30-0.45
RCMT 10T3M0-14	10.00	3.97	4.40	15.0	0.15	●	●	●	●						1.50-5.00	0.30-0.50
RCMT 1204M0-14	12.00	4.76	5.50	15.0	0.15			●	●		●	●	●	●	1.50-6.00	0.30-0.50
RCMT 1606M0-14	16.00	6.35	5.50	15.0	0.25			●	●						2.00-8.00	0.40-0.60
RCMT 2006M0-14	20.00	6.35	6.50	15.0	0.25			●	●	●					2.50-10.00	0.50-0.70
RCMT 2006M0E-14	20.00	6.35	6.50	15.0	0.25			●							2.50-10.00	0.50-0.70

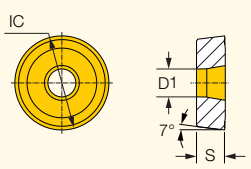
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

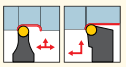
For tools, see pages: AVC-SRDCN-Y (103) • C#-SRDCN-16-Y (103) • C#-SRGCR-12-JHP (94) • C#-SRGCR/L (94) • HSK A63WH-SRDCN-Y (102) • SRDCN (94) • SRGCR-12-JHP (93) • SRGCR/L (93)

ISOTURN

RCMX-M3P-R
Round 7° Insert with a Positive Cutting Edge for Machining Wheels







Designation	Dimensions IC	S	D1	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
RCMX 200600-M3P-R	20.00	6.35	5.50	●	1.50-10.00	0.40-0.80
RCMX 320900-M3P-R	32.00	9.52	9.50	●	7.00-13.00	0.70-2.00

NEW

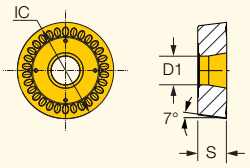
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

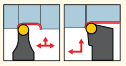
For tools, see pages: PRDCN (95)

ISOTURN

RCMX-R3P-R
Round 7° Insert with a Positive Cutting Edge for Machining Wheels







Designation	Dimensions IC	S	D1	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
RCMX 320900-R3P-R	32.00	9.52	9.50	●	7.00-13.00	0.70-2.00

NEW

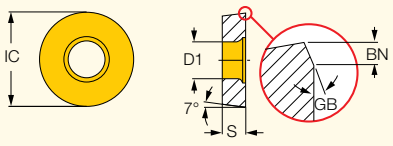
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

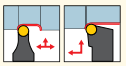
For tools, see pages: PRDCN (95)

ISOTURN

RCMX
Round Inserts with a 7° Positive Flank and Reinforced Cutting Edge for Semi-Roughing and Rough Profiling







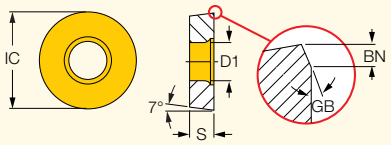
Designation	Dimensions IC	S	D1	GB	BN	Tough ↔ Hard IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
RCMX 100300	10.00	3.18	3.60	15.0	0.01	●		1.50-5.00	0.30-0.50
RCMX 120400	12.00	4.76	4.20	15.0	0.15		●	1.50-6.00	0.30-0.50
RCMX 200600	20.00	6.35	6.50	15.0	0.01	●		2.50-10.00	0.50-0.50

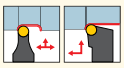
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

ISOTURN

RCMX-NR
Round 7° Inserts with a Positive Flank and Strong Cutting Edge for Rough Turning







Designation	Dimensions IC	S	D1	GB	BN	IC8250	Recommended Machining Data a_p (mm)	f (mm/rev)
RCMX 250700-NR	25.00	7.94	7.20	17.0	0.30	●	4.00-10.00	0.50-1.50
RCMX 3209M0-NR	32.00	9.52	9.50	17.0	0.30	●	7.00-13.00	0.70-2.00

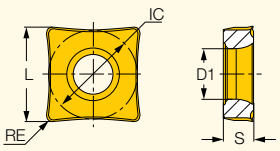
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

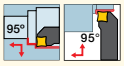
For tools, see pages: PRDCN (95) • PRGCR (95)

ISOTURN

QCMT-PF
Four 80° Cornered Insert with a Positive 7° Clearance and Chipformer for Finishing Applications







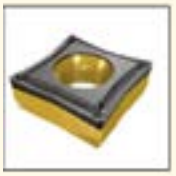
Designation	Dimensions IC	S	RE	D1	IC908	Recommended Machining Data a_p (mm)	f (mm/rev)
QCMT 09T302-PF	9.65	3.97	0.20	4.40	●	0.50-2.50	0.05-0.30

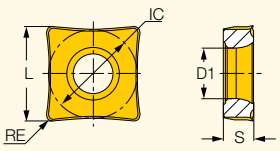
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

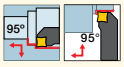
For tools, see pages: PQLCR/L (95) • PQLCR/L-S (95) • S/A-SQLCR/L (144)

ISOTURN

QCMT-SM
Inserts with a Positive 7° Clearance and Chipformer for Finishing Applications







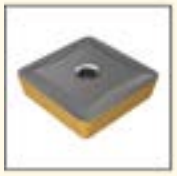
Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC830	IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
QCMT 09T304-SM	10.40	9.65	3.97	0.40	4.40	●	●	●	0.50-2.50	0.06-0.25

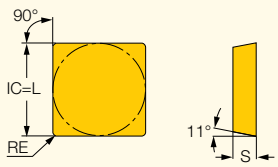
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

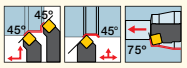
For tools, see pages: PQLCR/L (95) • PQLCR/L-S (95) • S/A-SQLCR/L (144)

ISOTURN

SPMR
Square Inserts with a Positive Chipformer Exerting Low Cutting Forces for Semi-Finishing and Finishing Applications







Designation	Dimensions L	S	RE	Tough ↔ Hard IC830	IC8250	IC8150	IC20N	Recommended Machining Data a_p (mm)	f (mm/rev)
SPMR 090304	9.52	3.18	0.40		•		•	1.50-5.00	0.15-0.30
SPMR 090308	9.52	3.18	0.80	•	•			1.50-6.00	0.16-0.35
SPMR 120304	12.70	3.18	0.40	•	•			1.50-5.00	0.15-0.35
SPMR 120308	12.70	3.18	0.80		•			1.50-6.00	0.16-0.40
SPMR 120312	12.70	3.18	1.20			•		1.50-6.00	0.20-0.45

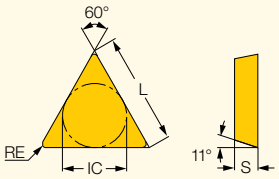
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

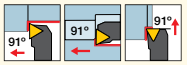
For tools, see pages: CSDPN (97) • CSSPR/L (97) • S-CSKPR (152)

ISOTURN

TPMR
Triangular 11° Positive Inserts with a Positive Chipformer Exerting Low Cutting Forces for Internal Finish Turning







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC8250	IC20N	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
TPMR 090202	9.60	5.56	2.38	0.20					•	1.00-3.00	0.10-0.20
TPMR 090204	9.60	5.56	2.38	0.40		•				1.00-3.50	0.15-0.20
TPMR 110304	11.00	6.35	3.18	0.40	•		•			1.00-3.50	0.15-0.25
TPMR 110308	11.00	6.35	3.18	0.80	•					1.00-3.50	0.15-0.30
TPMR 160304	16.50	9.52	3.18	0.40	•		•	•	•	1.00-4.00	0.15-0.33
TPMR 160308	16.50	9.52	3.18	0.80	•		•	•	•	1.00-4.00	0.15-0.35

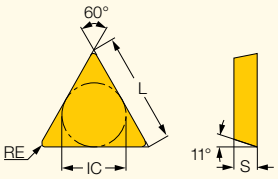
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

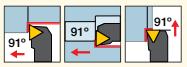
For tools, see pages: CTFPR/L (98) • CTGPR/L (97) • S-CTFPR/L (153)

ISOTURN

TPMR-PF
Triangular 11° Positive Inserts with a Positive Chipformer Exerting Low Cutting Forces for Internal Finish Turning







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC8250	IC8150	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
TPMR 110304-PF	11.00	6.35	3.18	0.40	•		•	•	0.40-3.00	0.08-0.25
TPMR 110308-PF	11.00	6.35	3.18	0.80	•			•	0.50-3.50	0.07-0.28
TPMR 160304-PF	16.50	9.52	3.18	0.40	•	•	•	•	0.50-3.50	0.06-0.25
TPMR 160308-PF	16.50	9.52	3.18	0.80	•	•		•	0.80-3.00	0.08-0.28

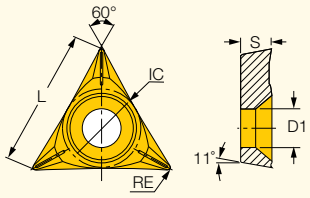
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

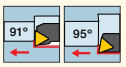
For tools, see pages: CTFPR/L (98) • CTGPR/L (97) • S-CTFPR/L (153)

ISOTURN

TPGT-SP
Super Positive Triangular Inserts with 11° Clearance for Fine Boring and Finish Turning







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC908	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
TPGT 110202-SP	11.00	6.35	2.38	0.20	3.00	●	●	0.40-1.00	0.05-0.15

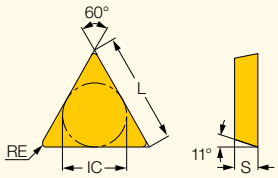
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

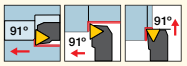
For tools, see pages: E-STFPR-HEAD (153)

ISOTURN

TPMR-FTF
Triangular 11° Positive Inserts with a Positive Chipformer Exerting, Low Cutting Forces for Finish Turning Applications







Designation	Dimensions L	IC	S	RE	IC20N	Recommended Machining Data a_p (mm)	f (mm/rev)
TPMR 110304-FTF	11.00	6.35	3.18	0.40	●	0.50-3.00	0.07-0.25
TPMR 160304-FTF	16.50	9.52	3.18	0.40	●	0.50-3.00	0.07-0.25

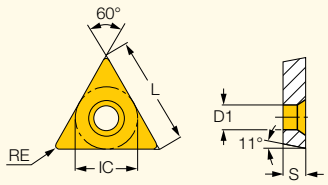
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

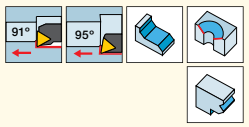
For tools, see pages: CTFPR/L (98) • CTGPR/L (97) • S-CTFPR/L (153)

ISOTURN

TPMT
Triangular 11° Positive Inserts with a Positive Chipformer Exerts Low Cutting Forces for Internal Finish Turning







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC830	IC635	IC50M	IC8350	IC8250	IC8150	IC520M	IC20	IC70	IC806	IC807	IC907	Recommended Machining Data a_p (mm)(1)	f (mm/rev)(2)
TPMT 110202	11.00	6.35	2.38	0.20	3.00	●										●	●	0.20-2.00	0.05-0.25
TPMT 110204	11.00	6.35	2.38	0.40	3.00	●					●		●	●		●	●	1.00-3.00	0.12-0.30
TPMT 110208	11.00	6.35	2.38	0.80	3.00	●					●		●					1.00-4.00	0.15-0.30
TPMT 160304	16.50	9.52	3.18	0.40	4.30	●			●	●			●	●		●	●	1.00-4.00	0.12-0.30
TPMT 160308	16.50	9.52	3.18	0.80	4.30	●	●	●				●	●		●	●	●	5.00-12.00	0.15-0.35

• For cutting speed recommendations, see pages 160-170,274-278

(1) For turning

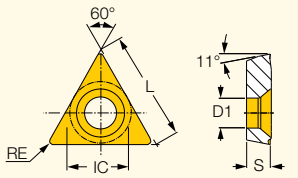
(2) For turning

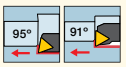
For tools, see pages: A/E/S-STFPR/L (154) • A/S-STLPR/L (155) • E-STFPR-HEAD (153)

ISOTURN

TPMT-PF
Triangular 11° Positive Inserts for Semi-Finishing and Finishing Applications







Designation	Dimensions L	IC[1]	S	RE	D1	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
TPMT 110204-PF	11.00	6.35	2.38	0.40	3.00	●	0.50-3.00	0.10-0.30

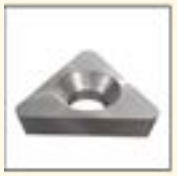
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

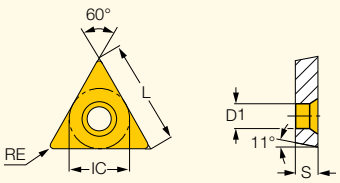
(1) Actual IC=6.28, to be used in 6.35mm pocket size

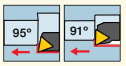
For tools, see pages: A/E/S-STFPR/L (154) • A/S-STLPR/L (155) • E-STFPR-HEAD (153)

ISOTURN

TPGB
Triangular Inserts with an 11° Positive Flank for Short Chipping Materials







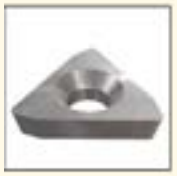
Designation	Dimensions L	IC	S	RE	D1	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
TPGB 110204	11.00	6.35	2.38	0.40	3.00	●	1.00-3.00	0.05-0.25

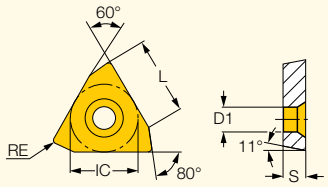
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

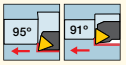
For tools, see pages: A/E/S-STFPR/L (154) • A/S-STLPR/L (155) • E-STFPR-HEAD (153)

ISOTURN

TPGB-XL
Triangular Inserts with an 11° Positive Flank for Short Chipping Materials







Designation	Dimensions L	IC	S	RE	D1	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
TPGB 110204-XL	11.00	6.35	2.38	0.40	3.00	●	1.00-3.00	0.05-0.25

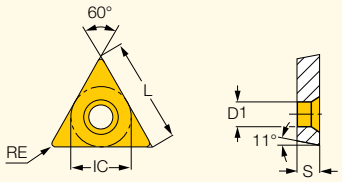
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A/E/S-STFPR/L (154) • A/S-STLPR/L (155) • E-STFPR-HEAD (153)

ISOTURN

TPGH-R/L
Triangular Inserts with an 11° Positive and Ground Chipformer for Finish Turning





Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC908	IC20	IC70	Recommended Machining Data a_p (mm)	f (mm/rev)
TPGH 110204-L	11.00	6.35	2.38	0.40	3.00		●	●	1.00-3.00	0.05-0.25
TPGH 110208-L	11.00	6.35	2.38	0.80	3.00	●			1.00-3.00	0.05-0.25
TPGH 160304-L	16.50	9.52	3.18	0.40	4.30		●	●	1.00-4.00	0.05-0.30
TPGH 160304-R	16.50	9.52	3.18	0.40	4.30			●	1.00-4.00	0.05-0.30
TPGH 160308-L	16.50	9.52	3.18	0.80	4.30		●	●	1.00-4.00	0.05-0.30

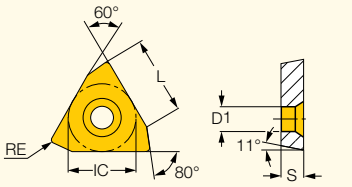
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A/E/S-STFPR/L (154) • A/S-STLPR/L (155)

ISOTURN

TPGH-XL
Triangular Inserts with an 11° Positive and Ground Chipformer for Finish Turning





Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC20	IC70	Recommended Machining Data a_p (mm)	f (mm/rev)
TPGH 110204-XL	11.00	6.35	2.38	0.40	3.00	●	●	1.00-3.00	0.05-0.25

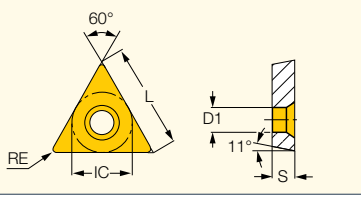
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A/E/S-STFPR/L (154) • A/S-STLPR/L (155) • E-STFPR-HEAD (153)

ISOTURN

TPGX
Triangular Inserts with an 11° Positive Flank and Ground Chipformer for Finish Turning





Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC54	IC908	IC20	IC20N	IC520N	Recommended Machining Data a_p (mm)	f (mm/rev)
TPGX 090202-L	9.52	5.56	2.38	0.20	3.00		●	●	●	●	1.00-2.00	0.10-0.20
TPGX 090204-L	9.52	5.56	2.38	0.40	3.00	●	●	●	●	●	1.00-2.50	0.15-0.20
TPGX 110302-L	11.00	6.35	3.18	0.20	3.50		●	●	●	●	1.00-2.50	0.10-0.20
TPGX 110304-L	11.00	6.35	3.18	0.40	3.50	●	●	●	●	●	1.00-3.00	0.15-0.20
TPGX 110308-L	11.00	6.35	3.18	0.80	3.50			●			1.00-3.50	0.15-0.25

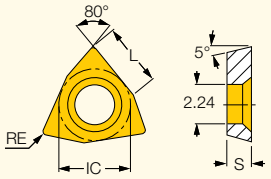
• For user guide and cutting speed recommendations, see pages 160-170, 274-278.

For tools, see pages: A/E-STFPR-X (154) • MG STFPR-X (154)

ISOTURN

WBGT
Trigon Inserts with a 5°
Positive Flank Ground
Chipformer for Finish Turning







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC908	IC807	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
WBGT 060102L	2.18	3.97	1.59	0.20	●	●	●	●	0.10-1.00	0.05-0.10

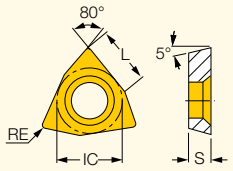
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: E/S-SWUBR/L (155) • MG-SWUBR/L (156) • PICIN-A-SWUBR/L (465) • PICIN-SWUBR/L (465)

ISOTURN

WBMT
Trigon Inserts with a 5°
Positive Flank Ground
Chipformer for Finish Turning







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC830	IC354	IC350	IC908	IC30N	IC530N	IC20N	IC520N	Recommended Machining Data a_p (mm)	f (mm/rev)
WBMT 060101R/L	2.18	3.97	1.59	0.10				●					0.40-2.00	0.10-0.15
WBMT 060102L	2.18	3.97	1.59	0.20	●	●	●		●	●	●	●	0.40-2.00	0.10-0.15
WBMT 060102R	2.18	3.97	1.59	0.20		●	●			●		●	0.40-2.00	0.10-0.15

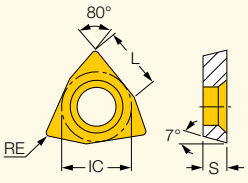
- WBMT 06...R right-hand inserts used on left-hand tools and WBMT 06...L left-hand inserts used on right-hand tools
- For user guide and cutting speed recommendations, see pages 160-170,274-278

For tools, see pages: E/S-SWUBR/L (155) • MG-SWUBR/L (156) • PICIN-A-SWUBR/L (465) • PICIN-SWUBR/L (465)

ISOTURN

WCGT
Trigon Inserts with a 7°
Positive Flank and Chipformer
for Finish Turning







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC908	IC30N	Recommended Machining Data a_p (mm)	f (mm/rev)
WCGT 020102L	2.18	3.97	1.59	0.20	●	●	0.40-2.00	0.05-0.10
WCGT 020104L	2.18	3.97	1.59	0.40	●	●	0.40-2.00	0.10-0.15

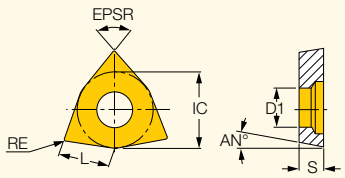
- For user guide and cutting speed recommendations, see pages 160-170, 274-278.

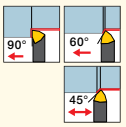
For tools, see pages: A/E-SWUCR (156) • MG-SWUCR (157)

ISOTURN

WPEX
80° and 84° Precision Trigon Inserts with Positive 8° and 12° Clearance for Finishing Applications







Designation	Dimensions L	S	RE	IC	D1	EPSR	AN	Tough ↔ Hard IC08	IC908	Recommended Machining Data a_p (mm)	f (mm/rev)
WPEX 040200R/L08	4.00	2.50	0.00	6.60	3.20	84.0	8.0	●		0.20-2.00	0.05-0.20
WPEX 040200R12	4.00	2.50	0.00	6.60	3.20	84.0	12.0	●		0.20-2.00	0.05-0.20
WPEX 040202R/L08	4.00	2.50	0.20	6.60	3.20	84.0	8.0	●		0.20-2.00	0.05-0.20
WPEX 050300R/L08	5.00	3.18	0.00	7.94	3.70	80.0	8.0	●	●	0.20-2.50	0.05-0.20
WPEX 050300R12	5.00	3.18	0.00	7.94	3.70	80.0	12.0	●	●	0.20-2.50	0.05-0.20
WPEX 050302R/L08	5.00	3.18	0.20	7.94	3.70	80.0	8.0	●	●	0.20-2.50	0.05-0.20
WPEX 050302R12	5.00	3.18	0.20	7.94	3.70	80.0	12.0		●	0.20-2.50	0.05-0.20
WPEX 050304R/L08	5.00	3.18	0.40	7.94	3.70	80.0	8.0	●	●	0.20-2.50	0.05-0.20
WPEX 050304R12	5.00	3.18	0.40	7.94	3.70	80.0	12.0		●	0.20-2.50	0.05-0.20
WPEX 060400R/L08	6.00	4.00	0.00	9.52	3.70	80.0	8.0	●	●	0.20-3.00	0.05-0.20
WPEX 060400R/L12	6.00	4.00	0.00	9.52	3.70	80.0	12.0	●	●	0.20-3.00	0.05-0.20
WPEX 060402R/L08	6.00	4.00	0.20	9.52	3.70	80.0	8.0	●	●	0.20-3.00	0.05-0.20
WPEX 060402R/L12	6.00	4.00	0.20	9.52	3.70	80.0	12.0	●	●	0.20-3.00	0.05-0.20
WPEX 060404R/L08	6.00	4.00	0.40	9.52	3.70	80.0	8.0	●	●	0.20-3.00	0.05-0.20
WPEX 060404R12	6.00	4.00	0.40	9.52	3.70	80.0	12.0	●	●	0.20-3.00	0.05-0.20

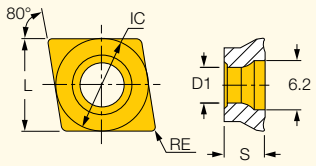
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

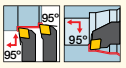
For tools, see pages: SWAPR-PAD (96) • SWAPR/L-S (96) • SWDPR/L (96)

CHAMTURN

CC95MT-SM
Single-Sided 80° Rhombic Inserts for Finishing (CHAMELEON Multifunction Pocket System)







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC830	IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
CC95MT 100504-SM	9.50	9.52	5.00	0.40	4.50	●	●	●	0.50-3.00	0.07-0.24

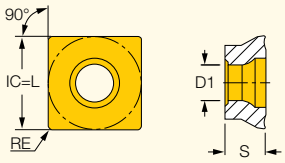
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

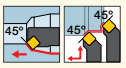
For tools, see pages: S-SUXCR/L-CM (144) • SUXCR/L-CM (70)

CHAMTURN

SC45MT-SM
Single-Sided Square Inserts for Finishing Applications (CHAMELEON Multifunction Pocket System)







Designation	Dimensions L	S	RE	D1	Tough ↔ Hard IC830	IC8250	IC8150	Recommended Machining Data a_p (mm)	f (mm/rev)
SC45MT 100508-SM	9.53	5.00	0.80	4.50	●	●	●	0.50-3.00	0.10-0.30

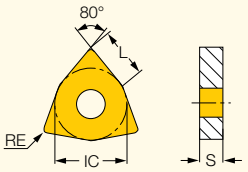
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

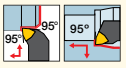
For tools, see pages: S-SUXCR/L-CM (144) • SUXCR/L-CM (70)

ALUPTURN POSITIVE DOUBLE SIDED

WNGG-F3N
Double-Sided Sharp Edged Positive and Polished Rake Inserts for Finishing Aluminum and Other Non-Ferrous Materials







Designation	Dimensions L	IC	S	RE	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
WNGG 060402-F3N-P	6.52	9.52	4.76	0.20	●	0.20-3.00	0.10-0.30
WNGG 060404-F3N-P	6.52	9.52	4.76	0.40	●	0.40-3.00	0.12-0.35
WNGG 060408-F3N-P	6.52	9.52	4.76	0.80	●	0.80-3.00	0.15-0.40

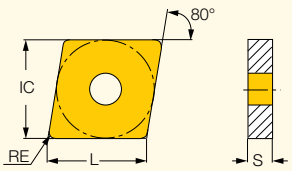
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

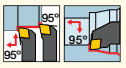
For tools, see pages: A-PWLNR/L-X/G (138) • A/S-MWLNR/L-W (136) • DWLNR/L (13) • MWLNR/L-W (22) • PWLNR/L-X (14) • PWLNR/L-X-JHP (15)
• PWLNR/L-X-JHP-MC (16)

ALUPTURN POSITIVE DOUBLE SIDED

CNGG-F3N
Double-Sided Sharp Edged Positive and Polished Rake Inserts for Finishing Aluminum and Other Non-Ferrous Materials







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC1520	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
CNGG 090402-F3N-P	9.70	9.52	4.76	0.20	●	●	0.30-3.00	0.10-0.30
CNGG 090404-F3N-P	9.70	9.52	4.76	0.40	●	●	0.40-3.00	0.10-0.30
CNGG 090408-F3N-P	9.70	9.52	4.76	0.80	●	●	0.80-3.00	0.10-0.30

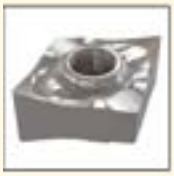
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

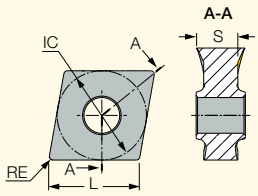
For tools, see pages: A/S-PCLNR/L-X/G (134) • C#-PCLNR/L-X-JHP (31) • PCLNR/L-PAD-JHP (25) • PCLNR/L-X (27) • PCLNR/L-X-JHP (28)
• PCLNR/L-X-JHP-MC (29) • AVC-PCLNR/L (124)

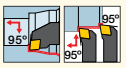
ALUPTURN POSITIVE DOUBLE SIDED

CNGX-M3N

Double-Sided Positive Rake Inserts with High Helical and Sharp Edge for Medium Machining Non-Ferrous Materials







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC1520	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
CNGX 090604-M3N-P	9.70	9.52	4.40	0.40	●	●	0.40-3.00	0.10-0.30
CNGX 090608-M3N-P	9.70	9.52	4.40	0.80	●	●	0.80-3.00	0.10-0.30

- PCLNR/L...X and A..-PCLNR/L-X are most recommended as they were designed especially for this insert
- For user guide and cutting speed recommendations, see pages 160-170,274-278

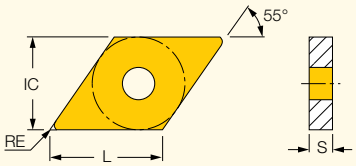
For tools, see pages: A/S-PCLNR/L-X/G (134) • C#-PCLNR/L-X-JHP (31) • PCLNR/L-X (27) • PCLNR/L-X-JHP (28) • PCLNR/L-X-JHP-MC (29)

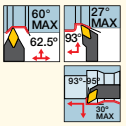
ALUPTURN POSITIVE DOUBLE SIDED

DNGG-M3N

Double-Sided Sharp-Edged Positive and Polished Rake Inserts for Finishing Aluminum and Other Non-Ferrous Materials







Designation	Dimensions L	IC	S	RE	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
DNGG 110402-M3N-P	11.63	9.52	4.76	0.20	●	0.30-3.00	0.10-0.30
DNGG 110404-M3N-P	11.63	9.52	4.76	0.40	●	0.30-3.00	0.10-0.30
DNGG 110408-M3N-P	11.63	9.52	4.76	0.80	●	0.30-3.00	0.10-0.30

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

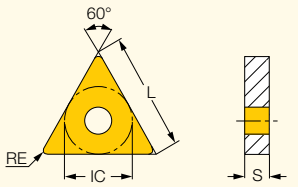
For tools, see pages: A/S-PDUNR/L (140) • AVC-DDUNR/L (126) • C#-PDJNR/L-JHP (38) • DDJNR/L (39) • PDJNR/L (36) • PDJNR/L-JHP (37)
• PDJNR/L-JHP-MC (37) • PDJNR/L-PAD-JHP (38)

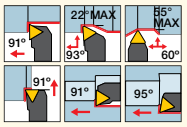
ALUPTURN POSITIVE DOUBLE SIDED

TNGG-M3N

Double-Sided Sharp Edged Positive and Polished Rake Inserts for Finishing Aluminum and Other Non-Ferrous Materials







Designation	Dimensions L	IC	S	RE	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
TNGG 160402-M3N-P	16.50	9.52	4.76	0.20	●	0.30-3.00	0.10-0.30
TNGG 160404-M3N-P	16.50	9.52	4.76	0.40	●	0.30-3.00	0.10-0.30
TNGG 160408-M3N-P	16.50	9.52	4.76	0.80	●	0.30-3.00	0.10-0.30

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

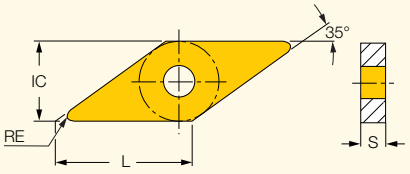
For tools, see pages: A-PTFNR/L-X/G (142) • AVC-PTLNR/L (125) • DTGNR/L (50) • MTENN-W (49) • MTJNR/L-W (49)
• PTFNR/L (48) • PTGNR/L (45) • PTGNR/L-X (46) • PTGNR/L-X-JHP (47) • PTGNR/L-X-JHP-MC (47) • S-MTLNR/L-W (143) • S-PTFNR/L (143)

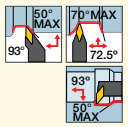
ALUPTURN POSITIVE DOUBLE SIDED

VNGG-M3N

Double-Sided Sharp Edged Positive and Polished Rake Inserts for Finishing on Aluminum and Other Non-Ferrous Materials







Designation	Dimensions L	IC	S	RE	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
VNGG 160402-M3N-P	16.60	9.52	4.76	0.20	●	0.20-3.00	0.10-0.25
VNGG 160404-M3N-P	16.60	9.52	4.76	0.40	●	0.40-3.00	0.12-0.30
VNGG 160408-M3N-P	16.60	9.52	4.76	0.80	●	0.80-3.00	0.15-0.35

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

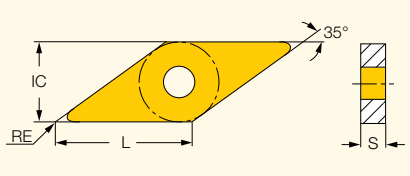
For tools, see pages: AVC-DVUNR/L (127) • MVJNR/L (43) • MVVNN (45)

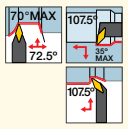
ALUPTURN POSITIVE DOUBLE SIDED

VNGU-R3N

Double-Sided Sharp Edged Positive Rake Inserts for Rough Machining Aluminum and Other Non-Ferrous Materials







Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC1520	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
VNGU 220612-R3N	22.00	12.70	6.77	1.20		●	1.00-4.50	0.10-0.30
VNGU 220616-R3N	22.00	12.70	6.51	1.60		●	1.50-4.50	0.10-0.35
VNGU 220630-R3N	22.00	12.70	6.35	3.00	●	●	1.50-4.50	0.15-0.40

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

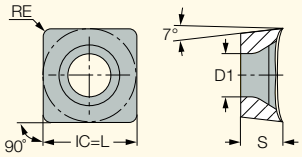
For tools, see pages: A-SVLFNR-AL-JHP (141) • A-SVQNR/L-AL-JHP (142) • SVHNR/L-AL-JHP (44) • SVVNN-AL-JHP (44)

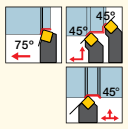
ISOTURN

SCGT-AS

Square Inserts with a 7° Positive Flank, Very Positive Rake Angle and Sharp Cutting Edge for Machining Aluminum







Designation	Dimensions IC	S	RE	D1	Tough ↔ Hard IC1520	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
SCGT 09T308-AS	9.52	3.97	0.80	4.40	●	●	0.50-3.00	0.10-0.30
SCGT 120404-AS	12.70	4.76	0.40	5.50		●	1.00-4.00	0.10-0.30
SCGT 120408-AS	12.70	4.76	0.80	5.50	●	●	1.00-4.00	0.10-0.30

• For user guide and cutting speed recommendations, see pages 160-170, 274-278.

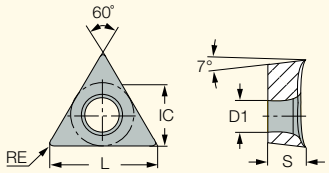
For tools, see pages: SSBCR/L (92) • SSSCR/L (92)

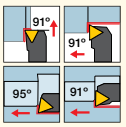
ISOTURN

TCGT-AS

Triangular Inserts with a 7° Positive Flank, Very Positive Rake Angle and Sharp Cutting Edge for Machining Aluminum







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC1520	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
TCGT 110204-AS	11.00	6.35	2.38	0.40	2.80	•	•	0.20-3.00	0.05-0.30
TCGT 16T304-AS	16.50	9.52	3.97	0.40	4.40	•	•	0.50-3.00	0.05-0.30
TCGT 16T308-AS	16.50	9.52	3.97	0.80	4.40	•	•	0.50-3.00	0.10-0.30

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

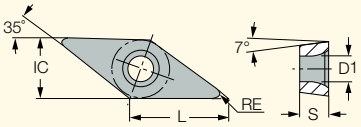
For tools, see pages: E-STFCR-HEAD (151) • S-MTLCR/L-W (151) • S-STFCR/L (151) • S-STLCR/L (152) • STFCR/L (92) • STGCR/L (93)

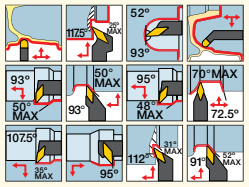
ISOTURN

VCGT-AS

35° Rhombic Inserts with a 7° Positive Flank, Very Positive Rake Angle and Sharp Cutting Edge for Machining Aluminum







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC1520	IC20	IC920	Recommended Machining Data a_p (mm)	f (mm/rev)
VCGT 110302-AS	11.10	6.35	3.18	0.20	2.90	•	•	•	0.20-2.50	0.05-0.20
VCGT 110304-AS	11.10	6.35	3.18	0.40	2.90	•	•		0.50-3.00	0.05-0.25
VCGT 160401-AS	16.60	9.52	4.76	0.10	4.40		•		0.20-2.50	0.05-0.20
VCGT 160402-AS	16.60	9.52	4.76	0.20	4.40	•	•		0.50-2.50	0.05-0.25
VCGT 160404-AS	16.60	9.52	4.76	0.40	4.40	•	•		0.50-3.00	0.05-0.25
VCGT 160408-AS	16.60	9.52	4.76	0.80	4.40	•	•		0.50-3.00	0.10-0.25
VCGT 160412-AS	16.60	9.52	4.76	1.20	4.40	•	•		0.50-3.00	0.10-0.25
VCGT 220520-AS	22.10	12.70	5.56	2.00	5.50	•			1.50-4.50	0.15-0.30
VCGT 220530-AS	22.10	12.70	5.56	3.00	5.50	•	•		1.50-4.50	0.15-0.30

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

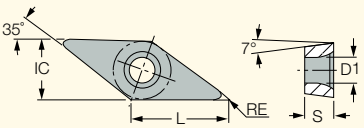
For tools, see pages: A/S-SVLBCR/L (150) • A/S-SVLFCR/L; A-SVUCR/L (149) • A/S-SVQCR/L (149) • AVC-SVLCR/L-VH (128) • AVC-SVMCR/L (124) • AVC-SVPCR/L (123) • AVC-SVQCR/L (123) • AVC-SVUCR/L (122) • C#-SVJCR/L (87) • C#-SVJCR/L-JHP (87) • C#-SVVCN (91) • DTF50 SVXCR-16X2 (510) • DTF50 SVXCR-22 (509) • HSK A63WH-SVJCR/L (87) • NQCH-SVACR/L-S-JHP (89) • NQCH-SVJCR/L-S-JHP (85) • NQCH-SVVCN-S-JHP (512) • NQCH-Y-SVJCR-S-JHP (86) • PVACR/L-S (84) • PVACR/L-S-JHP (89) • S/A-SVJCR/L (150) • SBTT#-SVJCR/L-JHP (416) • SBTT#-SVQCR/L-JHP (417) • SBTT#-SVUCR/L-JHP (416) • SBTT-SVVCN-JHP (416) • SVACR/L-S (88) • SVJCR-PAD (88) • SVJCR/L (511) • SVJCR/L-16-JHP (511) • SVJCR/L-PAD-JHP (88) • SVPCR/L-S (92) • SVVCN (511) • SVXCR/L (512) • Y-SVJCR-S (85) • Y-SVJCR-S-JHP (86) • AVC-SVLCR/L (123) • PVACR/L-S-JHP-MC (90)

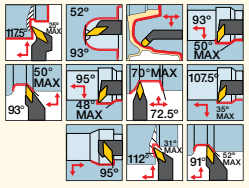
ISOTURN

VCGT-AF

Inserts with a Very Positive Rake Angle and Sharp Cutting Edge for Semi-Finishing and Finishing Aluminum







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC1520	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
VCGT 220508-AF	22.10	12.70	5.56	0.80	5.50		•	1.00-4.50	0.10-0.25
VCGT 220512-AF	22.10	12.70	5.56	1.20	5.50		•	1.00-4.50	0.10-0.30
VCGT 220516-AF	22.10	12.70	5.56	1.60	5.50	•	•	1.50-4.50	0.10-0.35

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

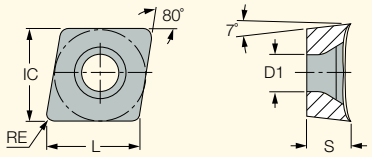
For tools, see pages: A/S-SVLFCR/L; A-SVUCR/L (149) • A/S-SVQCR/L (149) • DTF50 SVXCR-22 (509)

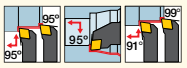
ISOTURN

CCGT-AS

80° Rhombic Inserts with a 7° Positive Flank, Very Positive Rake Angle and Sharp Cutting Edge for Machining Aluminum







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC1520	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
CCGT 060201-AS	6.40	6.35	2.38	0.10	2.80	●	●	0.50-2.00	0.10-0.20
CCGT 060202-AS	6.40	6.35	2.38	0.20	2.80	●	●	0.50-2.00	0.10-0.20
CCGT 060204-AS	6.40	6.35	2.38	0.40	2.80	●	●	0.50-2.00	0.10-0.25
CCGT 09T301-AS	9.70	9.52	3.97	0.10	4.40	●	●	0.50-2.50	0.10-0.25
CCGT 09T302-AS	9.70	9.52	3.97	0.20	4.40	●	●	0.50-2.50	0.10-0.25
CCGT 09T304-AS	9.70	9.52	3.97	0.40	4.40	●	●	0.50-2.50	0.10-0.25
CCGT 09T308-AS	9.70	9.52	3.97	0.80	4.40	●	●	0.80-3.00	0.10-0.30
CCGT 120402-AS	12.90	12.70	4.76	0.20	5.50	●	●	0.50-2.50	0.10-0.25
CCGT 120404-AS	12.90	12.70	4.76	0.40	5.50		●	0.50-2.50	0.10-0.25
CCGT 120408-AS	12.90	12.70	4.76	0.80	5.50	●	●	1.00-3.50	0.10-0.30

• For user guide and cutting speed recommendations, see pages 160-170, 274-278.

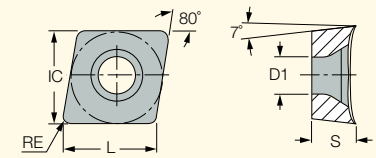
For tools, see pages: A/E/S-SCLCR/L (146) • AVC-SCLCR/L (121) • C#-SCLCR/L-JHP (71) • E-SCLCR/L-HEAD (145) • NQCH-SCACR/L-S-JHP (72) • PCLCR/L-S (72) • PCLCR/L-S-JHP (73) • PCLCR/L-S-JHP-MC (73) • SBTT#-SCLCR/L-JHP (418) • SCACR/L-S (72) • SCLCR-PAD (71) • SCLCR/L (70) • SCLCR/L-PAD-JHP (71)

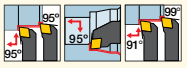
ISOTURN

CCGT-AF

80° Rhombic Inserts with a 7° Positive Flank, Very Positive Rake Angle and Sharp Cutting Edge for Machining Aluminum







Designation	Dimensions L	IC	S	RE	D1	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
CCGT 09T308-AF	9.70	9.52	3.97	0.80	4.40	●	0.80-3.00	0.15-0.25
CCGT 120408-AF	12.90	12.70	4.76	0.80	5.50	●	1.00-3.50	0.15-0.30

• For user guide and cutting speed recommendations, see pages 160-170, 274-278.

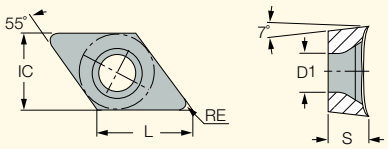
For tools, see pages: A/E/S-SCLCR/L (146) • AVC-SCLCR/L (121) • C#-SCLCR/L-JHP (71) • E-SCLCR/L-HEAD (145) • PCLCR/L-S (72) • PCLCR/L-S-JHP (73) • PCLCR/L-S-JHP-MC (73) • SBTT#-SCLCR/L-JHP (418) • SCLCR-PAD (71) • SCLCR/L (70) • SCLCR/L-PAD-JHP (71)

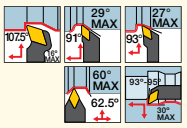
ISOTURN

DCGT-AS

55° Rhombic Inserts with a 7° Positive Flank, Very Positive Rake Angle and Sharp Cutting Edge for Machining Aluminum







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC1520	IC20	IC920	IC320	IC907	Recommended Machining Data a_p (mm)	f (mm/rev)
DCGT 070201-AS	7.75	6.35	2.38	0.10	2.80		●				0.50-2.00	0.03-0.20
DCGT 070202-AS	7.75	6.35	2.38	0.20	2.80	●	●	●			0.50-2.00	0.05-0.20
DCGT 070204-AS	7.75	6.35	2.38	0.40	2.80	●	●				0.50-2.50	0.05-0.25
DCGT 11T301-AS	11.60	9.52	3.97	0.10	4.40		●				0.50-2.50	0.05-0.25
DCGT 11T302-AS	11.60	9.52	3.97	0.20	4.40	●	●		●	●	0.50-2.50	0.05-0.26
DCGT 11T304-AS	11.60	9.52	3.97	0.40	4.40	●	●		●	●	0.50-2.50	0.05-0.25
DCGT 11T308-AS	11.60	9.52	3.97	0.80	4.40	●	●		●		0.80-3.00	0.08-0.30

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

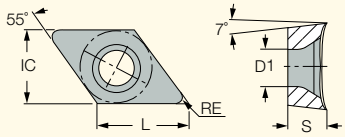
For tools, see pages: A/E/S-SDUCR/L (148) • AVC-SDUCR/L (122) • AVC-SDUCR/L-VH (128) • C#-SDJCR-JHP (78) • C#-SDJCR/L (77) • C#-SDNCN (84) • E-SDUCR/L-HEAD (148) • NQCH-SDACR/L-S-JHP (79) • NQCH-SDJCR/L-S-JHP (76) • NQCH-SDNCN-S-JHP (84) • NQCH-Y-SDJCR-S-JHP (77) • PDACR/L-S (74) • PDACR/L-S-JHP (82) • SBTT#-SDJCR/L-JHP (415) • SBTT-SDNCN-JHP (415) • SDACR/L-S (79) • SDHCR/L-S (79) • SDJCR-PAD (78) • SDJCR/L (75) • SDJCR/L-JHP-MC (76) • SDJCR/L-PAD-JHP (78) • SDNCN (83) • Y-SDJCR-S (76) • Y-SDJCR-S-JHP (77) • PDACR/L-S-JHP-MC (82)

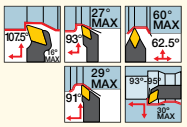
ISOTURN

DCGT-AF

Inserts with a Positive Rake Angle and Sharp Cutting Edge for Semi-Finishing and Finishing Aluminum







Designation	Dimensions L	IC	S	RE	D1	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
DCGT 11T304-AF	11.60	9.52	3.97	0.40	4.40	●	0.50-2.50	0.05-0.25

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

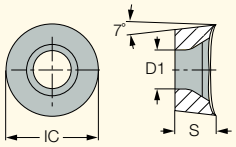
For tools, see pages: A/E/S-SDUCR/L (148) • AVC-SDUCR/L (122) • AVC-SDUCR/L-VH (128) • C#-SDJCR-JHP (78) • C#-SDJCR/L (77) • C#-SDNCN (84) • NQCH-SDACR/L-S-JHP (79) • NQCH-SDJCR/L-S-JHP (76) • NQCH-SDNCN-S-JHP (84) • NQCH-Y-SDJCR-S-JHP (77) • PDACR/L-S (74) • PDACR/L-S-JHP (82) • SBTT#-SDJCR/L-JHP (415) • SBTT-SDNCN-JHP (415) • SDACR/L-S (79) • SDHCR/L-S (79) • SDJCR/L (75) • SDJCR/L-JHP-MC (76) • SDJCR/L-PAD-JHP (78) • SDNCN (83) • Y-SDJCR-S (76) • Y-SDJCR-S-JHP (77) • PDACR/L-S-JHP-MC (82)

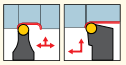
ISOTURN

RCGT-AS

Round Inserts with a 7° Positive Flank, Very Positive Rake Angle and Sharp Cutting Edge for Machining Aluminum







Designation	Dimensions IC	S	D1	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
RCGT 0803M0-AS	8.00	3.18	3.40	●	1.00-4.00	0.20-0.40
RCGT 1003M0-AS	10.00	3.18	4.00	●	1.00-5.00	0.20-0.40
RCGT 10T3M0-AS	10.00	3.97	4.40	●	1.00-5.00	0.20-0.40

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

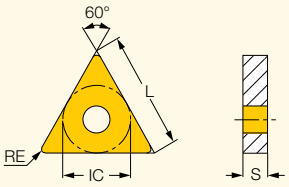
For tools, see pages: SRDCN (94) • SRGCR/L (93)

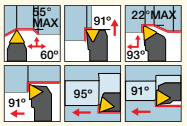
ISOTURN

TNMS-12

Triangular Single-Sided Inserts for Soft and Nonferrous Materials







Designation	Dimensions L	IC	S	RE	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
TNMS 160404-12	16.50	9.52	4.76	0.40	●	0.50-3.00	0.07-0.32
TNMS 160408-12	16.50	9.52	4.76	0.80	●	0.50-3.00	0.10-0.35
TNMS 220404-12	22.00	12.70	4.76	0.40	●	1.00-4.00	0.07-0.32
TNMS 220408-12	22.00	12.70	4.76	0.80	●	1.00-4.00	0.10-0.35

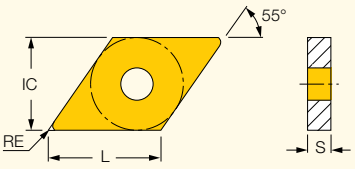
• For user guide and cutting speed recommendations, see pages 160-170, 274-278

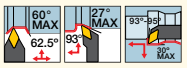
For tools, see pages: A-PTFNR/L-X/G (142) • NQCH-PTJNR/L-S-JHP (48) • PTFNR/L (48) • PTGNR/L (45) • PTGNR/L-X (46) • PTGNR/L-X-JHP (47) • PTGNR/L-X-JHP-MC (47) • S-PTFNR/L (143)

ISOTURN

DNMS-12
55° Rhombic Single-Sided Inserts for Soft and Nonferrous Materials







Designation	Dimensions L	IC	S	RE	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
DNMS 150408-12	15.50	12.70	4.76	0.80	●	1.00-4.00	0.07-0.35

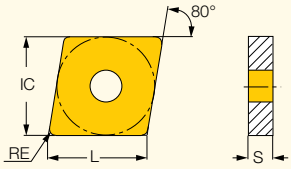
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

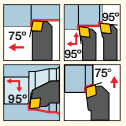
For tools, see pages: A/S-PDUNR/L (140) • C#-PDJNR/L-JHP (38) • PDJNR/L (36) • PDJNR/L-JHP (37) • PDJNR/L-JHP-MC (37)

ISOTURN

CNMS-12
80° Rhombic Single-Sided Inserts for Soft and Nonferrous Materials







Designation	Dimensions L	IC	S	RE	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
CNMS 120408-12	12.90	12.70	4.76	0.80	●	1.00-4.00	0.10-0.35

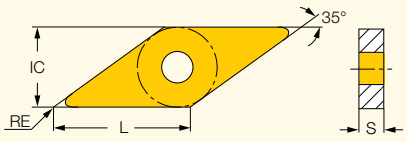
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

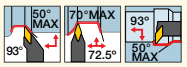
For tools, see pages: A/S-PCLNR/L (133) • A/S-PCLNR/L-X/G (134) • C#-PCLNR/L-12-JHP (26) • C#-PCLNR/L-X (30) • C#-PCLNR/L-X-JHP (31) • PCBNR/L (27) • PCLNR/L (24) • PCLNR/L-12-JHP (25) • PCLNR/L-X (27) • PCLNR/L-X-JHP (28) • PCLNR/L-X-JHP-MC (29)

ISOTURN

VNMS-12
35° Rhombic Single-Sided Inserts for Soft and Nonferrous Materials







Designation	Dimensions L	IC	S	RE	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
VNMS 160404-12	16.60	9.52	4.76	0.40	●	1.00-3.00	0.07-0.30
VNMS 160408-12	16.60	9.52	4.76	0.80	●	1.00-3.50	0.07-0.33

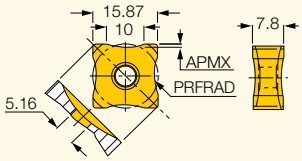
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: MVJNR/L (43) • MVVNN (45)

ISOTURN

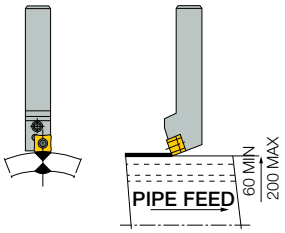
SNMX 150708R-..
Pipe Skiving Inserts with a Positive Rake Used to Remove Burr on Welded Tubes





Designation	Dimensions PRFRAD	APMX	Tough ↔ Hard IC8150	IC418
SNMX 150708R-11	11.00	1.20	●	
SNMX 150708R-13	13.00	1.00	●	
SNMX 150708R-15	15.00	0.86	●	
SNMX 150708R-18	18.00	0.71	●	
SNMX 150708R-20	20.00	0.64	●	
SNMX 150708R-22	22.00	0.58	●	
SNMX 150708R-25	25.00	0.50	●	
SNMX 150708R-27	27.00	0.47	●	
SNMX 150708R-30	30.00	0.42	●	
SNMX 150708R-35	35.00	0.36	●	
SNMX 150708R-40	40.00	0.31	●	
SNMX 150708R-45	45.00	0.28	●	
SNMX 150708R-50	50.00	0.25	●	●
SNMX 150708R-60	60.00	0.21	●	
SNMX 150708R-65	65.00	0.19	●	
SNMX 150708R-70	70.00	0.18	●	
SNMX 150708R-75	75.00	0.17	●	
SNMX 150708R-90	90.00	0.14	●	

For tools, see pages: PSANR/L (64)



These inserts remove the burr immediately after the welding process (material temperature is usually 300-400°C). Cutting speed varies from 40 to 150 m/min, depending on the diameter of the tube.

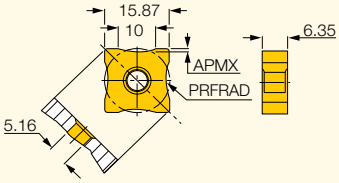
Recommended:

$$R = \frac{D\ (pipe)}{2} + (1\text{-}2\ mm)$$

ISOTURN

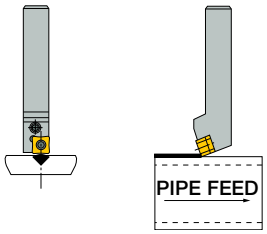
SNMX 150608R-..
Pipe Skiving Inserts Used to Remove the Burr of Welded Tubes





Designation	Dimensions PRFRAD	APMX	IC418
SNMX 150608R-15	15.00	0.86	●
SNMX 150608R-90	90.00	0.14	●

For tools, see pages: PSANR/L (64)



These inserts remove the burr immediately after the welding process (material temperature is usually 300-400° C). Cutting speed varies from 40 to 150 m/min, depending on the diameter of the tube.

Recommended:

$$R = \frac{D\ (pipe)}{2} + (1\text{-}2\ mm)$$

Machining Data and Speed Recommendations for Turning

ISO	Material		Condition	Tensile Strength [N/mm²]	Hardness HB	Material Group No.
P	non-alloy steel and cast steel, free cutting steel	<0.25% C	annealed	420	125	1
		≥0.25% C	annealed	650	190	2
		<0.55% C	quenched and tempered	850	250	3
		≥0.55% C	annealed	750	220	4
			quenched and tempered	1000	300	5
	low alloy and cast steel (less than 5% of alloying elements)		annealed	600	200	6
			quenched and tempered	930	275	7
				1000	300	8
				1200	350	9
	high alloyed steel, cast steel and tool steel		annealed	680	200	10
			quenched and tempered	1100	325	11
	stainless steel and cast steel		ferritic / martensitic	680	200	12
			martensitic	820	240	13

ISO	Material	Condition	Tensile Strength [N/mm²]	Hardness HB	Material No.
M	stainless steel and cast steel	austenitic, duplex	600	180	14

ISO	Material	Condition	Tensile Strength [N/mm²]	Hardness HB	Material No.
K	gray cast iron (GG)	ferritic / pearlitic		180	15
		pearlitic / martensitic		260	16
	nodular cast iron (GGG)	ferritic		160	17
		pearlitic		250	18
	malleable cast iron	ferritic		130	19
		pearlitic		230	20

ISO	Material		Condition	Tensile Strength [N/mm²]	Hardness HB	Material No.
N	aluminum-wrought alloys		not hardenable		60	21
			hardenable		100	22
	aluminum-cast alloys	≤12% Si	not hardenable		75	23
			hardenable		90	24
		>12% Si	high temperature		130	25
	copper alloys	>1% Pb	free cutting		110	26
			brass		90	27
			electrolytic copper		100	28
	non metallic		duroplastics, fiber plastics			29
			hard rubber			30

ISO	Material		Condition	Tensile Strength [N/mm²]	Hardness HB	Material No.
S	high temperature alloys	Fe based	annealed		200	31
			hardened		280	32
		Ni or Co based	annealed		250	33
			hardened		350	34
			cast		320	35
	titanium alloys		pure	Rm 400		36
			alpha+beta alloys, hardened	Rm 1050		37

ISO	Material	Condition	Tensile Strength [N/mm²]	Hardness HB	Material
H	hardened steel	hardened		55 HRC	38
		hardened		60 HRC	39
	chilled cast iron	cast		400	40
	cast iron	hardened		55 HRC	41

Cermet		Cermet + PVD		Carbide + PVD	Carbide + CVD				
IC20N	IC30N	IC520N	IC530N	IC3028/830	IC8250	IC8150	IC5005/428	IC807/907	IC8350
250-400	230-380	250-420	230-400	120-200	230-380	280-420	300-450	140-230	125-210
220-350	200-330	220-380	200-350	100-170	200-340	240-380	260-400	120-205	110-185
180-320	160-300	180-350	160-320	80-150	170-300	200-340	220-360	100-180	95-165
210-340	190-320	210-370	190-340	90-160	190-320	220-360	240-380	115-190	105-175
160-300	140-280	160-330	140-300	80-130	160-280	180-320	200-340	95-170	90-155
180-320	160-300	180-350	160-320	80-150	170-300	200-340	220-360	100-180	95-165
170-300	150-280	170-330	150-300	70-130	160-280	200-320	220-340	95-170	90-155
160-250	140-230	160-280	140-250	60-120	140-250	190-300	210-320	85-150	75-135
150-220	130-200	150-250	130-230	50-100	120-220	180-280	200-300	70-130	65-120
180-300	160-280	180-330	160-300	80-130	170-280	200-320	220-340	100-170	95-155
150-220	130-200	150-250	130-230	50-100	120-220	180-280	200-300	70-30	65-120
210-340	190-320	210-370	190-340	90-160	190-320	220-360	240-380		
180-320	160-300	180-350	160-320	80-150	170-300	240-380	260-400		

Cermet + PVD		Carbide + PVD			Carbide + CVD	
IC520N	IC530N	IC807/ 907	IC808/ 908	IC3028/830	IC6015	IC6025
150-280	140-250	100-200	90-200	50-120	140-250	120-180

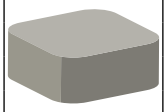
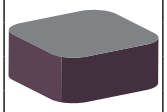
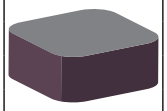
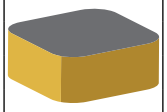
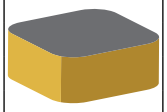
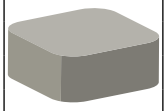
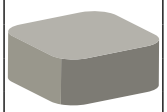
Carbide + CVD									
IC5005/ 428	IC5010/ 4028	IC8150							
160-300	160-300	140-280							
140-280	140-280	120-240							
350-700	300-600	250-350							
300-600	250-500	200-300							
200-350	250-400	180-320							
180-280	200-320	150-250							

Carbide	
IC20	
1000-2500	
300-1000	
300-1000	
200-600	
250-600	
180-400	
150-300	

Carbide		Carbide + PVD										
IC07	IC20	IC706	IC804	IC806	IC907	IC1017	IC3028					
40-55	35-45	50-70			50-80	50-70	30-40					
30-45	25-35	40-60			40-65	40-60	20-30					
30-40	25-30	50-80	65 - 105	50-80	45-60	50-80	20-25					
20-30	15-25	30-40	50 - 90	40-70	35-45	30-40	10-20					
25-35	20-30	30-40	40 - 85	30-65	30-50	30-40	15-25					
100-160	80-160	90-160			150-200	90-160	130-160					
50-60	50-60	50-52			50-100	50-50	30-60					

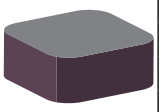
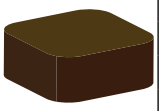
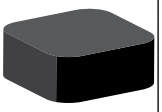
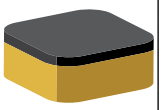
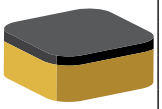
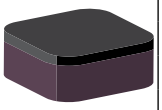
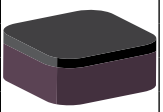
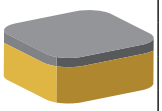
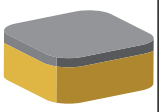
										Carbide + PVD
										IC907
										40-100
										30-60

Turning Materials Grades Chart

	Grade	ISO	Grade Description	Coating Layers	Coating Color*	Uncoated
PVD COATED	IC520N	P05-P25 M05-M15	A hard cermet grade with PVD coating. Suitable for finishing operations on steels and stainless steel at high cutting speeds and low feeds. Features excellent surface finish, very good wear resistance and prevents built-up edge.	TiN TiCN Base		
	IC530N	P25-P35 M20-M30	Tough cermet grade with PVD coating. Recommended for Semi-Finishing and finishing operations on steels at medium to high cutting speeds and low feeds. Features excellent surface finish, high wear resistance, plastic deformation durability and prevents built-up edge.	TiN TiCN Base		
	IC706	S10-S20	A hard submicron grain-sized substrate with a hard ceramic coating of Titanium Diboride (TiB_2), renowned for its exceptional oxidation stability and superior wear resistance. Ideal for semi-finishing and finishing operations on titanium alloys at moderate cutting speeds, resulting in extended tool life.	TiB_2 Base		
	IC804	S05-S15	A very hard submicron grain size substrate with PVD coating and a special SUMOTEC surface treatment. Suitable for semi-finishing and finishing operations under stable conditions on high temperature alloys and Titanium alloys moderate to relatively high cutting speeds. Features high wear resistance and plastic deformation durability.	TiAlN AlTiN Base		
	IC806	M05-M15 S10-S20	A hard submicron grain size substrate with PVD coating and a special SUMOTEC surface treatment. Excellent for machining high temperature alloys and Titanium alloys, at moderate to relatively high cutting speeds. Features high wear resistance and plastic deformation durability.	TiAlN AlTiN Base		
	IC807	P10-P20 M05-M15 K15-K30 S10-S20 H05-H15	A hard submicron grain size substrate with PVD coating and a special SUMOTEC surface treatment. Suitable for machining steels, alloy steels, austenitic stainless steel, high temperature alloys and hard steels at moderate to relatively high cutting speeds under stable conditions. Features high wear resistance and plastic deformation durability.	TiN TiAlN Base		
	IC830	P30-P45 M25-M40 S20-S30	A tough substrate with PVD coating and a special SUMOTEC surface treatment. Suitable for machining steel and stainless steel at low to medium cutting speeds and moderate to high feeds. The grade features high toughness and recommended for interrupted cuts and machining under unstable conditions. May be used on high temperature alloys at low cutting speeds.	TiN TiAlN Base		
	IC907	P10-P20 M05-M15 K15-K30 S10-S20 H05-H15	A hard submicron grain size substrate with PVD coating suitable for a wide range of materials such as steels, alloy steels, hard steels, austenitic stainless steel and heat resistant alloys at moderate to relatively high cutting speeds under stable conditions. Features high wear resistance and plastic deformation durability.	TiAlN Base		
	IC908	P15-P30 M20-M30 K20-K40 S15-S30 H20-H30	A tough submicron grain size substrate with PVD coating, recommended for general use in a large variety of operations and materials such as steels, alloy steels, austenitic stainless steel and high temperature alloys at moderate cutting speeds. Features high wear resistance and chipping durability.	TiAlN Base		

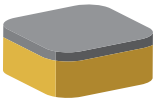
* For coated grades

Turning Materials Grades Chart

	Grade	ISO	Grade Description	Coating Layers	Coating Color*	Uncoated
PVD COATED	IC1017	S10-S25	High-hardness submicron grain substrate with a TiAlN PVD coating for machining high-temperature alloys at relatively higher speeds. This complements and enhances the machining capabilities of IC806 and IC804 grades. Suitable for aerospace and petroleum industry applications.	TiAlN AlTiN Base		
	IC1024	H10-H15	An extremely hard substrate with an ultra-fine grain size that also offers good toughness. The AlTiN PVD coating is suitable for machining hardened steels up to 62 HRC. This grade is cost-effective alternative to ceramic and CBN grades. It is recommended for finishing and light interrupted cutting operations, providing high deformation resistance.	AlTiN Base		
CVD COATED	IC428	K05-K20 H15-H25	A hard substrate with multilayer CVD coating. Recommended for machining gray and nodular cast iron at moderate to high cutting speeds.	Al_2O_3 Tic Base		
	IC5005	P05-P15 K05-K15 H15-H25	A very hard substrate with MTCVD coating with a special SUMOTEC surface treatment. Suitable for machining gray and nodular cast iron at high cutting speeds under stable conditions.	TiN Al_2O_3 TiCN Base		
	IC5010	K10-K20	A hard substrate with MTCVD coating with a special SUMOTEC surface treatment. Recommended for machining gray and nodular cast iron at moderate to high cutting speeds, provides very good resistance to chipping.	TiN Al_2O_3 TiCN Base		
	IC6015	M05-M25 S10-S20	A hard substrate with cobalt enriched outer layer and MTCVD coating and a special SUMOTEC surface treatment. Suitable for finishing and medium turning of stainless steel at high cutting speeds. Features long tool life and high wear resistance.	TiN Al_2O_3 TiCN Base		
	IC6025	M15-M35 S20-S30	A very tough substrate with MTCVD coating with a special SUMOTEC surface treatment. Recommended for machining stainless steel at moderate cutting speeds and medium to high feeds. Features very high toughness with excellent results in heavy machining operations, unstable conditions, and interrupted cut.	TiN Al_2O_3 TiCN Base		
	IC8150	P10-P25 M10-M20 K10-K25	A hard substrate with a cobalt enriched layer, MTCVD coating with a special SUMOTEC surface treatment. Recommended for high speed machining of steels, alloy steels and martensitic stainless steel with moderate feeds under stable conditions. Features excellent thermal stability, resistance to wear and plastic deformation durability.	TiN Al_2O_3 TiCN Base		
	IC8250	P15-P35 M15-M25	A tough substrate with a cobalt enriched layer and MTCVD coating with a special SUMOTEC surface treatment. Recommended for general use machining of steels, alloy steels and martensitic stainless steel in a wide range of conditions. Features high toughness and good wear resistance.	TiN Al_2O_3 TiCN Base		

* For coated grades

Turning Materials Grades Chart

	Grade	ISO	Grade Description	Coating Layers	Coating Color*	Uncoated
CVD COATED	IC8350	P20-P45 M20-M30	A very tough substrate with cobalt enriched layer and MTCVD coating and a special SUMOTEC surface treatment. Suitable for machining steels and alloy steels at low to medium cutting speeds and medium to high feeds. Features very high toughness with excellent results in heavy machining, unstable conditions, and interrupted cuts.	TiN Al_2O_3 TiCN Base		
UNCOATED	IC4	N01-N15 S05-S15	A very hard-uncoated carbide grade, suitable for machining aluminum alloys, aluminum alloys with high silicon content and other non-ferrous materials at high cutting speeds.	Base		
	IC08	M15-M30 N10-N25 S20-S30	A tough uncoated submicron carbide grade, suitable for steels, stainless steel and high temperature alloys at low cutting speeds. Good choice for non-ferrous materials.	Base		
	IC20	K10-K20 N05-N25 S10-S20 H10-H20	A hard-uncoated carbide grade for machining aluminum and other non-ferrous materials at medium to high cutting speeds. Can be used for cast iron at low cutting speeds. Suitable also for machining high temperature and Titanium alloys, at low cutting speeds.	Base		
CERMET	IC20N	P05-P25 M05-M15	A very hard cermet grade for turning and grooving. Recommended for finishing operations on steels and alloy steels at high cutting speeds and low feeds. Features excellent surface finish, high wear resistance, plastic deformation durability and prevents built-up edge.	Base		
	IC30N	P10-P30 M10-M20	A hard cermet grade, suitable for machining, steels and stainless steel at medium to high cutting speeds and low feeds. Features excellent surface finish, very good wear resistance and prevents built-up edge.	Base		

* For coated grades

GROOVE-TURN

YOU

INTELLIGENTLY?

GROOVING









Member IMC Group

ISCAR

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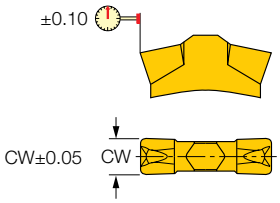
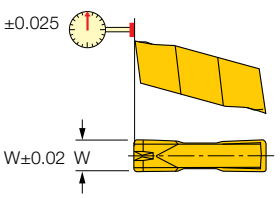
Information to Select the Correct Insert

ISCAR has an extensive variety of GROOVE-TURN products. In many cases, you can perform your operation by using several different products. In order to make the optimal selection, these basic parameters need to be defined:

- Insert width **[CW]**
- Necessary tolerance on the insert
- Maximum depth of grooving **[CDX]**
- Application requirement grooving and turning, or only grooving (**E-Type** or not)

According to these parameters:

- Select the most suitable product according to the tables on pages 283-284.
- Select the most suitable chipformer according to the information on pages 285-286.

Utility Inserts		Precision Grooving Inserts	
Pressed to Size Inserts		Peripheral Ground Inserts	
Width	± 0.05	Width	± 0.02
Repeatability	± 0.10	Repeatability	± 0.025
			

If you don't need the tight tolerance, save money and select a utillity insert (less expensive).

What is an E-type GROOVE-TURN Insert?

E-type inserts are precision ground grooving inserts with **turning** capability.

These inserts include the letter **E** in their description. (example: GIP 3.00**E**-0.4). This is to distinguish them from precision ground inserts which are not suitable for turning operations and don't include an **E** in their description. (example: GIP 3.00-0.2)

- E-type inserts usually have a larger corner radius
- E-type inserts have a larger honing size



Precision Grooving Insert



E-Type GROOVE-TURN

External GROOVE-TURN Insert Type

	Insert		Properties				CW range	CDX	Page
			Precision Ground	Utility	Number of Cutting Edges	Option for Turning			
PENTACUT		PENTACUT Size 17	✔		5		0.25-3.18	4	341-345
PENTACUT		PENTACUT Size 24	✔		5		0.5-4.23	1-6.5	356-363
PENTACUT		PENTACUT Size 34	✔		5		1.5-4.0	5-10	364-365
HELI-GRIP		HELI-GRIP		✔	2	✔	3-6.35	No depth limit	294-296
TOP-GRIP		TOP-GRIP		✔	2	✔	3-6.35	10.5-18.6	299
CUTGRIP		Short Pocket		✔	1	✔	3-12	No depth limit	316-321
CUTGRIP		Short Pocket	✔		2	✔*	0.5-11.0	13**	322-333
CUTGRIP		Long Pocket		✔	2	✔*	8.0	27	317-321
CUTGRIP		Long Pocket	✔		2	✔	8.0-11.0	27	322-328
HEAVY DUTY		SUMO-GRIP		✔	1	✔	6-14	No depth limit	375
HEAVY DUTY		TIGER		✔	1		10-20	No depth limit	371, 376

* Not on all the products

** On most items

Internal GROOVE-TURN Insert Type

	Insert	Tool	Insert	Utility	Precision	Dmin	CDX	CW	Page
PICCOCUT		PICCO/ MG PCO	PICCO		✔	2.0-7.0	0.4-2.5	0.5-2	441-463
CHAMGROOVE		MG/MGCH	GIQR 8		✔	8.0	0.7-1.5	0.5-4	470-471
		MG/MGCH	GIQR 11		✔	11.0	1.5-2.3	0.75-5	472
		MGCH	GIQR 11-15		✔	15.0	6.3	1-3	473
CUTGRIP		GEHIR/L	GEPI/ GEMI	✔	✔	12.5-16	2.4-3.0	1-3.18	384-386
		GHIR/L	GIFI/GIPI/ GINI/GIMIY	✔	✔	20-49	2.5-8.0	1.53-6.35	391-396
TOP-GRIP		TGIR/L	TGMF	✔		20.5-57	5.5-17.5	3-6.35	299
HELIGRIP		HELIIR/L	GRIP	✔		26-53	5-12	3-6.35	294-296
CUTGRIP		GHIR/L 40-8	GDMF/ GDMY/ GDMN...	✔	✔	65	15-20	8-11	317-319
		GHIC/CGHN	GIP/GIF/GIMN/GIMF/ GIA...	✔	✔	70-250	10-26	2.8-6.35	322-330

Chipbreaker Selection

T-Type

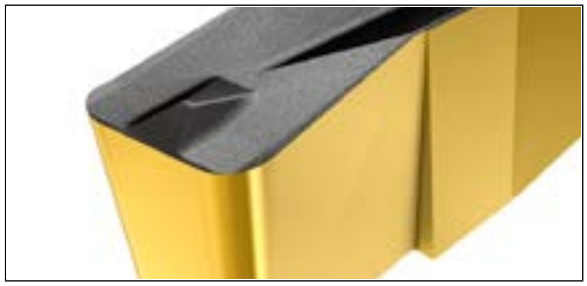
- Optimal performance in a wide range of materials and cutting conditions
- High efficiency in full grooving, partial grooving and turning applications
- Utility inserts only
- Width range External: 3-10 mm



General Use

P-Type

- Very "open" geometry
- Medium to high feed in turning and grooving
- Large variety of standard sizes
- Precision ground inserts only
- Width range External: 2.39-6.35 mm Internal: 2.39-6.35 mm



F-Type

- First choice in grooving
- Low to medium feeds in grooving and turning
- Both precision ground and utility inserts
- Width range External: 3.0-10 mm Internal: 3-6 mm



G-Type

- Efficient chipbreaker for narrow width grooves
- Width range: 1-2.3 mm
- No option for turning



Y-Type

- General use in grooving and turning
- Positive top rake reduces cutting forces
- Excellent for long shafts
- Eliminates vibrations
- Both precision ground and utility inserts
- Width range External: 8-20 mm



HG-Y-Type

- General use in grooving and turning
- Efficient for a wide range of materials and cutting conditions
- Utility inserts only
- Width range External: 3-6.35 mm Internal: 3-6.35 mm



Chipbreaker Selection

Problematic and Specific Materials

N-Type
- First choice in grooving of problematic, soft & gummy materials
- Very low to medium feeds (from 0.05 mm/rev)
- Both precision ground and utility inserts
- Option for turning
- Width range External: 3-8 mm Internal: 2-5 mm



M-Type
- Unique chipbreaker with splitter chips are split into 3 segments
- Efficient for problematic, soft & gummy materials
- Option for light turning
- Width 8 mm



A-Type
- First choice for machining cast Iron
- Peripheral 15° T-land on a flat top
- Exerts high cutting forces, therefore suitable for stable conditions
- Precision ground inserts only
- Width range External: 3-8 mm



PA-Type
- First choice for machining aluminum
- High positive rake
- Peripheral ground and polished top rake with a very sharp edge
- Suitable also for finish operations on titanium and heat resistant alloys
- Width range External: 3-8 mm



CW-Type
- Unique chipformer for heavy-duty grooving
- Very wide chipbreaking range on carbon and alloy steel
- Width range 14, 17 and 20 mm



Chipbreaker Selection

Profiling (full radius)

Y-Type
- First choice in profiling
- Positive top rake reduces cutting forces
- Excellent for long shafts
- Eliminates vibrations
- Both precision ground and utility inserts
- Width range External: 3-12 mm Internal: 2-3 mm



YF-Type
- First choice for profiling ductile materials
- Utility inserts only
- Width range External: 3-8 mm



PA-Type
- First choice for profiling aluminum
- High positive rake
- Peripheral ground and polished top rake with a very sharp edge
- Suitable also for finish operations on titanium and heat resistant alloys
- Width range External: 3-8 mm



YZ-Type
- First choice for profiling ductile aluminum
- Peripheral ground and polished top rake with a very sharp edge
- Width range External: 3-8 mm



H-Type
- Unique chipbreaker for heavy-duty profiling
- Negative T-land for extra edge toughness
- Suitable for heavy interrupted cuts and cast iron machining
- Width: 12 mm



Chipbreaker Width Range

External

Insert Width	G	P	F	Y	N	HG-Y	M	A	PA	T
12				20						
11										
10										
9										
8										
7										
6		6.35				6.35				
5										
4										
3			3.48							
2	2.3	2.39								
1										

Internal

Insert Width	P	F	N	HG-Y
7				
6	6.35			6.35
5				
4				
3				
2	2.39			
1				

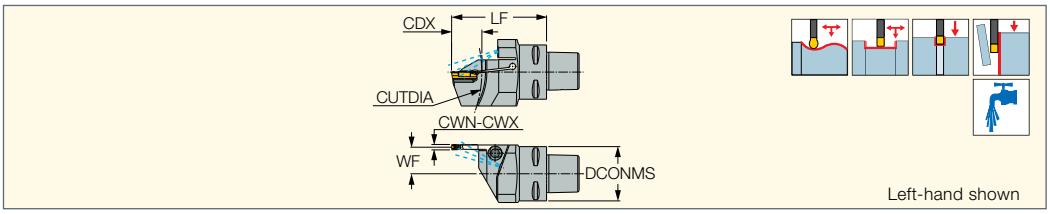
Suitable Chipbreaker and Required Feed Range for Workpiece Material

	Alloy Steel		Austenitic Stainless	High Temp. Alloys	Nonferrous Materials	Cast Iron
High		P	P	P		
		HG-Y	HG-Y	Y	PA*	A*
Feed		Y	Y	F	P	P
		F	F	PA (finish only)		HG
		T*	T*	T	T	
Low		N				F

* First Choice

HELI-GRIP

C#-HELIR/L
External Tools for Turning, Grooving and Parting with CAMFIX Exchangeable Shanks



Designation	DCONMS	CWN(1)	CWX(2)	WF	LF	CUTDIA(3)	Insert	CP(4)	DCP(5)
C4 HELIR/L 3T20	40.00	3.00	3.18	20.00	65.00	40.0	GRIP 3, HGN 3	100	1
C4 HELIR/L 4T25	40.00	4.00	4.76	19.60	70.00	50.0	GRIP 4, DGN 4	100	1
C5 HELIR/L 3T20	50.00	3.00	3.18	25.30	65.00	40.0	GRIP 3, HGN 3	100	1
C5 HELIR/L 4T25	50.00	4.00	4.76	24.90	70.00	50.0	GRIP 4, DGN 4	100	1
C5 HELIR/L 5T25	50.00	5.00	5.00	24.40	70.00	50.0	GRIP 5, DGN 5	100	1
C6 HELIR/L 3T20	63.00	3.00	3.18	31.80	65.00	40.0	GRIP 3, HGN 3	100	1
C6 HELIR/L 4T25	63.00	4.00	4.76	31.40	70.00	50.0	GRIP 4, DGN 4	100	1
C6 HELIR/L 5T25	63.00	5.00	5.00	30.90	70.00	50.0	GRIP 5, DGN 5	100	1
C6 HELIR/L 6T30	63.00	6.00	6.35	30.40	85.00	60.0	GRIP 6, DGN 6	100	1

- The depth of cut (CDX) for grooving is limited by the part diameter Dmax, for grooving depth capacity, see table below

(1) Minimum cutting width
(2) Maximum cutting width
(3) Maximum parting diameter
(4) Coolant pressure (Bar)
(5) 1 - Slot for data chip, 0 - Without slot for data chip

For inserts, see pages: GRIP-T (295) • GRIPA (296) • GRIPA (full radius) (296) • GRIP (294) • GRIP (full radius) (295) • DGN/DGNC/DGNM-C (539) • HGN-C (549) • DGR/L-C DGRC/LC-C (540) • DGN/DGNM-J/JS/JT (544) • HGN-J (550) • HGR/L-C (550) • HGR/L-J/JS (550) • DGR/L-J/JS (545) • DGN-MF (541) • DGN-UT/UA (547) • DGN-W (540) • HGN-UT (551)

Grooving Depth Capacity

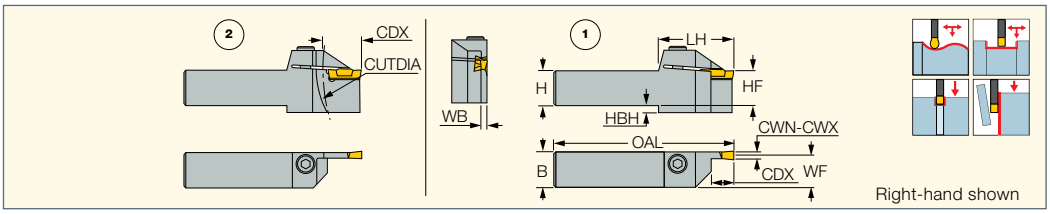
Designation	ØDmax																					
C4 HELIR/L 3T20	∞	∞	∞	∞	1151	384	231	167	131	109	94	83	—	—	—	—	—	—	—	—	—	—
C4 HELIR/L 4T25	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	1127	376	227	163	128	107	—	—	—	—	—
C5 HELIR/L 3T20	∞	∞	∞	1277	426	257	185	145	120	103	91	82	—	—	—	—	—	—	—	—	—	—
C5 HELIR/L 4T25	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	1301	434	261	188	148	122	105	—	—	—	—	—
C5 HELIR/L 5T25	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	1301	434	261	188	148	122	105	—	—	—	—	—
C6 HELIR/L 3T20	∞	787	394	264	199	161	136	118	105	95	87	81	—	—	—	—	—	—	—	—	—	—
C6 HELIR/L 4T25	∞	∞	∞	∞	∞	∞	1957	653	393	282	221	182	156	137	122	111	102	—	—	—	—	—
C6 HELIR/L 5T25	∞	∞	∞	∞	∞	∞	1957	653	393	282	221	182	156	137	122	111	102	—	—	—	—	—
C6 HELIR/L 6T30	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	1879	627	377	271	212	175	150	131	118	107	99
CDX	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Spare Parts

Designation			
C#-HELIR/L	SR M6X16 DIN912	HW 5.0	EZ 104

HELI-GRIP

HELIR/L
External Holders for Turning, Grooving and Parting



Designation	CDX(2)	CWN(3)	CWX(4)	Fig.	CUTDIA(5)	H	HF	B	WF	OAL	LH	WB	HBH
HELIR/L 1212-3T12	12.00	3.00	3.18	1.	-	12.0	12.0	12.0	10.80	135.00	30.0	2.40	4.0
HELIR/L 1616-3T12	12.00	3.00	3.18	1.	-	16.0	16.0	16.0	14.80	135.00	30.0	2.40	-
HELIR/L 2020-3T12	12.00	3.00	3.18	1.	-	20.0	20.0	20.0	18.80	135.00	29.0	2.40	-
HELIR/L 2525-3T12	12.00	3.00	3.18	1.	-	25.0	25.0	25.0	23.80	135.00	29.0	2.40	-
HELIR/L 1616-4T12	12.00	4.00	4.76	1.	-	16.0	16.0	16.0	14.40	135.00	29.0	3.20	-
HELIR/L 2020-4T12	12.00	4.00	4.76	1.	-	20.0	20.0	20.0	18.40	135.00	29.0	3.20	-
HELIR/L 2525-4T12	12.00	4.00	4.76	1.	-	25.0	25.0	25.0	23.40	135.00	29.0	3.20	-
HELIR/L 2020-5T12	12.00	5.00	5.00	1.	-	20.0	20.0	20.0	17.90	135.00	29.0	4.20	-
HELIR/L 2525-5T12	12.00	5.00	5.00	1.	-	25.0	25.0	25.0	22.90	135.00	29.0	4.20	-
HELIR/L 2525-6T12	12.00	6.00	6.35	1.	-	25.0	25.0	25.0	22.40	135.00	29.0	5.20	-
HELIR/L 1616-3T20 (1)	-	3.00	3.18	2.	40.0	16.0	16.0	16.0	14.80	140.00	36.4	2.40	-
HELIR/L 2020-3T20 (1)	-	3.00	3.18	2.	40.0	20.0	20.0	20.0	18.80	140.00	36.4	2.40	-
HELIR/L 2525-3T20 (1)	-	3.00	3.18	2.	40.0	25.0	25.0	25.0	23.80	140.00	36.4	2.40	-
HELIR/L 3232-3T20 (1)	-	3.00	3.18	2.	40.0	32.0	32.0	32.0	30.80	150.00	36.4	2.40	-
HELIR/L 1616-4T20	-	4.00	4.76	2.	40.0	16.0	16.0	16.0	14.40	140.00	38.0	3.20	4.0
HELIR/L 2020-4T25	-	4.00	4.76	2.	50.0	20.0	20.0	20.0	18.40	140.00	42.0	3.20	-
HELIR/L 2525-4T25	-	4.00	4.76	2.	50.0	25.0	25.0	25.0	23.40	140.00	42.0	3.20	-
HELIR/L 3232-4T25	-	4.00	4.76	2.	50.0	32.0	32.0	32.0	30.40	150.00	43.0	3.20	-
HELIR/L 2020-5T25	-	5.00	5.00	2.	50.0	20.0	20.0	20.0	17.90	140.00	42.0	4.20	-
HELIR/L 2525-5T25	-	5.00	5.00	2.	50.0	25.0	25.0	25.0	22.90	140.00	42.0	4.20	-
HELIR/L 3232-5T25	-	5.00	5.00	2.	50.0	32.0	32.0	32.0	29.90	150.00	43.0	4.20	-
HELIR/L 2525-6T30	-	6.00	6.35	2.	60.0	25.0	25.0	25.0	22.40	140.00	51.4	5.20	-
HELIR/L 3232-6T30	-	6.00	6.35	2.	60.0	32.0	32.0	32.0	29.40	150.00	51.4	5.20	-

- For tool type as shown in Fig.2, CDX for grooving is limited by the part diameter Dmax, for grooving depth capacity, see table below
- For user guide, see pages 475-492

(1) DGN inserts are not suitable for this tool (2) Does not depend on the workpiece diameter (3) Minimum cutting width (4) Maximum cutting width (5) Maximum parting diameter

For inserts, see pages: GRIP-T (295) • GRIPA (296) • GRIPA (full radius) (296) • GRIP (294) • GRIP (full radius) (295) • DGN/DGNC/DGNM-C (539) • HGN-C (549) • DGR/L-C DGRC/LC-C (540) • DGN/DGNM-J/JS/JT (544) • HGN-J (550) • HGR/L-C (550) • HGR/L-J/JS (550) • DGR/L-J/JS (545) • DGN-UT/UA (547) • DGN-W (540) • HGN-UT (551) • DGN-MF (541)

Depth Capacity

Designation	ØDmax												
HELIR/L 1616-3T20	∞	∞	∞	∞	∞	∞	194	80	–	–	–	–	–
HELIR/L 2020-3T20	∞	∞	∞	∞	∞	299	123	80	–	–	–	–	–
HELIR/L 2525-3T20	∞	∞	∞	815	229	136	99	79	–	–	–	–	–
HELIR/L 3232-3T20	∞	604	261	169	127	103	89	79	–	–	–	–	–
HELIR/L 1616-4T20	∞	∞	∞	∞	∞	505	132	78	–	–	–	–	–
HELIR/L 2020-4T20	∞	∞	∞	∞	∞	∞	∞	∞	∞	185	98	–	–
HELIR/L 2525-4T20	∞	∞	∞	∞	∞	∞	∞	368	233	136	98	–	–
HELIR/L 3232-4T20	∞	∞	∞	∞	∞	626	270	175	149	–	98	–	–
HELIR/L 2020-5T20	∞	∞	∞	∞	∞	∞	∞	∞	∞	182	98	–	–
HELIR/L 2525-5T20	∞	∞	∞	∞	∞	∞	∞	368	233	136	98	–	–
HELIR/L 3232-5T20	∞	∞	∞	∞	∞	626	270	175	149	–	98	–	–
HELIR/L 2525-6T20	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	354	135	98
HELIR/L 3232-6T20	∞	∞	∞	∞	∞	∞	∞	∞	1718	345	194	121	98
CDX	6.5	8.0	10.0	12.0	14.0	16.0	18.0	20.0	21.0	23.0	25.0	28.0	30.0

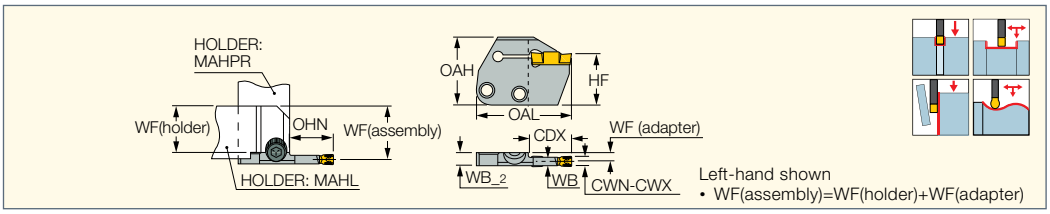
Spare Parts

Designation		
HELIR/L 1212-3T12	SR M5X16 DIN912	HW 4.0
HELIR/L 1616-3T12	SR M5X16 DIN912	HW 4.0
HELIR/L 2020-3T12	SR M5X16 DIN912	HW 4.0
HELIR/L 2525-3T12	SR M5X16 DIN912	HW 4.0
HELIR/L 1616-4T12	SR M5X16 DIN912	HW 4.0
HELIR/L 2020-4T12	SR M5X16 DIN912	HW 4.0
HELIR/L 2525-4T12	SR M5X16 DIN912	HW 4.0
HELIR/L 2020-5T12	SR M6X16 DIN912	HW 5.0
HELIR/L 2525-5T12	SR M6X16 DIN912	HW 5.0
HELIR/L 2525-6T12	SR M6X16 DIN912	HW 5.0
HELIR/L 1616-3T20	SR M6X16 DIN912	HW 5.0
HELIL 2020-3T20	SR M6X20 DIN912	HW 5.0
HELIR 2020-3T20	SR M6X16 DIN912	HW 5.0
HELIR/L 2525-3T20	SR M6X20 DIN912	HW 5.0
HELIR/L 3232-3T20	SR M6X20 DIN912	HW 5.0
HELIR/L 1616-4T20	SR M6X20 DIN912	HW 5.0
HELIR/L 2020-4T25	SR M6X20 DIN912	HW 5.0
HELIR/L 2525-4T25	SR M6X20 DIN912	HW 5.0
HELIR/L 3232-4T25	SR M6X20 DIN912	HW 5.0
HELIR/L 2020-5T25	SR M6X16 DIN912	HW 5.0
HELIR/L 2525-5T25	SR M6X20 DIN912	HW 5.0
HELIR/L 3232-5T25	SR M6X20 DIN912	HW 5.0
HELIR/L 2525-6T30	SR M6X20 DIN912	HW 5.0
HELIR/L 3232-6T30	SR M6X20 DIN912	HW 5.0

MODULAR GRIP

HGPAD

Adapters for Turning, Grooving and Parting Carrying HELI-GRIP Inserts



Designation	CWN(1)	CWX(2)	CDX(3)	OHN(4)	WF(5)	WB	WB_2	OAL	OAH	HF	Insert
HGPAD 3R/L-T12	3.00	3.20	12.00	15.2	4.80	2.50	6.0	39.70	32.00	24.0	GRIP 3, HGN 3
HGPAD 3R/L-T20	3.00	3.20	20.00	21.2	4.80	2.50	6.0	45.70	32.00	24.0	GRIP 3, HGN 3
HGPAD 4R/L-T12	4.00	4.76	12.00	18.7	4.40	3.30	6.0	43.20	32.00	24.0	GRIP 4, DGN 4
HGPAD 4R/L-T20	4.00	4.76	20.00	21.2	4.40	3.30	6.0	45.70	32.00	24.0	GRIP 4, DGN 4
HGPAD 5R/L-T12	5.00	5.00	12.00	18.7	3.90	4.20	6.0	43.20	32.00	24.0	GRIP 5, DGN 5
HGPAD 5R/L-T20	5.00	5.00	20.00	21.2	3.90	4.20	6.0	45.70	32.00	24.0	GRIP 5, DGN 5
HGPAD 6R/L-T12	6.00	6.35	12.00	18.7	3.40	5.20	6.0	43.20	32.00	24.0	GRIP 6, DGN 6
HGPAD 6R/L-T22	6.00	6.35	22.00	23.2	3.40	5.20	6.0	47.70	32.00	24.0	GRIP 6, DGN 6

- DO-GRIP DGN, HGN inserts can be used for grooving only
- For user guide, see pages 475-492

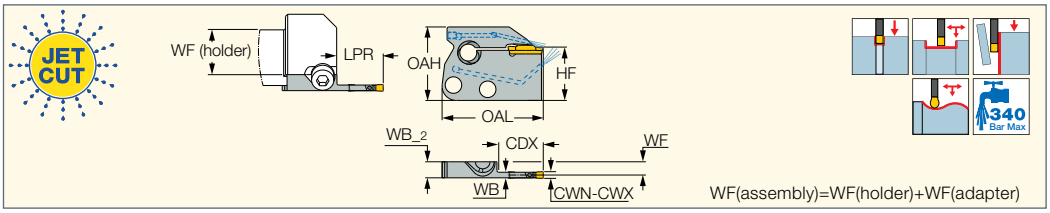
(1) Minimum cutting width
(2) Maximum cutting width
(3) Cutting depth maximum
(4) Minimum overhang
(5) WF(adapter)

For inserts, see pages: GRIP-T (295) • GRIPA (296) • GRIPA (full radius) (296) • GRIP (294) • GRIP (full radius) (295) • DGN/DGNC/DGNM-C (539) • HGN-C (549) • DGN/DGNM-J/JS/JT (544) • HGN-J (550) • HGR/L-C (550) • HGR/L-J/JS (550) • DGN-MF (541) • DGN-UT/UA (547) • DGN-W (540) • HGN-UT (551)

MODULAR GRIP

HGPAD-JHP

Adapters with High-Pressure Coolant Channels Carrying HELI-GRIP Inserts



Designation	CWN(1)	CWX(2)	CDX(3)	LPR	WF	WB	WB_2	OAL	OAH	HF
HGPAD 3R/L-T20-JHP	3.00	3.20	20.00	21.0	5.95	2.50	7.2	45.70	33.00	24.0
HGPAD 4R/L-T20-JHP	4.00	4.76	20.00	21.0	5.55	3.30	7.2	45.70	33.00	24.0
HGPAD 5R/L-T20-JHP	5.00	5.00	20.00	21.0	5.10	4.20	7.2	45.70	33.00	24.0
HGPAD 6R/L-T22-JHP	6.00	6.35	22.00	23.0	4.60	5.20	7.2	47.70	33.00	24.0

- For user guide and accessories, see pages 475-492

(1) Minimum cutting width
(2) Maximum cutting width
(3) Cutting depth maximum

For inserts, see pages: GRIP-T (295) • GRIPA (296) • GRIPA (full radius) (296) • GRIP (294) • GRIP (full radius) (295) • DGN/DGNC/DGNM-C (539) • HGN-C (549) • DGN/DGNM-J/JS/JT (544) • HGN-J (550) • HGR/L-C (550) • HGR/L-J/JS (550) • DGN-UT/UA (547) • HGN-UT (551) • DGN-W (540)

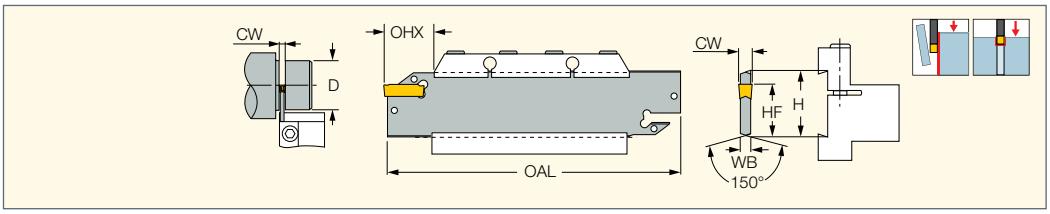
For holders, see pages: ABC MAHDR-#-XL-JHP (884) • C#-MAHD-JHP (697) • C#-MAHPD-JHP (698) • MAHR/L-JHP-MC (307) • MS##-##-MG-JHP (859) • MS-ES#####-GWS-MG-JHP (861) • TR TNK36 MAHDL-R-XL-JHP (884) • TR45 MAHDR-#-XL-JHP (883) • TR45TNL MAHDN-R-XL-JHP (883) • V## MAHD#-#-XL-##-JHP (880) • V## MAHD-XL-JHP (881) • MAHPR/L-JHP (308) • MAHR/L-JHP (306)

Flow Rate vs. Pressure

Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
HGPAD 3R/L-T20-JHP	5-7	6-8	7-9
HGPAD 4R/L-T20-JHP	9-11	10-12	11-13
HGPAD 5R/L-T20-JHP	11-13	12-14	13-15
HGPAD 6R/L-T22-JHP	16-18	16-18	19-21

HELI-GRIP

HGFH
Parting and Grooving Blades
for 3 mm GRIP Inserts



Designation	H	CW	WB	OAL	HF	OHX[1]	CUTDIA[2]	MIID[3]	
HGFH 26-3	26.0	3.00	2.40	110.00	21.4	37.5	75.0	HGN 3003C	EDG 23B*
HGFH 32-3	32.0	3.00	2.40	150.00	24.8	50.0	100.0	HGN 3003C	EDG 23B*

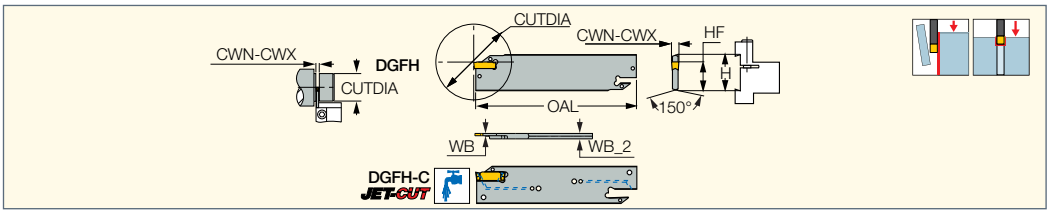
[1] Maximum overhang
[2] Maximum parting diameter
[3] Master insert identification
* Optional, to be ordered separately

For inserts, see pages: GRIP (294) • GRIP-T (295) • GRIPA (296) • GRIPA (full radius) (296) • GRIP (full radius) (295) • HGN-C (549) • HGR/L-C (550) • HGN-J (550) • HGN-UT (551) • HGR/L-J/JS (550)
For holders, see pages: C#-TBK-R/L (695) • HSK A-WH-TBK-R/L (706) • SGTBF (691) • SGTBR/L (691) • SGTBU/SGTBN (690) • UBHCR/L (691)



DO-GRIP

DGFH
Parting and Grooving Blades with and without Coolant Channels Carrying DO-GRIP and HELI-GRIP Inserts



Designation	H	CWN[4]	CWX[5]	WB	WB_2	OAL	HF	CUTDIA[6]
DGFH 26-1.4	26.0	1.40	1.40	1.00	2.4 [8]	110.00	21.4	26.0
DGFH 26-2 [1]	26.0	1.90 [7]	2.50	-	1.6	110.00	21.4	39.0 [9]
DGFH 26-3 [1]	26.0	3.00 [7]	3.18	-	2.4	110.00	21.4	39.0 [9]
DGFH 26C-3 [2]	26.0	3.00	3.18	-	2.4	110.00	21.4	39.0 [9]
DGFH 26-4	26.0	4.00	4.00	-	3.2	110.00	21.4	80.0
DGFH 32-1.4	32.0	1.40	1.40	1.00	2.4 [8]	150.00	24.8	26.0
DGFH 32-2 [1]	32.0	1.90 [7]	2.50	-	1.8	150.00	24.8	39.0 [9]
DGFH 32-3 [1]	32.0	3.00 [7]	3.18	-	2.4	150.00	24.8	39.0 [9]
DGFH 32C-3 [2]	32.0	3.00	3.18	-	2.4	150.00	24.8	39.0 [9]
DGFH 32-4	32.0	4.00	4.00	-	3.2	150.00	24.8	100.0
DGFH 32C-4 [3]	32.0	4.00	4.00	-	3.2	150.00	24.8	69.0
DGFH 32-5	32.0	5.00	5.00	-	4.0	150.00	24.8	120.0
DGFH 32-6	32.0	6.00	6.35	-	5.2	150.00	24.8	120.0
DGFH 45-3	45.0	3.00 [7]	3.18	-	2.4	225.00	38.0	160.0
DGFH 45-4	45.0	4.00	4.10	-	3.2	225.00	38.0	160.0
DGFH 45-5	45.0	4.80	5.00	-	4.0	225.00	38.0	160.0
DGFH 45-6	45.0	6.00	6.40	-	5.2	225.00	38.0	160.0

- DG..1.0 insert can be mounted into pocket sizes 2 and 3, in which case the pocket width has to be modified
- For user guide, see pages 475-492

[1] For CUTDIA 50 mm, use single-ended insert (should be modified by the user)
[2] Blades with frontal coolant holes (JET-CUT)
- For CUTDIA 50 mm, use single-ended insert (should be modified by the user)

[3] These blades are suitable for turning, using GRIP 4 inserts • Blades with frontal coolant holes (JET-CUT)
[4] Minimum cutting width
[5] Maximum cutting width
[6] Maximum workpiece diameter for grooving operation
[7] For DG. 1... insert, modify holder
[8] Thickness at the D.O.C. area is 1.0 mm
[9] Maximum diameter with double-sided inserts.

For inserts, see pages: DGN-LF/LFT (546) • DGN-MF (541) • DGN-T (541) • DGR/L-B (542) • GRIP-T (295) • GRIPA (296) • GRIPA (full radius) (296) • DGN/DGNC/DGNM-C (539) • DGR/L-C DGRC/LC-C (540) • DGN/DGNM-J/JS/JT (544) • DGR/L-J/JS (545) • DGN-P (548) • DGN-UT/UA (547) • DGN-W (540) • DGN-WP (549) • DGN-Z (546) • DGR-P (548) • DGR-WP (549) • DGR-Z/ZS (547) • GRIP (294) • GRIP (full radius) (295)
For holders, see pages: C#-TBK-R/L (695) • HSK A-WH-TBK-R/L (706) • SGTBF (691) • SGTBK (691) • SGTBR/L (691) • SGTBU/SGTBN (690) • UBHCR/L (691)

Spare Parts

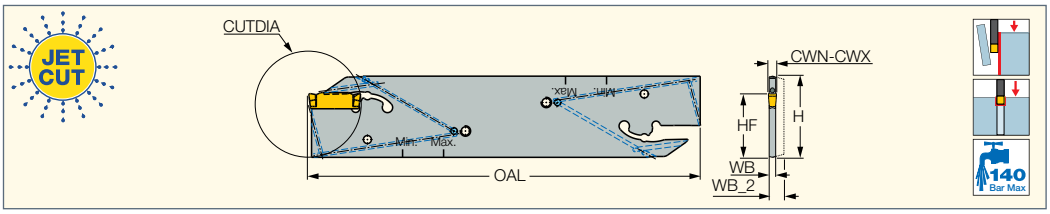
Designation						
DGFH 26-1.4	EDG 23B*					
DGFH 26-2	EDG 23A*					
DGFH 26-3	EDG 23A*					
DGFH 26C-3	EDG 23A*	SGC 340	SGCU 341*	CGF 343*	CF 343*	CGM 343*
DGFH 26-4	EDG 23A*					
DGFH 32-1.4	EDG 23B*					
DGFH 32-2	EDG 33A*					
DGFH 32-3	EDG 33A*					
DGFH 32C-3	EDG 33A*	SGC 340	SGCU 341*	CGF 343*	CF 343*	CGM 343*
DGFH 32-4	EDG 33A*					
DGFH 32C-4	EDG 33A*	SGC 340	SGCU 341*	CGF 343*	CF 343*	CGM 343*
DGFH 32-5	EDG 33A*					
DGFH 32-6	EDG 33A*					
DGFH 45-3	EDG 33A*					
DGFH 45-4	EDG 33A*					
DGFH 45-5	EDG 33A*					
DGFH 45-6	EDG 33A*					

* Optional, to be ordered separately

DO-GRIP

DGFH-JHP

Parting and Grooving Blades with Channels for Low and High-Pressure Coolant Carrying DO-GRIP Inserts



Designation	CWN[2]	CWX[3]	WB	WB_2	OAL	H	HF	CUTDIA[4]	Insert		
DGFH 32-2-JHP [1]	1.90 [5]	2.50	1.80	2.5	150.00	32.0	24.8	39.0	DG. 1.../DG. 2...	SGC 340	EDG 33A-JHP*
DGFH 32-3-JHP	3.00 [5]	3.18	2.50	-	152.00	32.0	24.8	90.0	DG. 1.../DG. 3...	SGC 340	EDG 33A-JHP*
DGFH 32-4-JHP	4.00	4.00	3.20	-	152.00	32.0	24.9	90.0	DG. 4.../GRIP 4...	SGC 340	EDG 33A-JHP*
DGFH 32-5-JHP	5.00	5.00	4.00	-	152.00	32.0	24.9	90.0	DG. 5.../GRIP 5...	SGC 340	EDG 33A-JHP*
DGFH 32-6-JHP [1]	6.00	6.35	5.20	-	160.00	32.0	24.9	90.0	DG. 6.../GRIP 6...	SGC 340	EDG 33A-JHP*

- For user guide and accessories, see pages 475-492

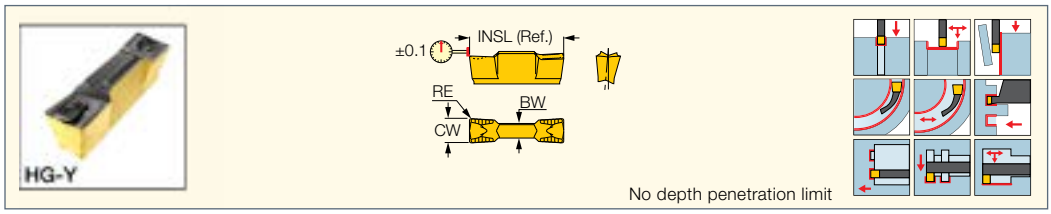
[1] Only an upper channel
[2] Minimum cutting width
[3] Maximum cutting width
[4] Maximum workpiece diameter for grooving operation
[5] For DG. 1... insert, modify holder
* Optional, to be ordered separately

For inserts, see pages: DGN-LF/LFT (546) • DGN-MF (541) • DGN-P (548) • DGN-T (541) • DGN-UT/UA (547) • DGN-W (540) • DGN-WP (549) • DGN-Z (546) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGR-P (548) • DGR-WP (549) • DGR-Z/ZS (547) • DGR/L-C DGRC/LC-C (540) • DGR/L-J/JS (545) • GRIP (294) • GRIP (full radius) (295) • GRIP-T (295) • GRIPA (296) • GRIPA (full radius) (296)
For holders, see pages: TGTBU-JHP (559)

HELI-GRIP

GRIP

Utility Double-Ended Inserts for External, Internal and Face Machining



Designation	Dimensions						Tough ↔ Hard										Recommended Machining Data		
	CW	CWTOL[1]	RE	RETOL[2]	INSL	BW	IC830	IC8250	IC08	IC808	IC908	IC418	IC5010	IC806	IC807	IC804	a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GRIP 3002Y	3.00	0.050	0.20	0.050	15.80	2.30	●	●	●	●	●			●	●	●	0.25-1.80	0.14-0.18	0.07-0.11
GRIP 3003Y	3.00	0.050	0.30	0.050	15.80	2.30	●	●	●	●	●	●	●	●			0.40-1.80	0.15-0.19	0.07-0.11
GRIP 318-040Y	3.18	0.050	0.40	0.050	15.80	2.30	●			●	●	●		●			0.50-1.90	0.17-0.22	0.07-0.12
GRIP 4002Y	4.00	0.050	0.20	0.050	19.00	2.80	●	●	●	●	●			●	●		0.25-2.40	0.16-0.21	0.09-0.14
GRIP 4004Y	4.00	0.050	0.40	0.050	19.00	2.80	●	●	●	●	●	●	●	●	●	●	0.50-2.40	0.18-0.24	0.09-0.15
GRIP 476-080Y	4.76	0.050	0.80	0.050	19.00	3.10	●	●		●	●	●		●			1.00-2.80	0.21-0.33	0.10-0.20
GRIP 5005Y	5.00	0.050	0.50	0.050	19.00	3.30	●	●	●	●	●	●	●	●	●	●	0.60-3.00	0.20-0.30	0.11-0.20
GRIP 5008Y	5.00	0.050	0.80	0.050	19.00	3.40	●	●		●	●	●	●	●	●		1.00-3.00	0.23-0.35	0.11-0.21
GRIP 6005Y	6.00	0.050	0.50	0.050	19.00	4.20	●	●		●	●	●	●	●	●		0.60-3.60	0.22-0.36	0.13-0.23
GRIP 6008Y	6.00	0.050	0.80	0.050	19.00	4.20	●	●		●	●	●	●	●	●		1.00-3.60	0.24-0.42	0.13-0.25
GRIP 635-080Y	6.35	0.050	0.80	0.050	19.00	4.20		●		●	●	●		●			1.00-3.80	0.25-0.44	0.14-0.27

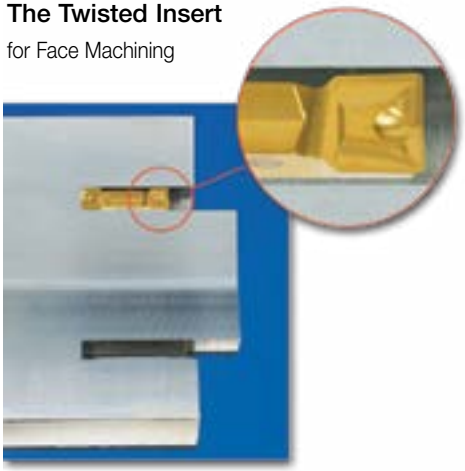
- For cutting speed recommendations and user guide, see pages 475-492

[1] Cutting width tolerance (+/-)
[2] Corner radius tolerance (+/-)

For tools, see pages: C#-HELIR/L (289) • C#-HFIR/L-MC (653) • CR HFIR-M (655) • D/HGAD RE/LE-JHP (561) • DGAD/HGAD (537) • DGFH (293) • DGFH-JHP (294) • DGFS (527) • DGTR/L (534) • HELIIR/L (397) • HELIR/L (290) • HFAER/L-4 (646) • HFAER/L-5T, 6T (647) • HFAIR/L-4 (651) • HFAIR/L-DG (652) • HFFR/L-T (645) • HFHR/L-4T (639) • HFHR/L-5T (640) • HFHR/L-6T (641) • HFIR/L-MC (654) • HFPAD-3 (643) • HFPAD-4 (643) • HFPAD-5 (644) • HFPAD-6 (644) • HFPAD-JHP (642) • HGAER/L-3 (646) • HGAIR/L-3 (648) • HGFH (292) • HGHR/L-3 (638) • HGPAD (291) • HGPAD-JHP (291) • IM-HFIR-MC (653)

The Twisted Insert

for Face Machining



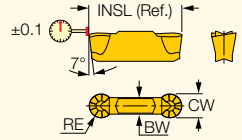
The double-ended, twisted insert body makes it possible to machine deeper than the insert's length.
A unique chipformer for controlled chip flow in axial and radial directions.
The rear angle is slanted in relation to the frontal edge so it does not come into contact with the machined groove surface as the tool penetrates deeply into the workpiece.

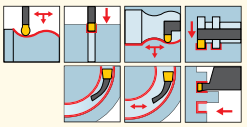


HELIGRIP

GRIP (full radius)
Utility Double-Ended Full Radius Inserts for External, Internal and Face Machining







No depth penetration limit

Designation	Dimensions CW	RE	CWTOL[1]	INSL	BW	Tough ↔ Hard IC830	IC8250	IC08	IC808	IC908	IC418	IC5010	IC806	IC807	IC804	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)	f face-groove (mm/rev)	f face-turn (mm/rev)
GRIP 3015Y	3.00	1.50	0.050	15.80	2.10	●	●	●	●	●	●	●	●	●	●	0.00-1.50	0.18-0.26	0.07-0.13	0.08-0.20	0.10-0.20
GRIP 318-159Y	3.18	1.59	0.050	15.80	2.30				●	●			●			0.00-1.50	0.19-0.28	0.07-0.13	0.08-0.20	0.10-0.20
GRIP 4020Y	4.00	2.00	0.050	19.00	2.80	●	●	●	●	●	●	●	●	●	●	0.00-2.00	0.20-0.34	0.09-0.17	0.10-0.24	0.15-0.30
GRIP 476-238Y	4.76	2.38	0.050	19.00	3.20				●	●	●		●			0.00-2.30	0.21-0.40	0.10-0.20	0.10-0.24	0.15-0.30
GRIP 5025Y	5.00	2.50	0.050	19.00	3.40	●	●		●	●	●		●	●	●	0.00-2.50	0.23-0.42	0.11-0.21	0.12-0.24	0.15-0.35
GRIP 6030Y	6.00	3.00	0.050	19.00	4.20	●	●	●	●	●	●	●	●	●		0.00-3.00	0.24-0.50	0.13-0.25	0.12-0.28	0.15-0.40
GRIP 635-318Y	6.35	3.18	0.050	19.00	4.00				●	●			●			0.00-3.10	0.25-0.53	0.14-0.27	0.12-0.28	0.15-0.40

- For cutting speed recommendations and user guide, see pages 475-492

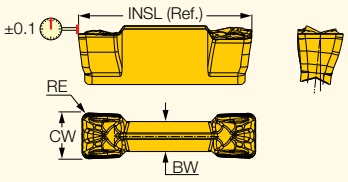
(1) Cutting width tolerance (+/-)

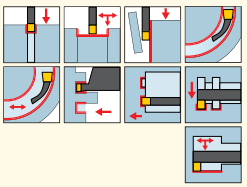
For tools, see pages: C#-HELIR/L (289) • C#-HFIR/L-MC (653) • CR HFIR-M (655) • D/HGAD RE/LE-JHP (561) • DGAD/HGAD (537) • DGFH (293) • DGFH-JHP (294) • DGFS (527) • DGTR/L (534) • HELIIR/L (397) • HELIR/L (290) • HFAER/L-4 (646) • HFAER/L-5T, 6T (647) • HFAIR/L-4 (651) • HFAIR/L-DG (652) • HFFR/L-T (645) • HFHR/L-4T (639) • HFHR/L-5T (640) • HFHR/L-6T (641) • HFIR/L-MC (654) • HFPAD-3 (643) • HFPAD-4 (643) • HFPAD-5 (644) • HFPAD-6 (644) • HFPAD-JHP (642) • HGAER/L-3 (646) • HGAIR/L-3 (648) • HGFH (292) • HGHR/L-3 (638) • HGPAD (291) • HGPAD-JHP (291) • IM-HFIR-MC (653)

HELIGRIP

GRIP-T
Utility Double-Ended Inserts for External, Internal and Face Machining







Designation	Dimensions CW	CWTOL[1]	RE	RETOL[2]	INSL	BW	Tough ↔ Hard IC830	IC8250	IC808	IC806	IC807	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GRIP 3002T	3.00	0.050	0.20	0.050	15.80	2.30	●	●	●	●	●	0.25-1.80	0.14-0.18	0.07-0.11
GRIP 3003T	3.00	0.050	0.30	0.050	15.80	2.30	●	●	●	●	●	0.40-1.80	0.14-0.18	0.07-0.11
GRIP 4004T	4.00	0.050	0.40	0.050	19.00	2.80	●	●	●	●	●	0.50-2.40	0.18-0.24	0.09-0.15
GRIP 5005T	5.00	0.050	0.50	0.050	19.00	3.40	●	●	●	●	●	0.60-3.00	0.20-0.30	0.11-0.20
GRIP 5008T	5.00	0.050	0.80	0.050	19.00	3.40	●	●	●	●	●	1.00-3.00	0.23-0.35	0.11-0.21
GRIP 6008T	6.00	0.050	0.80	0.050	19.00	4.20	●	●		●	●	1.00-3.60	0.24-0.42	0.13-0.25

NEW

- For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

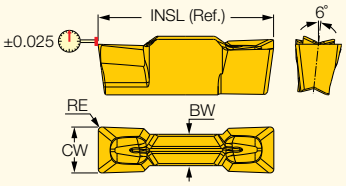
For tools, see pages: C#-HELIR/L (289) • D/HGAD RE/LE-JHP (561) • DGAD/HGAD (537) • DGFH (293) • DGFH-JHP (294) • DGFS (527) • DGTR/L (534) • HELIIR/L (397) • HELIR/L (290) • HFAER/L-4 (646) • HFAER/L-5T, 6T (647) • HFAIR/L-4 (651) • HFAIR/L-DG (652) • HFFR/L-T (645) • HFHR/L-4T (639) • HFHR/L-5T (640) • HFPAD-3 (643) • HFPAD-4 (643) • HFPAD-5 (644) • HFPAD-6 (644) • HFPAD-JHP (642) • HGAIR/L-3 (648) • HGFH (292) • HGPAD (291) • HGPAD-JHP (291)

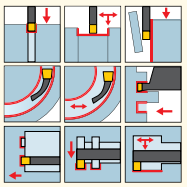
HELIGRIP

GRIPA

Ground Double-Ended Inserts for External, Internal and Face Machining







Designation	Dimensions						IC07	Recommended Machining Data				
	CW	CWTOL[1]	RE	RETOL[2]	INSL	BW		a_p (mm)	f turn (mm/rev)	f groove (mm/rev)	f face-groove (mm/rev)	f face-turn (mm/rev)
GRIPA 3.00-0.40	3.00	0.020	0.40	0.030	16.00	2.28	●	0.25-1.80	0.15-0.19	0.07-0.11	0.08-0.14	0.12-0.20
GRIPA 4.00-0.40	4.00	0.020	0.40	0.030	19.02	2.82	●	0.50-2.40	0.18-0.24	0.09-0.15	0.10-0.20	0.14-0.31
GRIPA 5.00-0.40	5.00	0.020	0.40	0.030	19.02	3.40	●	0.50-3.00	0.20-0.30	0.11-0.20	0.11-0.23	0.16-0.34
GRIPA 6.00-0.80	6.00	0.020	0.80	0.050	19.00	4.20	●	0.50-3.60	0.24-0.42	0.13-0.25	0.11-0.26	0.19-0.41

NEW

- For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

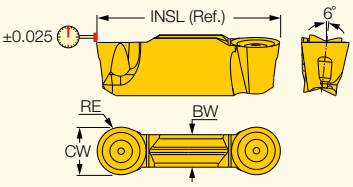
For tools, see pages: C#-HELIR/L (289) • C#-HFIR/L-MC (653) • CR HFIR-M (655) • D/HGAD RE/LE-JHP (561) • DGAD/HGAD (537) • DGFH (293) • DGFH-JHP (294) • DGFS (527) • DGTR/L (534) • HELIIR/L (397) • HELIR/L (290) • HFAER/L-4 (646) • HFAER/L-5T, 6T (647) • HFAIR/L-4 (651) • HFAIR/L-DG (652) • HFFR/L-T (645) • HFHR/L-4T (639) • HFHR/L-5T (640) • HFIR/L-MC (654) • HFPAD-JHP (642) • HGAER/L-3 (646) • HGAIR/L-3 (648) • HGFH (292) • HGHR/L-3 (638) • HGPAD (291) • HGPAD-JHP (291) • IM-HFIR-MC (653)

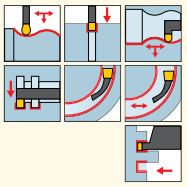
HELIGRIP

GRIPA (full radius)

Ground Double-Ended Full Radius Inserts for External, Internal and Face Machining







Designation	Dimensions						IC07	Recommended Machining Data				
	CW	CWTOL[1]	RE	RETOL[2]	INSL	BW		a_p (mm)	f turn (mm/rev)	f groove (mm/rev)	f face-groove (mm/rev)	f face-turn (mm/rev)
GRIPA 3.00-1.50	3.00	0.020	1.50	0.050	15.96	2.28	●	0.25-1.80	0.18-0.26	0.07-0.13	0.08-0.14	0.12-0.20
GRIPA 4.00-2.00	4.00	0.020	2.00	0.050	19.16	2.82	●	0.50-2.40	0.20-0.34	0.09-0.17	0.10-0.20	0.14-0.31
GRIPA 5.00-2.50	5.00	0.020	2.50	0.050	19.16	3.40	●	0.50-3.00	0.23-0.42	0.11-0.21	0.11-0.23	0.16-0.34
GRIPA 6.00-3.00	6.00	0.020	3.00	0.050	19.16	3.97	●	0.50-3.60	0.24-0.50	0.13-0.25	0.11-0.26	0.19-0.41

NEW

- For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

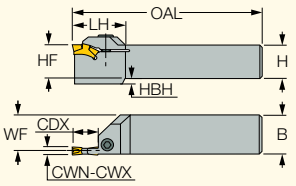
(2) Corner radius tolerance (+/-)

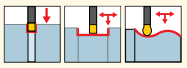
For tools, see pages: C#-HELIR/L (289) • C#-HFIR/L-MC (653) • CR HFIR-M (655) • D/HGAD RE/LE-JHP (561) • DGAD/HGAD (537) • DGFH (293) • DGFH-JHP (294) • DGFS (527) • DGTR/L (534) • HELIIR/L (397) • HELIR/L (290) • HFAER/L-4 (646) • HFAER/L-5T, 6T (647) • HFAIR/L-4 (651) • HFAIR/L-DG (652) • HFFR/L-T (645) • HFHR/L-4T (639) • HFIR/L-MC (654) • HFPAD-3 (643) • HFPAD-4 (643) • HFPAD-6 (644) • HFPAD-JHP (642) • HGAER/L-3 (646) • HGAIR/L-3 (648) • HGFH (292) • HGHR/L-3 (638) • HGPAD (291) • HGPAD-JHP (291) • IM-HFIR-MC (653)

TOP-GRIP

TGDR/L

External Holders for Turning, Grooving and Profiling





Right-hand shown

Designation	CWN[1]	CWX[2]	CDX[3]	H	HF	B	OAL	LH	WF	HBH	MIID[4]		
TGDR/L 1616-3M	3.00	3.00	7.50	16.0	16.0	16.0	100.00	30.5	14.80	6.0	TGMF 3	SR M5X12 DIN912	HW 4.0[a]
TGDR/L 2020-3M	3.00	3.00	7.50	20.0	20.0	20.0	125.00	30.5	18.70	-	TGMF 3	SR M5X12 DIN912	HW 4.0[a]
TGDR/L 2525-3M	3.00	3.00	7.50	25.0	25.0	25.0	140.00	30.5	23.70	-	TGMF 3	SR M5X12 DIN912	HW 4.0[a]
TGDR/L 1616-4M	4.00	5.00	9.00	16.0	16.0	16.0	100.00	32.2	14.20	6.0	TGMF 4	SR M5X12 DIN912	HW 4.0[a]
TGDR/L 2020-4M	4.00	5.00	9.00	20.0	20.0	20.0	125.00	32.2	18.20	6.0	TGMF 4	SR M5X12 DIN912	HW 4.0[a]
TGDR/L 2525-4M	4.00	5.00	15.50	25.0	25.0	25.0	140.00	34.0	23.20	-	TGMF 4	SR M5X12 DIN912	HW 4.0[a]
TGDR/L 2525-5M	5.00	5.00	18.00	25.0	25.0	25.0	140.00	37.0	22.70	-	TGMF 5	SR M5X12 DIN912	HW 4.0[a]
TGDR/L 3232-5M	5.00	5.00	22.00	32.0	32.0	32.0	150.00	45.0	29.80	-	TGMF 5	SR M6X12DIN912	HW 5.0[a]
TGDR/L 2525-6M	6.00	6.35	22.00	25.0	25.0	25.0	150.00	43.0	22.50	-	TGMF 6	SR M6X16 DIN912	HW 5.0[a]
TGDR/L 3232-6M	6.00	6.35	22.00	32.0	32.0	32.0	150.00	43.0	29.50	-	TGMF 6	SR M6X16 DIN912	HW 5.0[a]

- For user guide, see pages 475-492

(1) Minimum cutting width

(2) Maximum cutting width

(3) Grooving depth is limited by the insert

(4) Master insert identification

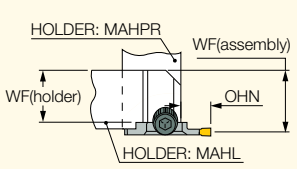
(a) For optional key with limited tightening torque see page 483

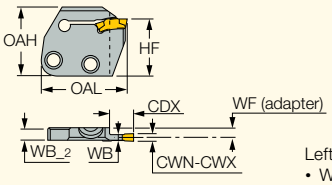
For inserts, see pages: TGMA (299) • TGMF (full radius) (299) • TGMF/P (299)

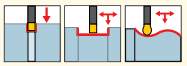
MODULAR-GRIP

TGPAD

TOP-GRIP Adapters Carrying TGMF / TGMP Groove-Turn Inserts







Left-hand shown

- WF(assembly)=WF(holder)+WF(adapter)

Designation	CWN[1]	CWX[2]	CDX[3]	WF[4]	WB	WB_2	OHN[5]	OAL	HF	OAH
TGPAD 3R/L-T9	3.00	3.00	9.00	4.00	2.40	5.2	12.7	37.20	24.0	30.00
TGPAD 4R/L-T16	4.00	5.00	16.00	3.50	3.40	5.2	17.2	41.70	24.0	30.00
TGPAD 5R/L-T16	5.00	5.00	16.00	3.00	4.40	5.2	17.2	41.70	24.0	30.00
TGPAD 6R/L-T22	6.00	6.35	22.00	3.50	5.00	6.0	23.2	47.10	24.0	32.00

- For user guide, see pages 475-492

(1) Minimum cutting width

(2) Maximum cutting width

(3) Grooving depth is limited by the insert

(4) WF(adapter)

(5) Minimum overhang

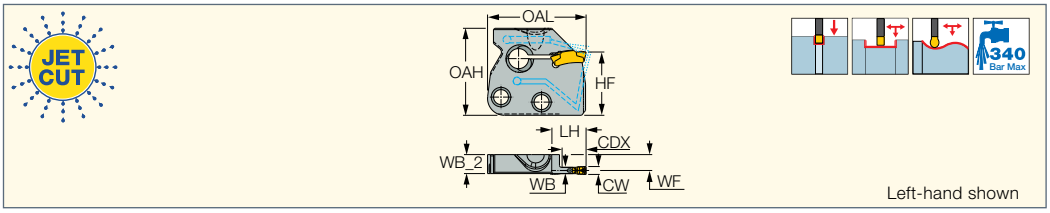
For inserts, see pages: TGMA (299) • TGMF (full radius) (299) • TGMF/P (299)



MODULAR GRIP

TGPAD-JHP

TOP-GRIP Adapters with Channels for High-Pressure Coolant Carrying TGMF / TGMP Groove-Turn Inserts



Designation	CWN[1]	CWX[2]	CDX[3]	WF	WB	WB_2	LH	OAL	HF	OAH
TGPAD 3R/L-T9-JHP	3.00	3.00	9.00	4.00	2.40	5.2	12.7	37.20	24.0	30.00
TGPAD 4R/L-T16-JHP	4.00	5.00	16.00	3.50	3.40	5.2	17.2	41.70	24.0	30.00
TGPAD 5R/L-T16-JHP	5.00	5.00	16.00	3.00	4.40	5.2	17.2	41.70	24.0	30.00
TGPAD 6R/L-T22-JHP	6.00	6.35	22.00	3.50	5.00	6.0	23.2	47.10	24.0	32.00

- For user guide, see pages 475-492

[1] Minimum cutting width
[2] Maximum cutting width
[3] Grooving depth is limited by the insert

For inserts, see pages: TGMF (full radius) (299) • TGMF/P (299)

Flow Rate vs. Pressure

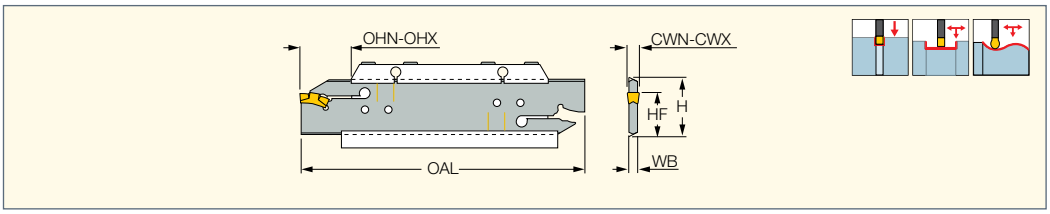
Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
TGPAD 3R/L-T9-JHP	11-17	17-23	23-26
TGPAD 4R/L-T16-JHP	20-25	25-31	31-34
TGPAD 5R/L-T16-JHP	27-33	33-39	39-43
TGPAD 6R/L-T22-JHP	30-35	35-41	41-44



TOP GRIP

TGHN-D

Double-Ended Blades Carrying Utility Inserts for Grooving and Turning



Designation	H	CWN[1]	CWX[2]	OHN[3]	OHX[4]	HF	OAL	WB	MIID[5]
TGHN 26-3D	26.0	3.00	3.00	10.0	15.0	21.4	110.00	2.40	TGMF 3
TGHN 26-4D	26.0	4.00	5.00	10.0	15.0	21.4	110.00	3.20	TGMF 4, TGMF/P 5
TGHN 26-5D	26.0	5.00	5.00	10.0	20.0	21.4	110.00	4.00	TGMF/P 5
TGHN 32-3D	32.0	3.00	3.00	10.0	18.0	24.8	150.00	2.40	TGMF 3
TGHN 32-4D	32.0	4.00	5.00	12.0	21.0	24.8	150.00	3.20	TGMF 4, TGMF/P 5
TGHN 32-5D	32.0	5.00	5.00	12.0	26.0	24.8	150.00	4.00	TGMF/P 5
TGHN 32-6D	32.0	6.00	6.35	16.0	26.0	24.8	150.00	5.20	TGMF 6

- Use the drilled holes on blade for min. and max. overhang • Grooving depth is limited by the insert • For user guide, see pages 475-492

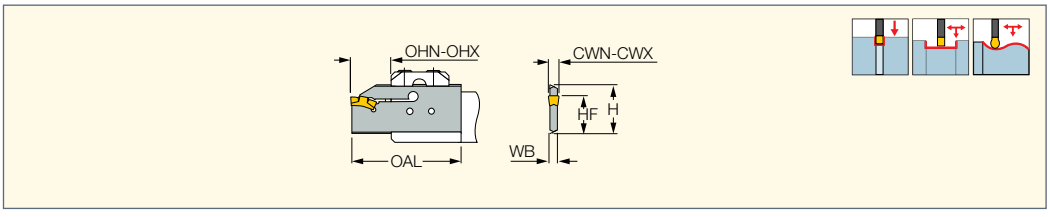
[1] Minimum cutting width
[2] Maximum cutting width
[3] Minimum overhang
[4] Maximum overhang
[5] Master insert identification

For inserts, see pages: TGMA (299) • TGMF (full radius) (299) • TGMF/P (299)
For holders, see pages: SGTBU/SGTBN (690) • UBHCR/L (691)

TOP GRIP

TGHN-S

Single-Ended Blades Carrying Utility Inserts for Grooving and Turning



Designation	H	CWN[1]	CWX[2]	OHN[3]	OHX[4]	HF	OAL	WB	MIID[5]
TGHN 32-3S	32.0	3.00	3.00	10.0	18.0	24.8	48.30	2.40	TGMF 3
TGHN 32-5S	32.0	5.00	5.00	12.0	25.0	24.8	54.00	4.00	TGMF/P 5
TGHN 32-6S	32.0	6.00	6.35	16.0	25.0	24.8	55.70	5.20	TGMF 6

- Use the drilled holes on blade for min. and max. overhang • Grooving depth is limited by the insert • For user guide, see pages 475-492

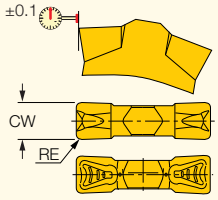
[1] Minimum cutting width
[2] Maximum cutting width
[3] Minimum overhang
[4] Maximum overhang
[5] Master insert identification

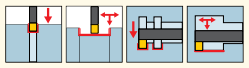
For inserts, see pages: TGMA (299) • TGMF (full radius) (299) • TGMF/P (299)
For holders, see pages: C#-TBU (696) • IM-TBU (707) • UBHCR/L (691)

TOP GRIP

TGMF/P
Utility Double-Ended Inserts for External and Internal Grooving and Turning







Repeatability ±0.1 while mounted on std. tool

Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	Tough ↔ Hard IC830	IC354	IC8250	IC808	IC20	IC20N	IC428	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
TGMF 302	3.00	0.20	0.050	0.050	10.50	•		•	•	•	•	•	0.25-1.80	0.14-0.18	0.07-0.11
TGMF 304	3.00	0.40	0.050	0.050	10.30	•		•	•	•	•	•	0.50-1.80	0.16-0.20	0.07-0.12
TGMF 402	4.00	0.20	0.050	0.050	14.70	•		•	•	•	•	•	0.20-2.40	0.16-0.21	0.09-0.14
TGMF 404	4.00	0.40	0.050	0.050	14.60	•	•	•	•	•	•	•	0.50-2.40	0.18-0.24	0.09-0.15
TGMP 506	5.00	0.60	0.050	0.050	15.00			•			•		0.75-3.00	0.21-0.32	0.11-0.20
TGMF 508	5.00	0.80	0.050	0.050	14.20	•		•	•	•	•	•	1.00-3.00	0.23-0.35	0.11-0.21
TGMF 635-080	6.35	0.80	0.050	0.050	18.60	•		•	•	•	•	•	1.00-3.80	0.25-0.44	0.14-0.27

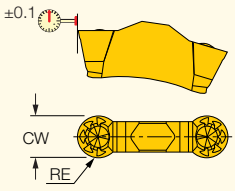
• DMIN for internal application=20.5 mm • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

For tools, see pages: TGDR/L (297) • TGHN 26-M (397) • TGHN-D (298) • TGHN-S (298) • TGIR/L-C (396) • TGPAD (297) • TGPAD-JHP (298)

TOP GRIP

TGMF (full radius)
Utility Double-Ended Full Radius Inserts for External and Internal Grooving and Profiling







Repeatability ±0.1 while mounted on std. tool

Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	Tough ↔ Hard IC830	IC354	IC8250	IC808	IC20	IC5010	IC428	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
TGMF 315	3.00	1.50	0.050	0.050	11.40	•	•	•	•	•	•		0.00-1.50	0.18-0.26	0.07-0.13
TGMF 420	4.00	2.00	0.050	0.050	14.90	•		•	•	•	•	•	0.00-2.00	0.20-0.34	0.09-0.17
TGMF 525	5.00	2.50	0.050	0.050	14.30	•		•	•	•		•	0.00-2.50	0.23-0.42	0.11-0.21
TGMF 630	6.00	3.00	0.050	0.050	18.30	•		•	•	•			0.00-3.00	0.24-0.50	0.13-0.25

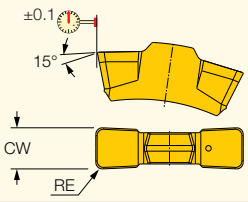
• Can cut arcs to 250° • DMIN for internal application=20.5 mm • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

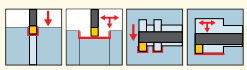
For tools, see pages: TGDR/L (297) • TGHN 26-M (397) • TGHN-D (298) • TGHN-S (298) • TGIR/L-C (396) • TGPAD (297) • TGPAD-JHP (298)

TOP GRIP

TGMA
Utility Double-Ended Inserts for External and Internal Grooving and Turning of Cast Iron







Repeatability ±0.1 while mounted on std. tool

Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	INSL	CDX(3)	IC5010	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
TGMA 304K	3.00	0.40	0.050	0.050	13.50	10.30	•	0.50-1.80	0.12-0.20	0.07-0.13
TGMA 404K	4.00	0.40	0.050	0.050	18.00	14.60	•	0.50-2.40	0.16-0.27	0.09-0.18
TGMA 408K	4.00	0.80	0.050	0.050	18.00	14.50	•	1.00-2.40	0.18-0.32	0.09-0.19
TGMA 508K	5.00	0.80	0.050	0.050	18.00	15.00	•	1.00-3.00	0.23-0.40	0.11-0.24
TGMA 608K	6.00	0.80	0.050	0.050	22.40	18.60	•	1.00-3.60	0.27-0.48	0.14-0.29

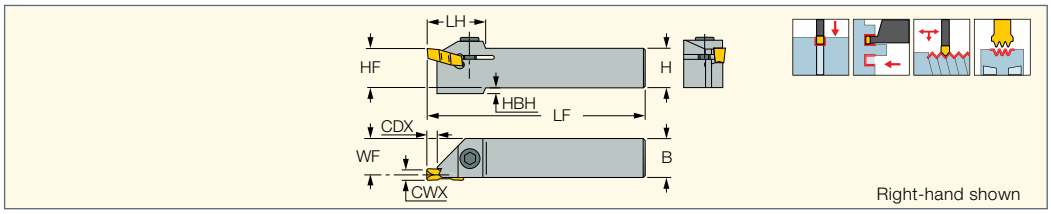
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

For tools, see pages: TGDR/L (297) • TGHN 26-M (397) • TGHN-D (298) • TGHN-S (298) • TGIR/L-C (396) • TGPAD (297)

CUTGRIP

GHMR/L

Toolholders for Shallow Radial and Axial Grooving with Narrow and Special Profile Inserts



Designation	CWX[2]	CDX[3]	H	HF	B	LF	LH	WF	HBH		
GHMR/L 12	4.00	4.80	12.0	12.0	12.0	110.00	25.0	10.80	4.0	SR 76-1021	T-20/5
GHMR/L 16	4.80	4.80	16.0	16.0	16.0	115.00	25.0	14.50	-	SR M6X16 DIN912	HW 5.0
GHMR 16-3 ST [1]	5.00	4.80	16.0	16.0	16.0	78.00	25.0	15.00	-	SR M6X16 DIN912	HW 5.0
GHMR/L 20	6.40	4.80	20.0	20.0	20.0	125.00	25.0	18.50	-	SR M6X16 DIN912	HW 5.0
GHMR/L 25	6.40	4.80	25.0	25.0	25.0	140.00	25.0	23.50	-	SR M6X16 DIN912	HW 5.0
GHMR/L 32	6.40	4.80	32.0	32.0	32.0	150.00	25.0	30.20	-	SR M6X16 DIN912	HW 5.0

- Use for recessing: light turning, small depth of cut (a_p=0.1-0.5 mm) and small feed (f=0.1 mm/rev) • For user guide, see pages 475-492

[1] For Star and multi-spindle machines

[2] Maximum cutting width

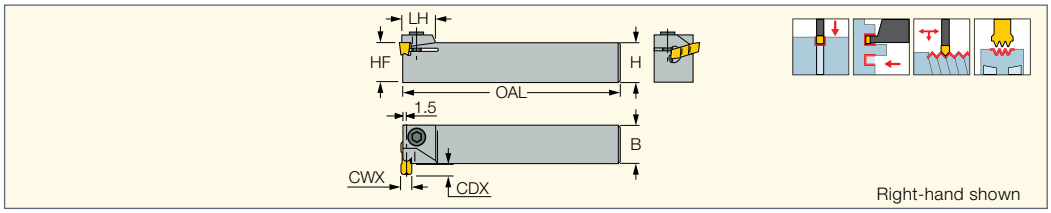
[3] Cutting depth maximum

For inserts, see pages: GIA-K (W=3-6) (329) • GIF (328) • GIF (full radius) (329) • GIF-E (W=4-6 full radius) (324) • GIF-E (W=4-6) (322) • GIG (326) • GIM-C (587) • GIM-J (587) • GIM-J-RA/LA (588) • GIM-UT (589) • GIM-UT-RA/LA (590) • GIM-W (588) • GIM-W-RA/LA (589) • GIMF (317) • GIMN (319) • GIMT (316) • GIMY (318) • GIMY (full radius) (320) • GIMY-F (321) • GIP (327) • GIP (flat top CW<BW) (325) • GIP (full radius CW<BW) (326) • GIP (full radius) (327) • GIP-E (323) • GIP-E (full radius) (325) • GIP-RX/LX (334) • GIP-UN (335) • GIPA (full radius W=3-6) (333) • GIPA (W=3-6) (332) • GIPM-A46 / GIP-1250 (430) • GIPY (331) • GITM (330) • GITM (full radius) (331) • GIVR/L (316) • GPV (336) • TIP-MT (727) • TIP-P-BSPT (768) • TIP-P-BSW (759) • TIP-P-ISO (743) • TIP-P-NPT (763) • TIP-P-UN (753) • TIP-WT (718)

CUTGRIP

GHMPR/L

Perpendicular Toolholders for Shallow Radial and Axial Grooving with Narrow and Special Profile Inserts



Designation	CWX[1]	CDX[2]	H	HF	B	LF	LH		
GHMPR/L 16	4.80	4.80	16.0	16.0	16.0	110.00	17.0	SR M6X16 DIN912	HW 5.0
GHMPR/L 20	6.40	4.80	20.0	20.0	20.0	120.00	17.0	SR M6X16 DIN912	HW 5.0
GHMPR/L 25	6.40	4.80	25.0	25.0	25.0	135.00	17.0	SR M6X16 DIN912	HW 5.0

- Use for recessing: light turning, small depth of cut (a_p=0.1-0.5 mm) and small feed (f=0.1 mm/rev) • For user guide, see pages 475-492

[1] Maximum cutting width

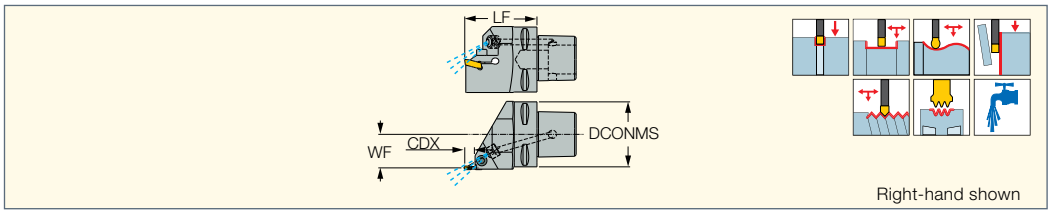
[2] Cutting depth maximum

For inserts, see pages: GIA-K (W=3-6) (329) • GIF (328) • GIF (full radius) (329) • GIF-E (W=4-6 full radius) (324) • GIF-E (W=4-6) (322) • GIG (326) • GIM-C (587) • GIM-J (587) • GIM-J-RA/LA (588) • GIM-UT (589) • GIM-UT-RA/LA (590) • GIM-W (588) • GIM-W-RA/LA (589) • GIMF (317) • GIMN (319) • GIMT (316) • GIMY (318) • GIMY (full radius) (320) • GIMY-F (321) • GIP (327) • GIP (flat top CW<BW) (325) • GIP (full radius CW<BW) (326) • GIP (full radius) (327) • GIP-E (323) • GIP-E (full radius) (325) • GIP-RX/LX (334) • GIP-UN (335) • GIPA (full radius W=3-6) (333) • GIPA (W=3-6) (332) • GIPM-A46 / GIP-1250 (430) • GIPY (331) • GITM (330) • GITM (full radius) (331) • GIVR/L (316) • GPV (336) • TIP-MT (727) • TIP-P-BSPT (768) • TIP-P-BSW (759) • TIP-P-ISO (743) • TIP-P-NPT (763) • TIP-P-UN (753) • TIP-WT (718)

CUTGRIP

C#-GHDR/L

External Grooving, Turning and Parting Toolholders with CAMFIX Exchangeable Tapered Shanks



Designation	CWN[2]	CWX[3]	DCONMS	CDX[4]	LF	WF	CP[5]	DCP[6]
C4 GHDR/L-3	2.80	4.00	40.00	9.00	55.00	20.00	100	1
C5 GHDR/L-3	2.80	4.00	50.00	9.00	55.00	24.00	100	1
C6 GHDR-3	2.80	4.00	63.00	9.00	55.00	32.00	100	1
C4 GHDR/L-4	4.00	5.00	40.00	10.00	55.00	20.00	100	1
C5 GHDR/L-4	4.00	5.00	50.00	10.00	55.00	24.00	100	1
C6 GHDR/L-4	4.00	5.00	63.00	10.00	55.00	32.00	100	1
C5 GHDR-5	5.00	6.40	50.00	12.00	55.00	24.00	100	1
C6 GHDR/L-5	5.00	6.40	63.00	12.00	55.00	32.00	100	1
C6 GHDR/L-8 [1]	7.00	8.40	63.00	25.00	70.00	30.00	100	1

- When using GPV and TIP inserts, toolholder must be modified according to insert profile to ensure clearance
- When using GIVR/L inserts, tool holder's seat needs to be modified

[1] Used with GIF 8, GIA 8, GIPA 8, GDMM, GIDA, GDMY, GDMF, GDMU inserts
[2] Minimum cutting width
[3] Maximum cutting width
[4] Cutting depth maximum
[5] Coolant pressure (Bar)
[6] 1 - Slot for data chip, 0 - Without slot for data chip

For inserts, see pages: GDMF (317) • GDMM-CC (664) • GDMN (319) • GDMT (317) • GDMU (319) • GDMY (318) • GDMY (full radius) (320) • GDMY-F (321) • GIA-K (long pocket) (330) • GIA-K (W=3-6) (329) • GIF (328) • GIF (full radius) (329) • GIF (long pocket) (328) • GIF-E (W=4-6 full radius) (324) • GIF-E (W=4-6) (322) • GIF-E (W=8,10 full radius) (324) • GIF-E (W=8,10) (322) • GIM-C (587) • GIM-J (587) • GIM-J-RA/LA (588) • GIM-UT (589) • GIM-UT-RA/LA (590) • GIM-W (588) • GIM-W-RA/LA (589) • GIMF (317) • GIMN (319) • GIMT (316) • GIMY (318) • GIMY (full radius) (320) • GIMY-F (321) • GIP (327) • GIP (full radius) (327) • GIP-E (323) • GIP-E (full radius) (325) • GIP-UN (335) • GIPA (full radius W=3-6) (333) • GIPA (W=3-6) (332) • GIPA/GIDA 8 (full radius) (334) • GIPM-A46 / GIP-1250 (430) • GIPY (331) • GITM (330) • GITM (full radius) (331) • GIVR/L (316) • GPV (336) • TIP-MT (727) • TIP-P-BSPT (768) • TIP-P-BSW (759) • TIP-P-ISO (743) • TIP-P-NPT (763) • TIP-P-UN (753) • TIP-WT (718)

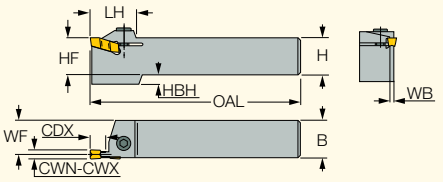
Spare Parts

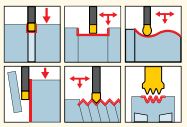
Designation			
C4 GHDR/L-3	SR M5X20DIN912	HW 4.0[a]	EZ 104
C5 GHDR/L-3	SR M5X20DIN912	HW 4.0[a]	EZ 104
C6 GHDR-3	SR M5X16 DIN912	HW 4.0[a]	EZ 125
C4 GHDR/L-4	SR M6X20 DIN912	HW 5.0[a]	EZ 104
C5 GHDR/L-4	SR M6X20 DIN912	HW 5.0[a]	EZ 104
C6 GHDR/L-4	SR M6X16 DIN912	HW 5.0[a]	EZ 125
C5 GHDR-5		HW 5.0[a]	EZ 104
C6 GHDR/L-5	SR M6X16 DIN912	HW 5.0[a]	EZ 125
C6 GHDL-8	SR M6X20 DIN912	HW 5.0[a]	EZ 146
C6 GHDR-8		HW 5.0[a]	EZ 146

[a] For optional key with limited tightening torque see page 484

CUTGRIP

GHDR/L (short pocket)
External Tools for Turning, Grooving and Parting





Right-hand shown

Designation	CWN[4]	CWX[5]	CDX[6]	H	HF	B	OAL	LH	WF	WB	HBH		
GHDR/L 12-3	2.80	4.00	8.00	12.0	12.0	12.0	110.00	25.0	10.80	2.40	4.0	SR 76-1021	T-20/5[a]
GHDR/L 16-3	2.80	4.00	9.00	16.0	16.0	16.0	110.00	26.0	14.80	2.40	4.0	SR M5X16 DIN912	HW 4.0[a]
GHDR/L 16-3 ST [1]	2.80	4.00	9.00	16.0	16.0	16.0	78.00	24.0	15.00	2.20	4.0	SR M5X16 DIN912	HW 4.0[a]
GHDR/L 20-3	2.80	4.00	9.00	20.0	20.0	20.0	120.00	26.0	18.80	2.40	-	SR M5X16 DIN912	HW 4.0[a]
GHDR/L 25-3	2.80	4.00	9.00	25.0	25.0	25.0	135.00	26.0	23.80	2.40	-	SR M5X16 DIN912	HW 4.0[a]
GHDR/L 16-4	4.00	5.00	10.00	16.0	16.0	16.0	110.00	26.0	14.40	3.20	4.0	SR M6X16 DIN912	HW 5.0[a]
GHDR 16-4 ST [1]	4.00	5.40	10.00	16.0	16.0	16.0	78.00	24.6	14.00	3.40	4.0	SR M6X16 DIN912	HW 5.0[a]
GHDR/L 20-4	4.00	5.00	10.00	20.0	20.0	20.0	120.00	26.0	18.40	3.20	-	SR M6X16 DIN912	HW 5.0[a]
GHDR/L 25-4	4.00	5.00	10.00	25.0	25.0	25.0	135.00	27.0	23.40	3.20	-	SR M6X16 DIN912	HW 5.0[a]
GHDR/L 32-4	4.00	5.00	10.00	32.0	32.0	32.0	150.00	27.0	30.40	3.20	-	SR M6X16 DIN912	HW 5.0[a]
GHDR/L 20-5	5.00	6.40	12.00	20.0	20.0	20.0	120.00	29.0	17.90	4.20	-	SR M6X16 DIN912	HW 5.0[a]
GHDR/L 25-5	5.00	6.40	12.00	25.0	25.0	25.0	135.00	29.0	22.90	4.20	-	SR M6X16 DIN912	HW 5.0[a]
GHDR/L 32-5	5.00	6.40	12.00	32.0	32.0	32.0	150.00	29.0	29.90	4.20	-	SR M6X16 DIN912	HW 5.0[a]
GHDR/L 25-6	6.00	6.40	12.00	25.0	25.0	25.0	135.00	29.0	22.30	5.40	-	SR M6X16 DIN912	HW 5.0[a]
GHDR/L 25-P8 [2]	7.00	10.00	16.50	25.0	25.0	25.0	150.00	35.7	21.80	6.50	-	SR M8X20DIN912	HW 6.0[a]
GHDR/L 32-P8 [3]	7.00	10.00	16.50	32.0	32.0	32.0	170.00	35.7	28.80	6.50	-	SR M8X20DIN912	HW 6.0[a]

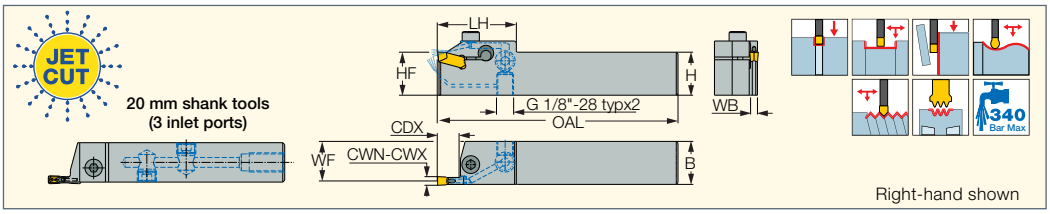
- For using TIP and GPV inserts, toolholder seat needs to be modified according to insert profile to ensure clearance.
- When using GIVR/L inserts, tool holder's seat needs to be modified • For user guide, see pages 475-492

[1] For Star and multi-spindle machines.
[2] Used with GIMF, GIMY, GIPY, GIMM, GITM, GPV inserts.
[3] Used with GIMT, GIMN, GIMF, GIMY, GIPY, GIMM,GITM,GPV Inserts
[4] Minimum cutting width
[5] Maximum cutting width
[6] Cutting depth maximum
[a] For optional key with limited tightening torque see page 484

For inserts, see pages: GIA-K (W=3-6) (329) • GIF (328) • GIF (full radius) (329) • GIF-E (W=4-6 full radius) (324) • GIF-E (W=4-6) (322)
• GIG (326) • GIM-C (587) • GIM-J (587) • GIM-J-RA/LA (588) • GIM-UT (589) • GIM-UT-RA/LA (590) • GIM-W (588) • GIM-W-RA/LA (589)
• GIMF (317) • GIMM 8CC (664) • GIMN (319) • GIMT (316) • GIMY (318) • GIMY (full radius) (320) • GIMY-F (321) • GIP (327)
• GIP (flat top CW<BW) (325) • GIP (full radius CW<BW) (326) • GIP (full radius) (327) • GIP-E (323) • GIP-E (full radius) (325)
• GIP-UN (335) • GIPA (full radius W=3-6) (333) • GIPA (W=3-6) (332) • GIPM-A46 / GIP-1250 (430) • GIPY (331) • GITM (330)
• GITM (full radius) (331) • GIVR/L (316) • GPV (336) • TIP-MT (727) • TIP-P-BSPT (768) • TIP-P-BSW (759) • TIP-P-ISO (743)
• TIP-P-NPT (763) • TIP-P-UN (753) • TIP-WT (718)

CUTGRIP

GHDR/L-JHP (short pocket)
Grooving and Turning
Tools with Channels for
High-Pressure Coolant



Designation	CWN[2]	CWX[3]	H	CDX[4]	B	OAL	LH	WF	WB	HF
GHDR/L 20-3-JHP	2.80	4.00	20.0	9.00	20.0	120.00	29.0	18.80	2.40	20.0
GHDR/L 25-3-JHP	2.80	4.00	25.0	9.00	25.0	140.00	44.0	23.80	2.40	25.0
GHDR/L 20-4-JHP	4.00	5.00	20.0	10.00	20.0	120.00	29.0	18.40	3.20	20.0
GHDR/L 25-4-JHP	4.00	5.00	25.0	10.00	25.0	140.00	45.0	23.40	3.20	25.0
GHDR/L 25-5-JHP	5.00	6.40	25.0	12.00	25.0	140.00	46.0	22.90	4.20	25.0
GHDR/L 25-P8-JHP [1]	7.00	10.00	25.0	16.50	25.0	150.00	50.0	21.80	6.50	25.0

- For using TIP and GPV inserts, toolholder seat needs to be modified according to insert profile to ensure clearance
- When using GIVR/L inserts, tool holder's seat needs to be modified
- For user guide and accessories see pages 475-492

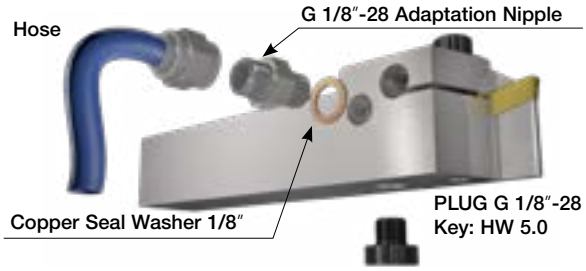
[1] Used with GIMF, GIMY, GIPY, GIMM, GITM, GPV, GIMY-F, GIMM 8CC,GIMT,GIMN,GITM (full radius), GIMY (full radius) inserts.
[2] Minimum cutting width
[3] Maximum cutting width
[4] Cutting depth maximum

For inserts, see pages: GIA-K (W=3-6) (329) • GIF (328) • GIF (full radius) (329) • GIF-E (W=4-6 full radius) (324) • GIF-E (W=4-6) (322)
• GIM-C (587) • GIM-J (587) • GIM-J-RA/LA (588) • GIM-UT (589) • GIM-UT-RA/LA (590) • GIM-W (588) • GIM-W-RA/LA (589) • GIMF (317)
• GIMM 8CC (664) • GIMN (319) • GIMT (316) • GIMY (318) • GIMY (full radius) (320) • GIMY-F (321) • GIP (327) • GIP (full radius) (327)
• GIP-E (323) • GIP-E (full radius) (325) • GIP-UN (335) • GIPA (full radius W=3-6) (333) • GIPA (W=3-6) (332) • GIPM-A46 / GIP-1250 (430)
• GIPY (331) • GITM (330) • GITM (full radius) (331) • GIVR/L (316) • GPV (336) • TIP-MT (727) • TIP-P-BSPT (768) • TIP-P-BSW (759)
• TIP-P-ISO (743) • TIP-P-NPT (763) • TIP-P-UN (753) • TIP-WT (718)

Flow Rate vs. Pressure

Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
GHDR/L 20-3-JHP	5-7	7-9	9-11
GHDR/L 20-4-JHP	6-8	10-12	12-14
GHDR/L 25-3-JHP	6-8	8-10	10-12
GHDR/L 25-4-JHP	10-12	14-16	16-18
GHDR/L 25-5-JHP	13-16	19-21	22-24

GHDR...-JHP



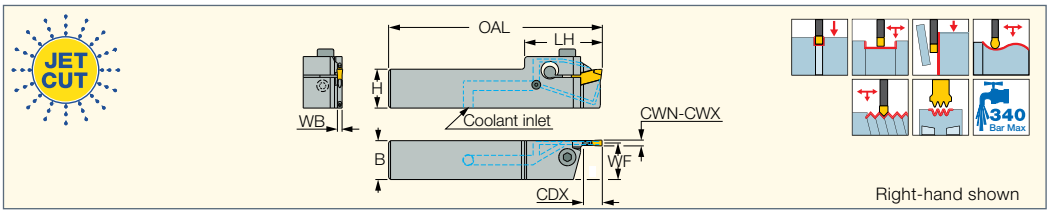
Spare Parts

Designation				
GHDR/L 20-3-JHP	SR M5X16 DIN912	HW 4.0[a]	PLG G1/8 TL360	HW 5.0
GHDR/L 25-3-JHP	SR M5X20DIN912	HW 4.0[a]	PLG 1/8ISO1179	HW 5.0
GHDR/L 20-4-JHP	SR M6X16 DIN912		PLG G1/8 TL360	HW 5.0
GHDR/L 25-4-JHP	SR M6X20 DIN912		PLG 1/8ISO1179	HW 5.0
GHDR/L 25-5-JHP	SR M6X20 DIN912		PLG 1/8ISO1179	HW 5.0
GHDR/L 25-P8-JHP	SR M6X20 DIN912		PLG 1/8ISO1179	HW 5.0

[a] For optional key with limited tightening torque see page 484

CUTGRIP

GHDR/L-JHP-MC
(short pocket)
Grooving and Turning Tools
with Bottom Inlet JETCUT
Coolant Channels



Designation	CWN(1)	CWX(2)	H	CDX	B	OAL	LH	WF	WB
GHDR/L 20-3-JHP-MC	2.80	4.00	20.0	9.00	20.0	110.00	40.0	18.80	2.40
GHDR/L 25-3-JHP-MC	2.80	4.00	25.0	9.00	25.0	123.00	37.0	23.80	2.40
GHDR/L 20-4-JHP-MC	4.00	5.00	20.0	10.00	20.0	110.00	40.0	18.40	3.20
GHDR/L 25-4-JHP-MC	4.00	5.00	25.0	10.00	25.0	123.00	37.0	23.40	3.20
GHDR/L 25-5-JHP-MC	5.00	6.40	25.0	12.00	25.0	123.00	37.0	22.90	4.20

- For using TIP and GPV inserts, toolholder seat needs to be modified according to insert profile to ensure clearance
- When using GIVR/L inserts, tool holder's seat needs to be modified
- For user guide and accessories see pages 475-492

(1) Minimum cutting width
(2) Maximum cutting width

For inserts, see pages: GIA-K (W=3-6) (329) • GIF (328) • GIF (full radius) (329) • GIF-E (W=4-6 full radius) (324) • GIF-E (W=4-6) (322) • GIM-C (587) • GIM-J (587) • GIM-J-RA/LA (588) • GIM-UT (589) • GIM-UT-RA/LA (590) • GIM-W (588) • GIM-W-RA/LA (589) • GIMF (317) • GIMM 8CC (664) • GIMN (319) • GIMT (316) • GIMY (318) • GIMY (full radius) (320) • GIMY-F (321) • GIP (327) • GIP (full radius) (327) • GIP-E (323) • GIP-E (full radius) (325) • GIP-UN (335) • GIPA (full radius W=3-6) (333) • GIPA (W=3-6) (332) • GIPM-A46 / GIP-1250 (430) • GIPY (331) • GITM (330) • GITM (full radius) (331) • GIVR/L (316) • GPV (336) • TIP-MT (727) • TIP-P-BSPT (768) • TIP-P-BSW (759) • TIP-P-ISO (743) • TIP-P-NPT (763) • TIP-P-UN (753) • TIP-WT (718)

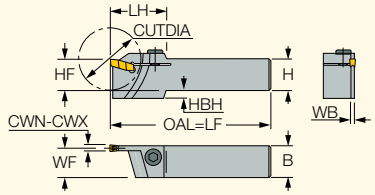
For holders, see pages: VDI-B1/B4AK-JHPMC (841) • VDI-B2/B3A-JHPMC (841) • VDI-B2/B3AK-JHPMC (841) • VDI-C1/C4A-JHPMC (841) • VDI-C1/C4AK-JHPMC (842) • VDI-C2/C3A-JHPMC (842) • VDI-C2/C3AK-JHPMC (842)

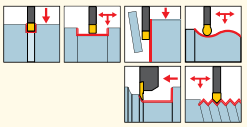
Spare Parts

Designation		
GHDR/L 20-3-JHP-MC	SR M5X20DIN912	HW 4.0
GHDR/L 25-3-JHP-MC	SR M5X20DIN912	HW 4.0
GHDR/L 20-4-JHP-MC	SR M6X20 DIN912	HW 5.0
GHDR/L 25-4-JHP-MC	SR M6X20 DIN912	HW 5.0
GHDR/L 25-5-JHP-MC	SR M6X20 DIN912	HW 5.0

CUTGRIP

GHGR/L
External Holders for Deep Grooving and Parting





Left-hand shown

Designation	CWN[3]	CWX[4]	CUTDIA[5]	H	HF	B	OAL	LH	WF	WB	HBH		
GHGR/L 20-2 [1]	0.40	2.40	34.0	20.0	20.0	20.0	120.00	33.0	19.20	1.70	-	SR M5X16 DIN912	HW 4.0[a]
GHGR/L 25-2 [1]	0.40	2.40	34.0	25.0	25.0	25.0	140.00	33.0	24.20	1.70	-	SR M5X16 DIN912	HW 4.0[a]
GHGL 16-3	3.00	4.00	40.0	16.0	16.0	16.0	110.00	36.0	14.70	2.50	4.0	SR M6X16 DIN912	HW 5.0[a]
GHGR 16-3	3.00	4.00	40.0	16.0	16.0	16.0	110.00	36.0	14.70	2.50	-		
GHGR/L 16-3 ST [2]	3.00	4.00	34.0	16.0	16.0	16.0	78.00	33.0	15.00	2.40	4.0	SR M6X16 DIN912	HW 5.0[a]
GHGR/L 20-3	3.00	4.00	40.0	20.0	20.0	20.0	120.00	36.0	18.70	2.50	-	SR M6X16 DIN912	HW 5.0[a]
GHGR/L 25-3	3.00	4.00	40.0	25.0	25.0	25.0	140.00	36.0	23.70	2.50	-	SR M6X16 DIN912	HW 5.0[a]
GHGR 16-4	4.00	5.00	40.0	16.0	16.0	16.0	110.00	36.0	14.40	3.20	4.0	SR M6X16 DIN912	HW 5.0[a]
GHGR/L 20-4	4.00	5.00	40.0	20.0	20.0	20.0	120.00	36.0	18.20	3.50	-	SR M6X16 DIN912	HW 5.0[a]
GHGR/L 25-4	4.00	5.00	40.0	25.0	25.0	25.0	140.00	36.0	23.20	3.50	-	SR M6X16 DIN912	HW 5.0[a]
GHGR/L 25-425	4.00	5.00	50.0	25.0	25.0	25.0	140.00	41.0	23.20	3.50	-	SR M6X16 DIN912	HW 5.0[a]
GHGR/L 25-5	5.00	6.40	50.0	25.0	25.0	25.0	140.00	41.0	22.90	4.20	-	SR M6X16 DIN912	HW 5.0[a]
GHGR/L 32-5	5.00	6.40	50.0	32.0	32.0	32.0	150.00	41.0	29.90	4.20	-	SR M6X16 DIN912	HW 5.0[a]
GHGR/L 25-630	6.00	8.00	60.0	25.0	25.0	25.0	140.00	45.0	22.30	5.40	-	SR M6X16 DIN912	HW 5.0[a]
GHGR/L 32-632	6.00	8.00	64.0	32.0	32.0	32.0	170.00	50.0	29.40	5.40	-	SR M6X16 DIN912	HW 5.0[a]

- For machining depth over 13 mm, a single-ended insert is required (GIM, GIMF,GIMY,GIMT,GIMN)
- CDX for grooving depth depends on part diameter Dmax
- For grooving a part with a diameter larger than CUTDIA, see next table
- For using TIP and GIVR/L inserts, tool holder seat needs to be modified according to insert profile to ensure clearance
- For user guide, see pages 475-492

[1] In the case of inserts with CW<2 mm, tool pocket should be ground to 0.3 mm thinner than the insert's grooving width.
[2] For Star and multi-spindle machines.
[3] Minimum cutting width
[4] Maximum cutting width
[5] Maximum parting diameter
[a] For optional key with limited tightening torque see page 484

For inserts, see pages: GIA-K (W=3-6) (329) • GIF (328) • GIF (full radius) (329) • GIF-E (W=4-6 full radius) (324) • GIF-E (W=4-6) (322)
• GIG (326) • GIM-C (587) • GIM-J (587) • GIM-J-RA/LA (588) • GIM-UT (589) • GIM-UT-RA/LA (590) • GIM-W (588) • GIM-W-RA/LA (589)
• GIMF (317) • GIMM 8CC (664) • GIMN (319) • GIMT (316) • GIMY (318) • GIMY (full radius) (320) • GIMY-F (321) • GIP (327)
• GIP (flat top CW<BW) (325) • GIP (full radius CW<BW) (326) • GIP (full radius) (327) • GIP-E (323) • GIP-E (full radius) (325)
• GIPA (full radius W=3-6) (333) • GIPA (W=3-6) (332) • GIPM-A46 / GIP-1250 (430) • GIPY (331) • GITM (330) • GITM (full radius) (331)
• TIP-MT (727) • TIP-P-BSPT (768) • TIP-P-BSW (759) • TIP-P-ISO (743) • TIP-P-NPT (763) • TIP-P-UN (753) • TIP-WT (718)

Depth Capacity*

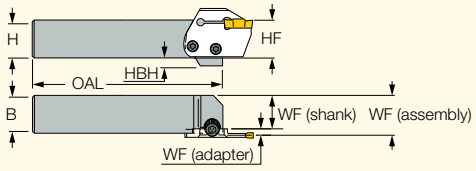
Designation	ØDmax												
GHGR/L 16-3	—	—	—	—	40	50	68	80	120	290	1000	—	—
GHGR/L 20-2	—	—	—	—	—	—	66	80	120	270	1000	—	—
GHGR/L 20-3	—	—	—	—	40	50	68	80	120	290	1000	—	—
GHGR/L 20-4	—	—	—	—	40	50	68	80	120	290	1000	—	—
GHGR/L 25-2	—	—	—	—	—	—	66	72	86	110	130	220	320
GHGR/L 25-3	—	—	—	—	40	80	105	120	190	450	1500	—	—
GHGR/L 25-4	—	—	—	—	40	80	105	120	190	450	1500	—	—
GHGR/L 25-425	—	—	99	135	350	700	—	—	—	—	—	—	—
GHGR/L 25-5	—	—	50	130	300	600	—	—	—	—	—	—	—
GHGR/L 25-630	—	100	350	—	—	—	—	—	—	—	—	—	—
GHGR/L 32-5	—	—	50	130	300	600	—	—	—	—	—	—	—
GHGR 32-632	—	—	—	—	—	—	—	—	—	—	—	—	—
CDX	32	30	25	23	20	19	17	16	14	12	11	9	8

* For over 13 mm depth: GIM, GIMF,GIMT,GIMN and GIMY, GPV (single ended insert) only.

MODULAR-GRIP

MAHR/L

Adapter Holders for all GRIP Systems



Left-hand shown
• WF(assembly)=WF(shank)+WF(adapter)

Designation	H	B	HF	OAL	HBH	WF[1]
MAHR/L 20	20.0	20.0	20.0	130.00	10.0	17.1
MAHR/L 25	25.0	25.0	25.0	130.00	5.0	22.1
MAHR/L 32	32.0	32.0	32.0	140.00	-	29.1

[1] WF(shank)

For tools, see pages: CGPAD (308) • DGAD-B-D (538) • DGAD/HGAD (537) • HFPAD-3 (643) • HFPAD-4 (643) • HFPAD-5 (644) • HFPAD-6 (644) • HGPAD (291) • PCADR/L (353) • SCLCR-PAD (71) • SDJCR-PAD (78) • SVJCR-PAD (88) • SWAPR-PAD (96) • TGAD (560) • TGPAD (297)

Spare Parts

Designation						
MAHR/L	SR M5-04451	T-20/5	SR 14-519	SR M6X20-XT[a]	HW 5.0	SR M6X6DIN551 14H/22H

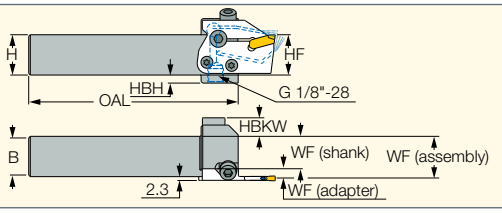
[a] For CGPAD, HGPAD, TGPAD and HFPAD adapters; supplied with the tools

MODULAR-GRIP

MAHR/L-JHP

Holders with High-Pressure Coolant Channels for MODULAR-GRIP Adapters

JET CUT



340 Bar Max

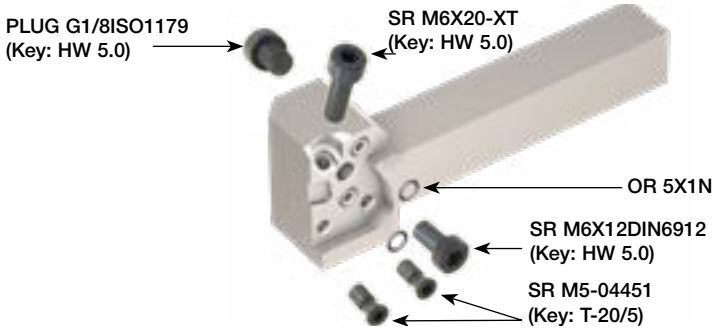
Left-hand shown
• WF(assembly)=WF(shank)+WF(adapter)

Designation	H	B	OAL	HBH	WF[1]	HBKW	HF
MAHR/L 20-JHP	20.0	20.0	130.00	10.0	15.1	16.50	20.0
MAHR/L 25-JHP	25.0	25.0	130.00	5.0	20.1	11.50	25.0
MAHR/L 32-JHP	32.0	32.0	140.00	-	27.1	4.50	32.0

• For user guide and accessories, see pages 475-492

[1] WF(shank)

For tools, see pages: DGPAD-D12/22-JHP (549) • HFPAD-JHP (652) • PCADRS/LS-JHP (359) • TGPAD-JHP (303) • CGPAD-JHP (314) • DGPAD-JHP (548) • TAGPAD-JHP (572) • HGPAD-JHP (295) • PCADR/L-JHP (358) • CGPAD (313) • DGAD-B-D (548) • DGAD/HGAD (547) • HFPAD-3 (653) • HFPAD-4 (653) • HFPAD-5 (654) • HFPAD-6 (654) • HGPAD (295) • PCADR/L (358) • TGAD (570) • TGPAD (302)



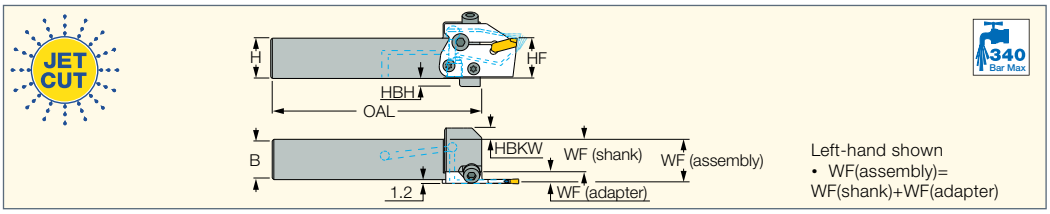
Spare Parts

Designation							
MAHR/L-JHP	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW 5.0	OR 5X1N	PLG 1/8ISO1179

MODULAR-GRIP

MAHR/L-JHP-MC

Holders with Bottom Inlets for High-Pressure Coolant Channels Carrying MODULAR-GRIP Grooving and Turning Adapters



Designation	H	B	OAL	HBH	WF[1]	HBKW	HF
MAHR/L 20-JHP-MC	20.0	20.0	98.00	10.0	14.0	6.00	20.0
MAHR/L 25-JHP-MC	25.0	25.0	98.00	5.0	19.0	-	25.0

• For CDX, refer to the adapters data.

(1) WF(shank)

For tools, see pages: HFPAD-JHP (642) • PCADRS/LS-JHP (354) • SCLCR/L-PAD-JHP (71) • TGPAD-JHP (298) • CGPAD-JHP (309) • DGPAD-JHP (538) • HGPAD-JHP (291) • PCADR/L-JHP (353) • TAGPAD-JHP (562) • CGPAD (308) • DGAD-B-D (538) • DGAD/HGAD (537) • HFPAD-3 (643) • HFPAD-4 (643) • HFPAD-5 (644) • HFPAD-6 (644) • HGPAD (291) • PCADR/L (353) • TGAD (560) • TGPAD (297)



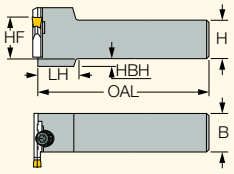
Spare Parts

Designation						
MAHR/L-JHP-MC	SR M6X20-XT	HW 5.0	SR M5-04451	T-20/5	SR M6X12DIN6912	OR 5X1N

MODULAR-GRIP

MAHPR/L

Holders for Perpendicularly Mounted Adapters suitable for all GRIP Systems



Designation	H	B	HF	OAL	LH	HBH
MAHPR/L 20	20.0	20.0	20.0	140.00	25.0	10.0
MAHPR/L 25	25.0	25.0	25.0	140.00	25.0	5.0
MAHPR/L 32	32.0	32.0	32.0	150.00	25.0	-

For tools, see pages: CGPAD (308) • DGAD-B-D (538) • DGAD/HGAD (537) • HFPAD-3 (643) • HFPAD-4 (643) • HFPAD-5 (644) • HFPAD-6 (644) • HGPAD (291) • PCADR/L (353) • SCLCR-PAD (71) • SDJCR-PAD (78) • SVJCR-PAD (88) • SWAPR-PAD (96) • TGAD (560) • TGPAD (297)

Spare Parts

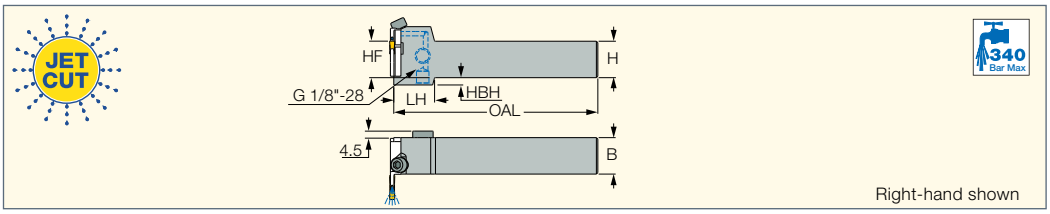
Designation						
MAHPR/L	SR M5-04451	T-20/5	SR 14-519	SR M6X20-XT[a]	HW 5.0	SR M6X6DIN551 14H/22H

(a) For CGPAD, HGPAD, TGPAD and HFPAD adapters. Supplied with the tools.

MODULAR-GRIP

MAHPR/L-JHP

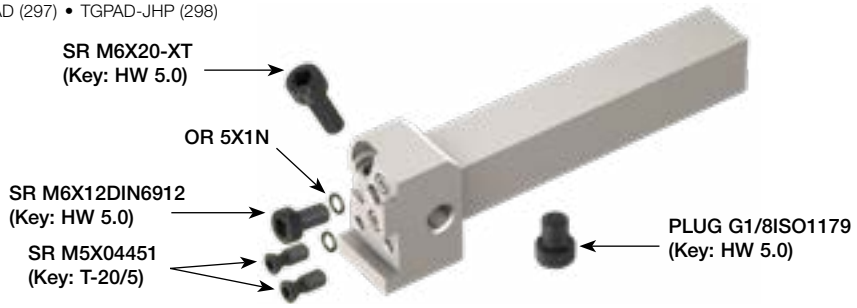
Holders with High-Pressure Coolant Channels for MODULAR-GRIP Perpendicularly Mounted Adapters



Designation	H	B	OAL	LH	HBH	HF
MAHPR/L 20-JHP	20.0	20.0	140.00	28.0	10.0	20.0
MAHPR/L 25-JHP	25.0	25.0	140.00	28.0	5.0	25.0
MAHPR/L 32-JHP	32.0	32.0	150.00	-	-	32.0

• For user guide and accessories, see pages 475-492

For tools, see pages: CGPAD (308) • CGPAD-JHP (309) • DGAD-B-D (538) • DGAD/HGAD (537) • DGPAD-JHP (538) • HFPAD-3 (643) • HFPAD-4 (643) • HFPAD-5 (644) • HFPAD-6 (644) • HFPAD-JHP (642) • HGPAD (291) • HGPAD-JHP (291) • PCADR/L (353) • PCADR/L-JHP (353) • PCADRS/LS-JHP (354) • PCLNR/L-PAD-JHP (25) • PDJNR/L-PAD-JHP (38) • SCLCR-PAD (71) • SCLCR/L-PAD-JHP (71) • SDJCR-PAD (78) • SDJCR-SL-PAD-JHP (74) • SDJCR/L-PAD-JHP (78) • SVJCR-PAD (88) • SVJCR/L-PAD-JHP (88) • SWAPR-PAD (96) • TAGPAD-JHP (562) • TGAD (560) • TGPAD (297) • TGPAD-JHP (298)



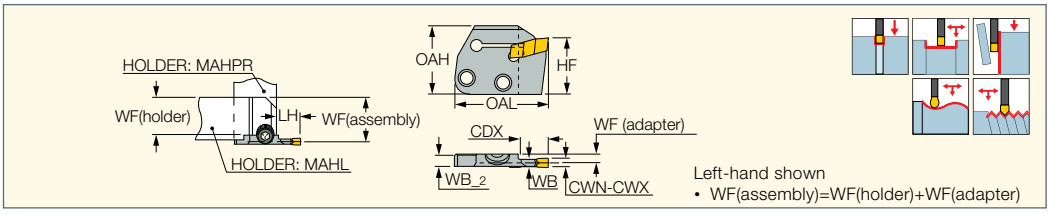
Spare Parts

Designation							
MAHPR/L-JHP	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW 5.0	OR 5X1N	PLG 1/8ISO1179

MODULAR-GRIP

CGPAD

Adapters for CUT-GRIP Inserts



Designation	CWN(1)	CWX(2)	CDX(3)	LH	WF(4)	WB	WB_2	OAL	OAH	HF
CGPAD 3R/L-T16	2.80	4.00	16.00	17.3	4.00	2.40	5.2	42.00	30.00	24.0
CGPAD 3R/L-T22	2.80	4.00	22.00	23.0	4.00	2.40	5.2	47.70	30.00	24.0
CGPAD 4R/L-T16	4.00	5.00	16.00	17.3	3.60	3.50	5.2	42.00	30.00	24.0
CGPAD 4R/L-T22	4.00	5.00	22.00	23.0	3.50	3.50	5.2	47.70	30.00	24.0
CGPAD 5R/L-T16	5.00	6.40	16.00	17.3	3.10	4.50	5.2	42.00	30.00	24.0
CGPAD 5R/L-T22	5.00	6.40	22.00	23.0	3.00	4.50	5.2	47.70	30.00	24.0
CGPAD 8R/L-T16	6.40	8.00	16.00	17.3	3.00	6.00	6.0	42.00	30.00	24.0
CGPAD 8R/L-T22	6.40	8.00	22.00	23.0	3.00	6.00	6.0	47.70	30.00	24.0

- For using TIP insert, toolholder seat needs to be modified according to insert profile to ensure clearance
- When using GIVR/L inserts, tool holder's seat needs to be modified
- For user guide, see pages 475-492

(1) Minimum cutting width
(2) Maximum cutting width
(3) Cutting depth maximum
(4) WF(adapter)

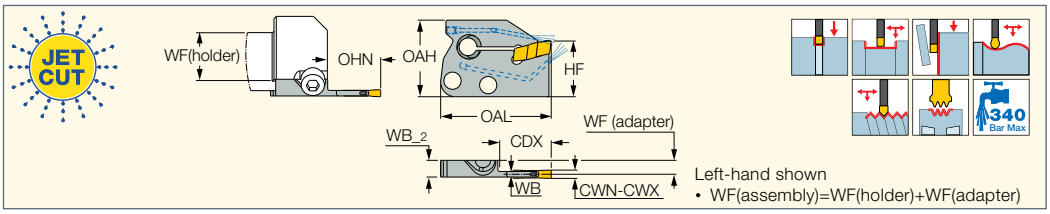
For inserts, see pages: GIF (328) • GIF (full radius) (329) • GIF-E (W=4-6 full radius) (324) • GIF-E (W=4-6) (322) • GIM-C (587) • GIM-J (587) • GIM-J-RA/LA (588) • GIM-UT (589) • GIM-UT-RA/LA (590) • GIM-W (588) • GIM-W-RA/LA (589) • GIMF (317) • GIMM 8CC (664) • GIMN (319) • GIMT (316) • GIMY (318) • GIMY (full radius) (320) • GIMY-F (321) • GIP (327) • GIP (full radius) (327) • GIP-E (323) • GIP-E (full radius) (325) • GIP-UN (335) • GIPA (full radius W=3-6) (333) • GIPA (W=3-6) (332) • GIPM-A46 / GIP-1250 (430) • GIPY (331) • GITM (330) • GITM (full radius) (331) • GIVR/L (316) • TIP-MT (727) • TIP-P-BSPT (768) • TIP-P-BSW (759) • TIP-P-ISO (743) • TIP-P-NPT (763) • TIP-P-UN (753) • TIP-WT (718)

For holders, see pages: C#-MAHD-JHP (697) • C#-MAHPD-JHP (698) • MAHR/L-JHP-MC (307) • MAHPR/L-JHP (308) • MAHR/L-JHP (306) • MAHR/L (306) • MAHPR/L (307) • C#-MAHD (697) • C#-MAHPD (698) • C#-MAHDR-45 (696) • HSK A63WH-MAHUR/L (706) • HSK A63WH-MAHDR-45 (705) • HSK A63WH-MAHDOR (705) • IM-MAHD (707) • IM-MAHPD (707)

MODULAR-GRIP

CGPAD-JHP

Adapters with High-Pressure Coolant Channels Carrying CUT-GRIP Inserts



Designation	CWN[1]	CWX[2]	CDX[3]	OHN[4]	WF[5]	WB	WB_2	OAL	OAH	HF
CGPAD 3R/L-T16-JHP	2.80	4.00	16.00	17.3	6.00	2.40	7.2	42.00	33.00	24.0
CGPAD 3R/L-T22-JHP	2.80	4.00	22.00	23.0	6.00	2.40	7.2	47.70	33.00	24.0
CGPAD 4R/L-T16-JHP	4.00	5.00	16.00	17.3	5.45	3.50	7.2	42.00	33.00	24.0
CGPAD 4R-T22-JHP	4.00	5.00	22.00	23.0	5.45	3.50	7.2	47.70	33.00	24.0
CGPAD 5R/L-T16-JHP	5.00	6.40	16.00	17.3	4.95	4.50	7.2	42.00	33.00	24.0
CGPAD 5R-T22-JHP	5.00	6.40	22.00	23.0	4.95	4.50	7.2	47.70	33.00	24.0
CGPAD 8R/L-T22-JHP	6.40	8.00	22.00	23.0	4.20	6.00	7.2	47.00	33.00	24.0

- For using TIP insert, toolholder seat needs to be modified according to insert profile to ensure clearance
- When using GIVR/L inserts, tool holder's seat needs to be modified
- For user guide and accessories see pages 475-492

[1] Minimum cutting width
[2] Maximum cutting width
[3] Cutting depth maximum
[4] Minimum overhang
[5] WF(adapter)

For inserts, see pages: GIA-K (W=3-6) (329) • GIF (328) • GIF (full radius) (329) • GIF-E (W=4-6 full radius) (324) • GIF-E (W=4-6) (322) • GIM-C (587) • GIM-J (587) • GIM-J-RA/LA (588) • GIM-UT (589) • GIM-UT-RA/LA (590) • GIM-W (588) • GIM-W-RA/LA (589) • GIMF (317) • GIMN (319) • GIMT (316) • GIMY (318) • GIMY (full radius) (320) • GIMY-F (321) • GIP (327) • GIP (full radius) (327) • GIP-E (323) • GIP-E (full radius) (325) • GIP-UN (335) • GIPA (full radius W=3-6) (333) • GIPA (W=3-6) (332) • GIPM-A46 / GIP-1250 (430) • GIPY (331) • GITM (330) • GITM (full radius) (331) • GIVR/L (316) • GPV (336) • TIP-MT (727) • TIP-P-BSPT (768) • TIP-P-BSW (759) • TIP-P-ISO (743) • TIP-P-NPT (763) • TIP-P-UN (753) • TIP-WT (718)

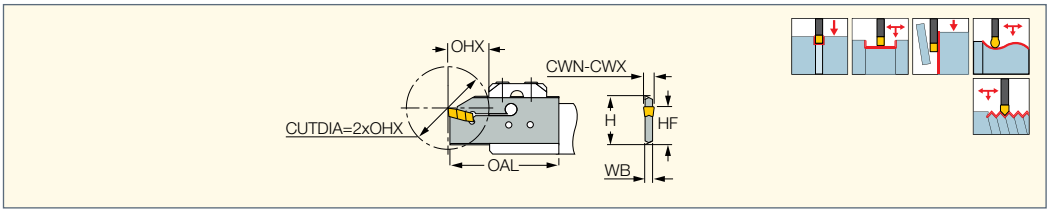
Flow Rate vs. Pressure

Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
CGPAD 3R/L-T16-JHP	6-8	7-9	8-10
CGPAD 3R-T22-JHP	5-7	6-8	7-9
CGPAD 4R/L-T16-JHP	10-12	11-13	12-14
CGPAD 5R/L-T16-JHP	12-14	16-18	19-21

CUT-GRIP

CGHN-S

Single-Ended Blades for External Machining



Designation	H	CWN[1]	CWX[2]	OHN[3]	OHX[4]	HF	OAL	WB
CGHN 32-3S	32.0	2.80	4.00	10.0	19.0	24.8	51.00	2.40
CGHN 32-4S	32.0	3.50	5.00	12.0	21.0	24.8	53.00	3.20
CGHN 32-5S	32.0	4.40	6.40	12.0	25.0	24.8	56.00	4.00
CGHN 32-6S	32.0	5.50	6.40	12.0	25.0	24.8	56.00	5.20

- When using a double-ended insert, grooving depth is limited by the insert
- When using GIVR/L inserts, tool holder's seat needs to be modified
- For user guide, see pages 475-492

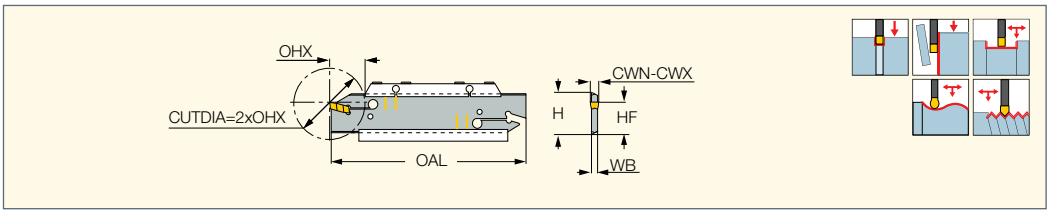
[1] Minimum cutting width
[2] Maximum cutting width
[3] Minimum overhang
[4] Maximum overhang

For inserts, see pages: GIA-K (W=3-6) (329) • GIF (328) • GIF (full radius) (329) • GIF-E (W=4-6 full radius) (324) • GIF-E (W=4-6) (322) • GIM-C (587) • GIM-J (587) • GIM-J-RA/LA (588) • GIM-UT (589) • GIM-UT-RA/LA (590) • GIM-W (588) • GIM-W-RA/LA (589) • GIMF (317) • GIMN (319) • GIMT (316) • GIMY (318) • GIMY (full radius) (320) • GIMY-F (321) • GIP (327) • GIP (full radius) (327) • GIP-E (323) • GIP-E (full radius) (325) • GIPA (full radius W=3-6) (333) • GIPA (W=3-6) (332) • GIPM-A46 / GIP-1250 (430) • GIPY (331) • GITM (330) • GITM (full radius) (331) • GIVR/L (316) • TIP-MT (727) • TIP-P-BSPT (768) • TIP-P-BSW (759) • TIP-P-ISO (743) • TIP-P-NPT (763) • TIP-P-UN (753) • TIP-WT (718)

For holders, see pages: C#-TBU (696) • IM-TBU (707) • UBHCR/L (691)

CUTGRIP

CGHN-D
Double-Ended Blades for
External Grooving and Turning



Designation	H	CWN(1)	CWX(2)	OHN(3)	OHX(4)	HF	OAL	WB
CGHN 26-3D	26.0	2.80	4.00	10.0	15.0	21.4	110.00	2.40
CGHN 26-4D	26.0	3.50	4.50	10.0	15.0	21.4	110.00	3.20
CGHN 26-5D	26.0	4.40	6.40	10.0	20.0	21.4	110.00	4.00
CGHN 32-3D	32.0	2.80	4.00	10.0	19.0	24.8	150.00	2.40
CGHN 32-4D	32.0	3.50	5.00	12.0	21.0	24.8	150.00	3.20
CGHN 32-5D	32.0	4.40	6.40	12.0	26.0	24.8	150.00	4.00
CGHN 32-6D	32.0	5.50	6.40	12.0	26.0	24.8	150.00	5.20

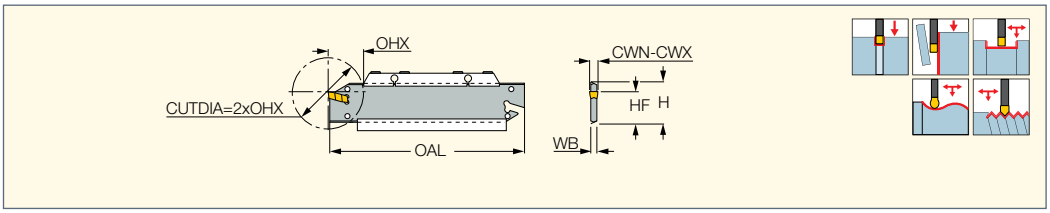
- Use the yellow lines on blade for min. and max. overhang • When using TIP inserts, toolholder seat needs to be modified according to insert profile to ensure clearance
- When using a double-ended insert, grooving depth is limited by the insert • When using GIVR/L inserts, tool holder's seat needs to be modified
- For user guide, see pages 475-492

(1) Minimum cutting width
(2) Maximum cutting width
(3) Minimum overhang
(4) Maximum overhang

For inserts, see pages: GIA-K (W=3-6) (329) • GIF (328) • GIF (full radius) (329) • GIF-E (W=4-6 full radius) (324) • GIF-E (W=4-6) (322)
• GIM-C (587) • GIM-J (587) • GIM-J-RA/LA (588) • GIM-UT (589) • GIM-UT-RA/LA (590) • GIM-W (588) • GIM-W-RA/LA (589) • GIMF (317)
• GIMN (319) • GIMT (316) • GIMY (318) • GIMY (full radius) (320) • GIMY-F (321) • GIP (327) • GIP (full radius) (327) • GIP-E (323)
• GIP-E (full radius) (325) • GIPA (full radius W=3-6) (333) • GIPA (W=3-6) (332) • GIPM-A46 / GIP-1250 (430) • GIPY (331)
• GITM (330) • GITM (full radius) (331) • GIVR/L (316) • TIP-MT (727) • TIP-P-BSPT (768) • TIP-P-BSW (759) • TIP-P-ISO (743)
• TIP-P-NPT (763) • TIP-P-UN (753) • TIP-WT (718)
For holders, see pages: SGTBU/SGTBN (690) • UBHCR/L (691)

CUTGRIP

CGHN-DG
Double-Ended Blades for
External Grooving and Turning
Self-Clamped Inserts



Designation	H	CWN(1)	CWX(2)	OHX(3)	OHX_2(4)	HF	OAL	WB	
CGHN 32-3DG	32.0	2.80	4.00	50.0	25.0	24.8	150.00	2.40	EDG 44A*
CGHN 32-4DG	32.0	3.50	5.00	50.0	30.0	24.8	150.00	3.20	EDG 44A*
CGHN 32-5DG	32.0	4.40	6.40	60.0	33.0	24.8	150.00	4.00	EDG 44A*
CGHN 32-6DG	32.0	5.50	6.40	60.0	35.0	24.8	150.00	5.20	EDG 44A*

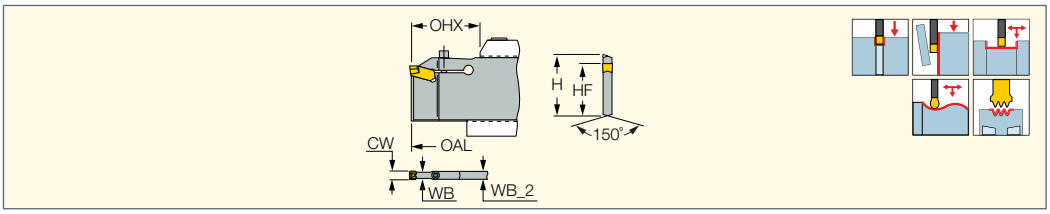
- DO-GRIP clamping insert is self-retained for long overhang • When using TIP inserts, toolholder seat needs to be modified according to insert profile to ensure clearance
- When using a double-ended insert, grooving depth is limited by the insert • When using GIVR/L inserts, tool holder's seat needs to be modified
- For user guide, see pages 475-492

(1) Minimum cutting width
(2) Maximum cutting width
(3) Maximum overhang for grooving
(4) Maximum overhang for turning
* Optional, to be ordered separately

For inserts, see pages: GIA-K (W=3-6) (329) • GIF (328) • GIF (full radius) (329) • GIF-E (W=4-6 full radius) (324) • GIF-E (W=4-6) (322)
• GIM-C (587) • GIM-J (587) • GIM-J-RA/LA (588) • GIM-UT (589) • GIM-UT-RA/LA (590) • GIM-W (588) • GIM-W-RA/LA (589) • GIMF (317)
• GIMN (319) • GIMT (316) • GIMY (318) • GIMY (full radius) (320) • GIMY-F (321) • GIP (327) • GIP (full radius) (327) • GIP-E (323)
• GIP-E (full radius) (325) • GIP-UN (335) • GIPA (full radius W=3-6) (333) • GIPA (W=3-6) (332) • GIPM-A46 / GIP-1250 (430)
• GIPY (331) • GITM (330) • GITM (full radius) (331) • GIVR/L (316) • TIP-MT (727) • TIP-P-BSPT (768) • TIP-P-BSW (759) • TIP-P-ISO (743)
• TIP-P-NPT (763) • TIP-P-UN (753) • TIP-WT (718)
For holders, see pages: C#-TBK-R/L (695) • HSK A-WH-TBK-R/L (706) • SGTBU/SGTBN (690) • UBHCR/L (691)

CUTGRIP

CGHN-P8
Blades for Deep Grooving and Turning



Designation	CW	OHX(3)	CDX(4)	WB	WB_2	HF	H	OAL		
CGHN 52-P8 (1)	8.00	50.0	43.00	6.00	7.4	45.0	52.6	190.00	SR 76-1637	HW 4.0
CGHN 53-P8 (2)	8.00	70.0	63.00	6.00	7.4	45.0	52.6	260.00	SR 76-1637	HW 4.0

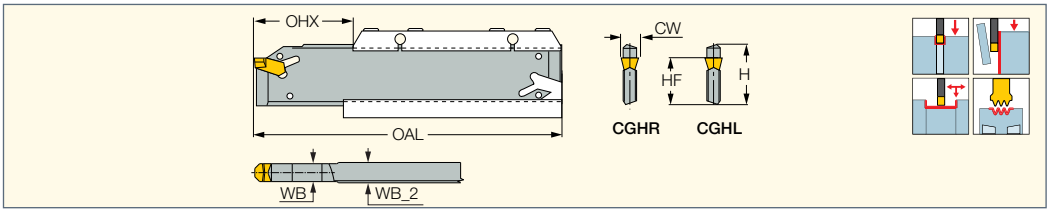
- For user guide, see pages 475-492

(1) If CUTDIA (workpiece) is smaller than 200 mm, then CDX=48; if CUTDIA (workpiece) is larger than 200 mm, then CDX=43
(2) If CUTDIA (workpiece) is smaller than 200 mm, then CDX=68; if CUTDIA (workpiece) is larger than 200 mm, then CDX=63
(3) Maximum overhang
(4) Cutting depth maximum

For inserts, see pages: GIMF (317) • GIMM 8CC (664) • GIMT (316) • GIMY (318) • GIMY (full radius) (320) • GIMY-F (321) • GIPY (331)
For holders, see pages: SGTBK (691) • SGTBU/SGTBN (690)

CUTGRIP

CGHR/L-P8DG
Double-Ended Heavy Duty Self-Clamped Grooving and Turning Blades



Designation	CW	OHX(1)	WB	WB_2	HF	H	LF	
CGHR/L 32-P8DG	8.00	40.0	6.00	6.8	24.8	32.0	150.00	EDG 44A*

- For user guide, see pages 475-492

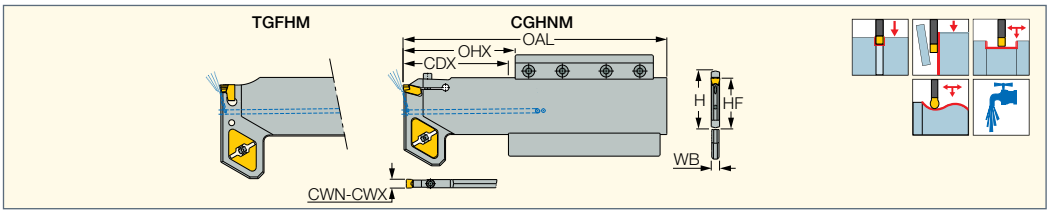
(1) Minimum overhang • If CUTDIA (workpiece) is smaller than 200 mm, then CDX=48; if CUTDIA (workpiece) is larger than 200 mm, then CDX=43
* Optional, to be ordered separately

For inserts, see pages: GIMF (317) • GIMM 8CC (664) • GIMT (316) • GIMY (318) • GIMY (full radius) (320) • GIMY-F (321) • GIPY (331)
For holders, see pages: C#-TBK-R/L (695) • HSK A-WH-TBK-R/L (706) • SGTBK (691) • SGTBU/SGTBN (690) • UBHCR/L (691)

WHISPERLINE

Anti-Vibration Blades

Anti-Vibration Blades for Deep Grooving and Turning



Designation	CWN(1)	CWX(2)	OHX(3)	CDX(4)	WB	HF	H	OAL	Insert					
CGHNM 53-6DG-AV	5.50	6.40	100.0	93.00	5.20	45.0	52.6	235.00	GIMF/N/T/Y 6 GIM 6	SGCU 341	OR 30X3 NBR	EDG 44A*	T-6/5	SGC 340
TGFHM 53K-8-AV	7.70	9.00	100.0	93.00	7.40	45.0	52.6	235.00	TAG/TAGB 8	SGCU 341	OR 30X3 NBR	ETG 8-12*	T-6/5	SGC 340
CGHNM 53-P8-AV	8.00	8.00	100.0	93.00 (5)	7.40	45.0	52.6	235.00	GIMY/F/MM 8	SGCU 341	OR 30X3 NBR		T-6/5	SGC 340

- For user guide, see pages 475-492

(1) Minimum cutting width

(2) Maximum cutting width

(3) Maximum overhang

(4) Cutting depth maximum

(5) For CUTDIA<200 CDX=98

* Optional, to be ordered separately

For inserts, see pages: GIA-K (W=3-6) (329) • GIF (328) • GIF (full radius) (329) • GIF-E (W=4-6 full radius) (324) • GIF-E (W=4-6) (322) • GIM-C (587) • GIMF (317) • GIMM 8CC (664) • GIMN (319) • GIMT (316) • GIMY (318) • GIMY (full radius) (320) • GIMY-F (321) • GIP (327) • GIP-E (323) • GIPA (full radius W=3-6) (333) • GIPA (W=3-6) (332) • GIPY (331) • GITM (330) • GITM (full radius) (331) • TAG N-C/W/M (568) • TAGB/TAGBA (375)

For holders, see pages: SGTBK (691) • SGTBU/SGTBN (690)

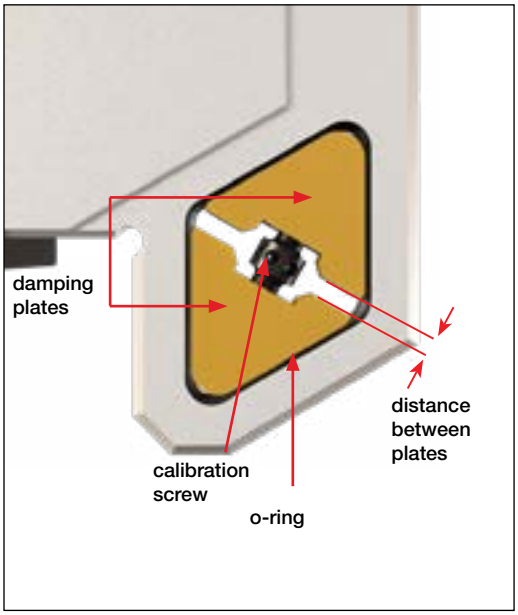
User Guide

- To maintain a stable and controlled machining process use constant RPM (G97).
- Each blade is pre-calibrated in laboratory conditions for an overhang of 100 mm.
- Although the pre-calibration is suitable for a wide range of overhangs, sometimes fine-tuning calibration is necessary, depends on the overhang and clamping rigidity of the machine.
- Before making fine tuning calibration try to optimize the cutting conditions. First step should be reducing the RPM.

Fine-Tuning Calibration

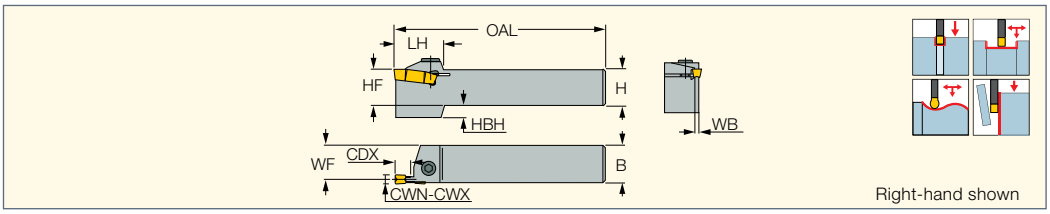
For shorter overhangs / more rigid clamping conditions, it is recommended to increase the compression of the O-ring by rotating the calibration screw clockwise (make sure the distance between the damping plates increases).

- For longer overhangs / less rigid clamping conditions, it is recommended to decrease the compression of the O-ring by rotating the calibration screw counter clockwise (make sure the distance between the damping plates decreases).
- The fine-tuning resolution should be about a half-turn for each 30 mm difference in the overhang.
- To restore the initial setup, use the distance between the damping plates imprinted on the blade.



CUT-GRIP

GHDR/L (long pocket)
External Tools for Grooving, Turning and Parting



Designation	CWN(1)	CWX(2)	CDX(3)	H	B	OAL	WF	WB	LH	HBH	HF		
GHDR/L 25-8	6.60	8.30	25.00	25.0	25.0	150.00	22.00	6.00	40.0	7.6	25.0	SR M6X16 DIN912	HW 5.0(a)
GHDR/L 3225-8	6.60	8.30	25.00	32.0	25.0	168.50	22.00	5.90	40.0	-	32.0	SR M6X16 DIN912	HW 5.0(a)
GHDR/L 25-812	6.60	8.30	12.00	25.0	25.0	140.00	22.00	5.90	33.0	-	25.0	SR M6X16 DIN912	HW 5.0(a)
GHDR/L 32-8	6.60	8.30	25.00	32.0	32.0	170.00	29.00	6.00	40.0	-	32.0	SR M6X16 DIN912	HW 5.0(a)
GHDL 32-812	6.60	8.30	12.00	32.0	32.0	160.00	29.00	5.90	33.0	-	32.0	SR M6X16 DIN912	HW 5.0(a)
GHDR/L 32-836	7.00	8.30	36.00	32.0	32.0	170.00	28.90	6.30	56.0	8.0	32.0	SR M8X20DIN912	HW 6.0(a)
GHDR/L 25-10	8.60	11.10	25.00	25.0	25.0	150.00	21.30	7.40	43.0	7.6	25.0	SR M8X20DIN912	HW 6.0(a)
GHDR/L 32-10	8.60	11.10	25.00	32.0	32.0	170.00	28.30	7.40	43.0	-	32.0	SR M8X20DIN912	HW 6.0(a)
GHDR/L 40-10	8.60	11.10	25.00	40.0	40.0	200.00	36.30	7.40	43.0	-	40.0	SR M8X20DIN912	HW 6.0(a)

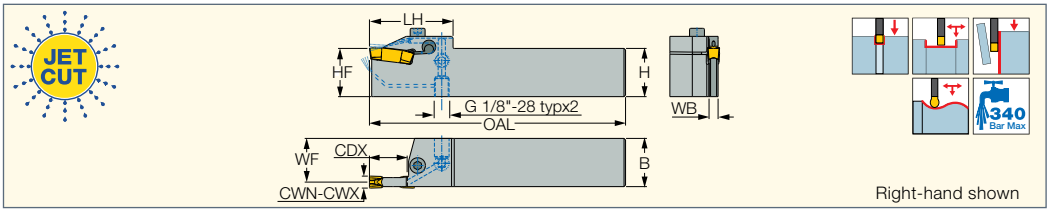
- For user guide, see pages 475-492

(1) Minimum cutting width
(2) Maximum cutting width
(3) Cutting depth maximum
(a) For optional key with limited tightening torque see page 484

For inserts, see pages: GDMF (317) • GDMM-CC (664) • GDMN (319) • GDMT (317) • GDMU (319) • GDMY (318) • GDMY (full radius) (320) • GDMY-F (321) • GDPY (323) • GIA-K (long pocket) (330) • GIF (long pocket) (328) • GIF-E (W=8,10 full radius) (324) • GIF-E (W=8,10) (322) • GIPA/GIDA 8 (full radius) (334)

CUT-GRIP

GHDR/L-JHP (long pocket)
CUT-GRIP Tools with Channels for High-Pressure Coolant for Grooving and Turning



Designation	CWN(1)	CWX(2)	CDX(3)	H	B	OAL	LH	WF	WB	HF
GHDL 32-8-JHP	6.60	8.30	25.00	32.0	32.0	170.00	55.5	29.00	6.00	32.0
GHDR 32-8-JHP	6.60	8.30	25.00	32.0	32.0	170.00	55.0	29.00	6.00	32.0

- For user guide and accessories see pages 475-492

(1) Minimum cutting width
(2) Maximum cutting width
(3) Cutting depth maximum

For inserts, see pages: GDMF (322) • GDMM-CC (674) • GDMN (324) • GDMT (322) • GDMU (324) • GDMY (323) • GDMY (full radius) (325) • GDMY-F (326) • GIA-K (long pocket) (335) • GIF (long pocket) (333) • GIF-E (W=8,10 full radius) (329) • GIF-E (W=8,10) (327) • GIPA/GIDA 8 (full radius) (339)

Flow Rate vs. Pressure

Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
GHDR/L 32-8-JHP	13-16	19-21	22-24

Spare Parts

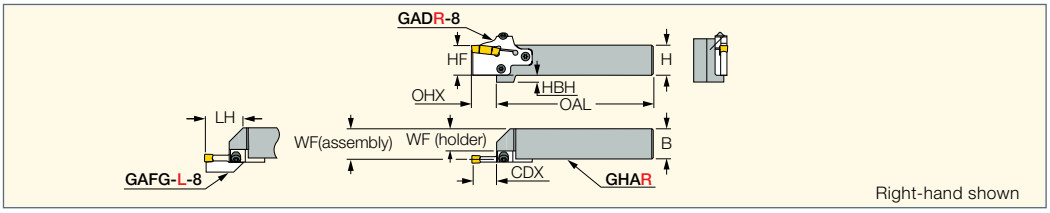
Designation			
GHDR/L 32-8-JHP	SR M6X25DIN912	HW 5.0(a)	PLG 1/8ISO1179

(a) For optional key with limited tightening torque see page 484

CUTGRIP

GHAR/L-8

External Holders for Grooving and Turning Adapters



Designation	H	HF	B	WF[1]	OAL	LF	LH	OHX[2]	HBH	TGA[3]	CDX[4]	FG[5]				
GHAR/L 25-8	25.0	25.0	25.0	16.0	124.50	109.50	45.0	25.50	14.0	GADR/L 8	25.50	GAFG...R/L-8	SR 14-519	T-20/5	SR M6X25DIN912	HW 5.0
GHAR/L 32-8	32.0	32.0	32.0	23.0	144.50	129.50	45.0	25.50	7.0	GADR/L 8	25.50	GAFG...R/L-8	SR 14-519	T-20/5	SR M6X25DIN912	HW 5.0

- Adapters GADR/L-8 for turning and grooving, GAFG-R/L-8 for face-grooving (to be ordered separately)

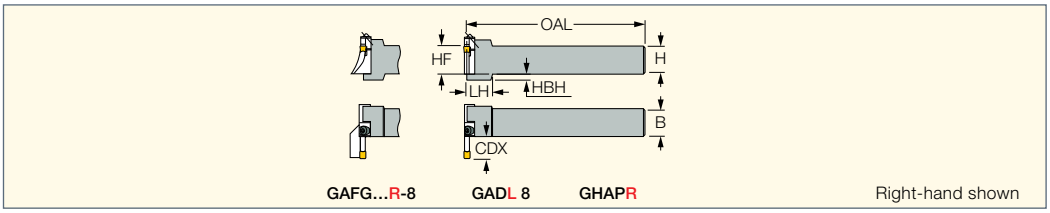
[1] WF(holder)
[2] Maximum overhang
[3] Adapter for Turning & Grooving
[4] See specific adapter dimensions
[5] Adapter for Face Grooving

For tools, see pages: GADR/L-8 (314) • GAFG-R/L-8 (661) • PCADR/L 34N-RE (354)

CUTGRIP

GHAPR/L-8

External Holders for Grooving and Turning With Perpendicularly Oriented Adapters



Designation	H	HF	B	OAL	LH	HBH	TGA[1]	CDX[2]	FG[3]				
GHAPR/L 32-8	32.0	32.0	32.0	155.00	30.0	7.0	GADR/L 8	25.50	GAFG...R/L-8	SR 14-519	T-20/5	SR M6X25DIN912	HW 5.0

- Adapters GADR/L-8 for turning and grooving, GAFG-R/L-8 for face-grooving (to be ordered separately)

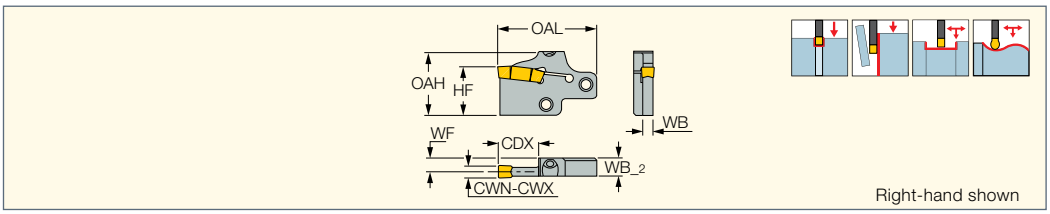
[1] Adapter for Turning & Grooving
[2] See specific adapter dimensions
[3] Adapter for Face Grooving

For tools, see pages: GADR/L-8 (314) • GAFG-R/L-8 (661) • PCADR/L 34N-RE (354)

CUTGRIP

GADR/L-8

Adapters for up to 25mm Deep Machining



Designation	CWN[1]	CWX[2]	CDX[3]	WB	HF	OAH	OAL	WB_2	WF
GADR/L 8	6.60	8.30	25.50	6.00	32.0	42.00	63.00	12.0	9.00

- For user guide, see pages 475-492

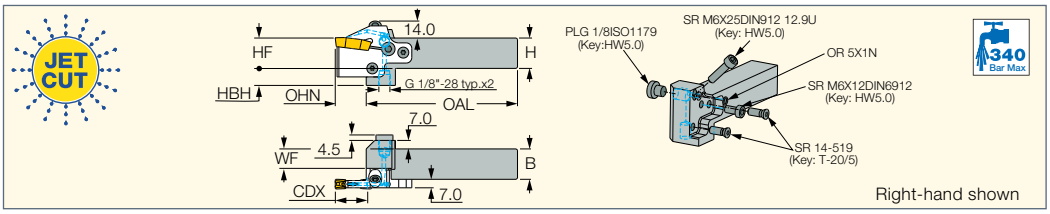
[1] Minimum cutting width
[2] Maximum cutting width
[3] Cutting depth maximum

For inserts, see pages: GDMA (332) • GDMF (317) • GDMM-CC (664) • GDMN (319) • GDMT (317) • GDMU (319) • GDMY (318) • GDMY (full radius) (320) • GDMY-F (321) • GIA-K (long pocket) (330) • GIF-E (W=8,10 full radius) (324) • GIF-E (W=8,10) (322) • GIPA/GIDA 8 (full radius) (334)
For holders, see pages: C#-GHAD-8 (699) • C#-GHAPR/L-8 (700) • GHAPR/L-8 (314) • GHAR/L-8 (314) • IM-GHAD-8 (708)

CUTGRIP

GHAR/L-JHP

Holders with High-Pressure Coolant Channels for Grooving and Turning Adapters



Designation	H	HF	B	WF	OAL	OHN(1)	HBH	CDX(2)
GHAR/L 25-8-JHP	25.0	25.0	25.0	16.0	124.50	25.00	14.0	25.50

- For user guide and accessories see pages 475-492

(1) Minimum overhang

(2) See specific adapter dimensions

For tools, see page: GADR/L-JHP (320)

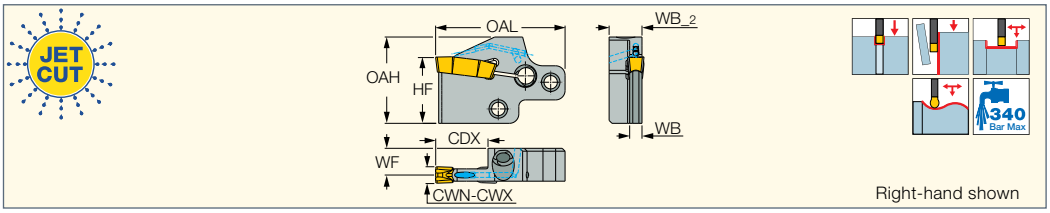
Spare Parts

Designation							
GHAR/L-JHP	SR 14-519	T-20/5	OR 5X1N	SR M6X12DIN6912	SR M6X25DIN912	PLG 1/8ISO1179	HW 5.0X120 MM

CUTGRIP

GADR/L-JHP

Adapters with High-Pressure Coolant Channels Carrying Groove-Turn Inserts for up to 25 mm Deep Machining



Designation	CWN(1)	CWX(2)	CDX(3)	WB	HF	OAH	OAL	WB_2	WF
GADR/L 8-JHP	6.60	8.30	25.50	6.00	32.0	42.00	63.00	17.0	14.00
GADR/L 10-JHP	8.60	10.30	25.50	7.40	32.0	42.00	63.00	17.7	14.00

- For user guide and accessories see pages 475-492

(1) Minimum cutting width

(2) Maximum cutting width

(3) Cutting depth maximum

For inserts, see pages: GDMA (337) • GDMF (322) • GDMM-CC (674) • GDMN (324) • GDMT (322) • GDMU (324) • GDMY (323) • GDMY (full radius) (325) • GDMY-F (326) • GDPY (328) • GIA-K (long pocket) (335) • GIF (long pocket) (333) • GIF-E (W=8,10 full radius) (329) • GIF-E (W=8,10) (327) • GIPA/GIDA 8 (full radius) (339)

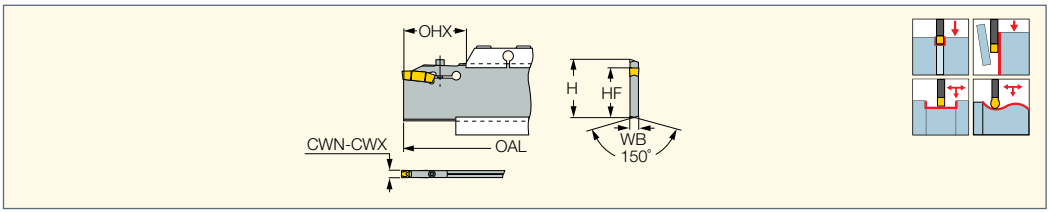
Flow Rate vs. Pressure

Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
GADR/L-JHP	15-17	23-25	27-29

CUTGRIP

CGHN-8-10D

Heavy Duty Deep Grooving and Turning Blades



Designation	CWN(1)	CWX(2)	OHX(3)	WB	HF	H	OAL		
CGHN 52-8D	8.00	8.30	50.0	7.40	45.0	52.6	190.00	SR 76-1637	HW 4.0
CGHN 53-8D	8.00	8.30	70.0	7.40	45.0	52.6	260.00	SR 76-1637	HW 4.0
CGHN 52-10D	10.00	11.00	70.0	9.20	45.0	52.6	190.00	SR 76-1289	HW 5.0
CGHN 53-10D	10.00	11.00	100.0	9.20	45.0	52.6	260.00	SR 76-1289	HW 5.0

- For user guide, see pages 475-492

(1) Minimum cutting width

(2) Maximum cutting width

(3) Minimum overhang • When using a double-ended insert, grooving depth is limited by the insert

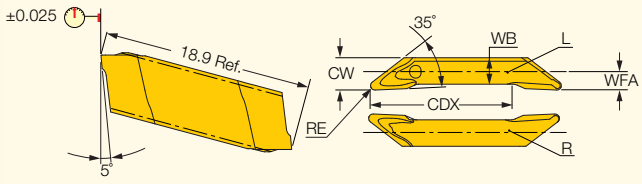
For inserts, see pages: GDMF (317) • GDMN (319) • GDMT (317) • GDMU (319) • GDMY (318) • GDMY (full radius) (320) • GDMY-F (321) • GDPY (323) • GIA-K (long pocket) (330) • GIF (long pocket) (328) • GIF-E (W=8,10 full radius) (324) • GIF-E (W=8,10) (322) • GIPA/GIDA 8 (full radius) (334)

For holders, see pages: SGTBK (691) • SGTBU/SGTBN (690)

CUTVGRIP

GIVR/L
Double-Edged Groove-Turn Inserts for Back Turning, Undercutting and Profiling





Designation	Dimensions RE	RETOL(1)	CW	CDX	WB	WFA	IC808	Recommended Machining Data a_p (mm)	f turn (mm/rev)
GIVR/L 302-F1M-12P	0.20	0.030	2.80	12.80	2.40	1.53	●	0.10-1.50	0.05-0.30
GIVR/L 304-F1M-12P	0.40	0.030	2.93	12.80	2.40	1.66	●	0.10-1.50	0.05-0.30

NEW

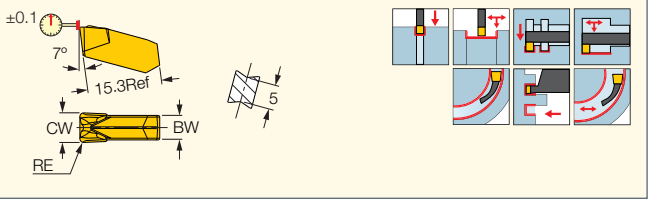
(1) Corner radius tolerance (+/-)

For tools, see pages: C#-GHDR/L (301) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-S (309) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHMPR/L (300) • GHMR/L (300) • GHMUR/L (335) • GHSR/L (428) • GHSR/L-JHP-SL (429) • NQCH-GHSR/L-JHP (428)

CUTGRIP

GIMT
Utility Single-Ended Inserts for Grooving and Turning





Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	Tough ↔ Hard IC830	IC8250	IC808	IC07	IC806	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIMT 302	3.00	0.20	0.050	0.050	2.40	●	●	●	●	●	0.50-1.80	0.10-0.22	0.07-0.15
GIMT 304	3.00	0.40	0.050	0.050	2.40	●	●	●	●	●	0.50-1.80	0.10-0.22	0.07-0.15
GIMT 402	4.00	0.20	0.050	0.050	3.40	●	●	●	●	●	0.50-2.40	0.15-0.25	0.09-0.20
GIMT 404	4.00	0.40	0.050	0.050	3.40	●	●	●	●	●	0.50-2.40	0.15-0.25	0.09-0.20
GIMT 508	5.00	0.80	0.050	0.050	4.00	●	●	●	●	●	1.00-3.00	0.20-0.35	0.11-0.22
GIMT 608	6.00	0.80	0.050	0.050	5.00	●	●	●	●	●	1.00-3.60	0.22-0.40	0.13-0.25
GIMT 808	8.00	0.80	0.050	0.050	6.00	●	●	●		●	1.00-4.80	0.32-0.56	0.18-0.34
GIMT 1008	10.00	0.80	0.050	0.050	8.00	●		●		●	1.00-6.00	0.35-0.65	0.22-0.40

• DMIN for internal applications = 70 mm • For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

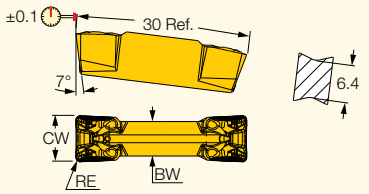
(2) Corner radius tolerance (+/-)

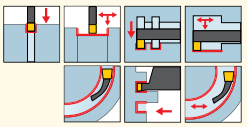
For tools, see pages: Anti-Vibration Blades (312) • C#-GHDR/L (301) • CGFG 51-P8 (661) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-P8 (311) • CGHN-S (309) • CGHR/L-P8DG (311) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300) • GHSR/L (428) • GHSR/L-JHP-SL (429) • NQCH-GHSR/L-JHP (428)

CUTGRIP

GDMT
Utility Double-Ended Inserts
for Grooving and Turning







Designation	Dimensions CW	CWTOL(1)	RE	RETOL(2)	BW	Tough ↔ Hard IC830	IC8250	IC808	IC806	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GDMT 808	8.00	0.050	0.80	0.050	6.00	●	●	●	●	1.00-4.80	0.32-0.56	0.18-0.34

NEW

- For cutting speed recommendations and user guide, see pages 475-492

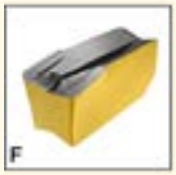
(1) Cutting width tolerance (+/-)

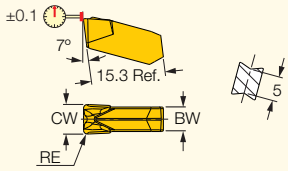
(2) Corner radius tolerance (+/-)

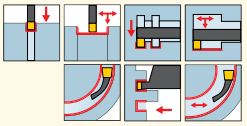
For tools, see pages: C#-GHDR/L (301) • CGHN-8-10D (315) • GADR/L-8 (314) • GADR/L-JHP (315) • GAFG-R/L-8 (661) • GHDR/L (long pocket) (313) • GHDR/L-JHP (long pocket) (313) • GHFG-R/L-8 (659) • GHFGR/L-8 (659) • GHIR/L (W=7.0-8.3) (398)

CUTGRIP

GIMF
Utility Single-Ended Inserts
for Grooving and Turning







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	Tough ↔ Hard IC830	IC8250	IC808	IC908	IC20	IC5010	IC428	IC806	IC907	IC4	IC804	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIMF 406	4.00	0.60	0.050	0.050	3.40	●	●	●	●	●	●	●	●	●	●	●	0.75-2.40	0.19-0.25	0.09-0.16
GIMF 502	5.00	0.20	0.050	0.050	4.00		●			●							0.25-3.00	0.18-0.26	0.11-0.18
GIMF 508	5.00	0.80	0.050	0.050	4.00	●	●	●	●	●	●	●	●		●	●	1.00-3.00	0.23-0.35	0.11-0.21
GIMF 605	6.00	0.50	0.050	0.050	5.00	●		●									0.60-3.60	0.22-0.36	0.13-0.23
GIMF 608	6.00	0.80	0.050	0.050	5.00	●	●	●	●	●	●		●		●	●	1.00-3.60	0.24-0.42	0.13-0.25
GIMF 808	8.00	0.80	0.050	0.050	6.00	●	●	●									1.00-4.80	0.32-0.56	0.18-0.34

- DMIN for internal applications = 70 mm • For cutting speed recommendations and user guide, see pages 475-492

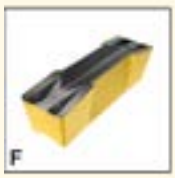
(1) Cutting width tolerance (+/-)

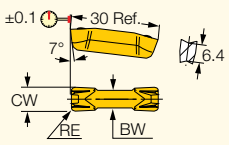
(2) Corner radius tolerance (+/-)

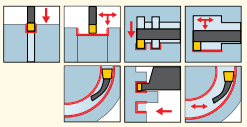
For tools, see pages: Anti-Vibration Blades (312) • C#-GHDR/L (301) • CGFG 51-P8 (661) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-P8 (311) • CGHN-S (309) • CGHR/L-P8DG (311) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300)

CUTGRIP

GDMF
Utility Double-Ended Inserts
for Grooving and Turning







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	BW	Tough ↔ Hard IC830	IC8250	IC808	IC5010	IC428	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GDMF 808	8.00	0.80	0.050	0.050	27.00	6.00	●	●	●	●	●	1.00-4.80	0.32-0.56	0.18-0.34

- DMIN for internal machining = 65 mm • For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

(3) Cutting depth maximum

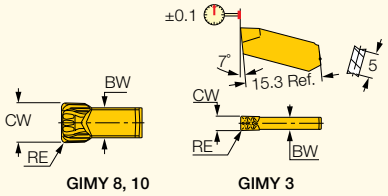
For tools, see pages: C#-GHDR/L (301) • CGHN-8-10D (315) • GADR/L-8 (314) • GADR/L-JHP (315) • GAFG-R/L-8 (661) • GHDR/L (long pocket) (313) • GHDR/L-JHP (long pocket) (313) • GHFG-R/L-8 (659) • GHFGR/L-8 (659) • GHIR/L (W=7.0-8.3) (398)

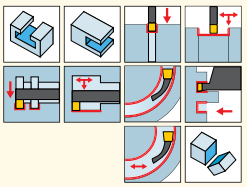
CUTGRIP

GIMY

Utility Single-Ended Inserts for Grooving and Turning







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	Tough ↔ Hard IC830	IC8250	IC808	IC908	IC20	IC806	IC4	IC804	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIMY 304	3.00	0.40	0.050	0.050	2.40	●	●			●	●	●	●	0.50-1.80	0.16-0.20	0.07-0.12
GIMY 808	8.00	0.80	0.050	0.050	6.00	●	●	●	●	●	●			1.00-4.80	0.32-0.56	0.18-0.34
GIMY 1008	10.00	0.80	0.050	0.050	8.00	●		●						1.00-4.60	0.35-0.65	0.22-0.40

• DMIN for internal applications =70 mm • For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

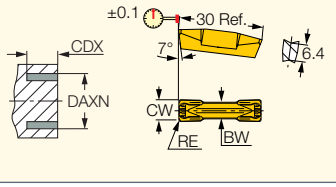
For tools, see pages: Anti-Vibration Blades (312) • C#-GHDR/L (301) • CGFG 51-P8 (661) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-P8 (311) • CGHN-S (309) • CGHR/L-P8DG (311) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300) • GHSR/L (428) • GHSR/L-JHP-SL (429) • NQCH-GHSR/L-JHP (428)

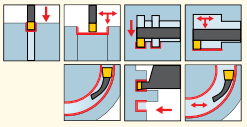
CUTGRIP

GDMY

Utility Double-Ended Inserts for Grooving and Turning







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	DAXN(3)	CDX(4)	Tough ↔ Hard IC830	IC8250	IC808	IC908	IC20	IC5010	IC428	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GDMY 808	8.00	0.80	0.050	0.050	6.00	50.0	27.00	●	●	●	●	●	●	●	1.00-4.80	0.32-0.56	0.18-0.34

• DMIN for internal machining = 65 mm • For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

(3) Minimum axial grooving diameter

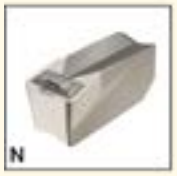
(4) Cutting depth maximum

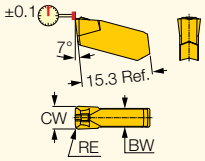
For tools, see pages: C#-GHDR/L (301) • CGHN-8-10D (315) • GADR/L-8 (314) • GADR/L-JHP (315) • GAFG-R/L-8 (661) • GHDR/L (long pocket) (313) • GHDR/L-JHP (long pocket) (313) • GHFG-R/L-8 (659) • GHFGR/L-8 (659) • GHIR/L (W=7.0-8.3) (398)

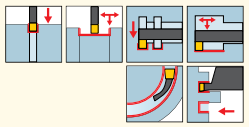
CUTGRIP

GIMN

Utility Single-Ended Inserts for Grooving and Turning Ductile Materials







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	Tough ↔ Hard IC908	IC907	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIMN 302	3.00	0.20	0.050	0.050	2.40		•	0.30-1.20	0.07-0.11	0.04-0.09
GIMN 406	4.00	0.60	0.050	0.050	3.40		•	0.75-1.60	0.11-0.18	0.05-0.14
GIMN 508	5.00	0.80	0.050	0.050	4.10	•	•	1.00-2.00	0.15-0.25	0.06-0.18
GIMN 608	6.00	0.80	0.050	0.050	5.00		•	1.00-2.40	0.18-0.30	0.07-0.22

• DMIN for internal applications = 70 mm • For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

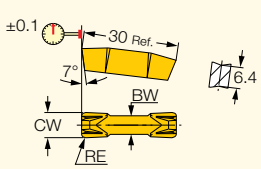
For tools, see pages: Anti-Vibration Blades (312) • C#-GHDR/L (301) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-S (309) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300)

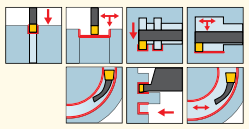
CUTGRIP

GDMN

Utility Double-Ended Inserts for Grooving and Turning Ductile Materials







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	BW	Tough ↔ Hard IC830	IC8250	IC808	IC907	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GDMN 808	8.00	0.80	0.050	0.050	27.00	6.00	•	•	•	•	1.00-3.20	0.20-0.35	0.10-0.30

• DMIN for internal machining = 65 mm • For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

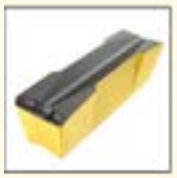
(3) Cutting depth maximum

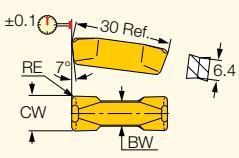
For tools, see pages: C#-GHDR/L (301) • CGHN-8-10D (315) • GADR/L-8 (314) • GADR/L-JHP (315) • GAFG-R/L-8 (661) • GHDR/L (long pocket) (313) • GHDR/L-JHP (long pocket) (313) • GHFG-R/L-8 (659) • GHFGR/L-8 (659) • GHIR/L (W=7.0-8.3) (398)

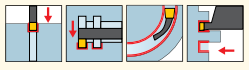
CUTGRIP

GDMU

Utility Inserts for Heavy Grooving on Ductile Materials







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	Tough ↔ Hard IC830	IC8250	Recommended Machining Data f groove (mm/rev)
GDMU 808	8.00	0.80	0.050	0.050	6.00	•	•	0.10-0.24

• For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

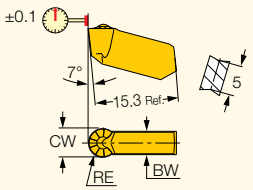
(2) Corner radius tolerance (+/-)

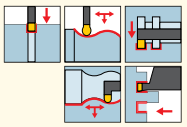
For tools, see pages: C#-GHDR/L (301) • CGHN-8-10D (315) • GADR/L-8 (314) • GADR/L-JHP (315) • GAFG-R/L-8 (661) • GHDR/L (long pocket) (313) • GHDR/L-JHP (long pocket) (313) • GHFG-R/L-8 (659) • GHFGR/L-8 (659) • GHIR/L (W=7.0-8.3) (398)

CUTGRIP

GIMY (full radius)
Utility Single-Ended Inserts for Grooving and Profiling







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	Tough ↔ Hard IC830	IC8250	IC808	IC908	IC20	IC20N	IC806	IC804	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIMY 315	3.00	1.50	0.050	0.050	2.40	●	●	●	●	●	●	●	●	0.00-1.50	0.18-0.26	0.07-0.13
GIMY 420	4.00	2.00	0.050	0.050	3.20	●	●	●	●	●	●	●	●	0.00-2.00	0.20-0.28	0.09-0.17
GIMY 525	5.00	2.50	0.050	0.050	3.90	●	●	●	●	●	●	●	●	0.00-2.50	0.23-0.42	0.11-0.21
GIMY 630	6.00	3.00	0.050	0.050	5.00	●	●	●	●	●	●	●	●	0.00-3.00	0.24-0.50	0.13-0.25
GIMY 635-318	6.35	3.18	0.050	0.050	5.10	●	●	●		●				0.00-3.10	0.25-0.53	0.14-0.27
GIMY 840	8.00	4.00	0.050	0.050	5.60	●	●	●	●	●				0.00-4.00	0.32-0.67	0.18-0.34

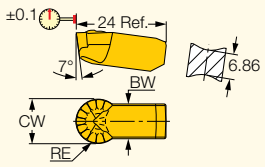
• DMIN for internal application=70 mm • Can cut arcs to 250° • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)

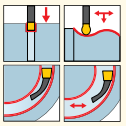
For tools, see pages: Anti-Vibration Blades (312) • C#-GHDR/L (301) • CGFG 51-P8 (661) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-P8 (311) • CGHN-S (309) • CGHR/L-P8DG (311) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300) • GHSR/L (428) • GHSR/L-JHP-SL (429) • NQCH-GHSR/L-JHP (428)

CUTGRIP

GIMY 1260
Utility Single-Ended Inserts for External Grooving and Profiling







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	Tough ↔ Hard IC830	IC8250	IC808	IC908	IC20	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIMY 1260	12.00	6.00	0.050	0.050	9.50	●	●	●	●	●	0.00-6.00	0.42-0.86	0.26-0.45

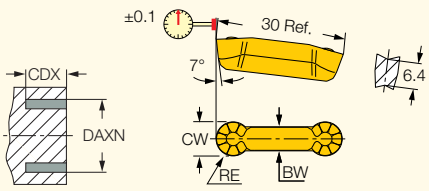
• Toolholder seat needs to be modified according to insert profile to ensure clearance • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)

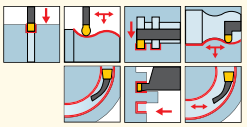
For tools, see pages: CGHR/L-12-14D (375) • GHDR/L/N 12/14 (375)

CUTGRIP

GDMY (full radius)
Utility Double-Ended Full Radius Inserts for Grooving and Profiling







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	DAXN(3)	CDX	Tough ↔ Hard IC830	IC8250	IC808	IC908	IC20	IC5010	IC428	IC806	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GDMY 840	8.00	4.00	0.050	0.050	5.60	50.0	25.00	●	●	●	●	●	●	●	●	0.00-4.00	0.32-0.67	0.18-0.34

• Can cut arcs to 250° • DMIN for internal machining = 65 mm • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Minimum axial grooving diameter

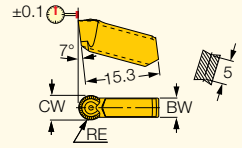
For tools, see pages: C#-GHDR/L (301) • CGHN-8-10D (315) • GADR/L-8 (314) • GADR/L-JHP (315) • GAFG-R/L-8 (661) • GHDKR/L (503) • GHDR/L (long pocket) (313) • GHDR/L-JHP (long pocket) (313) • GHFG-R/L-8 (659) • GHFGR/L-8 (659) • GHIR/L (W=7.0-8.3) (398)

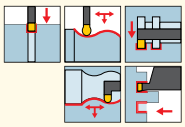
CUTGRIP

GIMY-F

Utility Single-Ended Inserts
for Grooving and Profiling
Ductile Materials







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	Tough ↔ Hard IC8250	IC808	IC908	IC806	IC804	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIMY 315F	3.00	1.50	0.050	0.050	2.40		•				0.00-1.50	0.18-0.26	0.07-0.13
GIMY 525F	5.00	2.50	0.050	0.050	3.90		•		•		0.00-2.50	0.23-0.42	0.11-0.21
GIMY 630F	6.00	3.00	0.050	0.050	5.00		•	•	•	•	0.00-3.00	0.24-0.50	0.13-0.25
GIMY 840F	8.00	4.00	0.050	0.050	5.60	•					0.00-4.00	0.32-0.67	0.18-0.34

• DMIN for internal applications =70 mm • Can cut arcs to 250° • For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

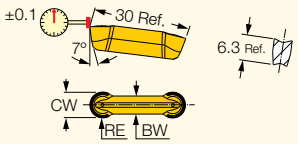
For tools, see pages: Anti-Vibration Blades (312) • C#-GHDR/L (301) • CGFG 51-P8 (661) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-P8 (311) • CGHN-S (309) • CGHR/L-P8DG (311) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300) • GHSR/L (428) • GHSR/L-JHP-SL (429) • NQCH-GHSR/L-JHP (428)

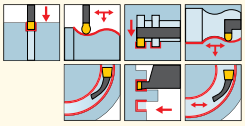
CUTGRIP

GDMY-F

Utility Double-Ended Inserts
for Grooving and Profiling
Ductile Materials







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	CDX(3)	Tough ↔ Hard IC808	IC908	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GDMY 840F	8.00	4.00	0.050	0.050	5.60	25.00	•	•	0.00-4.00	0.32-0.67	0.18-0.34

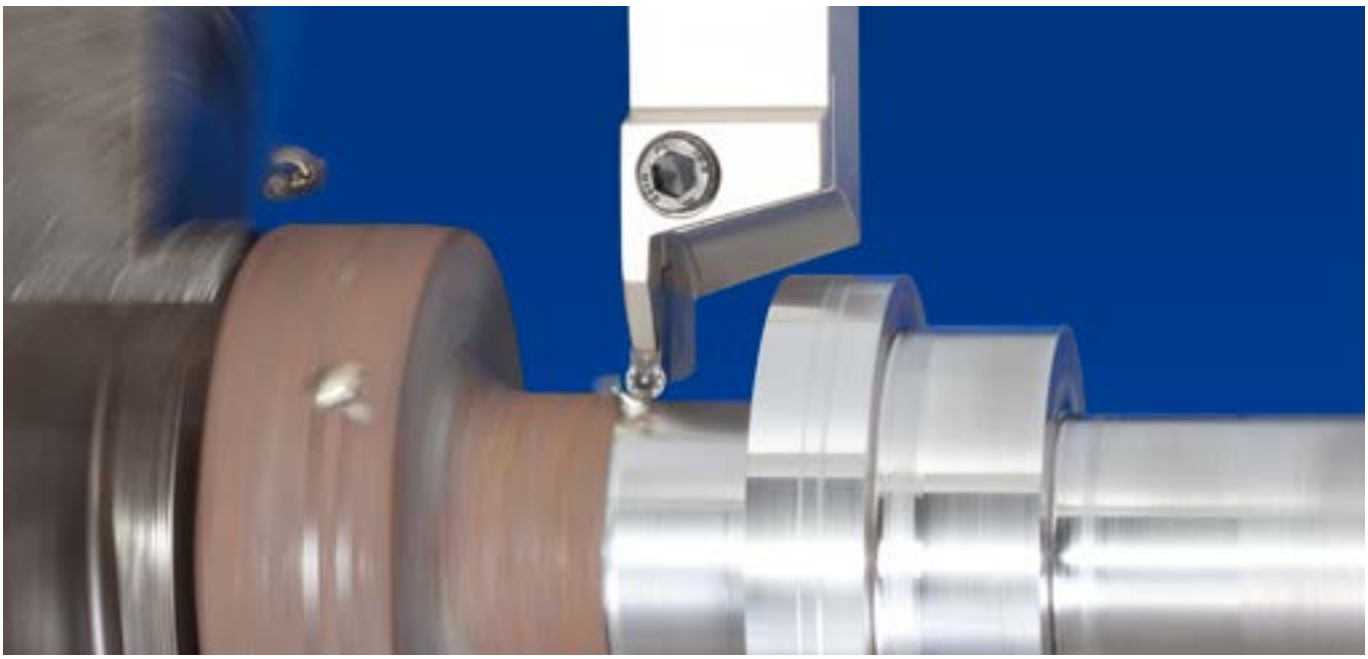
• DMIN for internal applications = 65 mm • For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

(3) Cutting depth maximum

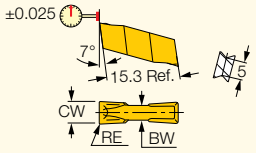
For tools, see pages: C#-GHDR/L (301) • CGHN-8-10D (315) • GADR/L-8 (314) • GADR/L-JHP (315) • GAFG-R/L-8 (661) • GHDR/L (long pocket) (313) • GHDR/L-JHP (long pocket) (313) • GHFG-R/L-8 (659) • GHFGR/L-8 (659) • GHIR/L (W=7.0-8.3) (398)

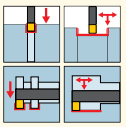


CUTGRIP

GIF-E (W=4-6)
Precision Double-Ended Inserts for Grooving and Turning







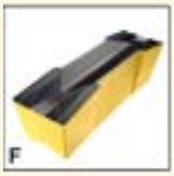
Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	CDX(3)	Tough ↔ Hard IC830	IC8250	IC808	IC908	IC20	IC807	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIF 4.00E-0.40	4.00	0.40	0.020	0.030	3.20	13.00	●	●	●	●	●	●	0.50-2.40	0.18-0.24	0.09-0.15
GIF 4.00E-0.60	4.00	0.60	0.020	0.050	3.20	13.00	●	●			●		0.75-2.40	0.19-0.25	0.09-0.16
GIF 4.00E-0.80	4.00	0.80	0.020	0.050	3.20	13.00	●	●	●	●	●	●	1.00-2.40	0.20-0.28	0.09-0.17
GIF 5.00E-0.40	5.00	0.40	0.020	0.030	4.00	13.00	●	●	●		●		0.50-3.00	0.20-0.30	0.11-0.19
GIF 5.00E-0.60	5.00	0.60	0.020	0.050	4.00	13.00	●	●			●		0.75-3.00	0.21-0.32	0.11-0.20
GIF 5.00E-0.80	5.00	0.80	0.020	0.050	4.00	13.00	●	●	●	●	●	●	1.00-3.00	0.23-0.35	0.11-0.21
GIF 6.00E-0.40	6.00	0.40	0.020	0.030	4.80	13.00	●	●	●		●		0.50-3.60	0.22-0.36	0.13-0.23
GIF 6.00E-0.80	6.00	0.80	0.020	0.050	4.80	13.00	●	●	●	●	●		1.00-3.60	0.24-0.42	0.13-0.25
GIF 6.00E-1.20	6.00	1.20	0.020	0.050	4.80	13.00		●			●		1.45-3.60	0.24-0.46	0.13-0.25

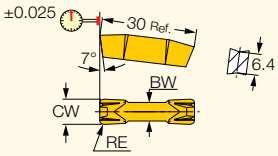
• DMIN for internal machining = 70 mm • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

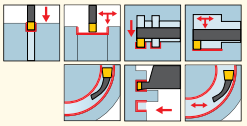
For tools, see pages: Anti-Vibration Blades (312) • C#-GHDR/L (301) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-S (309) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300) • GHSR/L-JHP-SL (429)

CUTGRIP

GIF-E (W=8,10)
Precision Double-Ended Inserts for Grooving and Turning







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	CDX(3)	Tough ↔ Hard IC830	IC8250	IC808	IC908	IC20	IC5010	IC428	IC806	IC807	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIF 8.00E-0.40	8.00	0.40	0.020	0.030	6.00	27.00		●	●	●						0.50-4.80	0.29-0.48	0.18-0.31
GIF 8.00E-0.80	8.00	0.80	0.020	0.050	6.00	27.00	●	●	●	●	●	●	●	●	●	1.00-4.80	0.32-0.56	0.18-0.34
GIF 8.00E-1.20	8.00	1.20	0.020	0.050	6.00	27.00	●	●	●	●	●	●	●			1.45-4.80	0.32-0.62	0.18-0.34
GIF 10.00E-0.80	10.00	0.80	0.020	0.050	8.00	27.00	●	●	●	●	●	●	●		●	1.00-6.00	0.35-0.65	0.22-0.40
GIF 10.00E-1.20	10.00	1.20	0.020	0.050	8.00	27.00	●	●	●	●	●			●		1.45-6.00	0.35-0.72	0.22-0.40

• DMIN for internal machining = 65 mm • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

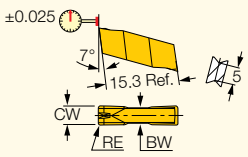
For tools, see pages: C#-GHDR/L (301) • CGHN-8-10D (315) • GADR/L-8 (314) • GADR/L-JHP (315) • GAFG-R/L-8 (661) • GHDR/L (long pocket) (313) • GHDR/L-JHP (long pocket) (313) • GHFG-R/L-8 (659) • GHFGR/L-8 (659) • GHIR/L (W=7.0-8.3) (398)

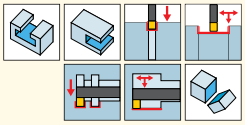
CUTGRIP

GIP-E

Precision Double-Ended Inserts for Grooving and Turning







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	CDX(3)	Tough ↔ Hard IC830	IC8250	IC808	IC908	IC20	IC20N	IC5010	IC428	IC806	IC807	IC804	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIP 3.00E-0.00	3.00	0.00	0.020	0.030	2.40	13.00	●											0.00-1.80	0.12-0.16	0.07-0.11
GIP 3.00E-0.20	3.00	0.20	0.020	0.030	2.40	13.00	●	●	●	●		●			●	●	●	0.25-1.80	0.15-0.20	0.08-0.13
GIP 3.00E-0.40	3.00	0.40	0.020	0.030	2.40	13.00	●	●	●	●	●	●	●	●	●	●		0.50-1.80	0.17-0.22	0.08-0.14
GIP 3.00E-0.80	3.00	0.80	0.020	0.050	2.40	13.00		●										1.00-1.80	0.19-0.26	0.08-0.15
GIP 4.00E-0.40	4.00	0.40	0.020	0.030	3.20	13.00	●	●	●	●	●	●	●	●	●	●	●	0.50-2.40	0.19-0.26	0.10-0.18
GIP 4.00E-0.60	4.00	0.60	0.020	0.050	3.20	13.00	●	●	●	●	●		●	●				0.75-2.40	0.21-0.28	0.10-0.19
GIP 4.00E-0.80	4.00	0.80	0.020	0.050	3.20	13.00	●	●	●	●	●		●	●	●	●		1.00-2.40	0.22-0.31	0.10-0.20
GIP 4.78E-0.55	4.78	0.55	0.020	0.050	4.00	13.00	●	●	●		●		●	●				0.70-2.80	0.21-0.31	0.12-0.20
GIP 5.00E-0.40	5.00	0.40	0.020	0.030	4.00	13.00	●	●	●		●				●			0.50-3.00	0.22-0.33	0.13-0.21
GIP 5.00E-0.60	5.00	0.60	0.020	0.050	4.00	13.00	●	●	●		●	●						0.75-3.00	0.23-0.35	0.13-0.22
GIP 5.00E-0.80	5.00	0.80	0.020	0.050	4.00	13.00	●	●	●		●		●	●				1.00-3.00	0.24-0.39	0.13-0.23
GIP 5.55E-0.55	5.55	0.55	0.020	0.050	4.80	13.00		●										0.70-3.30	0.21-0.36	0.14-0.23
GIP 6.00E-0.80	6.00	0.80	0.020	0.050	4.80	13.00		●	●		●		●	●				1.00-3.60	0.26-0.46	0.15-0.27
GIP 6.00E-1.20	6.00	1.20	0.020	0.050	4.80	13.00		●			●							1.45-3.60	0.26-0.51	0.15-0.27
GIP 6.35E-0.80	6.35	0.80	0.020	0.050	4.80	13.00	●	●	●		●							1.00-3.80	0.27-0.49	0.16-0.29

• DMIN for internal machining = 70 mm • For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

(3) Cutting depth maximum

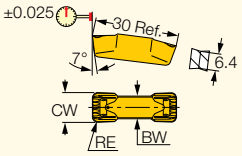
For tools, see pages: Anti-Vibration Blades (312) • C#-GHDR/L (301) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-S (309) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300) • GHSR/L (428) • GHSR/L-JHP-SL (429) • NQCH-GHSR/L-JHP (428)

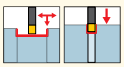
CUTGRIP

GDPY

Precision Double-Ended Inserts for External Heavy-Duty Grooving and Turning







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	Tough ↔ Hard IC830	IC8250	IC20	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GDPY 10.00-0.80	10.00	0.80	0.020	0.050	8.00	●	●	●	1.00-6.00	0.35-0.65	0.22-0.40
GDPY 10.00-1.20	10.00	1.20	0.020	0.050	8.00	●			1.45-6.00	0.45-0.80	0.22-0.40
GDPY 10.00-2.00	10.00	2.00	0.020	0.050	8.00	●		●	2.40-6.00	0.35-0.78	0.22-0.40
GDPY 11.00-1.20	11.00	1.20	0.020	0.050	8.00	●			1.45-6.60	0.39-0.73	0.24-0.41
GDPY 11.00-2.00	11.00	2.00	0.020	0.050	8.00	●			2.40-6.60	0.39-0.79	0.24-0.41

• For cutting speed recommendations and user guide, see pages 475-492

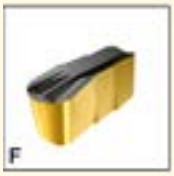
(1) Cutting width tolerance (+/-)

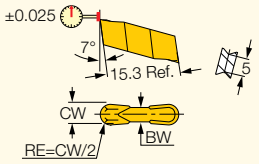
(2) Corner radius tolerance (+/-)

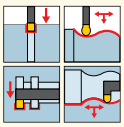
For tools, see pages: CGHN-8-10D (315) • GADR/L-JHP (315) • GHDR/L (long pocket) (313)

CUTGRIP

GIF-E (W=4-6 full radius)
Precision Double-Ended
Full Radius Inserts for
Profiling and Grooving







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	CDX(3)	Tough ↔ Hard IC830	IC8250	IC808	IC20	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIF 4.00E-2.00	4.00	2.00	0.020	0.050	3.20	11.80	●	●	●	●	0.00-2.00	0.20-0.34	0.09-0.17
GIF 5.00E-2.50	5.00	2.50	0.020	0.050	4.00	11.30	●	●		●	0.00-2.50	0.23-0.42	0.11-0.21
GIF 6.00E-3.00	6.00	3.00	0.020	0.050	4.80	10.80	●	●		●	0.00-3.00	0.24-0.50	0.13-0.25

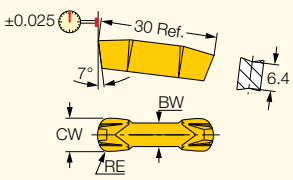
• DMIN for internal machining = 70 mm • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

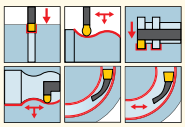
For tools, see pages: Anti-Vibration Blades (312) • C#-GHDR/L (301) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-S (309) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300)

CUTGRIP

GIF-E (W=8,10 full radius)
Precision Double-Ended
Full Radius Inserts for
Profiling and Grooving







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	Tough ↔ Hard IC830	IC8250	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIF 8.00E-4.00	8.00	4.00	0.020	0.050	6.00		●	0.00-4.00	0.32-0.67	0.18-0.34
GIF 10.00E-5.00	10.00	5.00	0.020	0.050	8.00	●	●	0.00-5.00	0.35-0.78	0.22-0.40

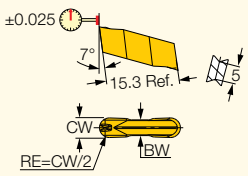
• DMIN for internal machining = 65 mm • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)

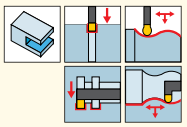
For tools, see pages: C#-GHDR/L (301) • CGHN-8-10D (315) • GADR/L-8 (314) • GADR/L-JHP (315) • GAFG-R/L-8 (661) • GHDR/L (long pocket) (313) • GHDR/L-JHP (long pocket) (313) • GHFG-R/L-8 (659) • GHFGR/L-8 (659) • GHIR/L (W=7.0-8.3) (398)

CUTGRIP

GIP-E (full radius)
Precision Double-Ended Full Radius Inserts for Profiling and Grooving







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	CDX(3)	Tough ↔ Hard IC830	IC8250	IC808	IC908	IC20	IC5010	IC428	IC807	IC804	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIP 3.00E-1.50	3.00	1.50	0.020	0.050	2.40	12.30	●	●	●	●	●			●	●	0.00-1.50	0.18-0.28	0.08-0.15
GIP 4.00E-2.00	4.00	2.00	0.020	0.050	3.20	11.80	●	●	●	●	●	●	●	●		0.00-2.00	0.20-0.34	0.10-0.20
GIP 5.00E-2.50	5.00	2.50	0.020	0.050	4.00	11.30		●			●	●	●			0.00-2.50	0.25-0.42	0.13-0.23
GIP 6.00E-3.00	6.00	3.00	0.020	0.050	4.80	10.80		●			●					0.00-3.00	0.27-0.54	0.15-0.27
GIP 6.35E-3.18	6.35	3.18	0.020	0.050	4.80	10.63		●			●					0.00-3.10	0.29-0.57	0.16-0.29

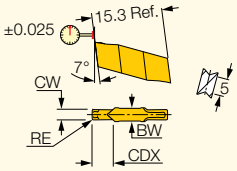
• DMIN for internal machining = 70 mm • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

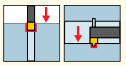
For tools, see pages: C#-GHDR/L (301) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-S (309) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300) • GHSR/L (428) • GHSR/L-JHP-SL (429) • NQCH-GHSR/L-JHP (428)

CUTGRIP

GIP (flat top CW<BW)
Flat Top Precision Double-Ended Inserts for Grooving







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	BW	Tough ↔ Hard IC830	IC54	IC808	IC908	IC20	IC20N	IC807	Recommended Machining Data f groove (mm/rev)
GIP 0.50-0.00	0.50	0.00	0.020	0.030	1.00	2.20		●	●		●			0.02-0.04
GIP 0.80-0.00	0.80	0.00	0.020	0.030	1.60	2.20		●	●		●			0.02-0.04
GIP 1.04-0.00	1.04	0.00	0.020	0.030	2.00	2.20	●		●	●	●		●	0.02-0.05
GIP 1.20-0.00	1.20	0.00	0.020	0.030	2.00	2.20	●		●	●	●		●	0.03-0.05
GIP 1.40-0.00	1.40	0.00	0.020	0.030	2.00	2.20	●		●	●	●			0.03-0.06
GIP 1.47-0.00	1.47	0.00	0.020	0.030	2.50	2.20	●		●	●	●			0.03-0.06
GIP 1.57-0.15	1.57	0.15	0.020	0.030	2.70	2.20	●		●	●	●		●	0.04-0.06
GIP 1.70-0.10	1.70	0.10	0.020	0.030	3.00	2.20	●		●	●	●	●		0.04-0.07
GIP 1.78-0.18	1.78	0.18	0.020	0.030	3.00	2.20	●		●	●	●			0.04-0.07
GIP 1.96-0.15	1.96	0.15	0.020	0.030	3.00	2.20	●	●	●	●	●	●	●	0.04-0.08

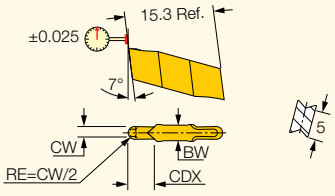
• DMIN for internal machining = 70 mm • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

For tools, see pages: GHDR/L (short pocket) (302) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300)

CUTGRIP

GIP (full radius CW<BW)
Flat Top Precision
Double-Ended Inserts with
Full Radius for Grooving





Designation	Dimensions						Tough ↔ Hard						Recommended Machining Data
	CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	BW	IC830	IC808	IC908	IC20	IC806	IC807	f groove (mm/rev)
GIP 1.00-0.50	1.00	0.50	0.020	0.050	2.00	2.20		●	●			●	0.03-0.06
GIP 1.40-0.70	1.40	0.70	0.020	0.050	2.00	2.20		●	●				0.04-0.07
GIP 1.57-0.79	1.57	0.79	0.020	0.050	2.70	2.20	●	●	●	●		●	0.04-0.08
GIP 2.00-1.00	2.00	1.00	0.020	0.050	3.00	2.20	●	●	●	●	●	●	0.05-0.11
GIP 2.39-1.20	2.39	1.20	0.020	0.050	4.70	2.40		●	●	●		●	0.06-0.12

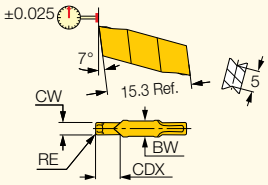
• DMIN for internal machining = 70 mm • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

For tools, see pages: GHDR/L (short pocket) (302) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300) • GHSR/L (428) • GHSR/L-JHP-SL (429) • NQCH-GHSR/L-JHP (428)

CUTGRIP

GIG
Precision Double-Ended
Inserts for Grooving





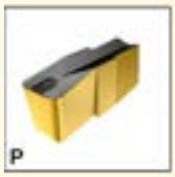
Designation	Dimensions						Tough ↔ Hard			Recommended Machining Data
	CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	BW	IC830	IC808	IC20	f groove (mm/rev)
GIG 1.04-0.00	1.04	0.00	0.020	0.030	2.00	2.20		●		0.02-0.03
GIG 1.20-0.00	1.20	0.00	0.020	0.030	2.00	2.20		●		0.02-0.03
GIG 1.25-0.10	1.25	0.10	0.020	0.030	2.00	2.20	●	●		0.02-0.04
GIG 1.40-0.00	1.40	0.00	0.020	0.030	2.00	2.20		●		0.02-0.04
GIG 1.45-0.10	1.45	0.10	0.020	0.030	2.00	2.20	●	●		0.02-0.04
GIG 1.47-0.00	1.47	0.00	0.020	0.030	2.50	2.20		●		0.02-0.04
GIG 1.50-0.10	1.50	0.10	0.020	0.030	2.50	2.20	●	●		0.02-0.04
GIG 1.57-0.15	1.57	0.15	0.020	0.030	2.70	2.20		●		0.03-0.05
GIG 1.70-0.10	1.70	0.10	0.020	0.030	3.00	2.20		●		0.03-0.05
GIG 1.78-0.18	1.78	0.18	0.020	0.030	3.00	2.20		●		0.03-0.05
GIG 1.85-0.15	1.85	0.15	0.020	0.030	3.00	2.20	●	●		0.03-0.05
GIG 1.86-0.15	1.86	0.15	0.020	0.030	3.00	2.20		●		0.03-0.05
GIG 1.96-0.15	1.96	0.15	0.020	0.030	3.00	2.20		●		0.03-0.06
GIG 2.00-0.20	2.00	0.20	0.020	0.030	3.00	2.20	●	●	●	0.04-0.06
GIG 2.22-0.15	2.22	0.15	0.020	0.030	3.50	2.20		●		0.04-0.06
GIG 2.30-0.20	2.30	0.20	0.020	0.030	3.50	2.20	●	●		0.04-0.07

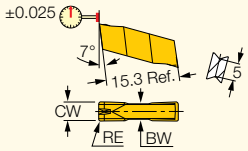
• DMIN for internal machining = 70 mm • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

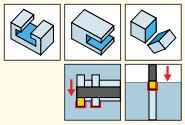
For tools, see pages: GHDR/L (short pocket) (302) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300) • GHSR/L (428) • GHSR/L-JHP-SL (429) • NQCH-GHSR/L-JHP (428)

CUTGRIP

GIP
Precision Double-Ended Inserts for Grooving







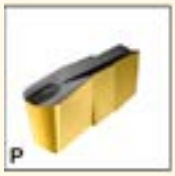
Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	BW	Tough ↔ Hard IC830	IC8250	IC808	IC908	IC20	IC20N	IC806	IC807	Recommended Machining Data f groove (mm/rev)
GIP 2.22-0.15	2.22	0.15	0.020	0.030	3.50	2.20	•		•	•	•			•	0.05-0.09
GIP 2.39-0.15	2.39	0.15	0.020	0.030	4.70	2.40	•		•	•	•			•	0.05-0.09
GIP 2.47-0.20	2.47	0.20	0.020	0.030	5.00	2.40	•		•	•	•	•		•	0.06-0.10
GIP 2.70-0.10	2.70	0.10	0.020	0.030	13.00	2.40	•		•	•	•			•	0.06-0.10
GIP 2.70-0.20	2.70	0.20	0.020	0.030	13.00	2.40			•		•				0.07-0.11
GIP 2.87-0.20	2.87	0.20	0.020	0.030	13.00	2.40	•		•	•	•				0.07-0.12
GIP 3.00-0.00	3.00	0.00	0.020	0.030	13.00	2.40	•		•		•				0.07-0.11
GIP 3.00-0.20	3.00	0.20	0.020	0.030	13.00	2.40	•		•	•	•		•	•	0.08-0.13
GIP 3.00-0.40	3.00	0.40	0.020	0.030	13.00	2.40					•				0.08-0.14
GIP 3.15-0.15	3.15	0.15	0.020	0.030	13.00	2.40	•	•	•	•	•	•			0.07-0.12
GIP 3.18-0.20	3.18	0.20	0.020	0.030	13.00	2.40	•	•	•	•	•			•	0.08-0.13
GIP 3.30-0.10	3.30	0.10	0.020	0.030	13.00	2.40	•	•	•		•				0.07-0.12
GIP 3.48-0.20	3.48	0.20	0.020	0.030	13.00	3.20		•			•				0.09-0.15
GIP 3.56-0.20	3.56	0.20	0.020	0.030	13.00	3.20		•			•				0.09-0.15
GIP 3.74-0.20	3.74	0.20	0.020	0.030	13.00	3.20		•	•		•				0.09-0.16
GIP 3.98-0.20	3.98	0.20	0.020	0.030	13.00	3.20	•	•	•	•	•			•	0.10-0.17
GIP 4.00-0.80	4.00	0.80	0.020	0.050	13.00	3.20					•				0.10-0.20
GIP 4.23-0.10	4.23	0.10	0.020	0.030	13.00	3.20	•	•	•		•				0.10-0.16
GIP 5.00-0.40	5.00	0.40	0.020	0.030	13.00	4.00					•				0.13-0.21
GIP 6.00-0.40	6.00	0.40	0.020	0.030	13.00	4.80					•				0.15-0.25
GIP 6.00-0.80	6.00	0.80	0.020	0.050	13.00	4.80					•				0.15-0.27

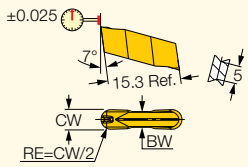
• DMIN for internal machining = 70 mm • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

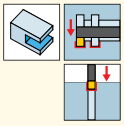
For tools, see pages: Anti-Vibration Blades (312) • C#-GHDR/L (301) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-S (309) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300) • GHSR/L (428) • GHSR/L-JHP-SL (429) • NQCH-GHSR/L-JHP (428)

CUTGRIP

GIP (full radius)
Precision Double-Ended Full Radius Inserts for Grooving







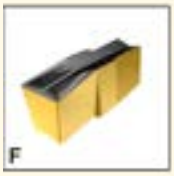
Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	BW	Tough ↔ Hard IC830	IC8250	IC808	IC20	IC804	Recommended Machining Data f groove (mm/rev)
GIP 3.00-1.50	3.00	1.50	0.020	0.050	12.30	2.40				•	•	0.08-0.15
GIP 3.18-1.59	3.18	1.59	0.020	0.050	12.20	2.40	•	•	•	•		0.08-0.16
GIP 3.98-1.99	3.98	1.99	0.020	0.050	11.80	3.20		•		•		0.10-0.20
GIP 4.78-2.39	4.78	2.39	0.020	0.050	11.40	4.80		•		•		0.12-0.22
GIP 5.00-2.50	5.00	2.50	0.020	0.050	11.30	4.00				•		0.13-0.23

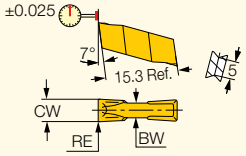
• For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

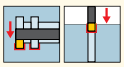
For tools, see pages: C#-GHDR/L (301) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-S (309) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300) • GHSR/L (428) • GHSR/L-JHP-SL (429) • NQCH-GHSR/L-JHP (428)

CUTGRIP

GIF
Precision Double-Ended
Inserts for Grooving







Designation	Dimensions						Tough ↔ Hard				Recommended Machining Data
	CW	RE	CWTOL(1)	RETOL(2)	BW	CDX(3)	IC830	IC8250	IC808	IC20	f groove (mm/rev)
GIF 3.48-0.20	3.48	0.20	0.020	0.030	3.20	13.00	●	●	●	●	0.08-0.12
GIF 3.56-0.20	3.56	0.20	0.020	0.030	3.20	13.00		●	●		0.08-0.13
GIF 3.74-0.20	3.74	0.20	0.020	0.030	3.20	13.00		●	●		0.08-0.13
GIF 3.98-0.20	3.98	0.20	0.020	0.030	3.20	13.00	●	●	●	●	0.09-0.14
GIF 4.23-0.10	4.23	0.10	0.020	0.030	3.20	13.00	●	●	●		0.08-0.13
GIF 4.45-0.15	4.45	0.15	0.020	0.030	4.00	13.00	●	●	●	●	0.09-0.14
GIF 4.78-0.55	4.78	0.55	0.020	0.050	4.00	13.00		●	●	●	0.11-0.18
GIF 4.86-0.30	4.86	0.30	0.020	0.030	4.00	13.00		●	●	●	0.11-0.18
GIF 5.28-0.20	5.28	0.20	0.020	0.030	4.00	13.00		●	●	●	0.12-0.18
GIF 5.39-0.20	5.39	0.20	0.020	0.030	4.00	13.00		●	●	●	0.12-0.19
GIF 5.90-0.20	5.90	0.20	0.020	0.030	4.80	13.00		●	●		0.12-0.21
GIF 6.35-0.50	6.35	0.50	0.020	0.050	4.80	13.00		●	●	●	0.14-0.24
GIF 6.35-0.55	6.35	0.55	0.020	0.050	4.80	13.00		●	●		0.14-0.24

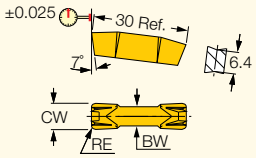
• DMIN for internal machining = 70 mm • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

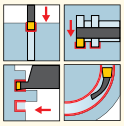
For tools, see pages: Anti-Vibration Blades (312) • C#-GHDR/L (301) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-S (309) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300) • GHSR/L-JHP-SL (429)

CUTGRIP

GIF (long pocket)
Precision Double-Ended
Inserts for Grooving







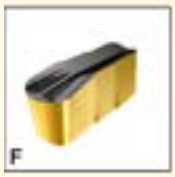
Designation	Dimensions						Tough ↔ Hard		Recommended Machining Data	
	CW	RE	CWTOL(1)	RETOL(2)	BW	CDX(3)	IC20	IC806	f groove (mm/rev)	f face-groove (mm/rev)
GIF 8.00-0.40	8.00	0.40	0.020	0.030	6.00	27.00	●	●	0.18-0.31	0.14-0.23
GIF 8.00-0.80	8.00	0.80	0.020	0.050	6.00	27.00	●	●	0.18-0.34	0.14-0.25

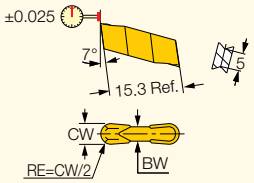
• DMIN for internal machining = 65 mm • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

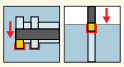
For tools, see pages: C#-GHDR/L (301) • CGHN-8-10D (315) • GADR/L-JHP (315) • GAFG-R/L-8 (661) • GHDR/L (long pocket) (313) • GHDR/L-JHP (long pocket) (313) • GHFG-R/L-8 (659) • GHFGR/L-8 (659)

CUTGRIP

GIF (full radius)
Precision Double-Ended Full Radius Inserts for Grooving







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	CDX(3)	Tough ↔ Hard IC8250	IC808	IC20	Recommended Machining Data f groove (mm/rev)
GIF 4.78-2.39	4.78	2.39	0.020	0.050	4.00	11.40	●	●		0.11-0.20
GIF 6.35-3.18	6.35	3.18	0.020	0.050	4.80	10.60			●	0.14-0.27

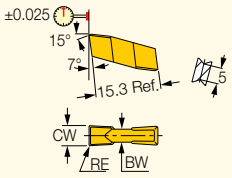
• DMIN for internal machining = 70 mm • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

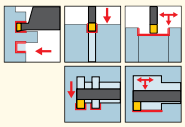
For tools, see pages: Anti-Vibration Blades (312) • C#-GHDR/L (301) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-S (309) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300)

CUTGRIP

GIA-K (W=3-6)
Flat Top Precision Double-Ended Inserts with T-Land for Machining Cast Iron







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	CDX(3)	Tough ↔ Hard IC5010	IC428	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIA 3.00K-0.40	3.00	0.40	0.020	0.030	2.40	13.00	●	●	0.50-1.80	0.12-0.20	0.07-0.13
GIA 4.00K-0.40	4.00	0.40	0.020	0.030	3.20	13.00	●	●	0.50-2.40	0.16-0.27	0.09-0.18
GIA 4.00K-0.80	4.00	0.80	0.020	0.050	3.20	13.00	●	●	1.00-2.40	0.18-0.32	0.09-0.19
GIA 5.00K-0.80	5.00	0.80	0.020	0.050	4.00	13.00	●	●	1.00-3.00	0.23-0.40	0.11-0.24
GIA 6.00K-0.80	6.00	0.80	0.020	0.050	4.80	13.00	●	●	1.00-3.60	0.27-0.48	0.14-0.29

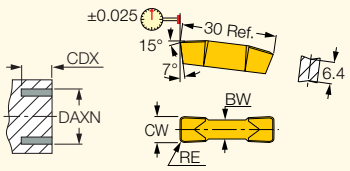
• DMIN for internal machining = 70 mm • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

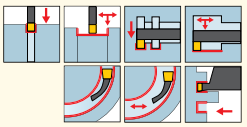
For tools, see pages: Anti-Vibration Blades (312) • C#-GHDR/L (301) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-S (309) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300)

CUTGRIP

GIA-K (long pocket)
Flat Top Precision Double-Ended Inserts with T-Land for Machining Cast Iron







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	CDX(3)	DAXN(4)	Tough ↔ Hard IC5010	IC428	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIA 8.00K-0.80	8.00	0.80	0.020	0.050	6.00	25.00	160.0	●	●	1.00-4.80	0.36-0.64	0.18-0.38
GIA 8.00K-1.20	8.00	1.20	0.020	0.050	6.00	25.00	160.0	●	●	1.45-4.80	0.36-0.70	0.18-0.38

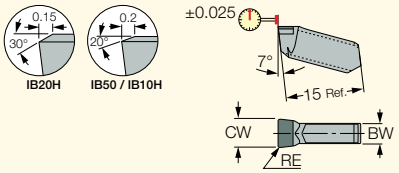
• DMIN for internal machining = 65 mm • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum
(4) Minimum axial grooving diameter

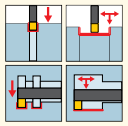
For tools, see pages: C#-GHDR/L (301) • CGHN-8-10D (315) • GADR/L-8 (314) • GADR/L-JHP (315) • GAFG-R/L-8 (661) • GHDR/L (long pocket) (313) • GHDR/L-JHP (long pocket) (313) • GHFG-R/L-8 (659) • GHFGR/L-8 (659) • GHIR/L (W=7.0-8.3) (398)

CUTGRIP

GITM
CBN Tipped Inserts for Turning and Grooving on Hard Ferrous Materials







HARD MATERIALS

Designation	Dimensions CW	RE	RETOL(1)	CWTOL(2)	BW	Tough ↔ Hard IB20H	IB10H	IB50	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GITM 2.00K-0.2	2.00	0.20	0.050	0.025	1.75			●	0.00-0.30	0.02-0.07	0.02-0.05
GITM 3.00K-0.20	3.00	0.20	0.050	0.020	2.40	●	●	●	0.00-0.30	0.02-0.07	0.02-0.05
GITM 4.00K-0.20	4.00	0.20	0.050	0.020	3.20	●	●	●	0.00-0.40	0.03-0.09	0.02-0.07
GITM 5.00K-0.40	5.00	0.40	0.050	0.020	4.00	●	●	●	0.00-0.50	0.05-0.13	0.03-0.10
GITM 6.00K-0.40	6.00	0.40	0.050	0.020	4.95	●	●	●	0.00-0.60	0.05-0.15	0.04-0.12
GITM 8.00K-0.40	8.00	0.40	0.050	0.020	6.00			●	0.00-0.80	0.07-0.20	0.05-0.16

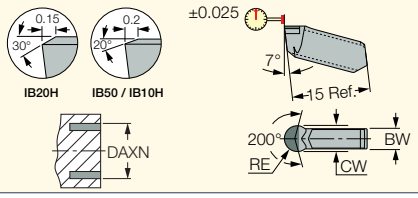
• DMIN for internal machining = 70 mm • For cutting speed recommendations and user guide, see pages 475-492
(1) Corner radius tolerance (+/-)
(2) Cutting width tolerance (+/-)

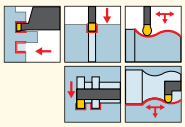
For tools, see pages: Anti-Vibration Blades (312) • C#-GHDR/L (301) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-S (309) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300) • GHSR/L (428) • GHSR/L-JHP-SL (429) • NQCH-GHSR/L-JHP (428)

CUTGRIP

GITM (full radius)
Full Radius CBN Tipped Inserts for Grooving and Turning on Hard Ferrous Materials







HARD MATERIALS

Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	DAXN(3)	Tough ↔ Hard IB20H	IB10H	IB50	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GITM 3.00K-1.50	3.00	1.50	0.020	0.050	2.40	160.0	●	●	●	0.00-0.30	0.03-0.10	0.02-0.06
GITM 4.00K-2.00	4.00	2.00	0.020	0.050	3.20	160.0	●	●	●	0.00-0.40	0.04-0.14	0.02-0.09
GITM 5.00K-2.50	5.00	2.50	0.020	0.050	3.90	160.0	●		●	0.00-0.50	0.05-0.18	0.03-0.11
GITM 6.00K-3.00	6.00	3.00	0.020	0.050	5.00	160.0	●	●	●	0.00-0.60	0.06-0.22	0.04-0.13
GITM 8.00K-4.00	8.00	4.00	0.020	0.050	5.60	160.0			●	0.00-0.80	0.08-0.29	0.05-0.17

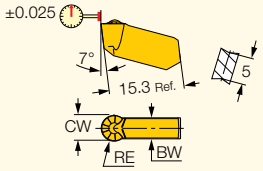
• DMIN for internal machining = 70 mm • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Minimum axial grooving diameter

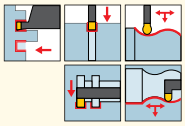
For tools, see pages: Anti-Vibration Blades (312) • C#-GHDR/L (301) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-S (309) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300) • GHSR/L (428) • GHSR/L-JHP-SL (429) • NQCH-GHSR/L-JHP (428)

CUTGRIP

GIPY
Single-Ended Full Radius Sharp Edged Precision Inserts for Profiling High Temperature Alloys







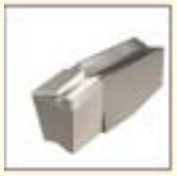
Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	Tough ↔ Hard IC20	IC320	IC07	IC806	IC1017	IC907	IC4	IC804	Recommended Machining Data f turn (mm/rev)	f groove (mm/rev)
GIPY 3.00-1.50	3.00	1.50	0.020	0.050	2.40	●	●		●	●	●	●	●	0.19-0.28	0.08-0.15
GIPY 4.00-2.00	4.00	2.00	0.020	0.050	3.20	●	●		●	●	●	●	●	0.22-0.37	0.10-0.20
GIPY 5.00-2.50	5.00	2.50	0.020	0.050	3.90	●	●		●	●	●	●	●	0.24-0.46	0.13-0.23
GIPY 6.00-3.00	6.00	3.00	0.020	0.050	5.00	●	●		●	●	●	●		0.26-0.55	0.15-0.27
GIPY 8.00-4.00	8.00	4.00	0.020	0.050	5.60	●	●	●	●	●	●			0.34-0.74	0.20-0.36

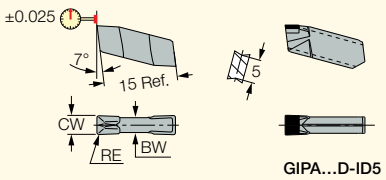
• Can cut arcs to 250° • DMIN for internal machining = 70 mm • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)

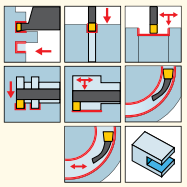
For tools, see pages: Anti-Vibration Blades (312) • C#-GHDR/L (301) • CGFG 51-P8 (661) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-P8 (311) • CGHN-S (309) • CGHR/L-P8DG (311) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300) • GHSR/L (428) • GHSR/L-JHP-SL (429) • NQCH-GHSR/L-JHP (428)

CUTGRIP

GIPA (W=3-6)
Double-Ended Precision Ground Inserts with a Polished Top Rake for Machining Aluminum







Designation	Dimensions CW	RE	CWTOL[2]	RETOL[3]	BW	Tough ↔ Hard IC1520	IC20	ID5	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIPA 3.00-0.20	3.00	0.20	0.020	0.030	2.40	●	●		0.25-1.80	0.12-0.20	0.08-0.14
GIPA 3.00-0.20-D [1]	3.00	0.20	0.020	0.030	2.40			●	0.25-1.80	0.12-0.25	0.09-0.16
GIPA 4.00-0.40	4.00	0.40	0.020	0.030	3.20	●	●		0.50-2.40	0.14-0.31	0.10-0.20
GIPA 5.00-0.40	5.00	0.40	0.020	0.030	4.00	●	●		0.50-3.00	0.16-0.34	0.11-0.23
GIPA 6.00-0.40	6.00	0.40	0.020	0.030	4.80	●	●		0.50-3.60	0.19-0.41	0.11-0.26

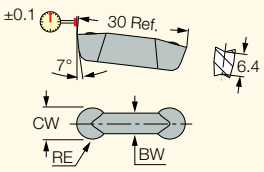
• DMIN for internal machining = 70 mm • For cutting speed recommendations and user guide, see pages 475-492
[1] Single-ended PCD tipped insert
[2] Cutting width tolerance (+/-)
[3] Corner radius tolerance (+/-)

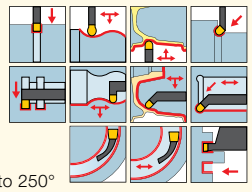
For tools, see pages: Anti-Vibration Blades (312) • C#-GHDR/L (301) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-S (309) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300) • GHSR/L (428) • GHSR/L-JHP-SL (429) • NQCH-GHSR/L-JHP (428)

CUTGRIP

GDMA
Utility Double-Ended Insert for Machining Aluminum







Designation	Dimensions CW	RE	CWTOL[1]	RETOL[2]	BW	Tough ↔ Hard IC07	IC507	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GDMA 840	8.00	4.00	0.050	0.050	5.60	●	●	0.00-4.00	0.24-0.67	0.14-0.38

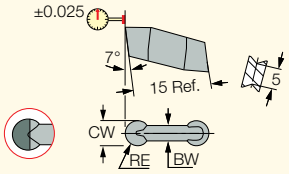
• For heavy-duty machining • DMIN for internal machining = 65 mm • For cutting speed recommendations and user guide, see pages 475-492
[1] Cutting width tolerance (+/-)
[2] Corner radius tolerance (+/-)

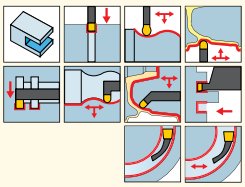
For tools, see pages: GADR/L-8 (314) • GADR/L-JHP (315) • GAFG-R/L-8 (661) • GHDKR/L (503) • GHIFR/L-A (503) • GHIR/L (W=7.0-8.3) (398) • GHIUR/L-C-A (15° & 27.5°) Bars (502) • GHIUR/L-UC (502)

CUTGRIP

GIPA (full radius W=3-6)
Precision Double-Ended Inserts with Polished Top Rake for Machining Aluminum







Designation	Dimensions					Tough ↔ Hard					Recommended Machining Data		
	CW	RE	CWTOL[4]	RETOL[5]	BW	IC1520	IC20	IC806	IC4	ID5	a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIPA 3.00-1.50	3.00	1.50	0.020	0.050	2.40	●	●				0.00-1.50	0.15-0.30	0.08-0.16
GIPA 3.00-1.50-D [1]	3.00	1.50	0.020	0.050	2.40					●	0.00-1.50	0.19-0.36	0.09-0.19
GIPA 4.00-2.00	4.00	2.00	0.020	0.050	3.20	●	●	●			0.00-2.00	0.20-0.43	0.10-0.22
GIPA 4.00-2.00-D [1]	4.00	2.00	0.020	0.050	3.20					●	0.00-2.00	0.25-0.53	0.12-0.26
GIPA 4.00-2.00YZ-D [2]	4.00	2.00	0.020	0.050	3.20					●	0.00-2.00	0.25-0.53	0.12-0.26
GIPA 5.00-2.50	5.00	2.50	0.020	0.050	3.90	●	●	●			0.00-2.50	0.21-0.48	0.09-0.24
GIPA 5.00-2.50-D [1]	5.00	2.50	0.020	0.050	3.90					●	0.00-2.50	0.22-0.60	0.11-0.30
GIPA 5.00-2.50YZ-D [2]	5.00	2.50	0.020	0.050	3.90					●	0.00-2.50	0.22-0.60	0.11-0.30
GIPA 6.00-3.00	6.00	3.00	0.020	0.050	4.80	●	●		●		0.00-3.00	0.21-0.58	0.11-0.29
GIPA 6.00-3.00-D [1]	6.00	3.00	0.020	0.050	4.80					●	0.00-3.00	0.26-0.72	0.13-0.36
GIPA 6.00-3.00YZ	6.00	3.00	0.020	0.050	4.80	●	●				0.00-3.00	0.21-0.58	0.11-0.29
GIPA 6.00-3.00YZ-D [2]	6.00	3.00	0.020	0.050	4.80					●	0.00-3.00	0.26-0.72	0.13-0.36
GIPA 6.00-3.00CB [3]	6.00	3.00	0.020	0.050	4.80					●	0.00-3.00	0.21-0.58	0.11-0.29

- For cutting speed recommendations and user guide, see pages 475-492

[1] Single-ended PCD tipped insert
[2] Single-ended molded PCD chipformer tipped insert
[3] Single-ended flat PCD tipped insert with chip deflector
[4] Cutting width tolerance (+/-)
[5] Corner radius tolerance (+/-)

For tools, see pages: Anti-Vibration Blades (312) • C#-GHDR/L (301) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-S (309) • CGPAD (308) • CGPAD-JHP (309) • GHDKR/L (503) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHIFR/L-A (503) • GHIUR/L-C-A (15° & 27.5°) Bars (502) • GHIUR/L-UC (502) • GHMPR/L (300) • GHMR/L (300) • GHSR/L (428) • GHSR/L-JHP-SL (429) • NQCH-GHSR/L-JHP (428)







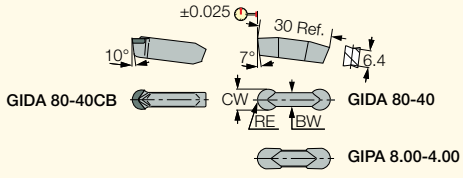


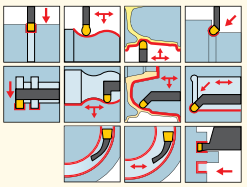
CUTGRIP

GIPA/GIDA 8 (full radius)

Precision Double-Ended Inserts with Polished Top Rake for Machining Aluminum







Designation	Dimensions CW	RE	CWTOL(2)	RETOL(3)	BW	Tough ↔ Hard IC1520	IC20	IC4	ID5	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIDA 80-40	8.00	4.00	0.020	0.050	5.60	●	●	●		0.00-4.00	0.24-0.67	0.14-0.38
GIDA 80-40-D	8.00	4.00	0.020	0.050	5.60				●	0.00-4.00	0.24-0.67	0.14-0.38
GIDA 80-40CB-D (1)	8.00	4.00	0.020	0.050	5.60				●	0.00-4.00	0.24-0.67	0.14-0.38
GIDA 80-40YZ	8.00	4.00	0.020	0.050	5.60	●	●	●		0.00-4.00	0.24-0.67	0.14-0.38
GIDA 80-40YZ-D	8.00	4.00	0.020	0.050	5.60				●	0.00-4.00	0.35-0.96	0.18-0.48
GIPA 8.00-4.00	8.00	4.00	0.020	0.050	6.00	●	●			0.00-4.00	0.24-0.67	0.14-0.38

• ID5 is a single-ended PCD tipped insert • For cutting speed recommendations and user guide, see pages 475-492

(1) Should not be clamped on tools with "A" suffix

(2) Cutting width tolerance (+/-)

(3) Corner radius tolerance (+/-)

For tools, see pages: C#-GHDR/L (301) • CGHN-8-10D (315) • GADR/L-8 (314) • GADR/L-JHP (315) • GAFG-R/L-8 (661) • GHDKR/L (503) • GHDR/L (long pocket) (313) • GHDR/L-8A (503) • GHDR/L-JHP (long pocket) (313) • GHFGR/L-8 (659) • GHIFR/L-A (503) • GHIR/L (W=7.0-8.3) (398) • GHIUR/L-C-A (15° & 27.5°) Bars (502) • GHIUR/L-UC (502)











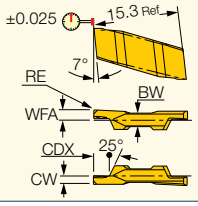


CUTGRIP

GIP-RX/LX

Precision Double-Ended Inserts for External Grooving Next to a Shoulder







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	BW	WFA	Tough ↔ Hard IC830	IC808	Recommended Machining Data f groove (mm/rev)
GIP 0.80-0.00R/LX	0.80	0.00	0.020	0.030	1.60	2.40	1.6	●		0.02-0.04
GIP 1.00-0.00R/LX	1.00	0.00	0.020	0.030	2.00	2.40	1.6	●		0.02-0.05
GIP 1.19-0.1RX	1.19	0.10	0.020	0.030	2.00	2.40	1.6		●	0.03-0.05
GIP 1.57-0.15 R/LX	1.57	0.15	0.020	0.030	2.70	2.40	1.7	●		0.04-0.06
GIP 1.57-0.79RX	1.57	0.79	0.020	0.030	2.80	2.40	1.7		●	0.04-0.08
GIP 2.00-0.15 R/LX	2.00	0.15	0.020	0.030	3.00	2.40	1.7	●		0.05-0.08
GIP 2.39-0.15 RX	2.39	0.15	0.020	0.030	3.50	2.40	1.7	●		0.05-0.09
GIP 2.39-1.19RX	2.39	1.19	0.020	0.050	3.90	2.40	1.7		●	0.06-0.12

• Toolholder seat needs to be modified according to insert profile to ensure clearance. • For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

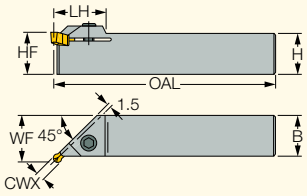
(2) Corner radius tolerance (+/-)

(3) Cutting depth maximum

For tools, see pages: GHMPR/L (300) • GHMR/L (300)

CUTGRIP

GHMUR/L
External Holders for
45° Undercutting



Right-hand shown

Designation	CWX(1)	H	HF	B	OAL	LH	WF		
GHMUR/L 16	4.80	16.0	16.0	16.0	112.00	25.0	19.00	SR M6X16 DIN912	HW 5.0
GHMUR/L 20	6.40	20.0	20.0	20.0	122.00	25.0	23.00	SR M6X16 DIN912	HW 5.0
GHMUR/L 25	6.40	25.0	25.0	25.0	127.00	25.0	28.00	SR M6X16 DIN912	HW 5.0

- For D>100 mm, GIP/GIF inserts can be used (clearance types UN, D or G are not required).

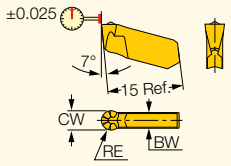
(1) Maximum cutting width

For inserts, see pages: GIMY-UN (335) • GIP-UN (335) • GIVR/L (316)

CUTGRIP

GIMY-UN
Utility Single-Ended Inserts
for External Undercutting





Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	CDX(3)	IC8250	Recommended Machining Data f groove (mm/rev)
GIMY 315-UN	3.00	1.50	0.050	0.050	2.40	2.00	●	0.05-0.15
GIMY 420-UN	4.00	2.00	0.050	0.050	3.20	2.50	●	0.05-0.15

- For 45° undercutting on D 100 mm, regular GIMY inserts may be used. • For cutting speed recommendations and user guide, see pages 475-492

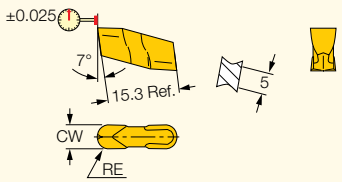
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

For tools, see pages: GHMUR/L (335)

CUTGRIP

GIP-UN
Precision Double-Ended Inserts
for External Undercutting





Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	DMIN	BW	CDX(3)	Tough ↔ Hard IC830	IC8250	IC808	IC20	Recommended Machining Data f groove (mm/rev)
GIP 3.00-1.50UN	3.00	1.50	0.050	0.050	35.00	2.40	4.00	●	●	●	●	0.05-0.15
GIP 4.00-2.0UN	4.00	2.00	0.050	0.050	35.00	3.20	4.00		●		●	0.05-0.15

- Not recommended for turning. • For undercutting at 45° and D100 mm, other GIP inserts apply as well
- For cutting speed recommendations and user guide, see pages 475-492

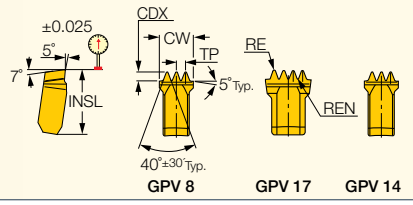
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

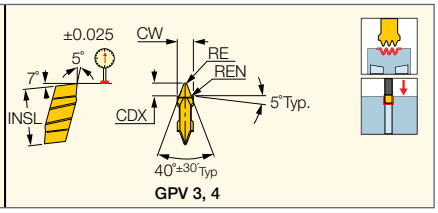
For tools, see pages: C#-GHDR/L (301) • CGHN-DG (310) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHMPR/L (300) • GHMR/L (300) • GHMUR/L (335)

CUTGRIP

GPV
Precision Inserts for Grooving
Multi V-Ribbed Pulleys







Designation	Dimensions CW	TP[5]	CDX[6]	RE	REN	NT[7]	INSL	Tough ↔ Hard IC8250	IC5010	IC428	Recommended Machining Data f groove (mm/rev)
GPV 3-2.34-1 [1]	2.80	2.34	2.21	0.32	0.20	1	15.30	●	●		0.06-0.15
GPV 4-3.56-1 [1]	4.03	3.56	3.42	0.45	0.30	1	15.30	●	●	●	0.06-0.15
GPV 8-2.34-3 [2]	7.48	2.34	2.21	0.32	0.20	3	15.30	●		●	0.06-0.15
GPV 14-2.34-4 [3]	9.82	2.34	2.21	0.32	0.20	4	24.00	●	●	●	0.06-0.15
GPV 14-3.56-3 [3]	11.14	3.56	3.42	0.45	0.30	3	24.00	●	●	●	0.06-0.15
GPV 17-3.56-4 [4]	14.68	3.56	3.42	0.45	0.30	4	24.00	●	●	●	0.06-0.15

• Toolholder seat needs to be modified according to insert profile to ensure clearance. • For cutting speed recommendations and user guide, see pages 475-492

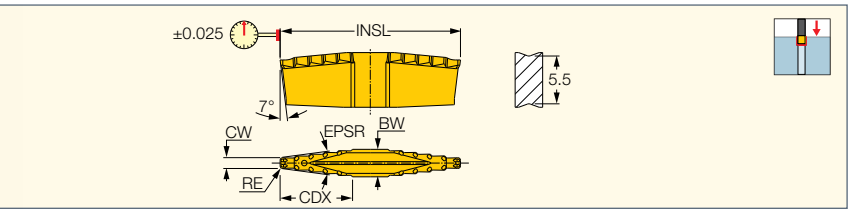
[1] Use holders which are suitable for GIP 3 / GIP 4
[2] Use holders which are suitable for GIMY 808
[3] Use holders which are suitable for TIGER 14
[4] Use holders which are suitable for TIGER 17
[5] Thread pitch
[6] Cutting depth maximum
[7] tooth count

For tools, see pages: C#-GHDR/L (301) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHDR/L/N 12/14 (375) • GHMPR/L (300) • GHMR/L (300)

CUTGRIP

GDK
Inserts for Rough Grooving
V-Shaped Piston Grooves





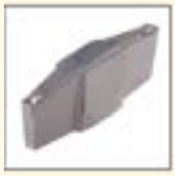
Designation	Dimensions CW	RE	CWTOL[1]	RETOL[2]	CDX[3]	EPSR	INSL	BW	IC808	Recommended Machining Data f groove (mm/rev)
GDK 1.5-MS	1.50	0.50	0.020	0.050	8.40	14.0	21.00	3.50	●	0.15-0.25
GDK 1.81-MS	1.81	0.50	0.020	0.050	8.40	12.0	19.70	3.50	●	0.15-0.25

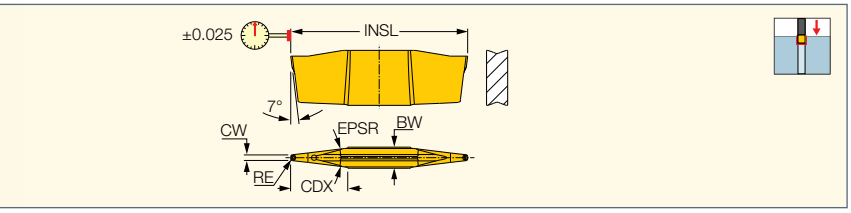
• For steel grooves

[1] Cutting width tolerance (+/-)
[2] Corner radius tolerance (+/-)
[3] Cutting depth maximum

CUTGRIP

GDP
Inserts for Precision Grooving
V-Shaped Piston Grooves





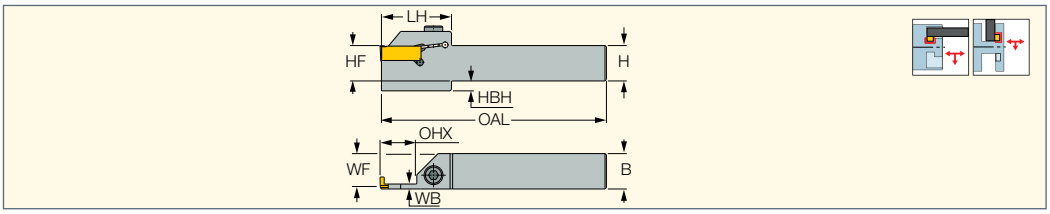
Designation	Dimensions CW	RE	CWTOL[1]	RETOL[2]	CDX[3]	EPSR	INSL	BW	IC908	Recommended Machining Data f groove (mm/rev)
GDP 1.55-0.30-1404Q	1.55	0.30	0.020	0.050	6.50	10.0	20.90	3.50	●	0.12-0.18

[1] Cutting width tolerance (+/-)
[2] Corner radius tolerance (+/-)
[3] Cutting depth maximum

CUTGRIP

HLPGR/L

Tools for L-Type LPGIR/L Inserts



Designation	OHX[1]	H	HF	HBH	B	WB	WF	OAL	LH	Insert	MIID[2]
HLPGR/L 2525-12-A3.5-T25	25.00	25.0	25.0	7.0	25.0	3.50	23.30	160.00	50.0	LPGIR/L 12	LPGIR 12
HLPGR/L 3225-12-A3.5-T25	25.00	32.0	32.0	-	25.0	3.50	23.30	160.00	50.0	LPGIR/L 12	LPGIR 12
HLPGR/L 2525-12-A4.5-T30	30.00	25.0	25.0	7.0	25.0	4.50	22.80	160.00	55.0	LPGIR/L 12	LPGIR 12
HLPGR/L 3225-12-A4.5-T30	30.00	32.0	32.0	-	25.0	4.50	22.80	160.00	55.0	LPGIR/L 12	LPGIR 12
HLPGR/L 2525-16-A6-T30	30.00	25.0	25.0	7.0	25.0	6.00	22.00	160.00	55.0	LPGIR/L 16	LPGIR 16
HLPGR/L 3225-16-A6-T30	30.00	32.0	32.0	-	25.0	6.00	22.00	160.00	55.0	LPGIR/L 16	LPGIR 16

- In case of face penetration prior to radial grooving, please check that the lower insert support is relieved from the groove's outer diameter

(1) Cutting depth maximum

(2) Master insert identification

For inserts, see pages: LPGIR/L (337)

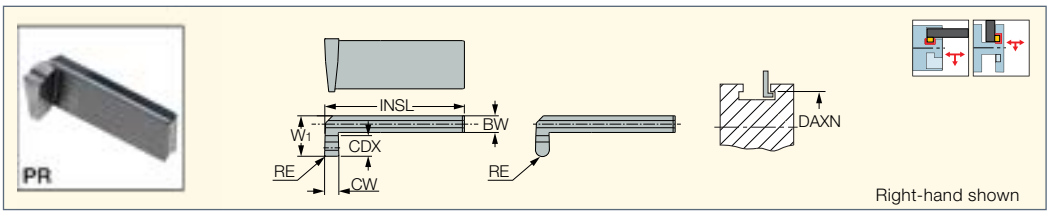
Spare Parts

Designation		
HLPGR/L	SR M6X20 DIN912	HW 5.0

CUTGRIP

LPGIR/L

Inserts for Axial Grooves Inside Radial Grooves and for Radial Grooves Inside Axial Grooves



Designation	Dimensions									IC907
	CW	RE	CWTOL[1]	RETOL[2]	BW	CDX	INSL	W1	DAXN[3]	
LPGIR/L 12-8-2T4PR	2.00	0.20	0.020	0.030	4.00	3.50	30.00	8.00	200.0	●
LPGIR/L 12-8-210T4	2.00	1.00	0.020	0.030	4.00	3.50	30.00	8.00	200.0	●
LPGIR/L 12-8.5-3T5PR	3.00	0.30	0.020	0.030	3.50	4.50	30.00	8.50	200.0	●
LPGIR/L 12-8.5-315T5	3.00	1.50	0.020	0.030	3.50	4.50	30.00	8.50	200.0	●
LPGIR/L 12-9.5-4T6PR	4.00	0.40	0.020	0.030	3.50	5.50	30.00	9.50	200.0	●
LPGIR/L 12-9.5-420T6	4.00	2.00	0.020	0.030	3.50	5.50	30.00	9.50	200.0	●
LPGIR/L 12-11-5T6.5PR	5.00	0.40	0.020	0.030	4.50	6.00	30.00	11.00	200.0	●
LPGIR/L 12-11-525T6.5	5.00	2.50	0.020	0.030	4.50	6.00	30.00	11.00	200.0	●
LPGIR/L 16-15.5-3T9PR	3.00	0.30	0.020	0.030	6.00	8.50	30.60	15.50	200.0	●
LPGIR/L 16-15.5-315T9	3.00	1.50	0.020	0.030	6.00	8.50	30.60	15.50	200.0	●
LPGIR/L 16-15.5-4T9PR	4.00	0.40	0.020	0.030	6.00	8.50	30.60	15.50	200.0	●
LPGIR/L 16-15.5-420T9	4.00	2.00	0.020	0.030	6.00	8.50	30.60	15.50	200.0	●
LPGIR/L 16-15.5-5T9PR	5.00	0.40	0.020	0.030	6.00	8.50	30.60	15.50	200.0	●
LPGIR/L 16-15.5-525T9	5.00	2.50	0.020	0.030	6.00	8.50	30.60	15.50	200.0	●

- For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

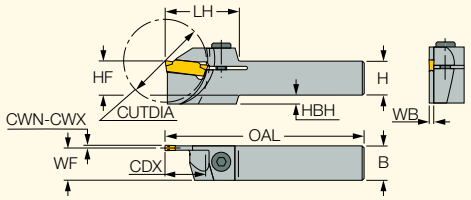
(2) Corner radius tolerance (+/-)

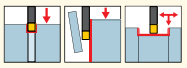
(3) Minimum axial grooving diameter

For tools, see pages: HLPGR/L (337)

CUTGRIP

PHGR/L
Holders for External Grooving and Turning





Left-hand shown

Designation	CWN[1]	CWX[2]	CUTDIA[3]	CDX[4]	H	HF	B	OAL	LH	WF	HBH	WB		
PHGR/L 16-2.4	2.40	3.18	34.0	17.00	16.0	16.0	16.0	110.00	33.0	15.10	5.5	1.90	SR M5X16 DIN912	HW 4.0
PHGR/L 20-2.4	2.40	3.18	34.0	17.00	20.0	20.0	20.0	120.00	33.0	19.10	-	1.90	SR M5X16 DIN912	HW 4.0
PHGR/L 25-2.4	2.40	3.18	34.0	17.00	25.0	25.0	25.0	140.00	33.0	24.10	-	1.90	SR M5X16 DIN912	HW 4.0

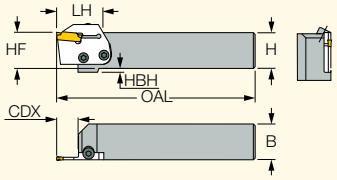
- For user guide, see pages 475-492

(1) Minimum cutting width
(2) Maximum cutting width
(3) Maximum parting diameter.
(4) Cutting depth maximum

For inserts, see pages: GDMW 2.4 (339)

CUTGRIP

PHAR/L
External Machining Holders for PADR/L Adapters



Right-hand shown

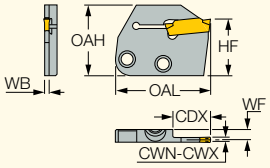
Designation	CDX[1]	H	HF	B	OAL	HBH	Adapter[2]				
PHAR/L 20	16.30	20.0	20.0	20.0	140.00	10.0	PADR/L 2.4	SR 76-1368	HW 4.0	SR M5-04451	T-20/5
PHAR/L 25	16.30	25.0	25.0	25.0	140.00	5.0	PADR/L 2.4	SR 76-1368	HW 4.0	SR M5-04451	T-20/5

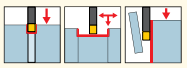
(1) Cutting depth maximum
(2) Adapters to be ordered separately.

For tools, see pages: PADR/L (338)

CUTGRIP

PADR/L
Adapters for GDMW/GDMY Groove-Turn Inserts





Left-hand shown

Designation	CWN[1]	CWX[2]	CDX[3]	OAL	WB	HF	OAH	WF	MIID[4]
PADR/L 2.4	2.40	3.18	16.30	41.00	1.90	24.0	30.00	4.20	GDMW 2.4

- For user guide, see pages 475-492

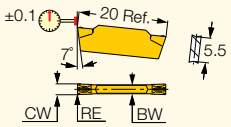
(1) Minimum cutting width
(2) Maximum cutting width
(3) Cutting depth maximum
(4) Master insert identification

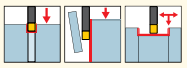
For inserts, see pages: GDMW 2.4 (339)
For holders, see pages: PHAR/L (338)

CUTGRIP

GDMW 2.4
Utility Double-Ended Inserts for External Turning, Grooving and Parting







Designation	Dimensions						Tough ↔ Hard					Recommended Machining Data		
	CW	RE	CWTOL[1]	RETOL[2]	BW	CDX[3]	IC830	IC808	IC908	IC20	IC20N	a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GDMW 2.4	2.40	0.18	0.040	0.030	2.00	18.00	●	●	●	●	●	0.25-1.50	0.07-0.12	0.05-0.08

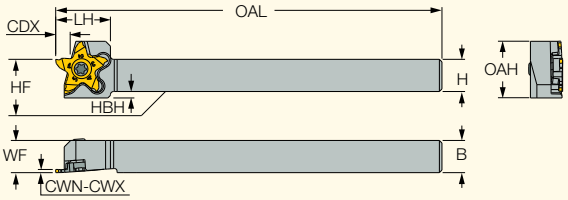
- For cutting speed recommendations and user guide, see pages 475-492

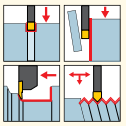
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

For tools, see pages: PADR/L (338) • PHGR/L (338) • PHSR/L (427)

PENTACUT

PCHRS/LS-17
Tools Carrying Inserts with 5 Cutting Edges for Grooving, Parting, and Recessing Next to High Shoulders





Right-hand shown

Designation	H	B	CWN[1]	CWX[2]	WF	OAL	LH	HBH	OAH	CDX	HF
PCHR/LS 0810-17	8.0	10.0	0.25	3.18	10.00	120.00	17.0	4.0	13.60	4.00	8.0
PCHR/LS 10-17	10.0	10.0	0.25	3.18	10.00	120.00	17.0	2.0	15.60	4.00	10.0
PCHR/LS 12-17	12.0	12.0	0.25	3.18	12.00	120.00	17.0	-	17.60	4.00	12.0
PCHR/LS 16-17	16.0	16.0	0.25	3.18	16.00	120.00	17.0	-	21.60	4.00	16.0
PCHR/LS 20-17	20.0	20.0	0.25	3.18	20.00	120.00	17.0	-	25.60	4.00	20.0
PCHR/LS 25-17	25.0	25.0	0.25	3.18	25.00	120.00	17.0	-	30.60	4.00	25.0

- Use right-hand inserts on right-hand tools and vice versa

(1) Minimum cutting width
(2) Maximum cutting width

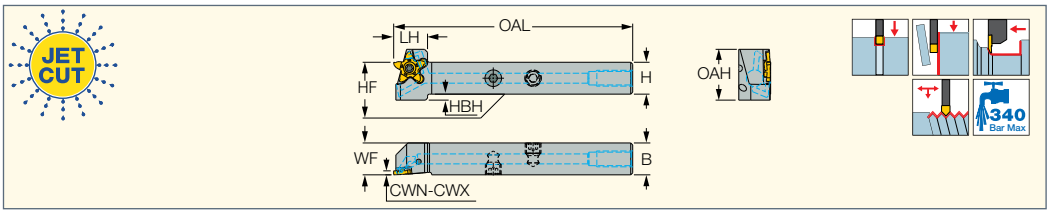
For inserts, see pages: PENTA 17-ER/EL (344) • PENTA 17-MT-RS/LS (438) • PENTA 17-NP-RS/LS (344) • PENTA 17-NX-RS (345) • PENTA 17-P-RS/LS (341) • PENTA 17-P-RS/LS (full radius) (343) • PENTA 17-WT-RS/LS (438) • PENTA 17R/L-P-RS (342)

Spare Parts

Designation		
PCHLS 0810-17	SR M4-39432	T-1508/5
PCHRS 0810-17	SR M4-39432L	T-1508/5
PCHLS 10-17	SR M4-39432	T-1508/5
PCHRS 10-17	SR M4-39432L	T-1508/5
PCHLS 12-17	SR M4-39432	T-1508/5
PCHRS 12-17	SR M4-39432L	T-1508/5
PCHLS 16-17	SR M4-39432	T-1508/5
PCHRS 16-17	SR M4-39432L	T-1508/5
PCHLS 20-17	SR M4-39432	T-1508/5
PCHRS 20-17	SR M4-39432L	T-1508/5
PCHLS 25-17	SR M4-39432	T-1508/5
PCHRS 25-17	SR M4-39432L	T-1508/5

PENTACUT

PCHRS/LS-17-JHP
Tools Carrying Inserts with 5 Cutting Edges for Shallow Profiling Next to High Shoulders



Designation	H	B	WF	OAL	LH	HBH	HF	OAH	CDX
PCHR/LS 10-17-JHP	10.0	10.0	10.00	100.00	17.0	8.0	10.0	24.50	4.00
PCHR/LS 12-17-JHP	12.0	12.0	12.00	100.00	17.0	6.0	12.0	24.50	4.00
PCHR/LS 16-17-JHP	16.0	16.0	16.00	120.00	17.0	3.0	16.0	25.50	4.00
PCHR/LS 20-17-JHP	20.0	20.0	20.00	120.00	17.0	-	20.0	26.50	4.00
PCHR/LS 25-17-JHP	25.0	25.0	25.00	120.00	17.0	-	25.0	31.50	4.00

- Use right-hand inserts on right-hand tools and vice versa

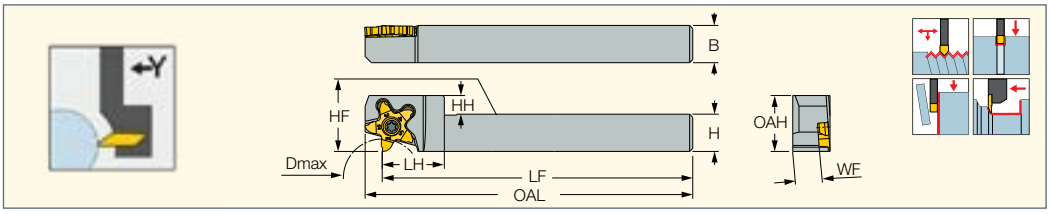
For inserts, see pages: PENTA 17-ER/EL (344) • PENTA 17-MT-RS/LS (438) • PENTA 17-NP-RS/LS (344) • PENTA 17-NX-RS (345) • PENTA 17-P-RS/LS (341) • PENTA 17-P-RS/LS (full radius) (343) • PENTA 17-WT-RS/LS (438) • PENTA 17R/L-P-RS (342) • PENTA 17R/L-SP-RS (342)

Spare Parts

Designation				
PCHLS 10-17-JHP	SR M4-39432	T-1508/5	HW 5/32"	SR 5/16UNF TL360
PCHRS 10-17-JHP	SR M4-39432L	T-1508/5	HW 5/32"	SR 5/16UNF TL360
PCHLS 12-17-JHP	SR M4-39432	T-1508/5	HW 5/32"	SR 5/16UNF TL360
PCHRS 12-17-JHP	SR M4-39432L	T-1508/5	HW 5/32"	SR 5/16UNF TL360
PCHLS 16-17-JHP	SR M4-39432	T-1508/5	HW 5/32"	SR 5/16UNF TL360
PCHRS 16-17-JHP	SR M4-39432L	T-1508/5	HW 5/32"	SR 5/16UNF TL360
PCHLS 20-17-JHP	SR M4-39432	T-1508/5	HW 5.0	PLG G1/8 TL360
PCHRS 20-17-JHP	SR M4-39432L	T-1508/5	HW 5.0	PLG G1/8 TL360
PCHLS 25-17-JHP	SR M4-39432	T-1508/5		
PCHRS 25-17-JHP	SR M4-39432L	T-1508/5		

NEOYSWISS AXIS

Y-PCHRS-17
Y-Axis Screw Lock Integral Tools Carrying 5 Edged PENTACUT Inserts for Grooving, Parting, and Recessing on Swiss-Type Machines



Designation	H	B	HH	LH	HF	WF	OAH	LF	OAL	D max(1)
Y-PCHRS 12-17	12.0	12.0	6.0	20.0	12.0	8.60	18.00	100.00	105.50	25.0 (2)
Y-PCHRS 16-17	16.0	16.0	2.0	20.0	16.0	12.30	18.00	125.00	130.50	38.0 (2)

- Use right-hand inserts on right-hand tools and vice versa

(1) Maximum workpiece diameter for grooving operation

(2) for grooving

For inserts, see pages: PENTA 17-ER/EL (344) • PENTA 17-MT-RS/LS (438) • PENTA 17-NP-RS/LS (344) • PENTA 17-NX-RS (345) • PENTA 17-P-RS/LS (341) • PENTA 17-P-RS/LS (full radius) (343) • PENTA 17-WT-RS/LS (438) • PENTA 17R/L-P-RS (342)

Spare Parts

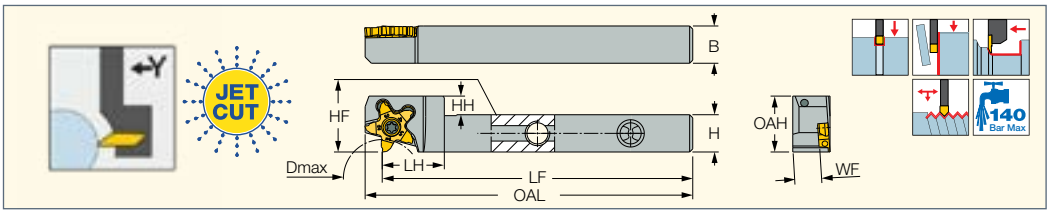
Designation		
Y-PCHRS-17	SR M4-39432L	T-1508/5



NEOYSWISS AXIS

Y-PCHRS-17-JHP

Y-Axis Screw Lock JETCUT Integral Tools for 5 Edged PENTACUT Inserts for Grooving, Parting, and Recessing on Swiss-Type Machines



Designation	H	B	HH	LH	HF	WF	OAH	LF	OAL	D max(1)
Y-PCHRS 12-17-JHP	12.0	12.0	6.0	20.0	12.0	8.60	18.00	100.00	105.50	25.0
Y-PCHRS 16-17-JHP	16.0	16.0	2.0	20.0	16.0	12.30	18.00	125.00	130.50	38.0

- Use right-hand inserts on right-hand tools and vice versa

(1) Maximum workpiece diameter for grooving operation

For inserts, see pages: PENTA 17-ER/EL (344) • PENTA 17-MT-RS/LS (438) • PENTA 17-NP-RS/LS (344) • PENTA 17-NX-RS (345) • PENTA 17-P-RS/LS (341) • PENTA 17-P-RS/LS (full radius) (343) • PENTA 17-WT-RS/LS (438) • PENTA 17R/L-P-RS (342)

Spare Parts

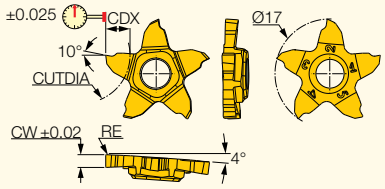
Designation				
Y-PCHRS-17-JHP	SR M4-39432L	T-1508/5	HW 5/32"	SR 5/16UNF TL360

PENTACUT

PENTA 17-P-RS/LS

Pentagonal Inserts for Grooving and Parting Soft Materials, Thin and Miniature Parts





Designation	Dimensions CW	RE	CDX	CUTDIA	IC1008	Recommended Machining Data f groove (mm/rev)
PENTA 17N025P000R/LS	0.25	0.00	0.60	1.2	●	0.02-0.03
PENTA 17N030P000R/LS	0.30	0.00	0.60	1.2	●	0.02-0.03
PENTA 17N033P000R/LS	0.33	0.00	0.60	1.2	●	0.02-0.03
PENTA 17N043P000R/LS	0.43	0.00	1.00	2.0	●	0.02-0.04
PENTA 17N050P000R/LS	0.50	0.00	2.00	4.0	●	0.02-0.04
PENTA 17N075P000R/LS	0.75	0.00	2.50	5.0	●	0.02-0.04
PENTA 17N080P000R/LS	0.80	0.00	2.50	5.0	●	0.02-0.04
PENTA 17N095P000R/LS	0.95	0.00	3.00	6.0	●	0.02-0.05
PENTA 17N100P010R/LS	1.00	0.10	3.00	6.0	●	0.02-0.05
PENTA 17N120P010R/LS	1.20	0.10	3.00	6.0	●	0.02-0.05
PENTA 17N140P010R/LS	1.40	0.10	3.00	6.0	●	0.02-0.05
PENTA 17N150P010R/LS	1.50	0.10	4.00	8.0	●	0.02-0.07
PENTA 17N157P010R/LS	1.57	0.10	4.00	8.0	●	0.02-0.07
PENTA 17N170P010R/LS	1.70	0.10	4.00	8.0	●	0.02-0.07
PENTA 17N178P010R/LS	1.78	0.10	4.00	8.0	●	0.02-0.07
PENTA 17N196P010R/LS	1.96	0.10	4.00	8.0	●	0.02-0.08
PENTA 17N200P010R/LS	2.00	0.10	4.00	8.0	●	0.02-0.08
PENTA 17N222P010R/LS	2.22	0.10	4.00	8.0	●	0.02-0.08
PENTA 17N230P010R/LS	2.30	0.10	4.00	8.0	●	0.02-0.08
PENTA 17N239P010R/LS	2.39	0.10	4.00	8.0	●	0.02-0.08
PENTA 17N247P010R/LS	2.47	0.10	4.00	8.0	●	0.02-0.08
PENTA 17N250P010R/LS	2.50	0.10	4.00	8.0	●	0.02-0.08
PENTA 17N270P010R/LS	2.70	0.10	4.00	8.0	●	0.02-0.09
PENTA 17N287P010R/LS	2.87	0.10	4.00	8.0	●	0.02-0.10
PENTA 17N300P010R/LS	3.00	0.10	4.00	8.0	●	0.02-0.10
PENTA 17N318P010R/LS	3.18	0.10	4.00	8.0	●	0.02-0.10

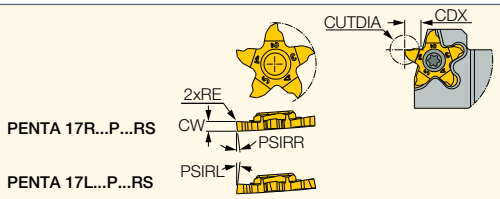
- For cutting speed recommendations and user guide, see pages 475-492

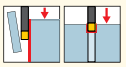
For tools, see pages: NQCH-PCHR/L-S-JHP (433) • PCADRS/LS-JHP (354) • PCHRS/LS-17 (339) • PCHRS/LS-17-JHP (340) • Y-PCHRS-17 (340) • Y-PCHRS-17-JHP (341)

PENTACUT

PENTA 17R/L-P-RS
Lead Angle Edge Pentagonal Inserts (5 edges) for Parting Miniature Parts







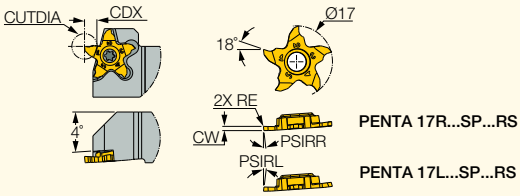
Designation	Dimensions CW	RE	CDX	CUTDIA	PSIRL	PSIRR	IC1008	Recommended Machining Data f groove (mm/rev)
PENTA 17L100P-15D-RS	1.00	0.05	3.00	6.0	15.0	-	●	0.02-0.03
PENTA 17L100P-6D-RS	1.00	0.05	3.00	6.0	6.0	-	●	0.02-0.04
PENTA 17R100P-15D-RS	1.00	0.05	3.00	6.0	-	15.0	●	0.02-0.03
PENTA 17R100P-6D-RS	1.00	0.05	3.00	6.0	-	6.0	●	0.02-0.04
PENTA 17L150P-15D-RS	1.50	0.05	4.00	8.0	15.0	-	●	0.02-0.03
PENTA 17L150P-6D-RS	1.50	0.05	4.00	8.0	6.0	-	●	0.02-0.04
PENTA 17R150P-15D-RS	1.50	0.05	4.00	8.0	-	15.0	●	0.02-0.03
PENTA 17R150P-6D-RS	1.50	0.05	4.00	8.0	-	6.0	●	0.02-0.04
PENTA 17L200P-15D-RS	2.00	0.05	4.00	8.0	15.0	-	●	0.02-0.03
PENTA 17L200P-6D-RS	2.00	0.05	4.00	8.0	6.0	-	●	0.02-0.04
PENTA 17R200P-15D-RS	2.00	0.05	4.00	8.0	-	15.0	●	0.02-0.03
PENTA 17R200P-6D-RS	2.00	0.05	4.00	8.0	-	6.0	●	0.02-0.04

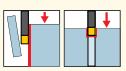
For tools, see pages: NQCH-PCHR/L-S-JHP (433) • PCADRS/LS-JHP (354) • PCHRS/LS-17 (339) • PCHRS/LS-17-JHP (340) • Y-PCHRS-17 (340) • Y-PCHRS-17-JHP (341)

PENTACUT

PENTA 17R/L-SP-RS
Pentagonal Inserts (5 edges) with a High Positive Rake for Parting Soft Materials





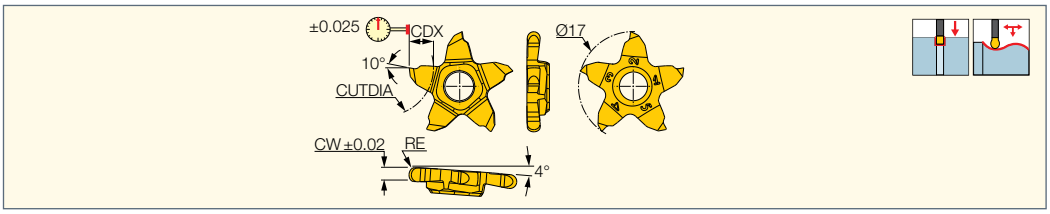


Designation	Dimensions CW	RE	CDX	CUTDIA	PSIRL	PSIRR	IC1007	Recommended Machining Data f groove (mm/rev)
PENTA 17L03SP6D-RS	0.30	0.00	0.60	1.2	6.0	-	●	0.02-0.03
PENTA 17R03SP6D-RS	0.30	0.00	0.60	1.2	-	6.0	●	0.02-0.03
PENTA 17L05SP6D-RS	0.50	0.00	2.00	4.0	6.0	-	●	0.02-0.04
PENTA 17R05SP6D-RS	0.50	0.00	2.00	4.0	-	6.0	●	0.02-0.04
PENTA 17L08SP6D-RS	0.80	0.00	2.50	5.0	6.0	-	●	0.02-0.04
PENTA 17R08SP6D-RS	0.80	0.00	2.50	5.0	-	6.0	●	0.02-0.04
PENTA 17L10SP6D-RS	1.00	0.00	3.00	6.0	6.0	-	●	0.02-0.05
PENTA 17R10SP6D-RS	1.00	0.00	3.00	6.0	-	6.0	●	0.02-0.05

For tools, see pages: PCADRS/LS-JHP (354) • PCHRS/LS-17-JHP (340)

PENTACUT

PENTA 17-P-RS/LS
(full radius)
Precision Grooving
Pentagonal Full Radius
Inserts for Soft Materials



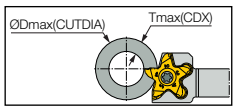
Designation	Dimensions CW	RE	CDX	CUTDIA	IC1008	Recommended Machining Data f groove (mm/rev)
PENTA 17N080P040R/LS	0.80	0.40	2.50	5.0	●	0.02-0.04
PENTA 17N100P050R/LS	1.00	0.50	3.00	6.0	●	0.02-0.05
PENTA 17N157P079R/LS	1.57	0.79	4.00	8.0	●	0.02-0.07
PENTA 17N200P100R/LS	2.00	1.00	4.00	8.0	●	0.02-0.08
PENTA 17N239P120R/LS	2.39	1.20	4.00	8.0	●	0.02-0.08

• For cutting speed recommendations and user guide, see pages 475-492

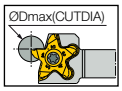
For tools, see pages: NQCH-PCHR/L-S-JHP (433) • PCADRS/LS-JHP (354) • PCHRS/LS-17 (339) • PCHRS/LS-17-JHP (340) • Y-PCHRS-17 (340) • Y-PCHRS-17-JHP (341)

Designation	Dmax as a function of depth of cut (T) W ±0.02	R	Tmax	T<2.3	T<2.5	T<3.0	T<3.5	T<3.8	T<4.0	Parting to center Dmax.
PENTA 17N025P000RS/LS	0.25	0.00	0.6*	---	---	---	---	---	---	1.2
PENTA 17N030P000RS/LS	0.30	0.00	0.6*	---	---	---	---	---	---	1.2
PENTA 17N033P000RS/LS	0.33	0.00	0.6*	---	---	---	---	---	---	1.2
PENTA 17N043P000RS/LS	0.43	0.00	1.0*	---	---	---	---	---	---	2
PENTA 17N050P000RS/LS	0.50	0.00	2.0*	---	---	---	---	---	---	4
PENTA 17N075P000RS/LS	0.75	0.00	2.5	N.L.		---	---	---	---	5
PENTA 17N080P000RS/LS	0.80	0.00	2.5	N.L.		---	---	---	---	
PENTA 17N095P000RS/LS	0.95	0.00		N.L.			---	---	---	
PENTA 17N100P010RS/LS	1.00	0.10		N.L.	400		---	---	---	
PENTA 17N100P050RS/LS	1.00	0.50	3.0	N.L.		100	---	---	---	6
PENTA 17N120P010RS/LS	1.20	0.10		N.L.			---	---	---	
PENTA 17N140P010RS/LS	1.40	0.10		N.L.			---	---	---	
PENTA 17N150P010RS/LS	1.50	0.10		N.L.						
PENTA 17N157P010RS/LS	1.57	0.10		N.L.						
PENTA 17N157P079RS/LS	1.57	0.79		N.L.						
PENTA 17N170P010RS/LS	1.70	0.10		N.L.						
PENTA 17N178P010RS/LS	1.78	0.10		N.L.						
PENTA 17N196P010RS/LS	1.96	0.10		N.L.						
PENTA 17N200P010RS/LS	2.00	0.10		N.L.						
PENTA 17N200P100RS/LS	2.00	1.00		N.L.						
PENTA 17N222P010RS/LS	2.22	0.10	4.0	N.L.	400	100	55	32	20	8
PENTA 17N230P010RS/LS	2.30	0.10		N.L.						
PENTA 17N239P010RS/LS	2.39	0.10		N.L.						
PENTA 17N239P120RS/LS	2.39	1.20		N.L.						
PENTA 17N247P010RS/LS	2.47	0.10		N.L.						
PENTA 17N250P010RS/LS	2.50	0.10		N.L.						
PENTA 17N270P010RS/LS	2.70	0.10		N.L.						
PENTA 17N287P010RS/LS	2.87	0.10		N.L.						
PENTA 17N300P010RS/LS	3.00	0.10		N.L.						
PENTA 17N318P010RS/LS	3.18	0.10		N.L.	400	100	55	32	25	

Parting Hollow Bars



Parting to Center

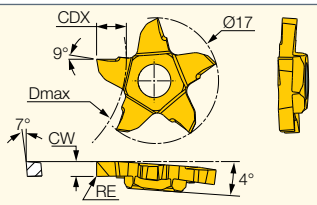


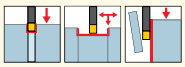
1. N.L. = NO LIMIT
2. *For precision grooving Dmax = N.L.
3. PENTA 17...RS to be clamped on PCHRS ...-17 holders, PENTA 17...LS to be clamped on PCHLS ...-17 holders.

PENTACUT

PENTA 17-NP-RS/LS
Pentagonal Inserts for Precision Grooving and Turning Next to High Shoulder Applications







Designation	Dimensions CW	CWTOL(1)	RE	RETOL(2)	CDX	D max(3)	IC1008	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
PENTA 17-100NP08R/LS	1.00	0.020	0.08	0.020	3.00	32.0 (4)	●	0.05-0.70	0.02-0.06	0.03-0.06
PENTA 17-200NP08R/LS	2.00	0.020	0.08	0.020	4.00	32.0 (4)	●	0.05-2.50	0.05-0.15	0.05-0.09
PENTA 17-300NP08R/LS	3.00	0.020	0.08	0.020	4.00	32.0 (4)	●	0.05-3.10	0.05-0.19	0.05-0.11

• When turning to the opposite side of chipformer, maximum CDX is 0.5 mm • For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

(3) Maximum workpiece diameter for grooving operation

(4) for grooving

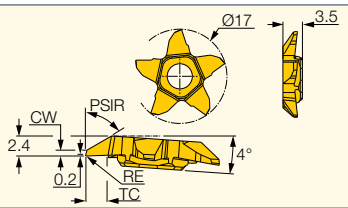
For tools, see pages: NQCH-PCHR/L-S-JHP (433) • PCADRS/LS-JHP (354) • PCHRS/LS-17 (339) • PCHRS/LS-17-JHP (340) • Y-PCHRS-17 (340) • Y-PCHRS-17-JHP (341)

Designation	Dimensions CW	RE	CDX	Dmax as a function of depth of cut (CDX) CDX≤2.5	CDX≤3.0	CDX≤3.5	CDX≤3.8	CDX≤4.0
PENTA 17-100NP08-R/LS	1.00	0.08	3.00	N.L.	100	-	-	-
PENTA 17-200NP08-R/LS	2.00	0.08	4.00	N.L.	100	75	45	32
PENTA 17-300NP08-R/LS	3.00	0.08	4.00	N.L.	100	75	45	32

PENTACUT

PENTA 17-ER/EL
Back Turning Pentagonal Inserts for Short Chipping Materials







Designation	Dimensions CW	RE	PSIR	Tc	IC1008	Recommended Machining Data a_p (mm)	f turn (mm/rev)
PENTA 17EL00-07K0LS	0.70	0.00	60.0	4.0	●	0.05-2.50	0.01-0.15
PENTA 17ER00-07K0RS	0.70	0.00	60.0	4.0	●	0.05-2.50	0.01-0.15
PENTA 17EL08-07K0LS	0.70	0.08	60.0	4.0	●	0.05-2.50	0.01-0.15
PENTA 17ER08-07K0RS	0.70	0.08	60.0	4.0	●	0.05-2.50	0.01-0.15

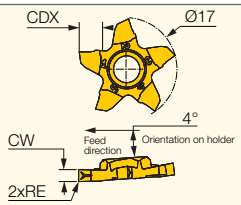
• For cutting speed recommendations and user guide, see pages 475-492

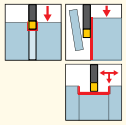
For tools, see pages: NQCH-PCHR/L-S-JHP (433) • PCHRS/LS-17 (339) • PCHRS/LS-17-JHP (340) • Y-PCHRS-17 (340) • Y-PCHRS-17-JHP (341)

PENTACUT

PENTA 17-NX-RS
Pentagonal Inserts for Precision Grooving and Parting Off for Next to Shoulder Applications







Designation	Dimensions CW	CWTOL(1)	RE	RETOL(2)	CDX	IC1008	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
PENTA 17N150NX080RS	1.50	0.020	0.08	0.020	4.00	●	0.05-1.80	0.02-0.11	0.02-0.07
PENTA 17N200NX080RS	2.00	0.020	0.08	0.020	4.00	●	0.05-2.50	0.03-0.15	0.03-0.09
PENTA 17N250NX080RS	2.50	0.020	0.08	0.020	4.00	●	0.05-3.10	0.03-0.19	0.03-0.11

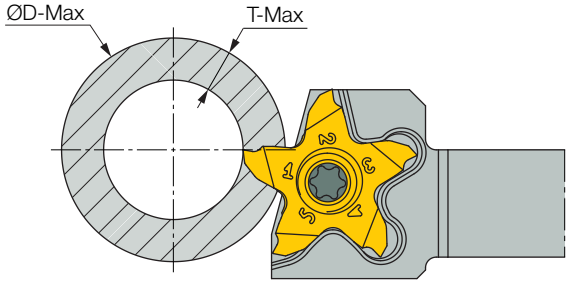
NEW

- For cutting speed recommendations and user guide, see pages 475-492

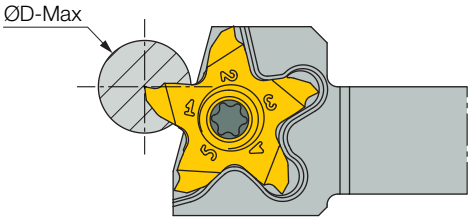
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)

For tools, see pages: NQCH-PCHR/L-S-JHP (433) • PCADRS/LS-JHP (354) • PCHRS/LS-17 (339) • PCHRS/LS-17-JHP (340) • Y-PCHRS-17 (340) • Y-PCHRS-17-JHP (341)

Grooving & Parting hollow bars



Parting to center



PENTA 17...NX...RS - Precision Grooving & Parting Inserts

Designation	CW	RE	T-Max	D-Max as a Function of Depth of Cut (T) T ≤ 2.3	T ≤ 2.5	T ≤ 3.0	T ≤ 3.5	T ≤ 3.8	T ≤ 4.0	Parting to Center D-Max
PENTA 17N150NX080RS	1.5	0.08	4.0	N.L.	400	100	55	32	25	8
PENTA 17N200NX080RS	2.0									
PENTA 17N250NX080RS	2.5									

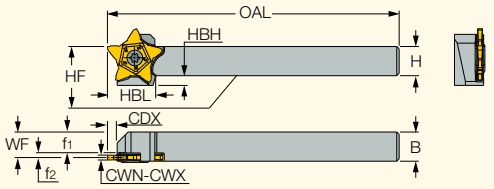
1. N.L. = NO LIMIT
2. * - For precision grooving Dmax = N.L.
3. PENTA 17...RS to be clamped on PCHRS ...-17 holders

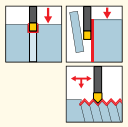
PENTACUT

PCHR/L-24
Grooving, Parting and Recessing Holders Carrying Inserts with 5 Cutting Edges

CWN-CWX	f_2
0.50-3.20	2.0
3.21-4.23	2.5
4.24-5.20	3.0
5.21-6.20	3.5
6.21-8.20	4.5

$WF=f_1+f_2$





Right-hand shown

Designation	H	HF	B	CWN[2]	CWX[3]	f1	CDX[4]	OAL	LH	HBH
PCHR/L 10-24	10.0	10.0	10.0	0.50	3.20	6.5	6.50	120.00	19.5	6.0
PCHR/L 12-24	12.0	12.0	12.0	0.50	3.20	8.5	6.50	120.00	19.5	4.0
PCHR/L 16-24	16.0	16.0	16.0	0.50	3.20	12.5	6.50	120.00	19.5	-
PCHR/L 20-24	20.0	20.0	20.0	0.50	3.20	16.5	6.50	120.00	19.5	-
PCHR/L 25-24	25.0	25.0	25.0	0.50	3.20	21.5	6.50	135.00	19.5	-
PCHR/L 16-24-5	16.0	16.0	16.0	3.21	5.20	11.5	6.40	120.00	21.5	4.0
PCHR/L 20-24-5	20.0	20.0	20.0	3.21	5.20	15.5	6.40	120.00	21.5	-
PCHR/L 25-24-5	25.0	25.0	25.0	3.21	5.20	20.5	6.40	135.00	21.5	-
PCHR/L 25-24-8 [1]	25.0	25.0	25.0	5.21	8.20	18.5	6.50	135.00	19.5	-

- WF=f1+f2 (according to insert width (CW) being used)

[1] Used with special inserts only
[2] Minimum cutting width
[3] Maximum cutting width
[4] For specific information, refer to insert data

For inserts, see pages: PENTA 24-BSPT (767) • PENTA 24-ISO (742) • PENTA 24-MT (725) • PENTA 24-NPT (763) • PENTA 24-UN (753) • PENTA 24-W (759) • PENTA 24-WT (717) • PENTA 24N-C (359) • PENTA 24N-C (full radius) (360) • PENTA 24N-C-SL (356) • PENTA 24N-J (358) • PENTA 24N-J (full radius) (359) • PENTA 24N-J-SL (356) • PENTA 24N-PF (full radius) (361) • PENTA 24N-PF/P (360) • PENTA 24N-Z (361) • PENTA 24R-C (601) • PENTA 24R-P (602) • PENTA 24R/L-DSL (357) • PENTA 24R/L-J (598) • PENTA 24R/L-Z (600)

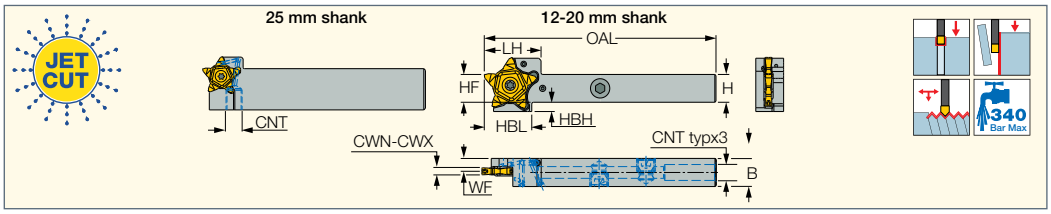
Spare Parts

Designation		
PCHL 10-24	SR 16-212-01397L	T-2010/5*
PCHR 10-24	SR 16-212-01397	T-2010/5*
PCHL 12-24	SR 16-212-01397L	T-2010/5*
PCHR 12-24	SR 16-212-01397	T-2010/5*
PCHL 16-24	SR 16-212-01397L	T-2010/5*
PCHR 16-24	SR 16-212-01397	T-2010/5*
PCHL 20-24	SR 16-212-01397L	T-2010/5*
PCHR 20-24	SR 16-212-01397	T-2010/5*
PCHL 25-24	SR 16-212-01397L	T-2010/5*
PCHR 25-24	SR 16-212-01397	T-2010/5*
PCHR/L 16-24-5	SR PCHR/L-8-06642	T-15/5
PCHR/L 20-24-5	SR PCHR/L-8-06642	T-15/5
PCHR/L 25-24-5	SR PCHR/L-8-06642	T-15/5
PCHR/L 25-24-8	SR PCHR/L-8-06642	T-15/5

* Optional, to be ordered separately

PENTACUT

PCHR/L-24-JHP
Grooving, Parting and Recessing Tools Carrying PENTA Inserts with Channels for High-Pressure Coolant



Designation	H	HF	B	CWN(1)	CWX(2)	CDX(3)	WF	OAL	LH	HBL	HBH	CNT	Insert
PCHR/L 12-24-JHP	12.0	12.0	12.0	0.50	3.20	6.50	5.50	100.00	24.5	20.50	4.0	UNF 5/16-24	PENTA 24
PCHR/L 16-24-JHP	16.0	16.0	16.0	0.50	3.20	6.50	9.50	120.00	24.5	-	-	UNF 5/16-24	PENTA 24
PCHR/L 20-24-JHP	20.0	20.0	20.0	0.50	3.20	6.50	13.50	135.00	24.5	-	-	G 1/8-28	PENTA 24
PCHR/L 25-24-JHP	25.0	25.0	25.0	0.50	3.20	6.50	18.50	135.00	24.5	-	-	G 1/8-28	PENTA 24

- For user guide and accessories see pages 475-496

(1) Minimum cutting width

(2) Maximum cutting width • Up to 6.2 mm width may be ordered on request.

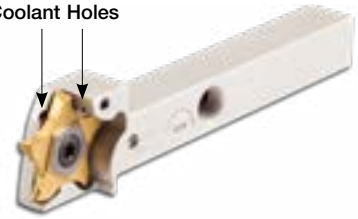
(3) For specific information, refer to insert data.

For inserts, see pages: PENTA 24-BSPT (767) • PENTA 24-ISO (742) • PENTA 24-MT (725) • PENTA 24-NPT (763) • PENTA 24-UN (753) • PENTA 24-W (759) • PENTA 24-WT (717) • PENTA 24N-C (359) • PENTA 24N-C (full radius) (360) • PENTA 24N-C-SL (356) • PENTA 24N-J (358) • PENTA 24N-J (full radius) (359) • PENTA 24N-J-SL (356) • PENTA 24N-PF (full radius) (361) • PENTA 24N-PF/P (360) • PENTA 24N-Z (361) • PENTA 24R-C (601) • PENTA 24R-P (602) • PENTA 24R/L-DSL (357) • PENTA 24R/L-J (598) • PENTA 24R/L-Z (600)

Flow Rate vs. Pressure

Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
PCHR/L 12-24-JHP	5-8	9-11	11-13
PCHR/L 16/20/25-24-JHP	12-14	14-16	16-18

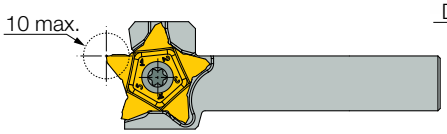
Coolant Holes



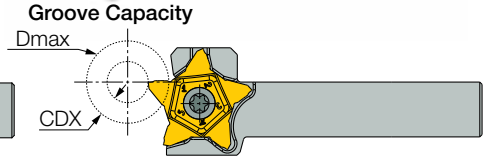
(2) Grooving Depth CDX Relative to Dmax

CDX	3.5	4	4.5	5
Dmax	No-limit	210	135	50

Cut-off to Center



Groove Capacity

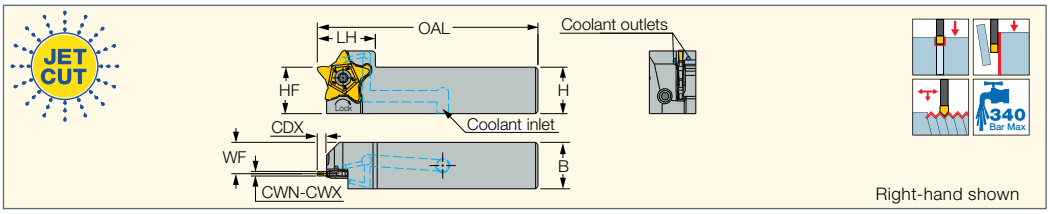


Spare Parts

Designation				
PCHL 12-24-JHP	SR 16-212-01397L-L8.5	T-2010/5	SR 5/16UNF TL360	HW 5/32"
PCHR 12-24-JHP	SR 16-212-01397-L8.5	T-2010/5	SR 5/16UNF TL360	HW 5/32"
PCHL 16-24-JHP	SR 16-212-01397L		SR 5/16UNF TL360	HW 5/32"
PCHR 16-24-JHP	SR 16-212-01397		SR 5/16UNF TL360	HW 5/32"
PCHL 20-24-JHP	SR 16-212-01397L		PLG G1/8 TL360	HW 5.0
PCHR 20-24-JHP	SR 16-212-01397		PLG G1/8 TL360	HW 5.0
PCHL 25-24-JHP	SR 16-212-01397L			
PCHR 25-24-JHP	SR 16-212-01397			

PENTACUT

PCHR/L-24-JHP-MC
Grooving, Parting and Recessing Tools Carrying PENTA Inserts with Bottom Inlets for High-Pressure Coolant



Designation	H	HF	B	CWN(1)	CWX(2)	CDX(3)	WF	OAL	LH	Insert
PCHR/L 20-24-JHP-MC	20.0	20.0	20.0	0.50	3.20	6.50	13.50	95.00	25.0	PENTA 24
PCHR/L 25-24-JHP-MC	25.0	25.0	25.0	0.50	3.20	6.50	18.50	110.00	25.0	PENTA 24

- For user guide and accessories see pages 475-496

(1) Minimum cutting width

(2) Maximum cutting width • Up to 6.2 mm width may be ordered on request.

(3) For specific information, refer to insert data.

For inserts, see pages: PENTA 24-BSPT (777) • PENTA 24-ISO (752) • PENTA 24-MT (735) • PENTA 24-NPT (773) • PENTA 24-UN (763) • PENTA 24-W (769) • PENTA 24-WT (727) • PENTA 24N-C (364) • PENTA 24N-C (full radius) (365) • PENTA 24N-C-SL (361) • PENTA 24N-J (363) • PENTA 24N-J (full radius) (364) • PENTA 24N-J-SL (356) • PENTA 24N-PF (full radius) (366) • PENTA 24N-PF/P (365) • PENTA 24N-Z (366) • PENTA 24R-C (611) • PENTA 24R-P (612) • PENTA 24R/L-DSL (362) • PENTA 24R/L-J (608) • PENTA 24R/L-Z (610)

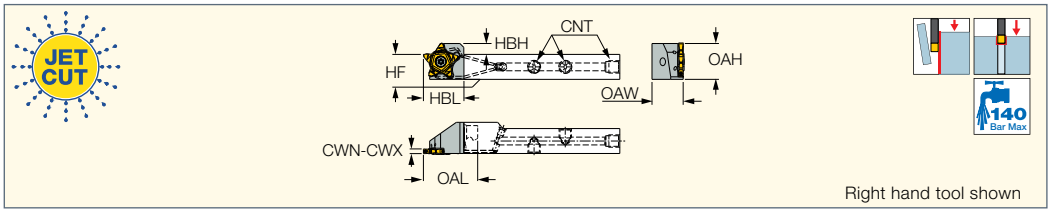
For holders, see pages: VDI-B1/B4AK-JHPMC (851) • VDI-B2/B3A-JHPMC (851) • VDI-B2/B3AK-JHPMC (851) • VDI-C1/C4A-JHPMC (851) • VDI-C1/C4AK-JHPMC (852) • VDI-C2/C3A-JHPMC (852) • VDI-C2/C3AK-JHPMC (852)

Spare Parts

Designation	
PCHL 20-24-JHP-MC	SR 16-212-01397L
PCHR 20-24-JHP-MC	SR 16-212-01397
PCHL 25-24-JHP-MC	SR 16-212-01397L
PCHR 25-24-JHP-MC	SR 16-212-01397

NEOSWISS

NQCH-PCHR/L-24-JHP
Screw Lock JETCUT Modular Heads Carrying PENTA Inserts for Grooving, Parting, and Recessing on Swiss-Type Machines



Designation	HF	OAW	OAH	HBH	OAL	HBL	CWN(1)	CWX(2)	Insert
NQCH12-PCHL24-JHP	12.0	20.00	23.00	7.0	34.80	26.0	0.50	3.20	PENTA 24
NQCH12-PCHR24-JHP	12.0	20.00	23.00	7.0	34.80	26.0	0.50	3.20	PENTA 24
NQCH16-PCHL24-JHP	16.0	20.00	23.00	7.0	34.80	26.0	0.50	3.20	PENTA 24
NQCH16-PCHR24-JHP	16.0	20.00	23.00	7.0	34.80	26.0	0.50	3.20	PENTA 24

NEW

(1) Minimum cutting width

(2) Maximum cutting width

For inserts, see pages: PENTA 24-BSPT (767) • PENTA 24-ISO (742) • PENTA 24-MT (725) • PENTA 24-NPT (763) • PENTA 24-UN (753) • PENTA 24-W (759) • PENTA 24-WT (717) • PENTA 24N-C (359) • PENTA 24N-C (full radius) (360) • PENTA 24N-C-SL (356) • PENTA 24N-J (358) • PENTA 24N-J (full radius) (359) • PENTA 24N-J-SL (356) • PENTA 24N-PF (full radius) (361) • PENTA 24N-PF/P (360) • PENTA 24N-Z (361) • PENTA 24R-C (601) • PENTA 24R-P (602) • PENTA 24R/L-DSL (357) • PENTA 24R/L-J (598) • PENTA 24R/L-Z (600)

For holders, see page: NQCH-JHP (424)

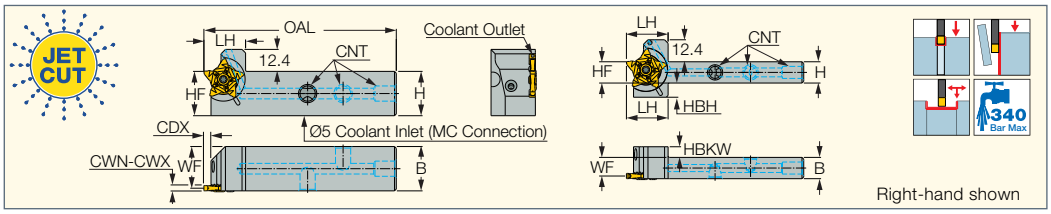
Spare Parts

Designation			
NQCH12-PCHL24-JHP	SR 16-212-01397	T-2010/5	SR 16-212-01397L
NQCH12-PCHR24-JHP	SR 16-212-01397	T-2010/5	SR 16-212-01397L
NQCH16-PCHL24-JHP	SR 16-212-01397	T-2010/5	SR 16-212-01397L
NQCH16-PCHR24-JHP	SR 16-212-01397	T-2010/5	SR 16-212-01397L

QUICKPENTA

PCHR/L-24-JHP-QC/MC

Grooving, Parting and Recessing Tools with Safety Lock Clamping for Five Cutting Edged Inserts



Designation	H	HF	B	CWN(2)	CWX(3)	CDX	WF	HBKW	OAL	CNT	LH	HBH	Insert
PCHR/L 12-24-JHP-QC	12.0	12.0	12.0	0.50	3.18	6.40	10.50	6.00	100.00	UNF 5/16-24	23.5	8.0	PENTA 24...SL
PCHR/L 16-24-JHP-QC	16.0	16.0	16.0	0.50	3.18	6.40	14.50	2.00	93.50	UNF 5/16-24	23.5	4.0	PENTA 24...SL
PCHR/L 20-24-JHP-MC-QC (1)	20.0	20.0	20.0	0.50	3.18	6.40	18.50	-	93.50	G1/8	23.5	-	PENTA 24...SL
PCHR/L 25-24-JHP-MC-QC (1)	25.0	25.0	25.0	0.50	3.18	6.40	23.50	-	108.50	G1/8	23.5	-	PENTA 24...SL

NEW

- For user guide and accessories see pages 475-496

(1) In addition, an MC connection is available for this tool

(2) Minimum cutting width

(3) Maximum cutting width

For inserts, see pages: PENTA 24N-C-SL (356) • PENTA 24N-J-SL (356) • PENTA 24R/L-DSL (357)

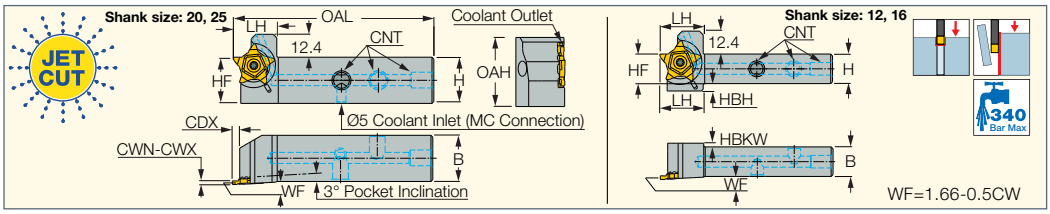
Spare Parts

Designation					
PCHR/L 12-24-JHP-QC	SR 16-212-01397R-SET		SR 5/16UNF TL360	T-2010/5	SR M3X0.5X10DIN7991 10.9
PCHR/L 16-24-JHP-QC	SR 16-212-01397R-SET		SR 5/16UNF TL360	T-2010/5	SR M3X0.5X10DIN7991 10.9
PCHR/L 20-24-JHP-MC-QC	SR 16-212-01397R-SET	SR M6X6 DIN913 TL360	PLG G1/8 TL360	T-2010/5	SR M3X0.5X10DIN7991 10.9
PCHR/L 25-24-JHP-MC-QC	SR 16-212-01397R-SET	SR M6X6 DIN913 TL360	PLG G1/8 TL360	T-2010/5	SR M3X0.5X10DIN7991 10.9

QUICKPENTA

PCHRS-24 JHP-QC/MC

Holders with PENTA-CUT Inserts for Grooving and Parting Next to High Shoulders, Enables Quick Cutting Edge Indexing



Designation	H	B	HF	CWN(1)	CWX(2)	CDX	OAL	LH	HBH	HBKW	OAH	CNT
PCHRS 12-24 JHP-QC	12.0	12.0	12.0	0.80	3.18	6.20	100.00	23.5	8.0	6.00	32.40	UNF 5/16-24
PCHRS 16-24 JHP-QC	16.0	16.0	16.0	0.80	3.18	6.20	93.50	23.5	4.0	2.00	32.40	UNF 5/16-24
PCHRS 20-24 JHP-MC-QC	20.0	20.0	20.0	0.80	3.18	6.20	93.50	23.5	-	-	32.40	G1/8
PCHRS 25-24 JHP-MC-QC	25.0	25.0	25.0	0.80	3.18	6.20	108.50	23.5	-	-	37.40	G1/8

NEW

(1) Minimum cutting width

(2) Maximum cutting width

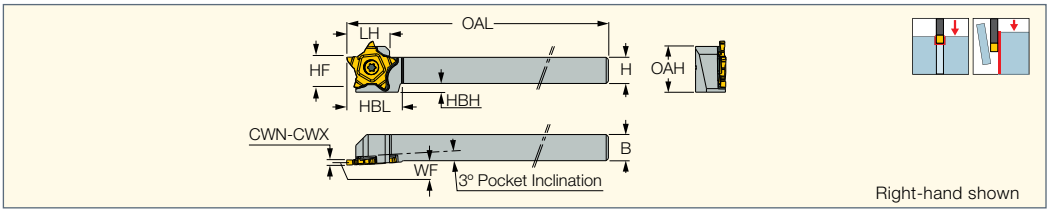
For inserts, see pages: PENTA 24N-NF-RS-SL (363) • PENTA 24N-NF-RSSL (full radius) (363)

Spare Parts

Designation			
PCHRS-24 JHP-QC/MC	SR 16-212-01397R-SET	T-2010/5	SR M3X0.5X10DIN7991 10.9

PENTACUT

PCHRS/LS
Holders Carrying Inserts with 5 Cutting Edges for Grooving, Parting and Recessing Next to High Shoulders



Designation	H	B	CWN(1)	CWX(2)	OAL	LH	HBL	HBH	OAH	HF
PCHR/LS 12-24	12.0	12.0	0.80	4.80	120.00	19.5	24.50	4.0	21.0	12.0
PCHR/LS 16-24	16.0	16.0	0.80	4.80	120.00	19.5	-	-	21.0	16.0
PCHR/LS 20-24	20.0	20.0	0.80	4.80	120.00	19.5	-	-	25.0	20.0
PCHR/LS 25-24	25.0	25.0	0.80	4.80	135.00	19.5	-	-	30.0	25.0

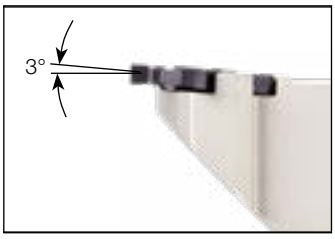
(1) Minimum cutting width
(2) Maximum cutting width

For inserts, see pages: PENTA 24N-J-RS (323) • PENTA 24N-RS/LS (323)

Spare Parts

Designation		
PCHR/LS 12-24	SR 16-212-01397R/LS	T-2010/5
PCHR/LS 16-24	SR 16-212-01397R/LS	T-2010/5
PCHR/LS 20-24	SR 16-212-01397R/LS	T-2010/5
PCHLS 25-24		T-2010/5*
PCHR/LS 25-24	SR 16-212-01397R/LS	
PCHRS 25-24		T-2010/5

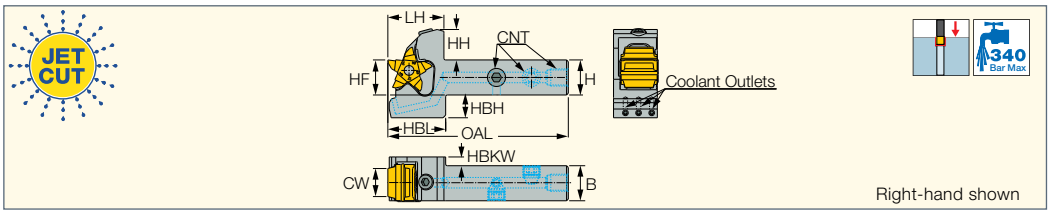
* Optional, to be ordered separately





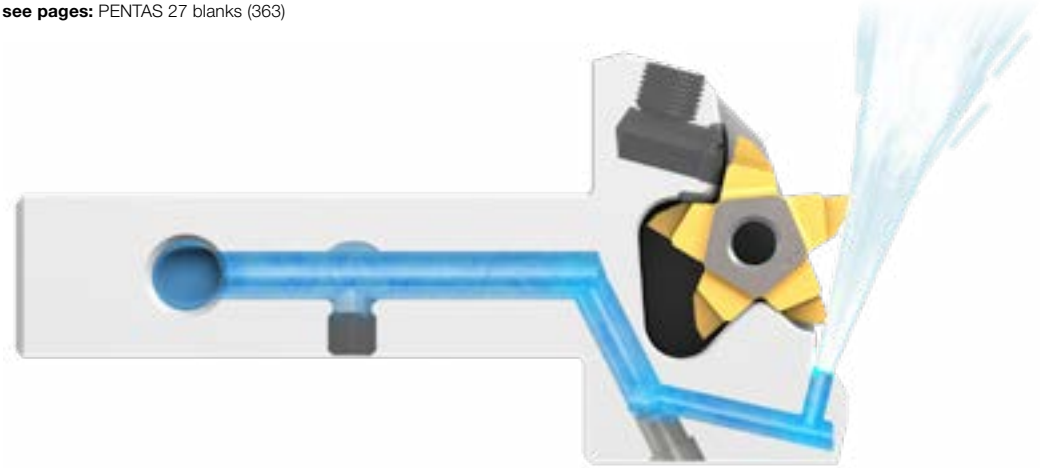
PENTACUT-27

PCHR/L-27-JHP-MC
Tools Carrying Pentagonal Wide Inserts for Specially Tailored Profiles



Designation	CW	H	B	HF	LH	HBL	HH	HBH	HBKW	OAL	CNT
PCHR/L 20-27-10-JHP-MC	10.00	20.0	20.0	20.0	32.0	33.0	17.4	13.0	5.00	103.00	G1/8
PCHR/L 25-27-10-JHP-MC	10.00	25.0	25.0	25.0	32.0	33.0	17.4	8.0	-	118.00	G1/8
PCHR/L 20-27-15-JHP-MC	15.00	20.0	20.0	20.0	32.0	33.0	17.4	13.0	5.00	103.00	G1/8
PCHR/L 25-27-15-JHP-MC	15.00	25.0	25.0	25.0	32.0	33.0	17.4	8.0	-	118.00	G1/8
PCHR/L 20-27-20-JHP-MC	20.00	20.0	20.0	20.0	32.0	33.0	17.4	13.0	5.00	103.00	G1/8
PCHR/L 25-27-20-JHP-MC	20.00	25.0	25.0	25.0	32.0	33.0	17.4	8.0	-	118.00	G1/8

For inserts, see pages: PENTAS 27 blanks (363)



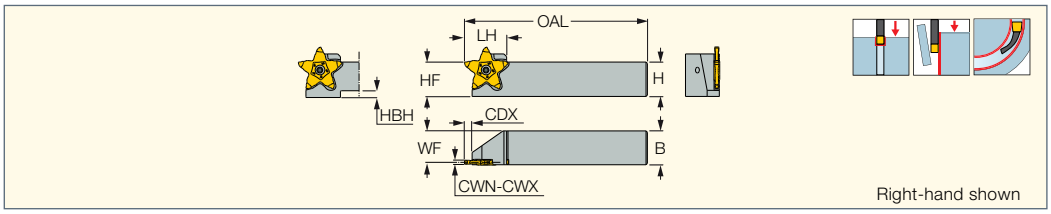
Spare Parts

Designation							
PCHR/L 20-27-10-JHP-MC	SR M8-40530	HW 3.0	SR M6X6 DIN913 TL360		HW 4.0	PLG G1/8 TL360	HW 5.0
PCHR/L 25-27-10-JHP-MC	SR M8-40530	HW 3.0	SR M6X6 DIN913 TL360		HW 4.0	PLG G1/8 TL360	HW 5.0
PCHR/L 20-27-15-JHP-MC	SR M8-40530	HW 3.0	SR M6X6 DIN913 TL360		HW 4.0	PLG G1/8 TL360	HW 5.0
PCHR/L 25-27-15-JHP-MC	SR M8-40530	HW 3.0	SR M6X6 DIN913 TL360		HW 4.0	PLG G1/8 TL360	HW 5.0
PCHR/L 20-27-20-JHP-MC	SR M8-40530	HW 3.0	SR M6X6 DIN913 TL360	PUSH ROD - 40529	HW 4.0	PLG G1/8 TL360	HW 5.0
PCHR/L 25-27-20-JHP-MC	SR M8-40530	HW 3.0	SR M6X6 DIN913 TL360	PUSH ROD - 40529	HW 4.0	PLG G1/8 TL360	HW 5.0

PENTACUT

PCHR/L-34

Grooving, Parting and Recessing Holders Carrying Inserts with 5 Cutting Edges



Designation	H	HF	B	CWN(2)	CWX(3)	WF	CDX(4)	OAL	LH	HBH
PCHR/L 16-34	16.0	16.0	16.0	1.50	4.00	14.20	10.00	120.00	31.0	9.0
PCHR/L 20-34	20.0	20.0	20.0	1.50	4.00	18.20	10.00	120.00	31.0	6.0
PCHR/L 25-34	25.0	25.0	25.0	1.50	4.00	23.20	10.00	135.00	31.0	-
PCHR/L 25-34-8 (1)	25.0	25.0	25.0	3.19	8.20	22.50	10.00	135.00	31.0	-
PCHR/L 32-34	32.0	32.0	32.0	1.50	4.00	30.10	10.00	135.00	31.0	-

(1) Used with special inserts only
(2) Minimum cutting width
(3) Maximum cutting width
(4) For specific information, refer to insert data

For inserts, see pages: PENTA 34F-R/L (674) • PENTA 34N-C (364) • PENTA 34N-J (365) • PENTA 34N-PB (364) • PENTA 34R/L-C (603) • PENTA 34R/L-J (604) • PENTA 34R/L-PB (605)

Spare Parts

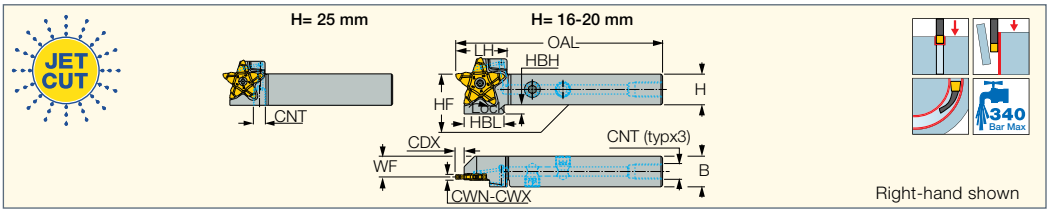
Designation		
PCHL 16-34	SR 16-212-01397	
PCHR 16-34	SR 16-212-01397	T-2010/5*
PCHL 20-34	SR 16-212-01397	
PCHR 20-34	SR 16-212-01397	T-2010/5*
PCHL 25-34	SR 16-212-01397	
PCHR 25-34	SR 16-212-01397	T-2010/5
PCHR/L 25-34-8	SR PCHR-8-06642	T-15/5
PCHL 32-34	SR 16-212-01397	
PCHR 32-34	SR 16-212-01397	T-2010/5*

* Optional, to be ordered separately

PENTACUT

PCHR/L-34-JHP

Grooving, Parting and Recessing Tools Carrying PENTA Inserts with Channels for High-Pressure Coolant



Designation	H	HF	B	CWN(1)	CWX(2)	CDX(3)	WF	OAL	LH	HBH	CNT	Insert
PCHR/L 16-34-JHP	16.0	16.0	16.0	1.50	4.00	10.00	9.60	120.00	33.5	9.0	UNF 5/16-24	PENTA 34
PCHR/L 20-34-JHP	20.0	20.0	20.0	1.50	4.00	10.00	13.60	135.00	33.5	6.0	G1/8-28	PENTA 34
PCHR/L 25-34-JHP	25.0	25.0	25.0	1.50	4.00	10.00	18.60	135.00	33.5	-	G1/8-28	PENTA 34

• For user guide and accessories, see pages 475-496
(1) Minimum cutting width
(2) Maximum cutting width
(3) For specific information, refer to insert data

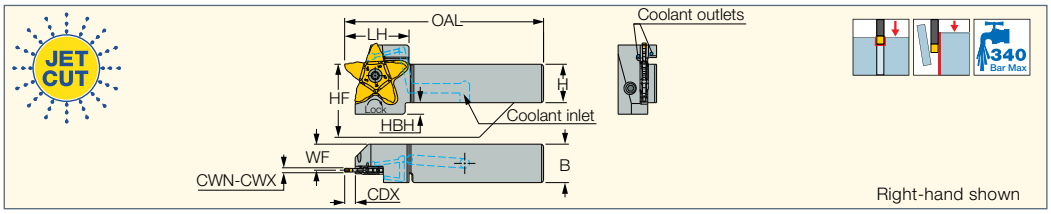
For inserts, see pages: PENTA 34F-R/L (684) • PENTA 34N-C (369) • PENTA 34N-J (370) • PENTA 34N-PB (369) • PENTA 34R/L-C (613) • PENTA 34R/L-J (614) • PENTA 34R/L-PB (615)

Spare Parts

Designation			
PCHR/L 16-34-JHP	SR 16-212-01397	SR 5/16UNF TL360	HW 5/32"
PCHR/L 20-34-JHP	SR 16-212-01397	PLG G1/8 TL360	HW 5.0
PCHR/L 25-34-JHP	SR 16-212-01397		

PENTACUT

PCHR/L-34-JHP-MC
Grooving, Parting and Recessing Tools Carrying PENTA Inserts with Bottom Inlets for High-Pressure Coolant



Designation	H	HF	B	CWN(1)	CWX(2)	CDX(3)	WF	OAL	LH	HBH	Insert
PCHR/L 20-34-JHP-MC	20.0	20.0	20.0	1.50	4.00	10.00	13.55	103.50	33.5	6.0	PENTA 34
PCHR/L 25-34-JHP-MC	25.0	25.0	25.0	1.50	4.00	10.00	18.55	118.50	33.5	-	PENTA 34

- For user guide and accessories, see pages 475-496

(1) Minimum cutting width
(2) Maximum cutting width
(3) For specific information, refer to insert data

For inserts, see pages: PENTA 34F-R/L (674) • PENTA 34N-C (364) • PENTA 34N-J (365) • PENTA 34N-PB (364) • PENTA 34R/L-C (603) • PENTA 34R/L-J (604) • PENTA 34R/L-PB (605)

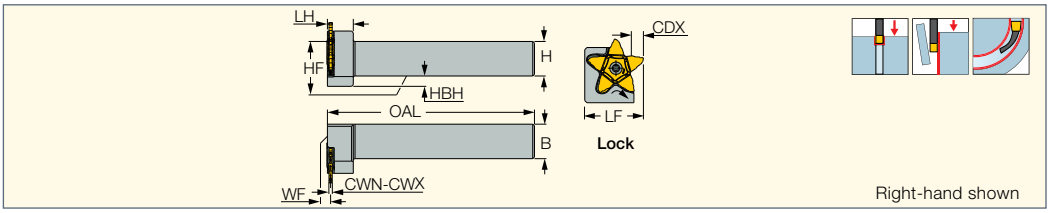
For holders, see pages: VDI-B1/B4AK-JHPMC (841) • VDI-B2/B3A-JHPMC (841) • VDI-B2/B3AK-JHPMC (841) • VDI-C1/C4A-JHPMC (841) • VDI-C1/C4AK-JHPMC (842) • VDI-C2/C3A-JHPMC (842) • VDI-C2/C3AK-JHPMC (842)

Spare Parts

Designation	
PCHR/L-34-JHP-MC	SR 16-212-01397

PENTACUT

PCHPR/L
Perpendicular Holders Carrying Inserts with 5 Cutting Edges for Facing, Grooving, Parting and Recessing



Designation	H	B	CWN(1)	CWX(2)	CDX(3)	HF	WF	LF	OAL	LH	HBH
PCHPR/L 16-24	16.0	16.0	0.50	3.20 (4)	6.50	16.0	1.50 (5)	23.5	120.00	11.5	-
PCHPR/L 20-24	20.0	20.0	0.50	3.20 (4)	6.50	20.0	1.50 (5)	28.0	120.00	11.5	-
PCHPR/L 25-24	25.0	25.0	0.50	3.20 (4)	6.50	25.0	1.50 (5)	33.0	135.00	11.5	-
PCHPR/L 20-34	20.0	20.0	1.40	4.00	10.00	20.0	1.90	34.0	120.00	15.0	6.0
PCHPR/L 25-34	25.0	25.0	1.40	4.00	10.00	25.0	1.90	34.0	135.00	15.0	-

(1) Minimum cutting width
(2) Maximum cutting width
(3) For specific information, refer to insert data
(4) Up to 6.2 mm width may be ordered on request
(5) Valid for inserts with CW<3.2 mm

For inserts, see pages: PENTA 24N-C (359) • PENTA 24N-C (full radius) (360) • PENTA 24N-C-SL (356) • PENTA 24N-J (358) • PENTA 24N-J (full radius) (359) • PENTA 24N-J-SL (356) • PENTA 24N-PF (full radius) (361) • PENTA 24N-PF/P (360) • PENTA 24N-Z (361) • PENTA 24R-C (601) • PENTA 24R-P (602) • PENTA 24R/L-DSL (357) • PENTA 24R/L-J (598) • PENTA 24R/L-Z (600) • PENTA 34F-R/L (674) • PENTA 34N-C (364) • PENTA 34N-J (365) • PENTA 34N-PB (364) • PENTA 34R/L-C (603) • PENTA 34R/L-J (604) • PENTA 34R/L-PB (605)

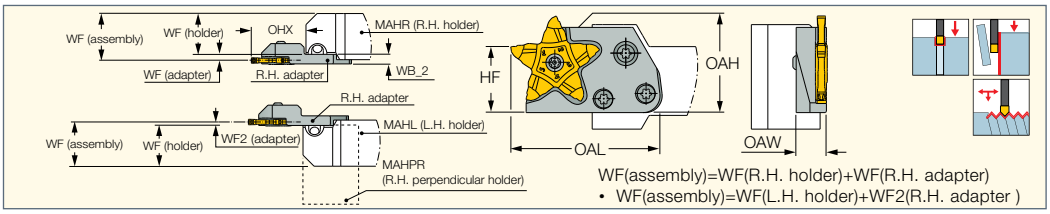
Spare Parts

Designation		
PCHPL 16-24	SR 16-212-01397	T-20/5
PCHPR 16-24	SR 16-212-01397L	T-20/5
PCHPL 20-24	SR 16-212-01397	T-20/5
PCHPR 20-24	SR 16-212-01397L	T-20/5
PCHPL 25-24	SR 16-212-01397	T-20/5
PCHPR 25-24	SR 16-212-01397L	T-20/5
PCHPR/L 20-34	SR 16-212-01397	T-20/5
PCHPR/L 25-34	SR 16-212-01397	T-20/5

MODULAR GRIP

PCADR/L

Adapters for PENTACUT Grooving Inserts



Designation	CWN(1)	CWX(2)	OHX(3)	OAL	WF(4)	WF2	OAW	WB_2	HF	OAH
PCADR/L 24N	0.50	3.18 (5)	17.00	41.50	3.20	2.00	9.00	5.2	24.0	30.30
PCADR/L 34N	1.50	4.00	29.60	54.20	3.35	1.85	11.00	5.2	24.0	31.00

- CDX and CUTDIA according to insert limitation

(1) Minimum cutting width
(2) Maximum cutting width
(3) Maximum overhang
(4) WF (adapter)
(5) Up to 6.2 mm width may be ordered on request

For inserts, see pages: PENTA 24-BSPT (767) • PENTA 24-ISO (742) • PENTA 24-MT (725) • PENTA 24-NPT (763) • PENTA 24-UN (753)
• PENTA 24-W (759) • PENTA 24-WT (717) • PENTA 24N-C (359) • PENTA 24N-C (full radius) (360) • PENTA 24N-C-SL (356) • PENTA 24N-J (358)
• PENTA 24N-J (full radius) (359) • PENTA 24N-J-SL (356) • PENTA 24N-PF (full radius) (361) • PENTA 24N-PF/P (360) • PENTA 24N-Z (361)
• PENTA 24R-C (601) • PENTA 24R-P (602) • PENTA 24R/L-DSL (357) • PENTA 24R/L-J (598) • PENTA 24R/L-Z (600) • PENTA 34F-R/L (674)
• PENTA 34N-C (364) • PENTA 34N-J (365) • PENTA 34N-PB (364) • PENTA 34R/L-C (603) • PENTA 34R/L-J (604) • PENTA 34R/L-PB (605)
For holders, see pages: IM-MAHPD (707) • MAHPR/L-JHP (308) • MAHR/L-JHP (306) • MAHR/L (306) • MAHPR/L (307) • C#-MAHD (697)
• C#-MAHPD (698) • C#-MAHDR-45 (696) • HSK A63WH-MAHUR/L (706) • HSK A63WH-MAHDR-45 (705) • HSK A63WH-MAHDOR (705) • IM-MAHD (707)
• C#-MAHD-JHP (697) • C#-MAHPD-JHP (698) • MAHR/L-JHP-MC (307)

Spare Parts

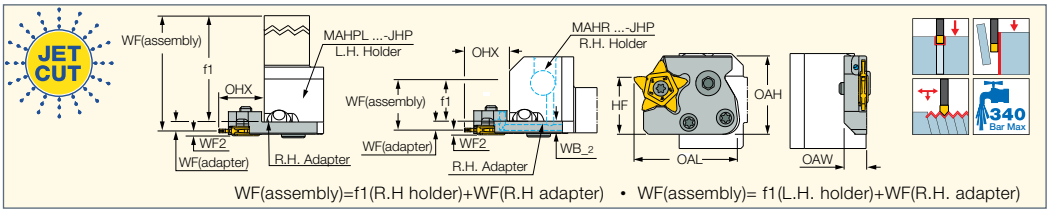
Designation	
PCADL 24N	SR 16-212-01397L(a)
PCADR 24N	SR 16-212-01397
PCADR/L 34N	SR 16-212-01397

(a) For left-hand holders

MODULAR GRIP

PCADR/L-JHP

Adapters with High-Pressure Coolant Holes for PENTACUT Grooving Inserts



Designation	CWN(1)	CWX(2)	OHX(3)	OAL	WF(4)	WF2	OAW	WB_2	HF	OAH	Insert
PCADR/L 24-JHP	0.50	3.18 (5)	19.30	43.80	5.20	2.00	10.00	7.2	24.0	33.00	PENTA 24
PCADR/L 34-JHP	1.50	4.00	27.80	54.20	5.35	2.15	11.00	7.2	24.0	33.00	PENTA 34

- CDX and CUTDIA according to insert limitation • For user guide and accessores, see pages 475-496

(1) Minimum cutting width
(2) Maximum cutting width
(3) Maximum overhang
(4) WF(adapter)
(5) Up to 6.2 mm width can be ordered on request

For inserts, see pages: PENTA 24-BSPT (767) • PENTA 24-ISO (742) • PENTA 24-MT (725) • PENTA 24-NPT (763) • PENTA 24-UN (753)
• PENTA 24-W (759) • PENTA 24-WT (717) • PENTA 24N-C (359) • PENTA 24N-C (full radius) (360) • PENTA 24N-C-SL (356) • PENTA 24N-J (358)
• PENTA 24N-J (full radius) (359) • PENTA 24N-J-SL (356) • PENTA 24N-PF (full radius) (361) • PENTA 24N-PF/P (360) • PENTA 24N-Z (361)
• PENTA 24R-C (601) • PENTA 24R-P (602) • PENTA 24R/L-DSL (357) • PENTA 24R/L-J (598) • PENTA 24R/L-Z (600) • PENTA 34F-R/L (674)
• PENTA 34N-C (364) • PENTA 34N-J (365) • PENTA 34N-PB (364) • PENTA 34R/L-C (603) • PENTA 34R/L-J (604) • PENTA 34R/L-PB (605)
For holders, see pages: ABC MAHDR-#-XL-JHP (884) • C#-MAHD-JHP (697) • C#-MAHPD-JHP (698) • MAHPR/L-JHP (308) • MAHR/L-JHP (306)
• MAHR/L-JHP-MC (307) • MS##-##-MG-JHP (859) • MS-ES#####-GWS-MG-JHP (861) • TR TNK36 MAHDL-R-XL-JHP (884) • TR45 MAHDR-#-XL-JHP (883)
• TR45TNL MAHDN-R-XL-JHP (883) • V## MAHD#-#-XL-##-JHP (880) • V## MAHD-XL-JHP (881)

Flow Rate vs. Pressure

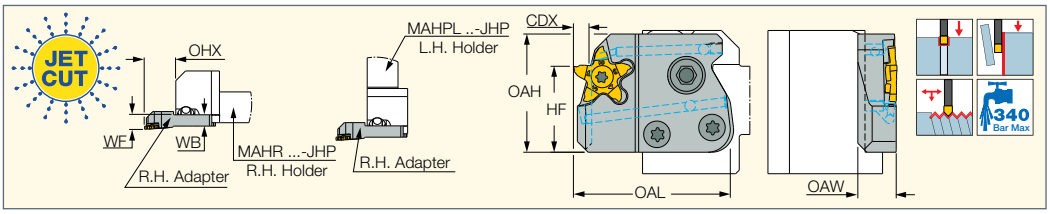
Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
PCADR/L 24-JHP	9-11	11-13	12-14

Spare Parts

Designation	
PCADL 24-JHP	SR 16-212-01397L
PCADR 24-JHP	SR 16-212-01397
PCADR/L 34-JHP	SR 16-212-01397

PENTACUT

PCADRS/LS-JHP
Adapters with High-Pressure Coolant Holes for PENTACUT 17



Designation	CWN(1)	CWX(2)	OHX(3)	OAL	WF	OAW	WB	HF	OAH	CDX	Insert
PCADR/LS 17-JHP	0.25	3.18	19.30	43.80	8.95	10.70	7.0	24.0	33.00	4.00	PENTA 17

• CDX and CUTDIA according to insert limitation • For user guide and accessories, see pages 475-496
(1) Minimum cutting width
(2) Maximum cutting width
(3) Maximum overhang

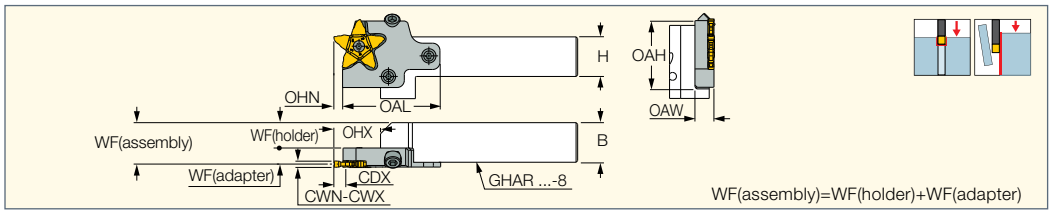
For inserts, see pages: PENTA 17-MT-RS/LS (438) • PENTA 17-NP-RS/LS (344) • PENTA 17-NX-RS (345) • PENTA 17-P-RS/LS (341) • PENTA 17-P-RS/LS (full radius) (343) • PENTA 17-WT-RS/LS (438) • PENTA 17R/L-P-RS (342) • PENTA 17R/L-SP-RS (342)
For holders, see pages: ABC MAHDR-#-XL-JHP (884) • C#-MAHD-JHP (697) • C#-MAHPD-JHP (698) • DT##/2 MAHD#-#-XL-JHP (860) • MAHPR/L-JHP (308) • MAHR/L-JHP (306) • MAHR/L-JHP-MC (307) • MS##-##-MG-JHP (859) • MS-ES#####-GWS-MG-JHP (861) • TR TNK36 MAHDL-R-XL-JHP (884) • TR45 MAHDR-#-XL-JHP (883) • TR45TNL MAHDN-R-XL-JHP (883) • V## MAHD#-#-XL-##-JHP (880) • V## MAHD-XL-JHP (881)

Spare Parts

Designation		
PCADLS 17-JHP	SR M4-39432	T-1508/5
PCADRS 17-JHP	SR M4-39432L	T-1508/5

PENTACUT

PCADR/L 34N-RE
Reinforced Adapters for PENTACUT Grooving Inserts



Designation	CWN(1)	CWX(2)	OHN(3)	OHX(4)	OAL	WF(5)	OAH	OAW
PCADR/L 34N-RE	1.50	4.00	5.50	29.50	61.50	10.15	42.00	12.00

• CDX and CUTDIA according to insert limitation • H, B, and WF(holder) according to holder being used
(1) Minimum cutting width
(2) Maximum cutting width
(3) Minimum overhang
(4) Maximum overhang
(5) WF(adapter)

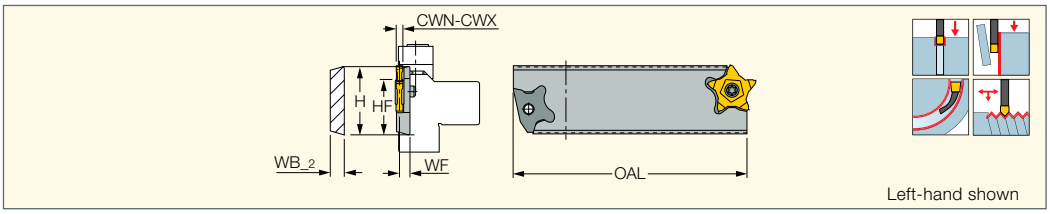
For inserts, see pages: PENTA 34F-R/L (674) • PENTA 34N-C (364) • PENTA 34N-J (365) • PENTA 34N-PB (364) • PENTA 34R/L-C (603) • PENTA 34R/L-J (604) • PENTA 34R/L-PB (605)
For holders, see pages: C#-GHAD-8 (699) • C#-GHAPR/L-8 (700) • GHAPR/L-8 (314) • GHAR/L-8 (314) • IM-GHAD-8 (708)

Spare Parts

Designation	
PCADR/L 34N-RE	SR 16-212-01397

PENTACUT

PCHBR/L
Double-Ended Parting and Grooving Blades for PENTACUT Inserts



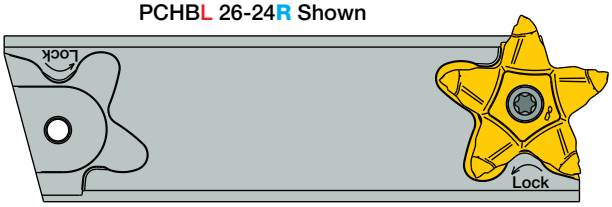
Designation	H	CWN[2]	CWX[3]	HF	WF[4]	OAL	WB_2	MIID[5]	
PCHBL 26-24R	26.0	0.50	6.20	21.4	7.00	110.00	8.5	PENTA 24	SR 16-212-01397L
PCHBR 26-24L	26.0	0.50	6.20	21.4	7.00	110.00	8.5	PENTA 24	SR 16-212-01397
PCHBR 26-24R	26.0	0.50	6.20	21.4	1.50	110.00	8.5	PENTA 24	SR 16-212-01397L
PCHBL 26-34R [1]	26.0	1.50	4.00	21.4	7.15	110.00	8.5	PENTA 34	SR 16-212-01397
PCHBR 26-34L [1]	26.0	1.50	4.00	21.4	7.15	110.00	8.5	PENTA 34	SR 16-212-01397
PCHBR 26-34R [1]	26.0	1.50	4.00	21.4	1.35	110.00	8.5	PENTA 34	
PCHBL 32-24R	32.0	0.50	6.20	24.8	7.00	110.00	8.5	PENTA 24	SR 16-212-01397L
PCHBR 32-24L	32.0	0.50	6.20	24.8	7.00	110.00	8.5	PENTA 24	SR 16-212-01397
PCHBL 32-34R	32.0	1.50	4.00	24.8	7.15	110.00	8.5	PENTA 34	SR 16-212-01397
PCHBR 32-34L	32.0	1.50	4.00	24.8	7.15	110.00	8.5	PENTA 34	SR 16-212-01397

- For insert/blade orientation, see the following drawings

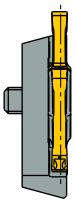
[1] Single pocket blade
[2] Minimum cutting width
[3] Maximum cutting width
[4] To the center of inserts up to 4.15 mm width
[5] Master insert identification

For inserts, see pages: PENTA 24-BSPT (767) • PENTA 24-ISO (742) • PENTA 24-MT (725) • PENTA 24-NPT (763) • PENTA 24-UN (753) • PENTA 24-W (759) • PENTA 24-WT (717) • PENTA 24N-C (359) • PENTA 24N-C (full radius) (360) • PENTA 24N-C-SL (356) • PENTA 24N-J (358) • PENTA 24N-J (full radius) (359) • PENTA 24N-J-SL (356) • PENTA 24N-PF (full radius) (361) • PENTA 24N-PF/P (360) • PENTA 24N-Z (361) • PENTA 24R-C (601) • PENTA 24R-P (602) • PENTA 24R/L-DSL (357) • PENTA 24R/L-J (598) • PENTA 24R/L-Z (600) • PENTA 34F-R/L (674) • PENTA 34N-C (364) • PENTA 34N-J (365) • PENTA 34N-PB (364) • PENTA 34R/L-C (603) • PENTA 34R/L-J (604) • PENTA 34R/L-PB (605)

PCHBL 26-24R Shown

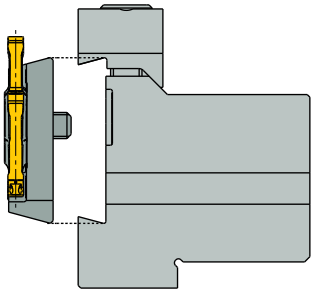


PCHBL 26-24L

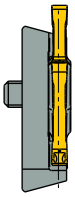


Left-hand blade

PCHBL 26-24R

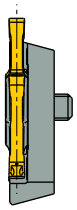


PCHBR 26-24L



Right-hand blade

PCHBR 26-24R



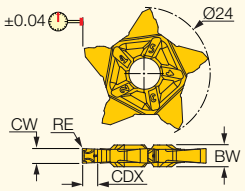
Pocket location on the blade

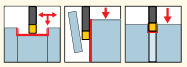
PENTACUT

PENTA 24N-C-SL

First Choice for The Parting of Bars, Hard Materials, and Tough Applications with a Negative Cutting Rake Angle







Designation	Dimensions CW	CWTOL(1)	RE	RETOL(2)	CDX(3)	BW	IC808G	Recommended Machining Data f groove (mm/rev)
PENTA 24N200C020SL	2.00	0.020	0.20	0.030	6.00	4.00	●	0.05-0.16
PENTA 24N300C020SL	3.00	0.020	0.20	0.030	6.20	4.00	●	0.06-0.20

NEW

- CUTDIA as a function of depth of cut (CDX).
- For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

For tools, see pages: NQCH-PCHR/L-24-JHP (348) • PCAD RE/LE-JHP (561) • PCADR/L (353) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-24 (346) • PCHR/L-24-JHP (347) • PCHR/L-24-JHP-MC (348) • PCHR/L-24-JHP-QC/MC (349)

Designation	D-Max As a Function of Depth of Cut (T) T-Max	T≤3.0	T≤3.5	T≤4.0	T≤4.5	T≤5.0	T≤5.5	T≤6.0	T≤6.2
PENTA 24N200C020SL	6.0	N.L.	470	210	120	75	45	20	-
PENTA 24N300C020SL	6.2	N.L.	470	210	120	75	60	40	20

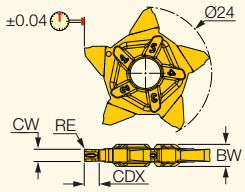
(1) The data in those tables refers to standard inserts only.
(2) As T decreases ,D-Max Increases. See tables for further data.
(3) N.L. = No Limit.

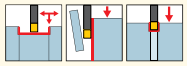
PENTACUT

PENTA 24N-J-SL

Five Cutting Edges for Parting and Grooving with Positive Rake Angle Clamped Onto Standard PENTACUT Holders.







Designation	Dimensions CW	CWTOL(1)	RE	RETOL(2)	CDX(3)	BW	IC808G	Recommended Machining Data f groove (mm/rev)
PENTA 24N050J004SL	0.50	0.020	0.04	0.020	2.50	4.00	●	0.02-0.06
PENTA 24N100J006SL	1.00	0.020	0.06	0.020	3.50	4.00	●	0.02-0.08
PENTA 24N150J010SL	1.50	0.020	0.10	0.020	5.00	4.00	●	0.03-0.10
PENTA 24N200J020SL	2.00	0.020	0.20	0.030	6.00	4.00	●	0.03-0.12
PENTA 24N247J020SL	2.47	0.020	0.20	0.030	5.00	4.00	●	0.03-0.15
PENTA 24N300J020SL	3.00	0.020	0.20	0.030	6.20	4.00	●	0.03-0.15

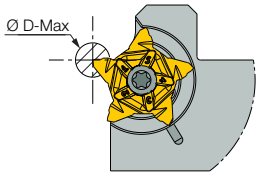
- For cutting speed recommendations and user guide, see pages 475-492

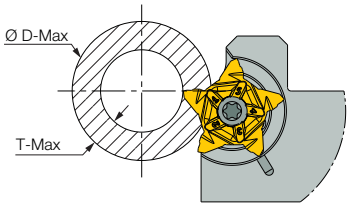
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

For tools, see pages: NQCH-PCHR/L-24-JHP (348) • PCAD RE/LE-JHP (561) • PCADR/L (353) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-24 (346) • PCHR/L-24-JHP (347) • PCHR/L-24-JHP-MC (348) • PCHR/L-24-JHP-QC/MC (349)

Designation	CW ± 0.02	Parting to Center D-Max	Parting Hollow Bars T-Max	Parting Hollow Bars D-Max
PENTA 24...SL	CW = 0.50	5	2.5*	250
	CW = 1.00	7	3.5	250
	CW = 1.50	10	5.0	30
	CW = 2.00	12	6.0	20
	CW = 2.47	10	5.0	30
	CW = 3.00	12.4	6.2	20

*Refers to PENTA 24N050J004SL



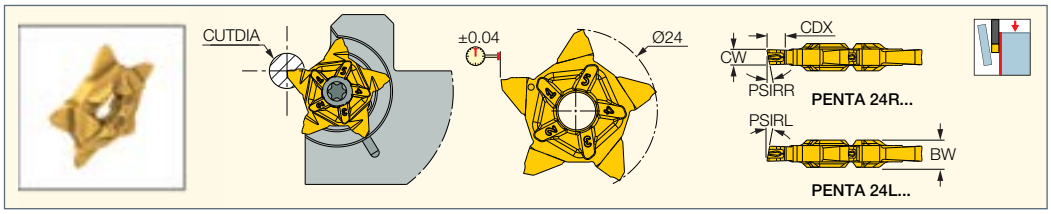


Designation	D-Max As a Function of Depth of Cut (T) T-Max	T≤3.0	T≤3.5	T≤4.0	T≤4.5	T≤5.0	T≤5.5	T≤6.0	T≤6.2
PENTA 24N050J004SL	2.5	-.	-	-	-	-	-	-	-
PENTA 24N100J006SL	3.5	N.L.	250	-	-	-	-	-	-
PENTA 24N150J010SL	5.0	N.L.	470	210	70	30	-	-	-
PENTA 24N200J020SL	6.0	N.L.	470	210	120	75	45	20	-
PENTA 24N247J020SL	5.0	N.L.	470	210	70	30	-	-	-
PENTA 24N300J020SL	6.2	N.L.	470	210	120	75	60	40	20

(1) The data in those tables refers to standard inserts only.
(2) As T decreases ,D-Max Increases. See tables for further data.
(3) N.L. = No Limit.

PENTACUT

PENTA 24R/L-DSL
Parting Insert with 5 Angled Cutting Edges to Minimize Burr Size. Can Be Clamped Also on Standard PENTA CUT Holders.



Designation	Dimensions						IC1010	Recommended Machining Data
	CW	CWTOL[1]	CDX[2]	PSIRL	PSIRR	CUTDIA		f groove (mm/rev)
PENTA 24L100J15DSL	1.00	0.020	3.50	15.0	-	7.0	●	0.02-0.05
PENTA 24R100J15DSL	1.00	0.020	3.50	-	15.0	7.0	●	0.02-0.05
PENTA 24L150J06DSL	1.50	0.020	5.00	6.0	-	10.0	●	0.03-0.08
PENTA 24R150J06DSL	1.50	0.020	5.00	-	6.0	10.0	●	0.03-0.08
PENTA 24L200J06DSL	2.00	0.020	6.00	6.0	-	12.0	●	0.03-0.10
PENTA 24R200J06DSL	2.00	0.020	6.00	-	6.0	12.0	●	0.03-0.10

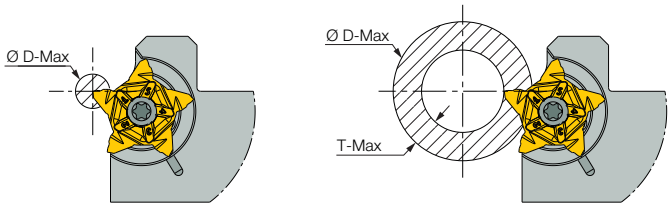
NEW

• CUTDIA - parting to center • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Cutting depth maximum

For tools, see pages: NQCH-PCHR/L-24-JHP (348) • PCAD RE/LE-JHP (561) • PCADR/L (353) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-24 (346) • PCHR/L-24-JHP (347) • PCHR/L-24-JHP-MC (348) • PCHR/L-24-JHP-QC/MC (349)

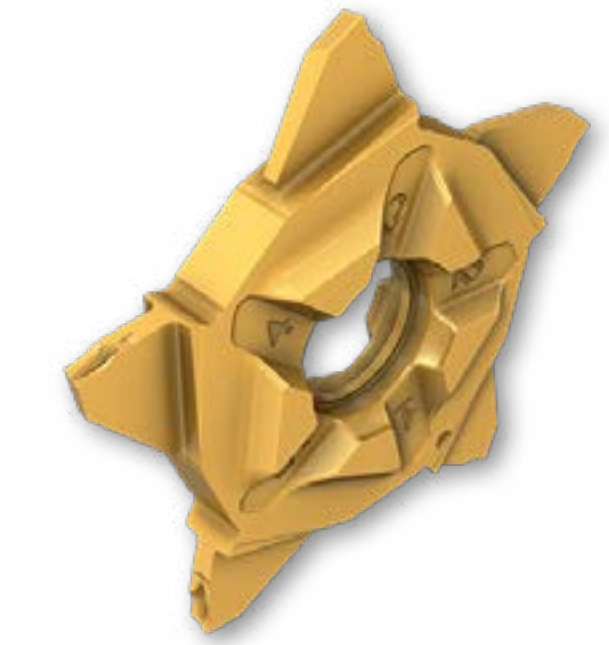
Designation	CW ± 0.02	Parting to Center D-Max	Parting Hollow Bars	
			T-Max	D-Max
PENTA 24...SL	CW = 0.50	5	2.5*	250
	CW = 1.00	7	3.5	250
	CW = 1.50	10	5.0	30
	CW = 2.00	12	6.0	20
	CW = 2.47	10	5.0	30
	CW = 3.00	12.4	6.2	20

*Refers to PENTA 24N050J004SL



Designation	Parting to Center D-Max	D-Max As a Function of Depth of Cut (T) (for Parting Hollow Bars)						
		T≤3.0	T≤3.5	T≤4.0	T≤4.5	T≤5.0	T≤5.5	T≤6.0
PENTA 24R/L100J15DSL	7	N.L.	250	-	-	-	-	-
PENTA 24R/L150J06DSL	10	N.L.	470	210	70	30	-	-
PENTA 24R/L200J06DSL	12	N.L.	470	210	120	75	45	20

(1) The data in those tables refers to standard inserts only.
(2) As T decreases ,D-Max Increases. See tables for further data.
(3) N.L. = No Limit.



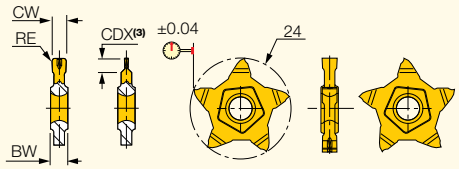
Identification System for Standard Inserts

PENTA	24	N	150	J	010
Family name	Circular circumference of the insert	Insert lead angle (K) N, R, L	Cutting edge width CW(mm) x100	Chipbreaker style J, Z	Corner radius RE (mm)x100 for neutral insert. (k=0) Or lead angle for right- or left-hand inserts. (eg. 15D=15°)

PENTACUT

PENTA 24N-J
Inserts with 5 Cutting Edges for Parting and Grooving Soft Materials, Tubes, Small and Thin-Walled Parts





Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	CDX(3)	Tough ↔ Hard IC1010	IC1008	IC908	IC807G	Recommended Machining Data f groove (mm/rev)
PENTA 24N050J000	0.50	0.00	0.020	0.020	4.00	1.00			•		0.02-0.04
PENTA 24N050J004	0.50	0.04	0.020	0.020	4.00	2.50		•			0.02-0.05
PENTA 24N080J000	0.80	0.00	0.020	0.020	4.00	1.60			•		0.02-0.05
PENTA 24N100J004	1.00	0.04	0.020	0.020	4.00	3.50			•		0.03-0.07
PENTA 24N100J006	1.00	0.06	0.020	0.020	4.00	3.50		•		•	0.03-0.07
PENTA 24N104J000	1.04	0.00	0.020	0.020	4.00	2.00			•		0.02-0.07
PENTA 24N120J000	1.20	0.00	0.020	0.020	4.00	2.00			•	•	0.03-0.07
PENTA 24N125J010	1.25	0.10	0.020	0.020	4.00	2.00			•		0.03-0.07
PENTA 24N140J000	1.40	0.00	0.020	0.020	4.00	2.00			•		0.03-0.08
PENTA 24N147J000	1.47	0.00	0.020	0.020	4.00	2.50			•		0.03-0.08
PENTA 24N150J010	1.50	0.10	0.000	0.020	4.00	5.00	•	•	•	•	0.03-0.10
PENTA 24N157J015	1.57	0.15	0.020	0.030	4.00	3.00			•	•	0.00-0.12
PENTA 24N170J010	1.70	0.10	0.020	0.030	4.00	3.00			•	•	0.03-0.12
PENTA 24N178J018	1.78	0.18	0.020	0.030	4.00	3.00			•	•	0.04-0.12
PENTA 24N185J015	1.85	0.15	0.020	0.030	4.00	3.00			•		0.04-0.12
PENTA 24N196J015	1.96	0.15	0.020	0.030	4.00	3.00			•	•	0.04-0.12
PENTA 24N196J040	1.96	0.40	0.020	0.030	4.00	3.00			•		0.03-0.10
PENTA 24N200J020	2.00	0.20	0.020	0.030	4.00	6.00	•	•	•	•	0.04-0.12
PENTA 24N222J015	2.22	0.15	0.020	0.030	4.00	3.50			•	•	0.04-0.16
PENTA 24N230J020	2.30	0.20	0.020	0.030	4.00	3.50			•	•	0.04-0.16
PENTA 24N239J015	2.39	0.15	0.020	0.030	4.00	5.00			•	•	0.04-0.16
PENTA 24N247J020	2.47	0.20	0.020	0.030	4.00	5.00			•	•	0.04-0.16
PENTA 24N250J020	2.50	0.20	0.020	0.030	4.00	5.00			•		0.04-0.16
PENTA 24N270J010	2.70	0.10	0.020	0.020	4.00	5.00			•		0.04-0.16
PENTA 24N287J020	2.87	0.20	0.020	0.030	4.00	6.50			•		0.04-0.16
PENTA 24N300J000	3.00	0.00	0.020	0.020	4.00	6.50			•		0.04-0.10
PENTA 24N300J020	3.00	0.20	0.020	0.030	4.00	6.50	•		•	•	0.04-0.16
PENTA 24N300J040	3.00	0.40	0.020	0.030	4.00	6.50			•	•	0.04-0.16
PENTA 24N315J015	3.15	0.15	0.020	0.030	4.00	6.50			•		0.04-0.16
PENTA 24N318J020	3.18	0.20	0.020	0.030	4.00	6.50			•	•	0.04-0.16
PENTA 24N330J010	3.30	0.10	0.020	0.030	5.00	6.40			•		0.04-0.16
PENTA 24N348J020	3.48	0.20	0.020	0.030	5.00	6.40			•		0.04-0.18
PENTA 24N356J020	3.56	0.20	0.020	0.030	5.00	6.40			•		0.04-0.18
PENTA 24N374J020	3.74	0.20	0.020	0.030	5.00	6.40			•		0.04-0.18
PENTA 24N398J020	3.98	0.20	0.020	0.030	5.00	6.20			•		0.04-0.18
PENTA 24N400J040	4.00	0.40	0.020	0.030	5.00	6.20			•		0.04-0.18
PENTA 24N423J010	4.23	0.10	0.020	0.030	5.00	6.20			•		0.04-0.18

• Recessing is possible only with 2.39 mm and wider inserts • For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

(3) For grooving and parting depth relative to part diameter, see page 361

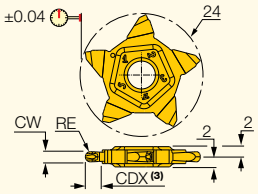
For tools, see pages: NQCH-PCHR/L-24-JHP (348) • PCAD RE/LE-JHP (561) • PCADR/L (353) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-24 (346) • PCHR/L-24-JHP (347) • PCHR/L-24-JHP-MC (348)

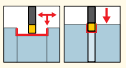
PENTACUT

PENTA 24N-J (full radius)

Precision Grooving
Pentagonal Full Radius
Inserts for Soft Materials







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	Tough ↔ Hard IC908	IC807G	Recommended Machining Data f groove (mm/rev)
PENTA 24N100J050	1.00	0.50	0.020	0.050	3.50	•		0.03-0.07
PENTA 24N120J060	1.20	0.60	0.020	0.050	2.00	•		0.03-0.07
PENTA 24N140J070	1.40	0.70	0.020	0.050	2.00	•		0.05-0.08
PENTA 24N157J079	1.57	0.79	0.020	0.050	3.00	•	•	0.05-0.08
PENTA 24N200J100	2.00	1.00	0.020	0.050	3.00	•	•	0.05-0.12
PENTA 24N239J120	2.39	1.20	0.020	0.050	5.00	•		0.06-0.16
PENTA 24N300J150	3.00	1.50	0.020	0.050	6.50	•	•	0.06-0.20
PENTA 24N318J159	3.18	1.59	0.020	0.050	6.50	•		0.06-0.20
PENTA 24N400J200	4.00	2.00	0.020	0.050	6.25	•		0.06-0.20

• Recessing is possible only with 2.39 mm and wider inserts. • For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

(3) For grooving depth relative to part diameter, see page 361

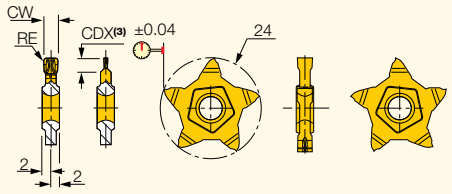
For tools, see pages: NQCH-PCHR/L-24-JHP (348) • PCAD RE/LE-JHP (561) • PCADR/L (353) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-24 (346) • PCHR/L-24-JHP (347) • PCHR/L-24-JHP-MC (348)

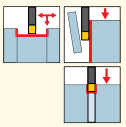
PENTACUT

PENTA 24N-C

Inserts with 5 Cutting Edges for Parting and Grooving Bars, Hard Materials and Tough Applications







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	IC908	Recommended Machining Data f groove (mm/rev)
PENTA 24N150C010	1.50	0.10	0.020	0.050	5.00	•	0.05-0.11
PENTA 24N157C015	1.57	0.15	0.020	0.050	3.00	•	0.05-0.12
PENTA 24N170C010	1.70	0.10	0.020	0.050	3.00	•	0.05-0.13
PENTA 24N178C018	1.78	0.18	0.020	0.050	3.00	•	0.05-0.14
PENTA 24N196C015	1.96	0.15	0.020	0.050	3.00	•	0.05-0.15
PENTA 24N200C020	2.00	0.20	0.020	0.050	6.00	•	0.05-0.16
PENTA 24N222C015	2.22	0.15	0.020	0.050	3.50	•	0.05-0.16
PENTA 24N230C020	2.30	0.20	0.020	0.050	3.50	•	0.06-0.17
PENTA 24N239C015	2.39	0.15	0.020	0.050	5.00	•	0.07-0.18
PENTA 24N247C020	2.47	0.20	0.020	0.050	5.00	•	0.08-0.18
PENTA 24N270C010	2.70	0.10	0.020	0.050	6.20	•	0.09-0.18
PENTA 24N287C020	2.87	0.20	0.020	0.050	6.20	•	0.10-0.18
PENTA 24N300C020	3.00	0.20	0.020	0.050	6.20	•	0.10-0.20
PENTA 24N300C040	3.00	0.40	0.020	0.050	6.20	•	0.10-0.20
PENTA 24N318C020	3.18	0.20	0.020	0.050	6.20	•	0.10-0.20
PENTA 24N478C055	4.78	0.55	0.020	0.050	6.20	•	0.10-0.25
PENTA 24N486C040	4.86	0.40	0.020	0.050	6.20	•	0.10-0.25
PENTA 24N500C040	5.00	0.40	0.020	0.050	6.20	•	0.10-0.25

• Recessing is possible only with 2.39 mm and wider inserts • For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

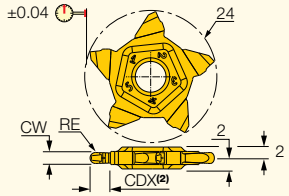
(3) For grooving and parting depths relative to part diameter, see page 361

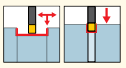
For tools, see pages: NQCH-PCHR/L-24-JHP (348) • PCAD RE/LE-JHP (561) • PCADR/L (353) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-24 (346) • PCHR/L-24-JHP (347) • PCHR/L-24-JHP-MC (348)

PENTACUT

PENTA 24N-C (full radius)
Full Radius Grooving Inserts with 5 Cutting Edges for Hard Materials and Tough Applications







Designation	Dimensions CW	RE	CWTOL(1)	CDX(2)	IC908	Recommended Machining Data f groove (mm/rev)
PENTA 24N157C079	1.57	0.79	0.020	3.00	●	0.04-0.12
PENTA 24N200C100	2.00	1.00	0.020	3.00	●	0.04-0.16
PENTA 24N239C120	2.39	1.20	0.020	5.00	●	0.06-0.18
PENTA 24N300C150	3.00	1.50	0.020	6.20	●	0.10-0.25

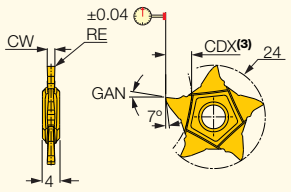
• Recessing is possible only with 2.39 mm and wider inserts • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) For grooving depth relative to part diameter, see page 361

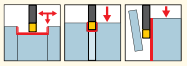
For tools, see pages: NQCH-PCHR/L-24-JHP (348) • PCAD RE/LE-JHP (561) • PCADR/L (353) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-24 (346) • PCHR/L-24-JHP (347) • PCHR/L-24-JHP-MC (348)

PENTACUT

PENTA 24N-PF/P
Pentagonal Inserts with a High Positive Flat Rake for Parting and Precision Grooving







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	GAN	Tough ↔ Hard IC1008	IC908	IC30N	Recommended Machining Data f groove (mm/rev)
PENTA 24N050PF005	0.50	0.05	0.020	0.020	2.50	6.0			●	0.01-0.04
PENTA 24N075PF005	0.75	0.05	0.020	0.020	2.50	6.0			●	0.02-0.05
PENTA 24N095PF005	0.95	0.05	0.020	0.020	4.00	6.0			●	0.02-0.05
PENTA 24N100P005	1.00	0.05	0.020	0.020	3.50	12.0	●			0.02-0.05
PENTA 24N100PF010	1.00	0.10	0.020	0.020	4.00	6.0		●	●	0.03-0.06
PENTA 24N125PF020	1.25	0.20	0.020	0.020	5.00	6.0			●	0.03-0.06
PENTA 24N145PF020	1.45	0.20	0.020	0.020	6.20	6.0			●	0.03-0.06
PENTA 24N150P005	1.50	0.05	0.020	0.020	5.00	12.0	●			0.02-0.07
PENTA 24N150PF020	1.50	0.20	0.020	0.030	6.00	6.0		●	●	0.03-0.09
PENTA 24N175PF020	1.75	0.20	0.020	0.030	6.20	6.0			●	0.02-0.08
PENTA 24N185PF020	1.85	0.20	0.020	0.030	6.00	6.0			●	0.03-0.10
PENTA 24N200P005	2.00	0.05	0.020	0.020	6.00	12.0	●			0.02-0.08
PENTA 24N200PF020	2.00	0.20	0.020	0.030	6.50	6.0		●	●	0.04-0.10
PENTA 24N230PF020	2.30	0.20	0.020	0.030	6.20	6.0			●	0.04-0.14
PENTA 24N239PF015	2.39	0.15	0.020	0.030	6.50	6.0		●		0.04-0.14
PENTA 24N250PF020	2.50	0.20	0.020	0.030	6.50	6.0		●	●	0.04-0.14
PENTA 24N300PF020	3.00	0.20	0.020	0.030	6.50	6.0		●	●	0.04-0.14
PENTA 24N300PF030	3.00	0.30	0.020	0.030	6.20	6.0			●	0.04-0.15
PENTA 24N400PF020	4.00	0.20	0.020	0.030	6.50	6.0			●	0.04-0.16
PENTA 24N400PF040	4.00	0.40	0.020	0.030	6.20	6.0			●	0.04-0.16

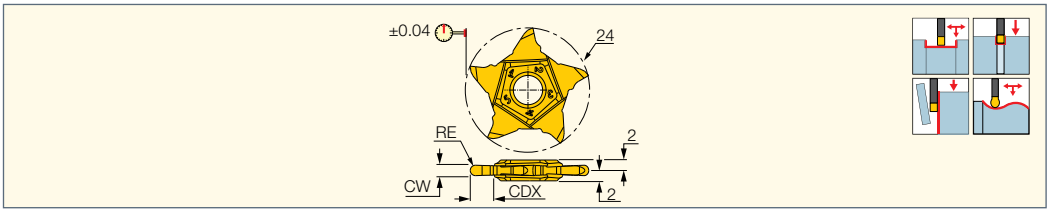
• For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) For grooving and parting depths relative to part diameter, see page 361

For tools, see pages: NQCH-PCHR/L-24-JHP (348) • PCAD RE/LE-JHP (561) • PCADR/L (353) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-24 (346) • PCHR/L-24-JHP (347) • PCHR/L-24-JHP-MC (348)

PENTACUT

PENTA 24N-PF (full radius)

Full Radius Pentagonal Inserts with a High Positive Flat Rake for Parting and Precision Grooving



Designation	Dimensions CW	RE	CWTOL(1)	CDX(2)	GAN	IC30N	Recommended Machining Data f groove (mm/rev)
PENTA 24N100PF050	1.00	0.50	0.020	4.50	6.0	●	0.03-0.06
PENTA 24N150PF075	1.50	0.75	0.020	6.20	6.0	●	0.03-0.06
PENTA 24N200PF100	2.00	1.00	0.020	6.20	6.0	●	0.04-0.10
PENTA 24N250PF125	2.50	1.25	0.020	6.20	6.0	●	0.04-0.14
PENTA 24N300PF150	3.00	1.50	0.020	6.20	6.0	●	0.04-0.15
PENTA 24N400PF200	4.00	2.00	0.020	6.20	6.0	●	0.04-0.16

- For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

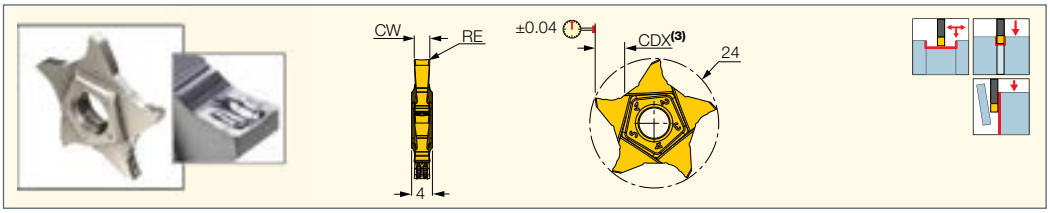
(2) For grooving and parting depths relative to part diameter, see page 361

For tools, see pages: NQCH-PCHR/L-24-JHP (348) • PCAD RE/LE-JHP (561) • PCADR/L (353) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-24 (346) • PCHR/L-24-JHP (347) • PCHR/L-24-JHP-MC (348)

PENTACUT

PENTA 24N-Z

Inserts with 5 Cutting Edges for Grooving and Parting Tubes, Small and Thin-Walled Parts



Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	IC908	Recommended Machining Data f groove (mm/rev)
PENTA 24N150Z010	1.50	0.10	0.020	0.020	5.00	●	0.05-0.08
PENTA 24N200Z020	2.00	0.20	0.020	0.030	6.40	●	0.04-0.12
PENTA 24N300Z020	3.00	0.20	0.020	0.000	6.40	●	0.04-0.16

- Cutting edge with high positive rake, suitable for parting tubes, thin walled parts and for small diameters
- Suitable for machining soft materials and bearing steel at low to medium feeds
- For cutting speed recommendations and user guide, see pages 475-492

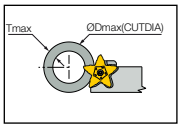
(1) Cutting width tolerance (+/-)

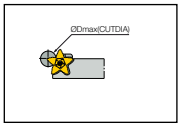
(2) Corner radius tolerance (+/-)

(3) For grooving and parting depths relative to part diameter, see page 361

For tools, see pages: NQCH-PCHR/L-24-JHP (348) • PCAD RE/LE-JHP (561) • PCADR/L (353) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-24 (346) • PCHR/L-24-JHP (347) • PCHR/L-24-JHP-MC (348)

ØDmax as a Function of Parting / Grooving Depth (T) for PENTA 24 Inserts										
CW±0.02	CDX(3)	CDX / ØDmax	T≤3.0	T≤3.5	T≤4.0	T≤4.5	T≤5.0	T≤5.5	T≤6.5	T≤6.4
CW=0.50 (1)	1.0	1.0 / N.L.	-	-	-	-	-	-	-	-
CW=0.50 (2)	2.5			250						
CW=0.80	1.6	1.6 / N.L.	-	-	-	-	-	-	-	-
CW=1.00	3.5		N.L.	250	-	-	-	-	-	-
1.04≤CW≤1.40	2.0	2.0 / N.L.	-	-	-	-	-	-	-	-
CW=1.47	2.5	2.5 / N.L.	-	-	-	-	-	-	-	-
CW=1.50	5.0		N.L.	470	210	70	30	-	-	-
1.57≤CW≤1.96	3.0		N.L.	-	-	-	-	-	-	-
CW=2.00	6.0(4)		N.L.	470	210	130	75	45	20	-
2.22≤CW≤2.30	3.5		N.L.	250	-	-	-	-	-	-
2.39≤CW≤2.50	5.0		N.L.	470	210	70	30	-	-	-
2.70≤CW≤3.18	6.4		N.L.	470	210	135	100	70	40	20





(1) Refers to PENTA 24N050J000 - a precision grooving insert (2) Refers to PENTA 24N050J004 - a parting insert (3) CUTDIA for parting = 2 x CDX

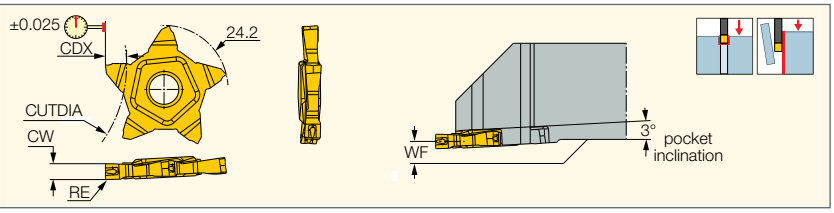
(4) For full radius insert, CDX = 3.0, ØDmax = No limit

PENTACUT

PENTA 24N-J-RS

Parting and Precision Grooving Pentagonal Inserts for Next to High Shoulder Applications





Designation	Dimensions CW	RE	CWTOL(1)	CDX(2)	CUTDIA(3)	WF	IC908	Recommended Machining Data f groove (mm/rev)
PENTA 24N157J020RS	1.57	0.20	0.200	3.00	-	1.20	●	0.03-0.10
PENTA 24N157J079RS	1.57	0.79	0.200	3.00	-	1.20	●	0.04-0.12
PENTA 24N200J020RS	2.00	0.20	0.200	3.00	-	1.00	●	0.04-0.12
PENTA 24N239J020RS	2.39	0.20	0.200	5.00	30.0 (4)	0.80	●	0.04-0.14
PENTA 24N239J119RS	2.39	1.19	0.200	5.00	30.0 (4)	0.80	●	0.04-0.16
PENTA 24N318J020RS	3.18	0.20	0.200	6.20	16.0 (4)	0.40	●	0.04-0.16
PENTA 24N318J159RS	3.18	1.59	0.200	6.20	16.0 (4)	0.40	●	0.04-0.16

(1) Cutting width tolerance (+/-)
(2) Cutting depth maximum
(3) Maximum workpiece diameter for grooving operation
(4) for grooving

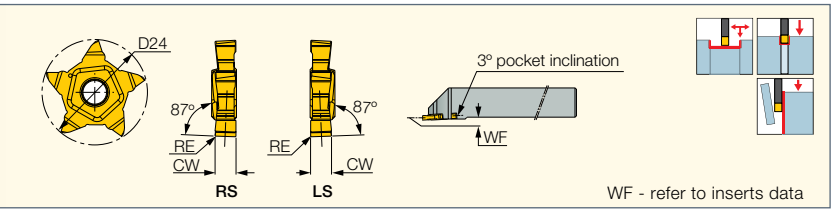
For tools, see page: PCHRS/LS (350)

PENTACUT

PENTA 24N-RS/LS

Pentagonal Inserts for Parting and Precision Grooving Next to High Shoulder Applications





Designation	Dimensions CW	RE	CWTOL(1)	CDX(2)	CUTDIA(3)	WF	IC908	Recommended Machining Data f groove (mm/rev)
PENTA 24N080NF010R/LS	0.80	0.10	0.020	1.60	- (4)	1.60	●	0.03-0.05
PENTA 24N100NF010R/LS	1.00	0.10	0.020	1.80	- (4)	1.50	●	0.03-0.06
PENTA 24N119NF010R/LS	1.19	0.10	0.020	2.00	- (4)	1.40	●	0.03-0.06
PENTA 24N157NF020R/LS	1.57	0.20	0.020	3.00	- (4)	1.20	●	0.03-0.08
PENTA 24N157NF079R/LS	1.57	0.79	0.020	3.00	- (4)	1.20	●	0.03-0.08
PENTA 24N200NF020R/LS	2.00	0.20	0.020	3.00	- (4)	1.00	●	0.03-0.10
PENTA 24N239NF020R/LS	2.39	0.20	0.020	5.00	40.0	0.80	●	0.03-0.12
PENTA 24N239NF119R/LS	2.39	1.19	0.020	5.00	40.0	0.80	●	0.03-0.12
PENTA 24N300NF020R/LS	3.00	0.20	0.020	6.20	16.0	0.50	●	0.04-0.14
PENTA 24N318NF020R/LS	3.18	0.20	0.020	6.50	13.0	0.40	●	0.04-0.14
PENTA 24N318NF159R/LS	3.18	1.59	0.020	6.50	13.0	0.40	●	0.04-0.14
PENTA 24N400NF020RS	4.00	0.20	0.020	6.50	13.0	1.00	●	0.04-0.16
PENTA 24N480NF020R/LS	4.80	0.20	0.020	6.50	13.0	1.60	●	0.04-0.16

- For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)
(2) Cutting depth maximum
(3) Maximum workpiece diameter for grooving operation
(4) No limit

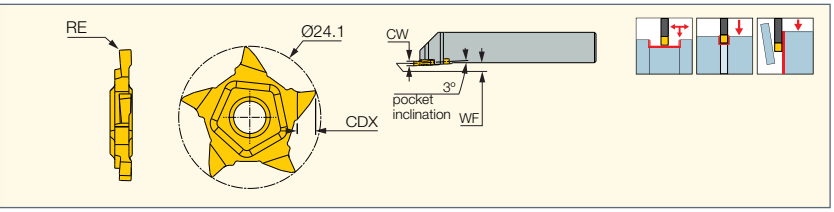
For tools, see page: PCHRS/LS (350)

PENTACUT

PENTA 24N-PF-RS

Pentagonal Inserts for Parting and Precision Grooving Next to High Shoulder Applications





Designation	Dimensions CW	RE	CWTOL(1)	CDX	WPGDX	WF	IC908	Recommended Machining Data f groove (mm/rev)
PENTA 24N200PF020RS	2.00	0.20	0.020	3.00	- (2)	0.96	●	0.04-0.10

NEW

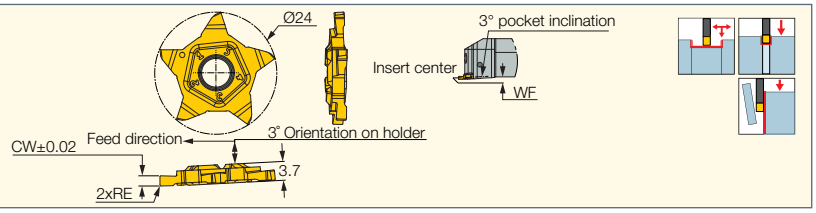
- For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)
(2) No limit

QUICKPENTA

PENTA 24N-NF-RS-SL
Pentagonal Parting and Grooving Inserts for Quick Cutting Edge Indexing. Used for Next to High Shoulder Applications





Designation	Dimensions CW	RE	CDX	WF	IC808G	Recommended Machining Data f groove (mm/rev)
PENTA 24N080NF01RS-SL	0.80	0.10	1.60	1.26	●	0.03-0.07
PENTA 24N100NF01RS-SL	1.00	0.10	1.80	1.16	●	0.03-0.08
PENTA 24N119NF01RS-SL	1.19	0.10	2.00	1.06	●	0.03-0.10
PENTA 24N157NF02RS-SL	1.57	0.20	3.00	0.88	●	0.04-0.12
PENTA 24N200NF02RS-SL	2.00	0.20	3.00	0.66	●	0.04-0.12
PENTA 24N239NF02RS-SL	2.39	0.20	5.00	0.46	●	0.04-0.14
PENTA 24N300NF02RS-SL	3.00	0.20	6.20	0.16	●	0.04-0.14

NEW

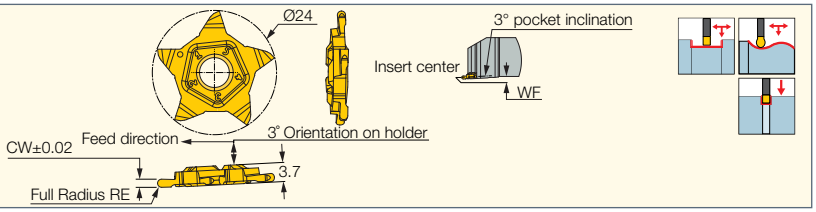
- For cutting speed recommendations and user guide, see pages 475-492

For tools, see page: PCHRS-24 JHP-QC/MC (349)

QUICKPENTA

PENTA 24N-NF-RSSL (full radius)
Precision Grooving Pentagonal Full Radius Inserts for Quick and Accurate Cutting Edge Indexing.





Designation	Dimensions CW	RE	CDX	IC808G	Recommended Machining Data f groove (mm/rev)
PENTA 24N157NF079RSSL	1.57	0.79	3.00	●	0.04-0.10
PENTA 24N318NF159RSSL	3.18	1.59	6.20	●	0.05-0.15

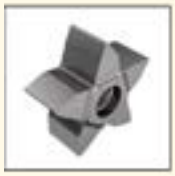
NEW

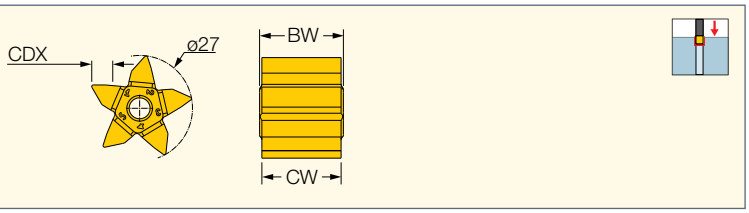
- Recessing is possible only with 2.39 mm and wider inserts.
- For cutting speed recommendations and user guide, see pages 475-492

For tools, see pags: PCHRS-24 JHP-QC/MC (349)

PENTACUT-27

PENTAS 27 blanks
Blank Inserts with 5 Wide Cutting Edges for the Production of Special Profile Contours





Designation	Dimensions CW	CDX	BW	IC08
PENTAS 27-10FT	10.00	4.00	11.80	●
PENTAS 27-15FT	15.00	4.00	16.80	●
PENTAS 27-20FT	20.00	4.00	21.80	●

For tools, see page: PCHR/L-27-JHP-MC (350)

PENTACUT

PENTA 34N-PB
Parting and Grooving Pentagonal Inserts for Parting Bearing Steel and Other Ductile Materials



Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	IC908	Recommended Machining Data f groove (mm/rev)
PENTA 34N150PB015	1.50	0.15	0.020	0.030	8.50	●	0.03-0.06
PENTA 34N200PB020	2.00	0.20	0.020	0.030	8.50	●	0.03-0.08
PENTA 34N300PB020	3.00	0.20	0.020	0.030	9.50	●	0.03-0.10

• For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) For grooving and parting depths relative to part diameter, see page 364

For tools, see pages: PCADR/L (353) • PCADR/L 34N-RE (354) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-34 (351) • PCHR/L-34-JHP (351) • PCHR/L-34-JHP-MC (352)

PENTACUT

PENTA 34N-C
Inserts with 5 Cutting Edges for Parting and Grooving Hard Materials, Tough and General Applications



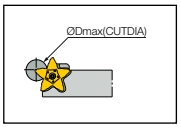
Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	IC908	Recommended Machining Data f groove (mm/rev)
PENTA 34N150C015	1.50	0.15	0.020	0.030	8.00	●	0.03-0.07
PENTA 34N200C020	2.00	0.20	0.020	0.030	8.00	●	0.04-0.14
PENTA 34N200C100	2.00	1.00	0.020	0.050	8.00	●	0.05-0.16
PENTA 34N222C015	2.22	0.15	0.020	0.030	8.00	●	0.05-0.14
PENTA 34N230C020	2.30	0.20	0.020	0.030	8.00	●	0.05-0.14
PENTA 34N239C015	2.39	0.15	0.020	0.030	8.00	●	0.05-0.15
PENTA 34N239C120	2.39	1.20	0.020	0.050	8.00	●	0.05-0.18
PENTA 34N247C020	2.47	0.20	0.020	0.030	8.00	●	0.05-0.18
PENTA 34N250C020	2.50	0.20	0.020	0.030	8.00	●	0.05-0.18
PENTA 34N270C010	2.70	0.10	0.020	0.030	10.00	●	0.05-0.18
PENTA 34N287C020	2.87	0.20	0.020	0.030	10.00	●	0.05-0.18
PENTA 34N300C000	3.00	0.00	0.020	0.020	10.00	●	0.04-0.10
PENTA 34N300C020	3.00	0.20	0.020	0.030	10.00	●	0.06-0.22
PENTA 34N300C040	3.00	0.40	0.020	0.030	10.00	●	0.06-0.25
PENTA 34N300C150	3.00	1.50	0.020	0.050	10.00	●	0.06-0.20
PENTA 34N315C015	3.15	0.15	0.020	0.030	10.00	●	0.06-0.20
PENTA 34N318C020	3.18	0.20	0.020	0.030	10.00	●	0.06-0.22
PENTA 34N330C010	3.30	0.10	0.020	0.020	10.00	●	0.06-0.20
PENTA 34N348C020	3.48	0.20	0.020	0.030	10.00	●	0.06-0.25
PENTA 34N350C025	3.50	0.25	0.020	0.030	10.00	●	0.06-0.30
PENTA 34N398C020	3.98	0.20	0.020	0.030	10.00	●	0.06-0.30
PENTA 34N400C030	4.00	0.30	0.020	0.030	10.00	●	0.06-0.30

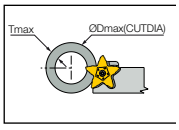
• For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) For grooving and parting depths relative to part diameter, see page 364

For tools, see pages: PCADR/L (353) • PCADR/L 34N-RE (354) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-34 (351) • PCHR/L-34-JHP (351) • PCHR/L-34-JHP-MC (352)

	ØDmax as a Function of Parting / Grooving Depth (T) for PENTA 34 Inserts						
CW±0.02	T≤5.0	T≤6.0	T≤7.0	T≤8.0	T≤8.5	T≤9.0	T≤10.0
1.50 ≤ CW ≤ 2.69	N.L.	350	165	100	55	-	-
2.70 ≤ CW ≤ 4.00						55	20

CUTDIA for parting = 2 x CDX
N.L. = No Limit



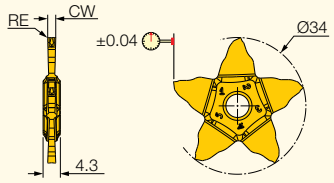


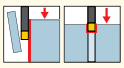
PENTACUT

PENTA 34N-J

Inserts with 5 Cutting Edges for Parting and Grooving Soft Materials, Parting Tubes, Small and Thin-Walled Parts







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	IC908	Recommended Machining Data f groove (mm/rev)
PENTA 34N150J015	1.50	0.15	0.020	0.002	8.50	●	0.03-0.10
PENTA 34N200J020	2.00	0.20	0.020	0.002	8.50	●	0.04-0.12
PENTA 34N200J100	2.00	1.00	0.020	0.002	8.50	●	0.05-0.12
PENTA 34N239J015	2.39	0.15	0.020	0.002	8.50	●	0.04-0.16
PENTA 34N239J120	2.39	1.20	0.020	0.002	8.50	●	0.06-0.16
PENTA 34N250J020	2.50	0.20	0.020	0.002	8.50	●	0.04-0.16
PENTA 34N270J010	2.70	0.10	0.020	0.002	10.00	●	0.04-0.16
PENTA 34N300J000	3.00	0.00	0.020	0.000	10.00	●	0.04-0.10
PENTA 34N300J020	3.00	0.20	0.020	0.002	10.00	●	0.04-0.16
PENTA 34N300J040	3.00	0.40	0.020	0.002	10.00	●	0.04-0.16
PENTA 34N300J150	3.00	1.50	0.020	0.002	10.00	●	0.06-0.20
PENTA 34N318J020	3.18	0.20	0.020	0.002	10.00	●	0.20-0.16

- Recessing is possible only with 2.39 mm and wider inserts
- For cutting speed recommendations and user guide, see pages 475-492

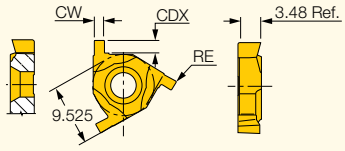
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) For grooving and parting depths relative to part diameter, see page 364

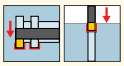
For tools, see pages: PCADR/L (353) • PCADR/L 34N-RE (354) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-34 (351) • PCHR/L-34-JHP (351) • PCHR/L-34-JHP-MC (352)

GTGA

Precision Shallow Grooving Inserts with 3 Cutting Edges







GTGA 16 ER/IL shown

Designation	Dimensions CW	CDX(1)	CWTOL(2)	RE	RETOL(3)	Tough ↔ Hard IC528	IC508	Recommended Machining Data f groove (mm/rev)
GTGA 16EL/IR 100	1.00	1.55	0.020	0.10	0.030	●	●	0.02-0.03
GTGA 16ER/IL 100	1.00	1.55	0.020	0.10	0.030	●	●	0.02-0.03
GTGA 16EL/IR 120	1.20	1.60	0.020	0.10	0.030	●	●	0.02-0.03
GTGA 16ER/IL 120	1.20	1.60	0.020	0.10	0.030	●	●	0.02-0.03
GTGA 16EL/IR 140	1.40	1.80	0.020	0.10	0.030	●	●	0.02-0.04
GTGA 16ER/IL 140	1.40	1.80	0.020	0.10	0.030	●	●	0.02-0.04
GTGA 16EL/IR 170	1.70	2.00	0.020	0.10	0.030	●	●	0.03-0.05
GTGA 16ER/IL 170	1.70	2.00	0.020	0.10	0.030	●	●	0.03-0.05
GTGA 16EL/IR 195	1.95	2.00	0.020	0.10	0.030	●	●	0.03-0.06
GTGA 16ER/IL 195	1.95	2.00	0.020	0.10	0.030	●	●	0.03-0.06
GTGA 16EL/IR 225	2.25	2.10	0.020	0.10	0.030	●	●	0.04-0.06
GTGA 16ER/IL 225	2.25	2.10	0.020	0.10	0.030	●	●	0.04-0.06

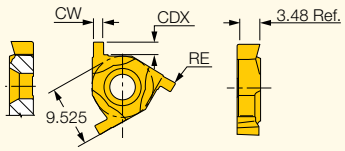
- Inserts for right-hand external grooving can be used as left-hand internal grooving
- Use with anvil AE 16-0 on external tools and with anvil AI 16-0 on internal tools
- For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting depth maximum
(2) Cutting width tolerance (+/-)
(3) Corner radius tolerance (+/-)

For tools, see pages: AVC-D-SIR/L (805) • C#-SER/L (799) • C#-SIR/L (803) • NQCH-SER/L-JHP (800) • SBTT#-16ER/L-JHP (418) • SER-D (800) • SER/L (798) • SER/L-JHP (799) • SER/L-JHP-MC (800) • SIR/L (801)

GTMA
Utility Shallow Grooving Inserts with 3 Cutting Edges





GTMA 16 ER/IL shown

Designation	Dimensions CW	CDX(1)	CWTOL(2)	RE	RETOL(3)	IC508	Recommended Machining Data f groove (mm/rev)
GTMA 16ER/IL 120	1.20	1.60	0.050	0.10	0.050	●	0.02-0.03
GTMA 16ER/IL 140	1.40	1.80	0.050	0.10	0.050	●	0.02-0.04
GTMA 16ER/IL 160	1.60	2.00	0.050	0.10	0.050	●	0.03-0.05
GTMA 16ER/IL 175	1.75	2.00	0.050	0.10	0.050	●	0.03-0.05
GTMA 16ER/IL 195	1.95	2.00	0.050	0.10	0.050	●	0.03-0.06
GTMA 16ER/IL 222	2.22	2.10	0.050	0.10	0.050	●	0.04-0.06

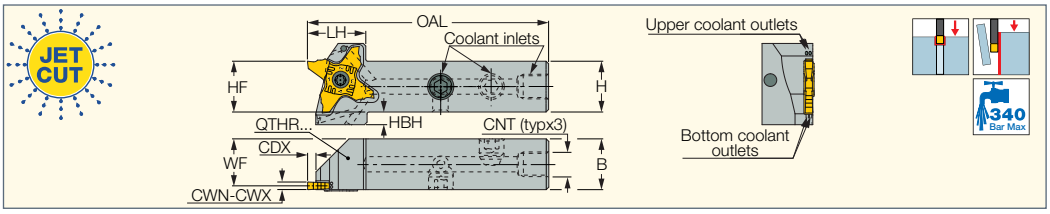
- Inserts for right-hand external grooving can be used as left-hand internal grooving
- Use with anvil AE 16-0 on external tools and with anvil AI 16-0 on internal tools
- For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting depth maximum
(2) Cutting width tolerance (+/-)
(3) Corner radius tolerance (+/-)

For tools, see pages: AVC-D-SIR/L (805) • C#-SER/L (799) • C#-SIR/L (803) • NQCH-SER/L-JHP (800) • SBTT#-16ER/L-JHP (418) • SER-D (800) • SER/L (798) • SER/L-JHP (799) • SER/L-JHP-MC (800) • SIR/L (801)

GROOVE4CUT

QTHR/L-30-JHP-MC
Grooving and Parting Tools Carrying GROOVE 4 CUT Inserts with Inlets for High-Pressure Coolant



Designation	H	HF	B	CWN(1)	CWX(2)	CDX	WF	OAL	LH	HBH	CNT	Insert
QTHR/L 16-30-JHP-MC	16.0	16.0	16.0	1.00	3.00	7.30	14.50	93.50	23.0	9.0	UNF 5/16-24	QGI 30...
QTHR/L 20-30-JHP-MC	20.0	20.0	20.0	1.00	3.00	7.30	18.50	93.50	23.0	5.0	G1/8	QGI 30...
QTHR/L 25-30-JHP-MC	25.0	25.0	25.0	1.00	3.00	7.30	23.50	108.00	23.0	-	G1/8	QGI 30...

NEW

- For user guide and accessories, see pages 475-496

(1) Minimum cutting width
(2) Maximum cutting width

For inserts, see pages: QGI 30N-P (368) • QGI 30N-PF (367)

Spare Parts

Designation							
QTHR/L 16-30-JHP-MC	SR 16-212-01397	T-2010/5	SR M6X4 DIN913	HW 5/32"	SR M4X3 DIN913	HW 3.0	SR 5/16UNF TL360
QTHR/L 20-30-JHP-MC	SR 16-212-01397	T-2010/5	SR M6X6 DIN913 TL360	HW 5.0	SR M4X4 DIN913	HW 3.0	PLG G1/8 TL360
QTHR/L 25-30-JHP-MC	SR 16-212-01397	T-2010/5	SR M6X6 DIN913 TL360	HW 5.0	SR M4X4 DIN913	HW 3.0	PLG G1/8 TL360

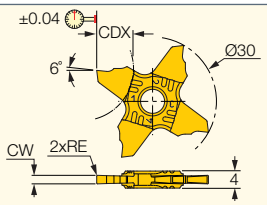


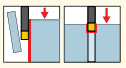
GROOVE4CUT

QGI 30N-PF

4 Cutting Edged Inserts with a Positive Flat Rake for Parting and Precision Grooving







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX	IC1008	Recommended Machining Data f groove (mm/rev)
QGI 30N100PF006	1.00	0.06	0.020	0.020	4.00	●	0.02-0.05
QGI 30N120PF000	1.20	0.00	0.020	0.020	5.00	●	0.02-0.07
QGI 30N150PF010	1.50	0.10	0.020	0.020	7.20	●	0.03-0.08
QGI 30N200PF020	2.00	0.20	0.020	0.030	7.20	●	0.03-0.10
QGI 30N247PF020	2.47	0.20	0.020	0.030	7.20	●	0.03-0.12
QGI 30N250PF020	2.50	0.20	0.020	0.030	7.20	●	0.03-0.12
QGI 30N270PF010	2.70	0.10	0.020	0.020	7.20	●	0.03-0.12
QGI 30N300PF020	3.00	0.20	0.020	0.030	7.20	●	0.03-0.12

NEW

- For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

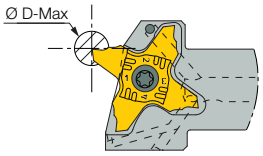
(2) Corner radius tolerance (+/-)

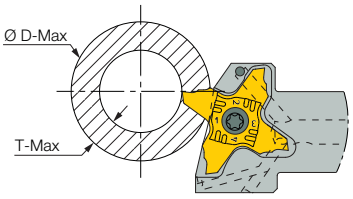
For tools, see page: QTHR/L-30-JHP-MC (366)

Depth Capacity

Determining depth of cut (Tmax) as a function of workpiece diameter (Dmax.)

Designation	CW ± 0.02	Parting to Center D-Max	Parting Hollow Bars T-Max	Parting Hollow Bars D-Max
QGI 30N...PF...	CW = 1.00	8	4	300
	CW = 1.50	14.4	7.2	60
	CW = 2.00			
	CW = 2.50			
	CW = 3.00			





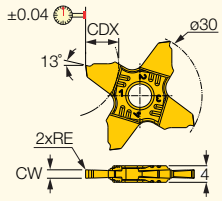
Designation	RE	T-Max	D-Max As a Function of Depth of Cut (T) T≤3.0	T≤4.0	T≤4.5	T≤0.5	T≤5.5	T≤6.0	T≤6.5	T≤7.0	T≤7.2
QGI 30N100PF006	0.06	4.0	N.L.(1)	300	260	200	160	120	95	75	60
QGI 30N120PF000	0.00	5									
QGI 30N150PF010	0.10	7.2									
QGI 30N200PF020	0.20										
QGI 30N247PF020	0.20										
QGI 30N250PF020	0.20										
QGI 30N270PF010	0.10										
QGI 30N300PF020	0.20										

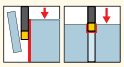
(1) N.L. = No Limit.

GROOVE4CUT

QGI 30N-P
4 Cutting Edged Inserts with a High Positive Flat Rake for Parting and Precision Grooving







Designation	Dimensions CW	RE	CWTOL[1]	RETOL[2]	CDX	IC1008	Recommended Machining Data f groove (mm/rev)
QGI 30N100P005	1.00	0.05	0.020	0.020	4.00	●	0.02-0.04
QGI 30N120P005	1.20	0.05	0.020	0.020	5.00	●	0.02-0.06
QGI 30N150P005	1.50	0.05	0.020	0.020	7.20	●	0.02-0.07
QGI 30N200P005	2.00	0.05	0.020	0.020	7.20	●	0.02-0.08
QGI 30N247P005	2.47	0.05	0.020	0.020	7.20	●	0.02-0.10
QGI 30N250P005	2.50	0.05	0.020	0.020	7.20	●	0.02-0.10
QGI 30N270P005	2.70	0.05	0.020	0.020	7.20	●	0.02-0.10
QGI 30N300P005	3.00	0.05	0.020	0.020	7.20	●	0.02-0.10

NEW

- For cutting speed recommendations and user guide, see pages 475-492

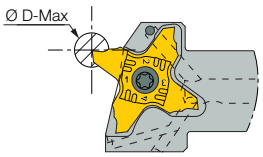
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)

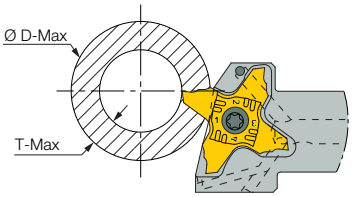
For tools, see page: QTHR/L-30-JHP-MC (366)

Depth Capacity

Determining depth of cut (Tmax) as a function of workpiece diameter (Dmax.)

Designation	CW ± 0.02	Parting to Center D-Max	Parting Hollow Bars T-Max	Parting Hollow Bars D-Max
QGI 30N...P...	CW = 1.00	8	4	300
	CW = 1.50	14.4	7.2	60
	CW = 2.00			
	CW = 2.50			
	CW = 3.00			





Designation	RE	T-Max	D-Max As a Function of Depth of Cut (T) T≤3.0	T≤4.0	T≤4.5	T≤0.5	T≤5.5	T≤6.0	T≤6.5	T≤7.0	T≤7.2
QGI 30N100P005	0.05	4.0	N.L.[1]	300	260	200	160	120	95	75	60
QGI 30N120P005		5					-	-	-	-	-
QGI 30N150P005		7.2									
QGI 30N200P005											
QGI 30N247P005											
QGI 30N250P005											
QGI 30N270P005											
QGI 30N300P005											

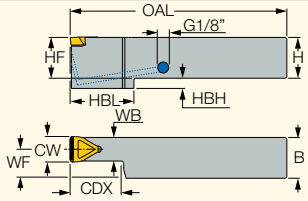
(1) N.L. = No Limit.

HEAVY DUTY



DOVE IQ GRIP TIGER LINE

THDR/L-IQ
External Holders for Wide Grooving Inserts



Left-hand shown

Designation	CW	CDX(1)	H	HF	B	OAL	WB	WF	HBH	HBL
THDR/L 2525-10T20-IQ	10.00	20.00	25.0	25.0	25.0	170.00	9.20	20.40	8.0	30.0
THDR/L 3232-10T20-IQ	10.00	20.00	32.0	32.0	32.0	170.00	9.20	27.40	8.0	30.0
THDR/L 2525-12T20-IQ	12.00	20.00	25.0	25.0	25.0	170.00	11.00	19.50	8.0	30.0
THDR/L 3232-12T20-IQ	12.00	20.00	32.0	32.0	32.0	170.00	11.00	26.50	8.0	30.0
THDR/L 2525-14T20-IQ	14.00	20.00	25.0	25.0	25.0	170.00	13.00	18.50	8.0	30.0
THDR/L 3232-14T20-IQ	14.00	20.00	32.0	32.0	32.0	170.00	13.00	25.50	8.0	30.0
THDR/L 3232-16T40-IQ	16.00	40.00	32.0	32.0	32.0	170.00	14.80	24.60	8.0	48.0
THDR/L 4040-16T50-IQ	16.00	50.00	40.0	40.0	40.0	180.00	14.80	32.60	-	-
THDR 3232-18T40-IQ	18.00	40.00	32.0	32.0	32.0	170.00	16.50	23.80	8.0	48.0
THDR 4040-18T50-IQ	18.00	50.00	40.0	40.0	40.0	180.00	16.50	31.80	-	-
THDR/L 3232-20T40-IQ	20.00	40.00	32.0	32.0	32.0	170.00	18.00	23.00	8.0	48.0
THDR/L 4040-20T50-IQ	20.00	50.00	40.0	40.0	40.0	180.00	18.00	31.00	-	-

- For grooving only

(1) Cutting depth maximum

For inserts, see page: TIGER-IQ (371)



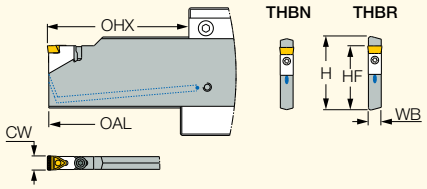
Spare Parts

Designation				
THDR/L 2525-10T20-IQ	PIN 5.5 INJ	SR M6-26392	BLD T15/S7	SW6-T
THDR/L 3232-10T20-IQ	PIN 5.5 INJ	SR M6-26392	BLD T15/S7	SW6-T
THDR/L 2525-12T20-IQ	PIN 5.5 INJ	SR M6-26392	BLD T15/S7	SW6-T
THDR/L 3232-12T20-IQ	PIN 5.5 INJ	SR M6-26392	BLD T15/S7	SW6-T
THDR/L 2525-14T20-IQ	PIN 5.5 INJ	SR M6-26392	BLD T15/S7	SW6-T
THDR/L 3232-14T20-IQ	PIN 5.5 INJ	SR M6-26392	BLD T15/S7	SW6-T
THDR/L 3232-16T40-IQ	PIN 6.5 INJ 7000944	SR M8-26393	BLD T20/S7	SW6-T
THDR/L 4040-16T50-IQ	PIN 6.5 INJ 7000944	SR M8-26393	BLD T20/S7	SW6-T
THDR 3232-18T40-IQ	PIN 6.5 INJ 7000944	SR M8-26393	BLD T20/S7	SW6-T
THDR 4040-18T50-IQ	PIN 6.5 INJ 7000944	SR M8-26393	BLD T20/S7	SW6-T
THDR/L 3232-20T40-IQ	PIN 6.5 INJ 7000944	SR M8-26393	BLD T20/S7	SW6-T
THDR/L 4040-20T50-IQ	PIN 6.5 INJ 7000944	SR M8-26393	BLD T20/S7	SW6-T

DOVE IQ GRIP TIGER LINE

THBR/L/N-IQ
Blades Carrying Cartridges for Wide Grooving Inserts





Designation	CW	OHX(3)	CDX(4)	WB	OAL	HF	H						
THBN 53K-10-IQ (1)	10.00	100.0	93.00	9.00	260.00	45.2	52.6	SR M5X3.5PL	SR M5X23-A90	BLD IP20/S7	SW6-T	SGC 340	SGCU 341
THBR/L 53K-12-IQ (2)	12.00	100.0	93.00	10.80	260.00	45.2	52.6	SR M5X3.5PL	SR M5X23-A90	BLD IP20/S7	SW6-T	SGC 340	SGCU 341
THBR/L 53K-14-IQ (2)	14.00	100.0	93.00	12.60	260.00	45.2	52.6	SR M5X3.5PL	SR M5X23-A90	BLD IP20/S7	SW6-T	SGC 340	SGCU 341

- For user guide, see pages 475-492

(1) Cartridges have to be ordered separately.

(2) For best performance use SGTBU...-14 holder blocks

(3) Maximum overhang

(4) If workpiece diameter is smaller than 200 mm, then CDX=98, if workpiece diameter is larger than 200 mm, then CDX=93.

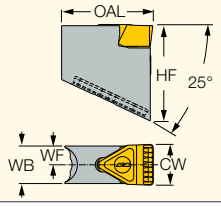
For tools, see page: CR THDN-IQ (371)

DOVE IQ GRIP TIGER LINE

CR THDN-IQ

Cartridges for Blades Carrying Wide Grooving Inserts





Designation	CW	WF	HF	OAL	WB				
CR THDN-10-IQ	10.00	4.60	24.0	22.60	9.20	SR M6-26392	PIN 5.5 INJ	BLD T15/S7	SW6-T
CR THDN-12-IQ	12.00	5.50	23.7	23.60	11.00	SR M6-26392	PIN 5.5 INJ	BLD T15/S7	SW6-T
CR THDN-14-IQ	14.00	6.50	23.7	24.20	13.00	SR M6-26392	PIN 5.5 INJ	BLD T15/S7	SW6-T

- For user guide, see pages 475-492

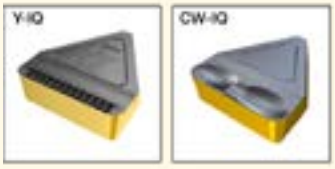
For inserts, see page: TIGER-IQ (371)

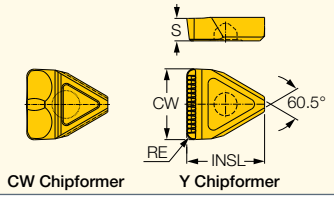
For holders, see page: THBR/L/N-IQ (370)

DOVE IQ GRIP TIGER LINE

TIGER-IQ

Utility Single-Ended Inserts for External Heavy Grooving and Deep Machining





Designation	Dimensions						Tough ↔ Hard		Recommended Machining Data
	CW	RE	CWTOL(1)	RETOL(2)	S	INSL	IC830	IC808	f groove (mm/rev)
TIGER 1008Y-IQ	10.00	0.80	0.080	0.050	5.05	13.30	●	●	0.20-0.35
TIGER 1212Y-IQ	12.00	1.20	0.080	0.050	5.05	14.00	●	●	0.20-0.40
TIGER 1415-CW-IQ	14.00	1.50	0.080	0.050	5.15	16.10		●	0.22-0.45
TIGER 1415Y-IQ	14.00	1.50	0.080	0.050	5.15	16.10	●	●	0.22-0.45
TIGER 1615Y-IQ	16.00	1.50	0.080	0.050	6.35	20.00	●	●	0.22-0.50
TIGER 1820Y-IQ	18.00	2.00	0.080	0.050	6.35	20.90	●	●	0.25-0.55
TIGER 2020-CW-IQ	20.00	2.00	0.080	0.050	6.35	22.00		●	0.25-0.60
TIGER 2020Y-IQ	20.00	2.00	0.080	0.050	6.35	22.00	●	●	0.25-0.60

- For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

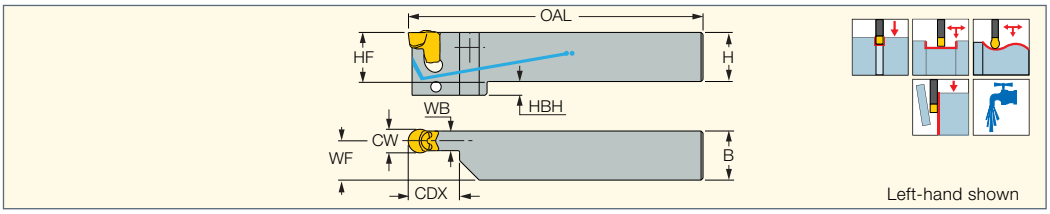
For tools, see pages: CR THDN-IQ (371) • THDR/L-IQ (370)



SUMO-GRIP HEAVY DUTY LINE

TGBHR/L

Toolholders for Heavy Duty Groove-Turn and Parting Applications



Designation	CW	H	HF	B	WB	OAL	CDX[2]	WF	HBH
TGBHR/L 20C-6 [1]	6.00	20.0	20.0	20.0	5.20	135.00	12.00	17.40	5.0
TGBHR/L 25C-6 [1]	6.00	25.0	25.0	25.0	5.20	135.00	12.00	22.40	-
TGBHR/L 32C-6 [1]	6.00	32.0	32.0	32.0	5.20	150.00	12.00	29.40	-
TGBHR/L 25C-8	8.00	25.0	25.0	25.0	7.00	150.00	25.00	21.50	12.0
TGBHR/L 32C-8	8.00	32.0	32.0	32.0	7.00	170.00	30.00	28.50	5.0
TGBHR/L 25C-10	10.00	25.0	25.0	25.0	8.00	150.00	25.00	21.00	12.0
TGBHR/L 32C-10	10.00	32.0	32.0	32.0	8.00	170.00	30.00	28.00	5.0
TGBHR/L 25C-12	12.00	25.0	25.0	25.0	10.00	150.00	25.00	20.00	12.0
TGBHR/L 32C-12	12.00	32.0	32.0	32.0	10.00	170.00	30.00	27.00	5.0
TGBHR/L 25C-14T20	14.00	25.0	25.0	25.0	12.00	140.00	20.00	19.00	12.0
TGBHL 32C-14T40	14.00	32.0	32.0	32.0	12.00	170.00	40.00	26.00	5.0
TGBHR/L 40C-14T40	14.00	40.0	40.0	40.0	12.00	170.00	40.00	34.00	-

• The tools for the 14 mm inserts feature a 1/8" port thread for standard tube fittings • For user guide, see pages 475-492

[1] For detailed depth capacity, see table below

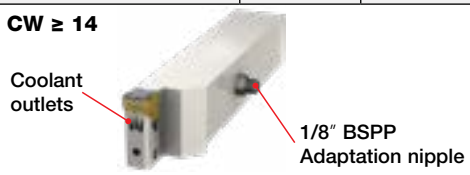
[2] Cutting depth maximum

For inserts, see pages: TAG N-C/W/M (568) • TAG N-J/JS/JT (570) • TAG N-UT (572) • TAG R/L-C (569) • TAG R/L-J/JS (571) • TAGB/TAGBA (375)

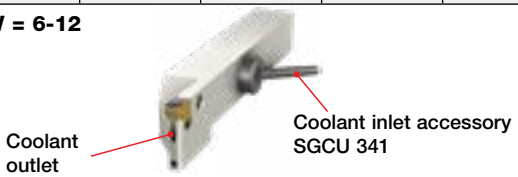
Depth Capacity for TGBHR/L...C-6

CDX	28	26	24	22	20	18	16	14	12
Dmax	35	55	75	100	120	150	200	350	∞

CW ≥ 14



CW = 6-12



Spare Parts

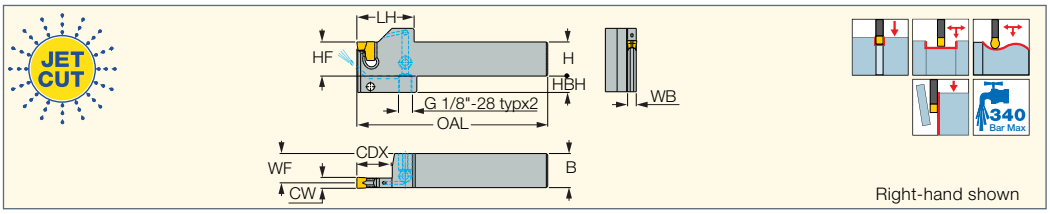
Designation			
TGBHR/L 20C-6	ETG 5-7*	SGCU 341*	
TGBHR/L 25C-6	ETG 5-7*	SGCU 341*	
TGBHR/L 32C-6	ETG 5-7*	SGCU 341*	
TGBHR/L 25C-8	ETG 8-12*	SGCU 341*	
TGBHR/L 32C-8	ETG 8-12*	SGCU 341*	
TGBHR/L 25C-10	ETG 8-12*	SGCU 341*	
TGBHR/L 32C-10	ETG 8-12*	SGCU 341*	
TGBHR/L 25C-12	ETG 8-12*	SGCU 341*	
TGBHR/L 32C-12	ETG 8-12*	SGCU 341*	
TGBHL 25C-14T20	ETG 8-12*		
TGBHR 25C-14T20	ETG 8-12*		JHP NIPPLE G1/8"-7/16"UNF*
TGBHL 32C-14T40	ETG 8-12*		JHP NIPPLE G1/8"-7/16"UNF*
TGBHR/L 40C-14T40	ETG 8-12*		

* Optional, to be ordered separately

SUMO-GRIP HEAVY DUTY LINE

TGBHR/L-JHP

Grooving and Turning SUMO-GRIP Tools with Channels for High-Pressure Coolant



Designation	H	CW	HF	B	LH	WB	OAL	CDX(1)	WF	HBH
TGBHR/L 25-8-JHP	25.0	8.00	25.0	25.0	42.0	7.00	150.00	25.00	21.50	12.0
TGBHR/L 32-8-JHP	32.0	8.00	32.0	32.0	42.0	7.00	170.00	25.00	28.50	12.0

- For user guide see pages 475-492

(1) Cutting depth maximum

For inserts, see pages: TAG N-C/W/M (568) • TAGB/TAGBA (375)

Flow Rate vs. Pressure

Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
TGBHR/L-JHP	13-16	19-21	22-24

ETG 8-12 Extractor for 8 to 12.7 mm Inserts



Spare Parts

Designation			
TGBHL 25-8-JHP	ETG 8-12		
TGBHR/L 25-8-JHP		PLG 1/8ISO1179	HW 5.0
TGBHR 25-8-JHP	ETG 8-12*		
TGBHL 32-8-JHP		PLG 1/8ISO1179	HW 5.0
TGBHR 32-8-JHP	ETG 8-12*	PLG 1/8ISO1179	HW 5.0

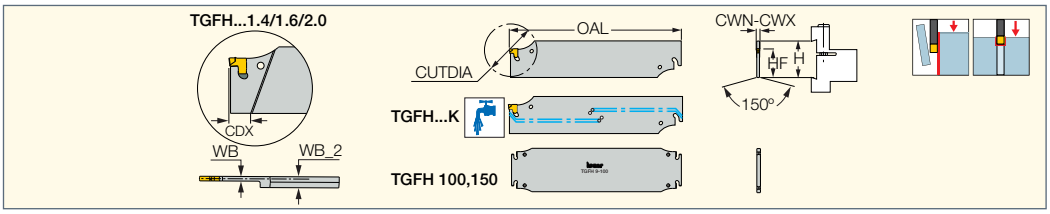
* Optional, to be ordered separately



SUMO-GRIP HEAVY DUTY LINE

TGFH/R/L

Blades with a Tangentially Oriented Pocket Carrying TANG-GRIP Single-Ended Inserts for Parting and Grooving



Designation	H	CWN[2]	CWX[3]	WB	WB_2	OAL	CDX	HF	CUTDIA[4]	CSP[5]	Insert		
TGFH 19-1.4	19.0	1.40	1.40	1.10	2.5	86.00	9.60	15.7	30.0	0	TAG 1.4	ETG 1.4/1.6*	
TGFH 19-1.6	19.0	1.60	1.60	1.30	1.6	86.00	11.00	15.7	32.0	0	TAG 1.6	ETG 1.4/1.6*	
TGFH 19-2	19.0	1.80	2.40	-	1.7	86.00	-	15.7	38.0	0	TAG 2	ETG 2*	
TGFH 26-1.4	26.0	1.40	1.40	1.10	2.5	110.00	8.30	21.4	29.0	0	TAG 1.4	ETG 1.4/1.6*	
TGFH 26-1.6	26.0	1.60	1.60	1.30	1.6	110.00	10.00	21.4	35.0	0	TAG 1.6	ETG 1.4/1.6*	
TGFH 26-2	26.0	1.80	2.40	-	1.7	110.00	-	21.4	50.0	0	TAG 2	ETG 2*	
TGFH 26-3	26.0	2.80	3.50	-	2.5	110.00	-	21.4	75.0	0	TAG 3	ETG 3-4*	
TGFH 26K-3 [1]	26.0	2.80	3.50	-	2.5	110.00	-	21.4	75.0	1	TAG 3	ETG 3-4-SH*	SGC 340
TGFH 26-4	26.0	3.70	4.50	-	3.4	110.00	-	21.4	80.0	0	TAG 4	ETG 3-4*	
TGFH 26-5	26.0	4.70	5.50	-	4.0	150.00	-	21.4	80.0	0	TAG 5	ETG 5-7*	
TGFH 32-1.4	32.0	1.40	1.40	1.10	2.5	150.00	7.10	24.8	29.0	0	TAG 1.4	ETG 1.4/1.6*	
TGFH 32-1.6	32.0	1.60	1.60	1.30	1.6	150.00	10.00	24.8	38.0	0	TAG 1.6	ETG 1.4/1.6*	
TGFH 32-2	32.0	1.80	2.40	1.70	2.5	150.00	-	24.8	50.0	0	TAG 2	ETG 2*	
TGFH 32-3	32.0	2.80	3.50	-	2.5	150.00	-	24.8	100.0	0	TAG 3	ETG 3-4*	
TGFH 32K-3 [1]	32.0	2.80	3.50	-	2.5	150.00	-	24.8	100.0	1	TAG 3	ETG 3-4-SH*	SGC 340
TGFH 32-4	32.0	3.70	4.50	-	3.4	150.00	-	24.8	100.0	0	TAG 4	ETG 3-4*	
TGFH 32K-4 [1]	32.0	3.70	4.50	-	3.4	150.00	-	24.8	100.0	1	TAG 4	ETG 3-4-SH*	SGC 340
TGFH 32-5	32.0	4.70	5.50	-	4.0	150.00	-	24.8	120.0	0	TAG 5	ETG 5-7*	
TGFH 32-6	32.0	5.70	6.50	-	5.2	150.00	-	24.8	120.0	0	TAG 6	ETG 5-7*	
TGFH 32-7	32.0	6.80	7.50	-	6.0	148.00	-	24.8	120.0	0	TAG 7	ETG 5-7*	
TGFH 45-3	45.0	2.80	3.50	-	2.5	225.00	-	38.1	160.0	0	TAG 3	ETG 3-4*	
TGFH 45-4	45.0	3.70	4.50	-	3.4	225.00	-	38.1	160.0	0	TAG 4	ETG 3-4*	
TGFH 45-5	45.0	4.70	5.50	-	4.0	225.00	-	38.1	160.0	0	TAG 5	ETG 5-7*	
TGFH 45-6	45.0	5.70	6.50	-	5.2	225.00	-	38.1	160.0	0	TAG 6	ETG 5-7*	
TGFH 45-7	45.0	6.80	7.50	-	6.0	225.00	-	38.1	160.0	0	TAG 7	ETG 5-7*	
TGFH 52-7	52.6	6.80	7.50	-	6.0	190.00	-	45.2	190.0	0	TAG 7	ETG 5-7*	
TGFH 53-7	52.6	6.80	7.50	-	6.0	260.00	-	45.2	220.0	0	TAG 7	ETG 5-7*	
TGFH 52K-8 [1]	52.6	7.70	8.50	-	7.2	190.00	-	45.2	190.0	1	TAG 8	ETG 8-12*	
TGFH 53K-8 [1]	52.6	7.70	8.50	-	7.2	260.00	-	45.2	215.0	1	TAG 8	ETG 8-12*	
TGFH 52K-9 [1]	52.6	8.70	10.00	-	8.2	190.00	-	45.2	190.0	1	TAG 9	ETG 8-12*	
TGFH 53K-9 [1]	52.6	8.70	10.00	-	8.2	260.00	-	45.2	215.0	1	TAG 9	ETG 8-12*	
TGFHR/L 53K-12 [1]	52.6	11.70	12.70	-	10.0	260.00	-	45.2	215.0	1	TAG 12	ETG 8-12*	
TGFH 100-9	100.0	8.70	10.00	-	8.2	460.00	-	92.5	450.0	0	TAG 9	ETG 8-12*	
TGFH 100-12	100.0	11.70	12.70	-	10.0	460.00	-	92.5	450.0	0	TAG 12	ETG 8-12*	
TGFH 150-12	150.0	11.70	12.70	-	10.0	610.00	-	142.5	600.0	0	TAG 12	ETG 8-12*	

• For user guide, see pages 475-492

[1] With coolant holes, the recommended coolant pressure is 10 bar min.; cooling tube SGCU 341 should be ordered separately

[2] Minimum cutting width

[3] Maximum cutting width

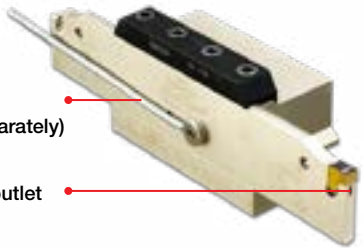
[4] Maximum workpiece diameter for grooving operation

[5] 0 - Without coolant supply, 1 - With coolant supply

* Optional, to be ordered separately

For inserts, see pages: TAG N-A (573) • TAG N-C (full radius) (569) • TAG N-C/W/M (568) • TAG N-HF (568) • TAG N-J/JS/JT (570) • TAG N-LF (572) • TAG N-MF (570) • TAG N-T (573) • TAG N-UT (572) • TAG R/L-C (569) • TAG R/L-J/JS (571) • TAGB/TAGBA (375)
For holders, see pages: C#-TBK-R/L (695) • SGTBF (691) • SGTBK (691) • SGTBR/L (691) • SGTBU/SGTBN (690) • UBHCR/L (691)

K TYPE COOLANT

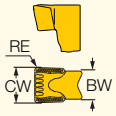


SUMO-GRIP HEAVY DUTY LINE

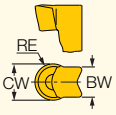
TAGB/TAGBA

Single-Ended Utility Inserts for Grooving, Turning and Parting

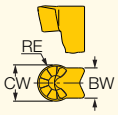




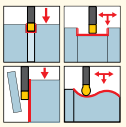
TAGB 608Y
TAGB 808Y
TAGB 1008Y
TAGB 1208Y
TAGB 1415Y



TAGB 1260H



TAGB 630Y
TAGBA 80-40YZ
TAGB 840Y
TAGB 1050Y
TAGB 1260Y



Designation	Dimensions CW	CWTOL[3]	RE	RETOL[4]	BW	Tough ↔ Hard IC8250	IC808	IC07	IC806	IC807	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
TAGB 608Y	6.00	0.050	0.80	0.050	5.20		●		●		1.00-3.60	0.20-0.60	0.18-0.30
TAGB 630Y	6.00	0.050	3.00	0.050	5.20		●		●		0.00-3.00	0.25-0.55	0.18-0.32
TAGB 808Y	8.00	0.050	0.80	0.050	6.20	●	●		●	●	1.00-5.60	0.25-0.55	0.18-0.32
TAGB 840Y [1]	8.00	0.050	4.00	0.050	6.20	●	●		●	●	0.00-4.00	0.24-0.67	0.18-0.32
TAGBA 80-40YZ [1]	8.00	0.050	4.00	0.050	6.00			●			0.00-4.00	0.40-0.70	0.25-0.40
TAGB 1008Y	10.00	0.050	0.80	0.050	8.00	●	●				1.00-7.00	0.30-0.70	0.22-0.40
TAGB 1050Y [2]	10.00	0.050	5.00	0.050	8.00	●	●		●		0.00-5.00	0.30-0.85	0.22-0.40
TAGB 1208Y	12.00	0.070	0.80	0.050	10.00	●	●				1.00-8.40	0.35-0.85	0.26-0.48
TAGB 1260Y [2]	12.00	0.070	6.00	0.050	10.00	●	●				0.00-6.00	0.35-0.90	0.26-0.48
TAGB 1260H [2]	12.00	0.070	6.00	0.050	10.00	●	●				0.00-6.00	0.45-1.00	0.35-0.55
TAGB 1415Y	14.00	0.070	1.50	0.050	12.00	●	●				1.80-8.40	0.35-0.85	0.26-0.50

- H-type chipformer with a negative T-land for machining heavy interrupted applications and cast iron parts
- For cutting speed recommendations and user guide, see pages 475-492

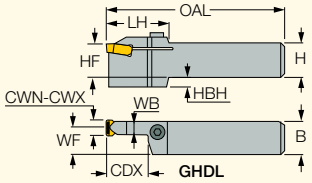
[1] Blade's pocket must be modified
[2] Tool's pocket must be modified
[3] Cutting width tolerance (+/-)
[4] Corner radius tolerance (+/-)

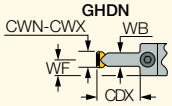
For tools, see pages: Anti-Vibration Blades (312) • TGBHR/L (372) • TGBHR/L-JHP (373) • TGFH-JHP (555) • TGFH/R/L (374) • TGSU (558) • TGTR/L-IQ (564)

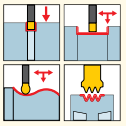
CUT-GRIP

GHDR/L/N 12/14

External Tools for Wide Grooving Inserts







Left-hand shown

Designation	CWN[1]	CWX[2]	CDX[3]	H	HF	B	OAL	WF	WB	LH	HBH	Insert		
GHDR/L 32-12	12.00	14.53	30.00	32.0	32.0	32.0	170.00	27.30	9.50	50.0	-	GIMY 1260,TIGER 1453	SR M8X20DIN912	HW 6.0
GHDR/L 2525-14T12	13.00	17.40	12.00	25.0	25.0	25.0	150.00	19.00	12.00	41.0	-	TIGER/GPV 14/16/17	SR M8X20DIN912	HW 6.0
GHDR 3232-14T12	13.00	17.40	12.00	32.0	32.0	32.0	170.00	26.00	12.00	41.0	-	TIGER/GPV 14/16/17	SR M8X20DIN912	HW 6.0
GHDR/L 3232-14T38	13.00	17.40	38.00	32.0	32.0	32.0	170.00	26.00	12.00	59.0	8.0	TIGER 14/16/17	SR M8X20DIN912	HW 6.0
GHDN 3232-14T38	13.00	17.40	38.00	32.0	32.0	32.0	170.00	16.00	12.00	57.5	8.0	TIGER 14/16/17	SR M8X20DIN912	HW 6.0
GHDR/L 4040-14T38	13.00	17.40	38.00	40.0	40.0	40.0	170.00	34.00	12.00	59.0	-	TIGER 14/16/17	SR M8X20DIN912	HW 6.0
GHDN 4040-14T45	14.50	17.40	45.00	40.0	40.0	40.0	170.00	20.00	12.00	55.5	-	TIGER 14/16/17	SR 76-1289	HW 5.0

- For user guide, see pages 475-492

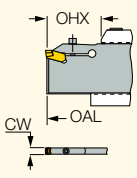
[1] Minimum cutting width
[2] Maximum cutting width
[3] Cutting depth maximum

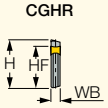
For inserts, see pages: GIMY 1260 (320) • GPV (336) • TIGER (376)

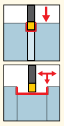
CUT-GRIP

CGHR/L-12-14D

Deep Machining Screw-Clamped Blades for Wide Grooving and Heavy Turning Applications







Designation	CWN[1]	CWX[2]	OHX[3]	CDX[4]	WB	OAL	HF	H		
CGHR/L 53-12D	12.00	14.50	100.0	93.00	9.50	260.00	45.0	52.6	SR 76-4002	HW 5.0
CGHR/L 53-14D	12.50	17.40	100.0	93.00	11.10	260.00	45.0	52.6	SR M6X25DIN912	HW 5.0

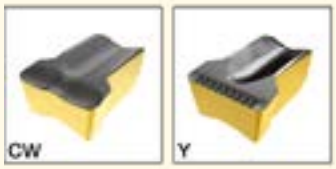
- If the diameter of the workpiece is smaller than 200 mm, then CDX=98 mm • For user guide, see pages 475-492

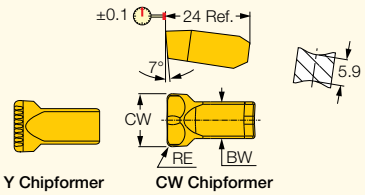
[1] Minimum cutting width
[2] Maximum cutting width
[3] Maximum overhang
[4] If workpiece diameter is smaller than 200 mm, then CDX=98, if workpiece diameter is larger than 200 mm, then CDX=93.

For inserts, see pages: GIMY 1260 (320) • TIGER (376)
For holders, see pages: SGTBK (691) • SGTBU/SGTBN (690)

CUTGRIP

TIGER
Utility Single-Ended Inserts for External Heavy Grooving and Deep Machining





Designation	Dimensions CW	CWTOL(1)	RE	RETOL(2)	BW	INSL	Tough ↔ Hard IC830	IC808	IC20	Recommended Machining Data f groove (mm/rev)
TIGER 1453-152	14.53	0.080	1.52	0.050	10.00	24.00	●	●	●	0.22-0.44
TIGER 1453-152-CW	14.53	0.080	1.52	0.050	10.00	24.00		●		0.15-0.50
TIGER 16.63-1.52	16.63	0.020	1.52	0.050	12.70	24.00		●		0.25-0.50
TIGER 1740-200	17.40	0.080	2.00	0.100	12.70	24.00		●		0.26-0.52

- For cutting speed recommendations and user guide, see pages 475-492

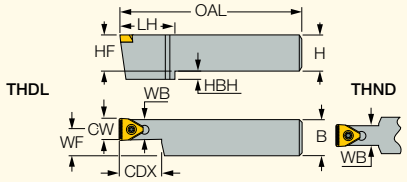
(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

For tools, see pages: CGHR/L-12-14D (375) • GHDR/L/N 12/14 (375)

CUTGRIP

THDR/L/N
External Holders for Wide (20 mm) Grooving Inserts



Left-hand shown

Designation	CW	CDX(1)	H	HF	B	OAL	WB	WF	HBH	LH	Insert			
THDR 3232-17T38	17.00	38.00	32.0	32.0	32.0	170.00	16.00	24.00	8.0	50.0	TIGERV 1740	SR 14-519	BLD T20/M7	SW6-T
THDR/L 4040-17T45	17.00	45.00	40.0	40.0	40.0	170.00	15.00	32.50	-	-	TIGERV 1740	SR 14-519	BLD T20/M7	SW6-T
THDR/L 3232-20T38	20.06	38.00	32.0	32.0	32.0	170.00	17.50	23.30	8.0	50.0	TIGERV 2006	SR 14-519	BLD T20/M7	SW6-T
THDN 3232-20T38	20.06	38.00	32.0	32.0	32.0	170.00	17.50	16.00	8.0	50.0	TIGERV 2006	SR 14-519	BLD T20/M7	SW6-T
THDR/L 4040-20T45	20.06	45.00	40.0	40.0	40.0	170.00	17.50	31.30	-	-	TIGERV 2006	SR 14-519	BLD T20/M7	SW6-T
THDN 4040-20T45	20.06	45.00	40.0	40.0	40.0	170.00	17.50	20.00	-	-	TIGERV 2006	SR 14-519	BLD T20/M7	SW6-T

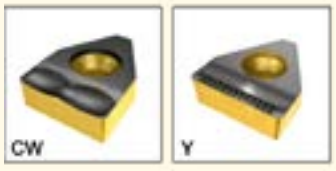
- For grooving only

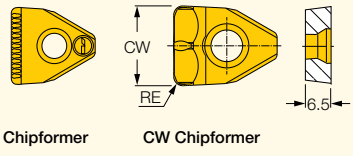
(1) Cutting depth maximum

For inserts, see page: TIGERV (376)

CUTGRIP

TIGERV
Utility Single-Ended Inserts for External Deep Grooving and Heavy Machining





Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	Tough ↔ Hard IC830	IC808	IC20	Recommended Machining Data f groove (mm/rev)
TIGERV 1700-200-CW	17.00	2.00	0.080	0.050		●		0.20-0.60
TIGERV 2006-152	20.06	1.52	0.080	0.050	●	●	●	0.30-0.60

- For cutting speed recommendations and user guide, see pages 475-492

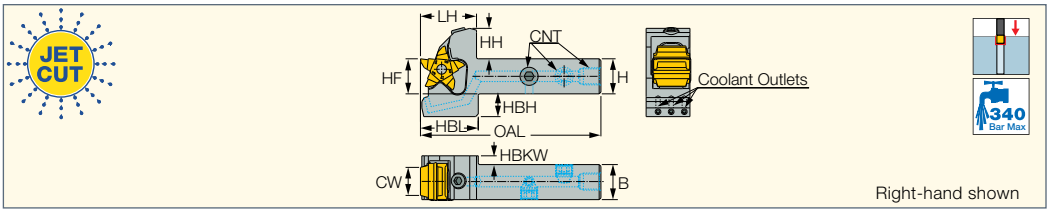
(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

For tools, see page: THDR/L/N (376)

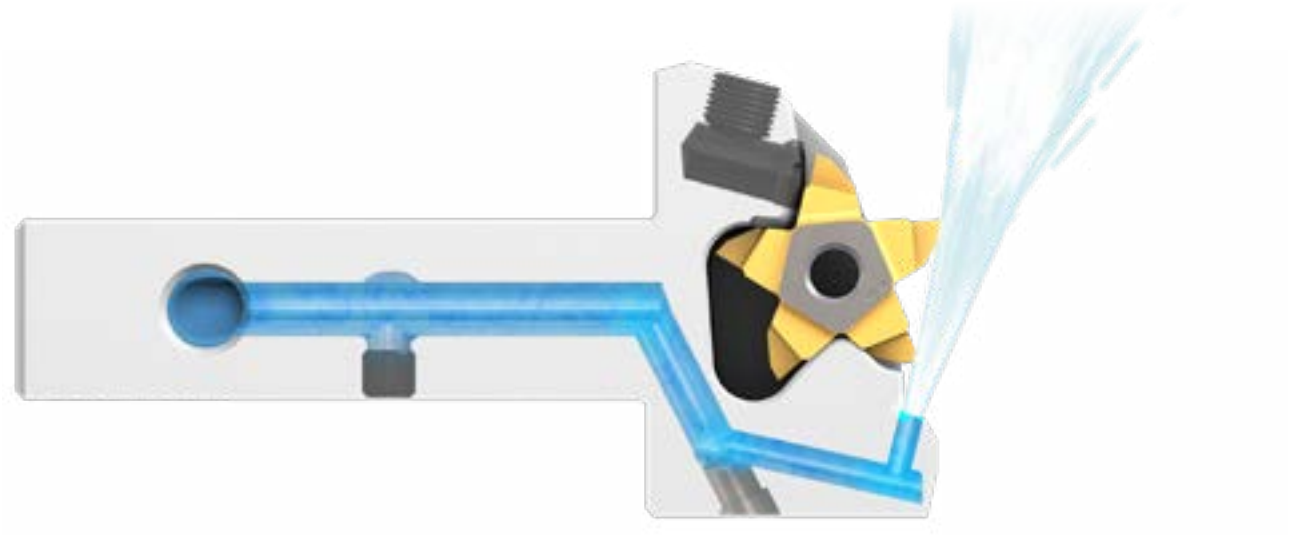
PENTACUT-27

PCHR/L-27-JHP-MC
Tools Carrying Pentagonal Wide Inserts for Specially Tailored Profiles



Designation	CW	H	B	HF	LH	HBL	HH	HBH	HBKW	OAL	CNT
PCHR/L 20-27-10-JHP-MC	10.00	20.0	20.0	20.0	32.0	33.0	17.4	13.0	5.00	103.00	G1/8
PCHR/L 25-27-10-JHP-MC	10.00	25.0	25.0	25.0	32.0	33.0	17.4	8.0	-	118.00	G1/8
PCHR/L 20-27-15-JHP-MC	15.00	20.0	20.0	20.0	32.0	33.0	17.4	13.0	5.00	103.00	G1/8
PCHR/L 25-27-15-JHP-MC	15.00	25.0	25.0	25.0	32.0	33.0	17.4	8.0	-	118.00	G1/8
PCHR/L 20-27-20-JHP-MC	20.00	20.0	20.0	20.0	32.0	33.0	17.4	13.0	5.00	103.00	G1/8
PCHR/L 25-27-20-JHP-MC	20.00	25.0	25.0	25.0	32.0	33.0	17.4	8.0	-	118.00	G1/8

For inserts, see page: PENTAS 27 blanks (363)

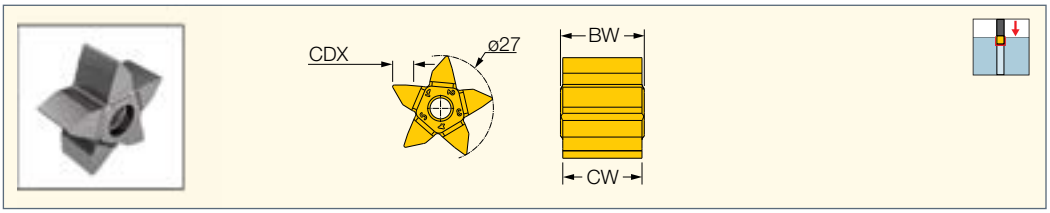


Spare Parts

Designation							
PCHR/L 20-27-10-JHP-MC	SR M8-40530	HW 3.0	SR M6X6 DIN913 TL360		HW 4.0	PLG G1/8 TL360	HW 5.0
PCHR/L 25-27-10-JHP-MC	SR M8-40530	HW 3.0	SR M6X6 DIN913 TL360		HW 4.0	PLG G1/8 TL360	HW 5.0
PCHR/L 20-27-15-JHP-MC	SR M8-40530	HW 3.0	SR M6X6 DIN913 TL360		HW 4.0	PLG G1/8 TL360	HW 5.0
PCHR/L 25-27-15-JHP-MC	SR M8-40530	HW 3.0	SR M6X6 DIN913 TL360		HW 4.0	PLG G1/8 TL360	HW 5.0
PCHR/L 20-27-20-JHP-MC	SR M8-40530	HW 3.0	SR M6X6 DIN913 TL360	PUSH ROD - 40529	HW 4.0	PLG G1/8 TL360	HW 5.0
PCHR/L 25-27-20-JHP-MC	SR M8-40530	HW 3.0	SR M6X6 DIN913 TL360	PUSH ROD - 40529	HW 4.0	PLG G1/8 TL360	HW 5.0

PENTACUT-27

PENTAS 27 blanks
Blank Inserts with 5 Wide Cutting Edges for the Production of Special Profile Contours



Designation	Dimensions			IC08
	CW	CDX	BW	
PENTAS 27-10FT	10.00	4.00	11.80	●
PENTAS 27-15FT	15.00	4.00	16.80	●
PENTAS 27-20FT	20.00	4.00	21.80	●

For tools, see page: PCHR/L-27-JHP-MC (350)

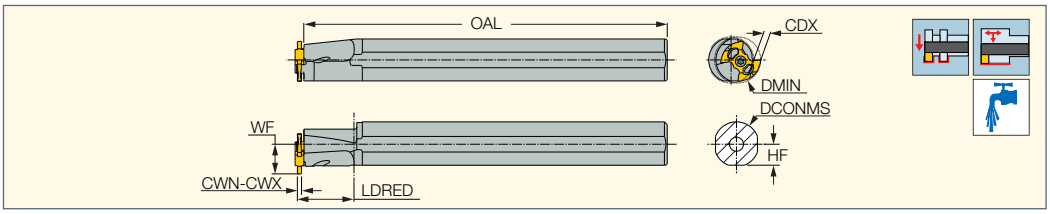
INTERNAL TOOLS AND INSERTS



QUICK GROOVE

GQHINR/L

Internal Grooving and Turning Bars on Which Inserts with 4 Cutting Edges Are Mounted.



Designation	CWN(1)	CWX(2)	DCONMS	DMIN	CDX(3)	OAL	LDRED	WF	HF
GQHINR/L 16C-16.5-20	1.00	3.00	16.00	16.50	2.50	130.00	20.0	10.60	7.5
GQHINR/L 16C-16.5-40	1.00	3.00	16.00	16.50	2.50	150.00	40.0	10.60	7.5
GQHINR/L 20C-24	1.00	3.00	20.00	24.00	2.50	160.00	60.0	13.00	9.0

NEW

- For user guide, see pages 475-492

(1) Minimum cutting width
(2) Maximum cutting width
(3) Cutting depth maximum

For inserts, see page: GQIN (379)

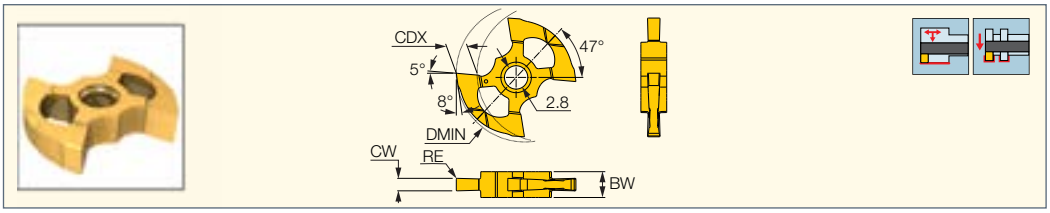
Spare Parts

Designation			
GQHINR/L 16C-16.5-20	SR 14-560	T-8/5	PL 16
GQHINR/L 16C-16.5-40	SR 14-560	T-8/5	PL 16
GQHINR/L 20C-24	SR 14-560	T-8/5	PL 20

QUICK GROOVE

GQIN

4 Cutting Edges Precision Grounded Inserts for Internal Grooving and Recessing Operations



Designation	Dimensions CW	RE	DMIN	CDX	BW	IC808G	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GQIN 1.00-0.05	1.00	0.05	16.50	2.50	3.10	●	0.05-0.30	0.02-0.05	0.02-0.06
GQIN 1.50-0.10	1.50	0.10	16.50	2.50	3.10	●	0.10-0.40	0.02-0.05	0.02-0.06
GQIN 2.00-0.20	2.00	0.20	16.50	2.50	3.10	●	0.20-0.50	0.02-0.05	0.02-0.06
GQIN 2.50-0.20	2.50	0.20	16.50	2.50	3.10	●	0.20-0.65	0.02-0.05	0.02-0.06
GQIN 3.00-0.20	3.00	0.20	16.50	2.50	3.10	●	0.20-0.75	0.02-0.05	0.02-0.06

NEW

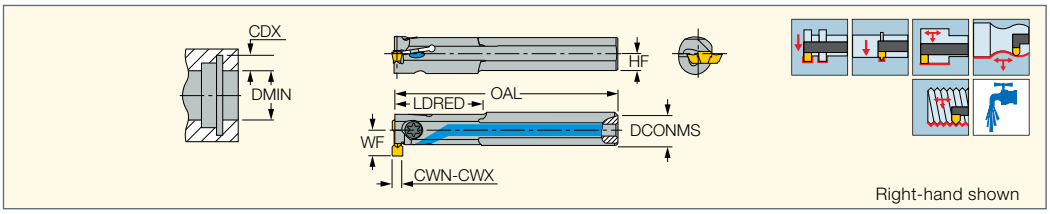
- Cutting edge with high positive rake, suitable for thin walled parts and for small diameters
- Suitable for Machining soft materials and bearing steel at low to medium feeds
- For cutting speed recommendations and user guide, see pages 475-492

For tools, see page: GQHINR/L (379)

CUTGRIP

GEHIMR/L

Internal Machining Boring Bars with Coolant Holes for Insert Widths Less than 1.9 mm



Designation	CWN[1]	CWX[2]	DCONMS	DMIN	CDX[3]	OAL	LDRED	WF	HF	CND[4]			
GEHIMR/L 10-13	0.80	1.90	10.00	12.50	2.50	125.00	25.0	7.60	5.0	3.50	SR 16-236	T-15/5	
GEHIMR/L 12-14	0.80	1.90	12.00	14.00	2.50	150.00	35.0	9.00	6.0	6.00	SR 16-236	T-15/5	
GEHIMR/L 16-13	0.80	1.90	16.00	12.50	2.50	125.00	20.0	10.60	7.5	8.00	SR 16-236	T-15/5	PL 16
GEHIMR/L 16-14	0.80	1.90	16.00	14.00	2.50	125.00	25.0	10.90	7.5	8.00	SR 16-236	T-15/5	PL 16
GEHIMR/L 16-16	0.80	1.90	16.00	16.00	2.50	160.00	40.0	10.50	7.5	8.00	SR M5-04451	T-20/5	PL 16

- For user guide, see pages 475-492

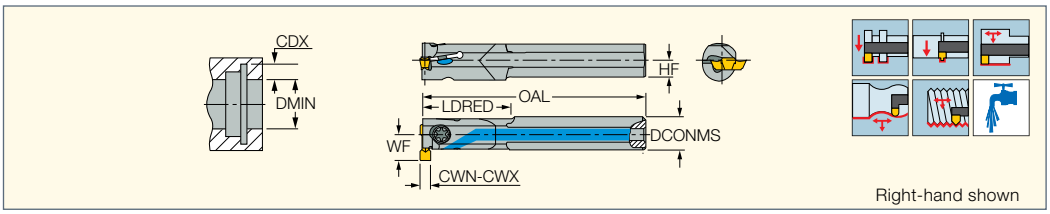
[1] Minimum cutting width
[2] Maximum cutting width
[3] Cutting depth maximum
[4] Coolant inlet diameter

For inserts, see pages: GEPI (385) • GEPI (W<M) (385) • GEPI-MT (727) • GEPI-RX/LX (386) • GEPI-WT (718)

CUTGRIP

GEHIMR/L-SC

Internal Machining Solid Carbide Bars with Coolant Holes for Insert Widths Less than 1.9 mm



Designation	CWN[1]	CWX[2]	DCONMS	DMIN	CDX[3]	OAL	LDRED	WF	HF	CND[4]			
GEHIMR/L 10SC-13	0.80	1.90	10.00	12.50	2.50	125.00	30.0	7.60	5.0	3.50	SR 16-236	T-15/5	
GEHIMR/L 12SC-14	0.80	1.90	12.00	14.00	2.50	125.00	40.0	9.00	6.0	6.00	SR 16-236	T-15/5	
GEHIMR/L 16SC-13	0.80	1.90	16.00	12.50	2.50	125.00	35.0	10.60	7.5	8.00	SR 16-236	T-15/5	PL 16
GEHIMR/L 16SC-16	0.80	1.90	16.00	16.00	2.50	160.00	70.0	10.50	7.5	8.00	SR M5-04451	T-20/5	PL 16

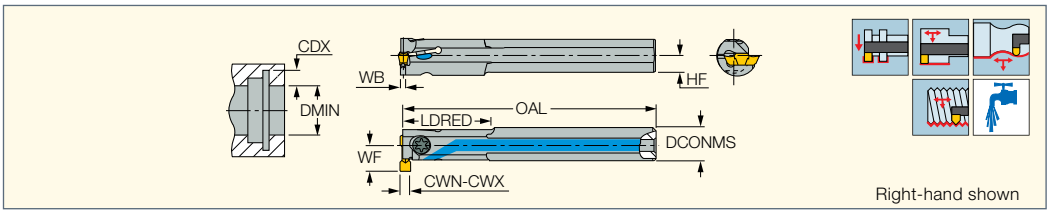
- For user guide, see pages 475-492

[1] Minimum cutting width
[2] Maximum cutting width
[3] Cutting depth maximum
[4] Coolant inlet diameter

For inserts, see pages: GEPI (385) • GEPI (W<M) (385) • GEPI-MT (727) • GEPI-RX/LX (386) • GEPI-WT (718)

CUTGRIP

GEHIR/L
Internal Machining Bars
with Coolant Holes



Designation	CWN(1)	CWX(2)	DCONMS	DMIN	CDX(3)	OAL	LDRED	WF	WB	HF	CND(4)
GEHIR/L 10-11.5-2-T3	1.90	2.40	10.00	11.50	3.00	125.00	25.0	8.80	1.60	5.0	3.50
GEHIR/L 10-13-2-T2.4	1.90	2.40	10.00	12.50	2.40	125.00	25.0	7.50	1.60	5.0	3.50
GEHIR/L 12-11.5-2-T3*	1.90	2.40	12.00	11.50	3.00	125.00	20.0	11.60	1.60	6.0	6.00
GEHIR/L 12-14-2-T2.6	1.90	2.40	12.00	14.00	2.60	150.00	35.0	9.10	1.60	6.0	6.00
GEHIR/L 12-14-2-T4	1.90	2.40	12.00	14.00	4.00	150.00	35.0	10.30	1.60	6.0	6.00
GEHIR/L 12-15-2-T6	1.90	2.40	12.00	15.00	6.00	150.00	29.0	12.30	1.60	6.0	6.00
GEHIL 16-11.5-2-T3	1.90	2.40	16.00	11.50	3.00	125.00	20.0	11.60	1.60	7.5	8.00
GEHIR 16-11.5-2-T3	1.90	2.40	16.00	11.50	3.00	125.00	20.0	11.10	1.60	7.5	8.00
GEHIR/L 16-13-2-T2.4	1.90	2.40	16.00	12.50	2.40	125.00	20.0	10.50	1.60	7.5	8.00
GEHIR/L 16-14-2-T2.6	1.90	2.40	16.00	14.00	2.60	125.00	25.0	11.00	1.60	7.5	8.00
GEHIR/L 16-14-2-T4	1.90	2.40	16.00	14.00	4.00	125.00	25.0	12.40	1.60	7.5	8.00
GEHIR/L 16-16-2-T3	1.90	2.40	16.00	16.00	3.00	160.00	40.0	11.00	1.60	7.5	8.00
GEHIR/L 16-20-2-T8	1.90	2.40	16.00	20.00	8.00	160.00	40.0	16.10	1.60	7.5	8.00
GEHIR/L 12-14-3-T2.6	2.40	3.20	12.00	14.00	2.60	150.00	35.0	9.10	2.00	6.0	6.00
GEHIR/L 12-14-3-T4	2.40	3.20	12.00	14.00	4.00	150.00	35.0	10.30	2.00	6.0	6.00
GEHIR/L 12-15-3-T6	2.40	3.20	12.00	15.00	6.00	150.00	29.0	12.30	2.00	6.0	6.00
GEHIL 16-11.5-3-T3	2.40	3.20	16.00	11.50	3.00	125.00	20.0	11.60	2.00	7.5	8.00
GEHIR 16-11.5-3-T3	2.40	3.20	16.00	11.50	3.00	125.00	20.0	11.10	2.00	7.5	8.00
GEHIR/L 16-13-3-T2.4	2.40	3.20	16.00	12.50	2.40	125.00	20.0	10.50	2.00	7.5	8.00
GEHIR/L 16-14-3-T2.6	2.40	3.20	16.00	14.00	2.60	125.00	25.0	11.00	2.00	7.5	8.00
GEHIR/L 16-14-3-T4	2.40	3.20	16.00	14.00	4.00	125.00	25.0	12.40	2.00	7.5	8.00
GEHIR/L 16-16-3-T3	2.40	3.20	16.00	16.00	3.00	160.00	40.0	11.00	2.00	7.5	8.00
GEHIR/L 16-20-3-T8	2.40	3.20	16.00	20.00	8.00	160.00	40.0	16.10	2.00	7.5	8.00

- For user guide, see pages 475-492

(1) Minimum cutting width
(2) Maximum cutting width
(3) Cutting depth maximum
(4) Coolant inlet diameter

For inserts, see pages: GEMI (384) • GEMI (full radius) (384) • GEPI (385) • GEPI (full radius) (386) • GEPI-MT (727) • GEPI-WT (718)

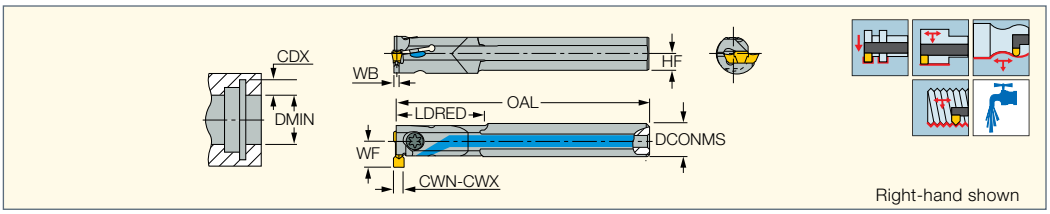
Spare Parts

Designation			
GEHIR/L 10-11.5-2-T3	SR 14-513	T-8/5	
GEHIR/L 10-13-2-T2.4	SR 16-236	T-15/5	
GEHIL 12-11.5-2-T3	SR 14-513	T-8/5	
GEHIR 12-11.5-2-T3*	SR 14-513		
GEHIR/L 12-14-2-T2.6	SR 16-236	T-15/5	
GEHIR/L 12-14-2-T4	SR 14-562	T-10/5	
GEHIR/L 12-15-2-T6	SR 14-513	T-8/5	
GEHIR/L 16-11.5-2-T3	SR 14-513	T-8/5	PL 16
GEHIR/L 16-13-2-T2.4	SR 16-236	T-15/5	PL 16
GEHIR/L 16-14-2-T2.6	SR 16-236	T-15/5	PL 16
GEHIR/L 16-14-2-T4	SR 14-562	T-10/5	PL 16
GEHIR/L 16-16-2-T3	SR M5-04451	T-20/5	PL 16
GEHIR/L 16-20-2-T8	SR M5-04451	T-20/5	PL 16
GEHIR/L 12-14-3-T2.6	SR 16-236	T-15/5	
GEHIR/L 12-14-3-T4	SR 14-562	T-10/5	
GEHIR/L 12-15-3-T6	SR 14-513	T-8/5	
GEHIR/L 16-11.5-3-T3	SR 14-513	T-8/5	PL 16
GEHIR/L 16-13-3-T2.4	SR 16-236	T-15/5	PL 16
GEHIR/L 16-14-3-T2.6	SR 16-236	T-15/5	PL 16
GEHIR/L 16-14-3-T4	SR 14-562	T-10/5	PL 16
GEHIR/L 16-16-3-T3	SR M5-04451	T-20/5	PL 16
GEHIR/L 16-20-3-T8	SR M5-04451	T-20/5	PL 16

CUTGRIP

GEHIR/L-SC

Internal Machining Solid Carbide Bars with Coolant Holes



Designation	CWN(1)	CWX(2)	DCONMS	DMIN	CDX(3)	OAL	LDRED	WF	WB	HF	CND(4)			
GEHIR/L 10SC-13-2	1.90	2.40	10.00	12.50	2.40	125.00	30.0	7.50	1.60	5.0	3.50	SR 16-236	T-15/5	
GEHIR 12SC-14-2	1.90	2.40	12.00	14.00	2.60	125.00	40.0	9.10	1.60	6.0	6.00	SR 16-236	T-15/5	
GEHIR/L 16SC-16-2	1.90	2.40	16.00	16.00	3.00	160.00	70.0	11.00	1.60	7.5	8.00	SR M5-04451	T-20/5	PL 16
GEHIR 12SC-14-3	2.40	3.20	12.00	14.00	2.60	125.00	40.0	9.10	2.00	6.0	6.00	SR 16-236	T-15/5	
GEHIR 16SC-13-3	2.40	3.20	16.00	12.50	2.40	125.00	35.0	10.50	2.00	7.5	8.00	SR 16-236	T-15/5	PL 16
GEHIR/L 16SC-14-3	2.40	3.20	16.00	14.00	2.60	140.00	40.0	11.00	2.00	7.5	8.00	SR 16-236	T-15/5	PL 16
GEHIR/L 16SC-16-3	2.40	3.20	16.00	16.00	3.00	160.00	70.0	11.00	2.00	7.5	8.00	SR M5-04451	T-20/5	PL 16

- For user guide, see pages 475-492

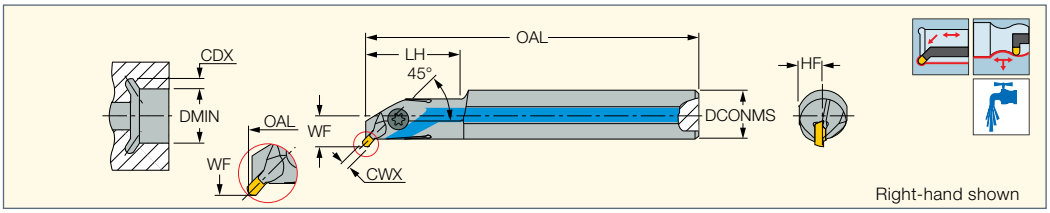
(1) Minimum cutting width
(2) Maximum cutting width
(3) Cutting depth maximum
(4) Coolant inlet diameter

For inserts, see pages: GEMI (384) • GEMI (full radius) (384) • GEPI (385) • GEPI (full radius) (386) • GEPI-MT (727) • GEPI-WT (718)

CUTGRIP

GEHIUR/L

Boring Bars with Coolant Holes for Undercutting and Turning



Designation	CWX(1)	DCONMS	DMIN	CDX(2)	OAL	LH	WF	HF	CND(3)			
GEHIUR/L 12U	3.20	12.00	14.00	2.00	125.00	20.0	8.70	6.0	6.00	SR 16-236 P	T-15/5	
GEHIUR/L 16U	3.20	16.00	16.00	2.00	125.00	32.0	9.70	7.5	8.00	SR M5-04451	T-20/5	PL 16

- For profiling use GEPI (full radius) inserts only, for undercutting use GEPI - UN/UR/UL

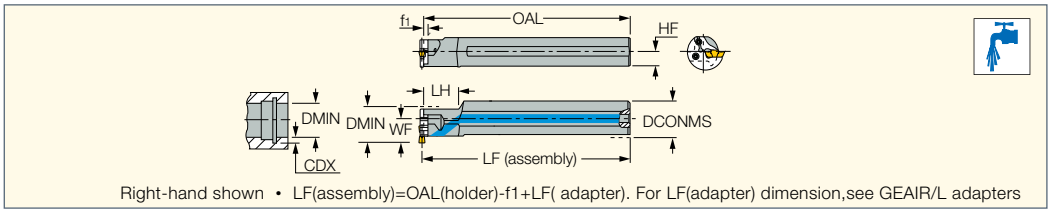
(1) Maximum cutting width
(2) Cutting depth maximum
(3) Coolant inlet diameter

For inserts, see pages: GEPI (full radius) (386) • GEPI-UN/UR/UL (386)

CUTGRIP

GHAIR/L-GE

Bars with Coolant Holes for Internal Grooving and Turning Adapters



Designation	DCONMS	LH	OAL	WF	HF	f1	Adapter			
GHAIR/L 16-20	16.00	-	150.00	11.50	7.5	2.4	GEAIR/L 20..	SR 76-2057	T-8/5	PL 16
GHAIR/L 20-20	20.00	20.0	150.00	13.50	9.0	2.4	GEAIR/L 20..	SR 76-2057	T-8/5	PL 20
GHAIR/L 25-20	25.00	25.0	200.00	16.00	11.5	2.4	GEAIR/L 20..	SR 76-2057	T-8/5	PL 25
GHAIR/L 32-20	32.00	32.0	200.00	19.50	14.5	2.4	GEAIR/L 20..	SR 76-2057	T-8/5	PL 32
GHAIR/L 20-25	20.00	-	150.00	14.50	9.0	2.4	GEAIR/L 25..	SR 16-236 P	T-15/5	PL 20
GHAIR/L 25-25	25.00	25.0	200.00	17.00	11.5	2.4	GEAIR/L 25..	SR 16-236 P	T-15/5	PL 25
GHAIR/L 32-25	32.00	32.0	200.00	20.50	14.5	2.4	GEAIR/L 25..	SR 16-236 P	T-15/5	PL 32

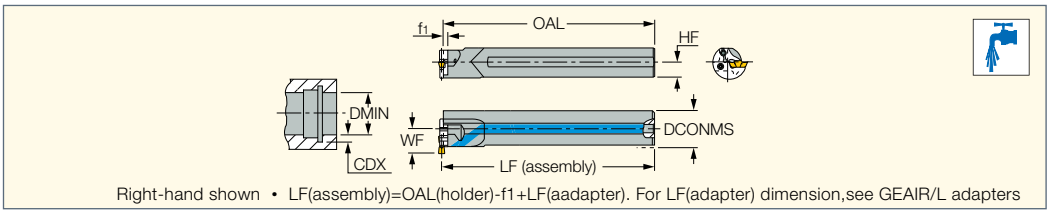
- For DMIN & CDX refer to GEAIR/L adapters

For tools, see page: GEAIR/L (383)

CUTGRIP

GHAIR/L-SC-GE

Solid Carbide Bars with Coolant Holes for Internal Grooving and Turning Adapters



Right-hand shown • LF(assembly)=OAL(holder)-f1+LF(aadapter). For LF(adapter) dimension,see GEAIR/L adapters

Designation	DCONMS	OAL	WF	HF	f1	Adapter			
GHAIR/L 25SC-25	25.00	200.00	17.00	11.5	2.4	GEAIR/L 25-...	SR 16-236 P	T-15/5	PL 25

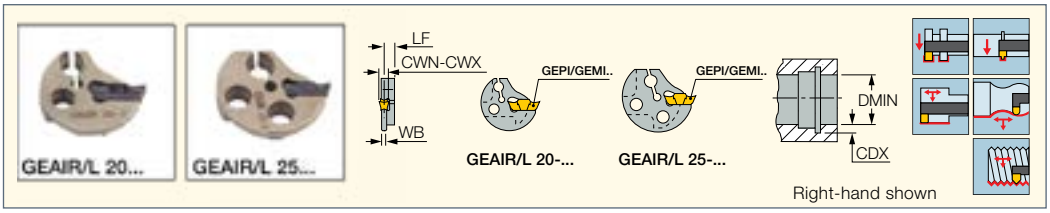
• For DMIN & CDX refer to GEAIR/L adapters.

For tools, see page: GEAIR/L (383)

CUTGRIP

GEAIR/L

Internal Grooving and Turning Adapters



Right-hand shown

Designation	DMIN	CWN(1)	CWX(2)	CDX(3)	LF	WB	MIID(4)
GEAIR/L 20-2	20.00	1.90	2.40	3.00	3.40	1.60	GEPI 2.00-0.10
GEAIR/L 20-3	20.00	2.40	3.00	3.00	3.60	2.00	GEPI 3.00-0.20
GEAIR/L 20-4	20.00	3.00	4.00	3.00	3.85	2.50	GEPI 3.18-0.20
GEAIR/L 25-2	25.00	1.90	2.40	4.00	3.40	1.60	GEPI 2.00-0.10
GEAIR/L 25-3	25.00	2.40	3.00	4.00	3.60	2.00	GEPI 3.00-0.20
GEAIR/L 25-4	25.00	3.00	4.00	4.00	3.85	2.50	GEPI 3.18-0.20

• When using TIPI inserts, toolholder seat needs to be modified according to insert profile to ensure clearance • For user guide, see pages 475-492

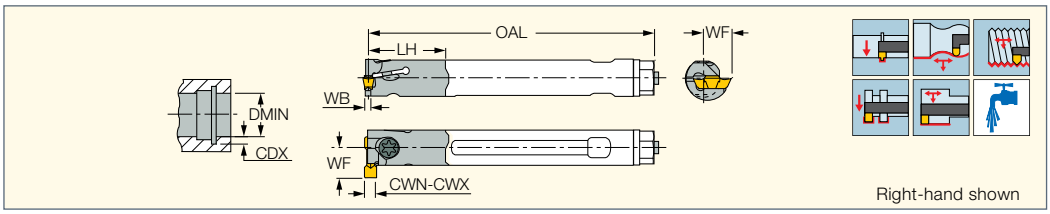
(1) Minimum cutting width
(2) Maximum cutting width
(3) Cutting depth maximum
(4) Master insert identification

For inserts, see pages: GEMI (384) • GEMI (full radius) (384) • GEPI (385) • GEPI (full radius) (386) • GEPI-MT (727) • GEPI-WT (718)
For holders, see pages: C#-GHAIR/L (703) • GHAIR/L-GE (382) • GHAIR/L-SC-GE (383)

CUTGRIP

E-GEHIR / E-GHIR

Interchangeable Heads for Internal Grooving and Turning



Right-hand shown

Designation	CWN(1)	CWX(2)	DMIN	CDX(3)	OAL	LH	WF	WB	Insert		
E12 GEHIR 16-1	1.50	1.90	16.00	2.20	174.00	21.0	9.00	1.20	GEPI, GEMI	SR M5-04451-L10.5	T-20/5
E12 GEHIR 16-2	1.90	2.40	16.00	2.20	174.00	21.0	9.00	1.60	GEPI, GEMI	SR M5-04451-L10.5	T-20/5
E12 GEHIR 16-3	2.40	3.00	16.00	2.20	174.00	21.0	9.00	2.00	GEPI, GEMI	SR M5-04451-L10.5	T-20/5
E16 GHIR 25-3	2.40	3.00	25.00	4.00	209.00	28.7	12.80	2.00	GIPI,GIMIY,GIFI,TIPI	SR M5-04451	T-20/5

• Left-hand heads on request • The shank assembly is the same for right- and left-hand heads • For user guide, see pages 475-492

(1) Minimum cutting width
(2) Maximum cutting width
(3) Cutting depth maximum

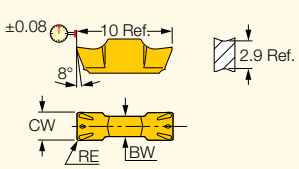
For inserts, see pages: GEMI (384) • GEMI (full radius) (384) • GEPI (385) • GEPI (full radius) (386) • GEPI (W<M) (385) • GEPI-MT (727) • GEPI-WT (718) • GIMIY (391) • GINI-E (393) • GIPI (394) • GIPI-E (392)

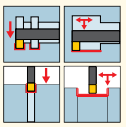
CUTGRIP

GEMI

Utility Double-Ended Inserts for Internal, External Grooving and Turning







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	Tough ↔ Hard IC808	IC908	IC807	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GEMI 2002N	2.00	0.20	0.050	0.050	1.60	●			0.25-0.80	0.05-0.10	0.04-0.08
GEMI 3002M	3.00	0.20	0.050	0.050	2.00	●	●		0.25-1.30	0.10-0.14	0.05-0.09
GEMI 3002N	3.00	0.20	0.050	0.050	2.00	●		●	0.25-1.00	0.07-0.12	0.04-0.08

• GEMI N inserts for ductile materials and low feed • DMIN for internal application=11.5 mm • For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

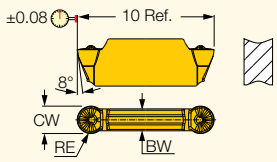
For tools, see pages: AVC-GEAIR/L (389) • E-GEHIR / E-GHIR (383) • GEAIR/L (383) • GEHIR/L (381) • GEHIR/L-SC (382) • GEHSR (427) • GEHSR/L-SL (426)

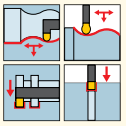
CUTGRIP

GEMI (full radius)

Utility Double-Ended Full Radius Inserts for Internal and External Grooving and Profiling







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	IC808	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GEMI 2010Y	2.00	1.00	0.020	0.050	1.60	●	0.10-1.00	0.06-0.12	0.03-0.08
GEMI 3015Y	3.00	1.50	0.040	0.050	2.00	●	0.10-1.50	0.10-0.18	0.05-0.10

• DMIN for internal application=11.5 mm • For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

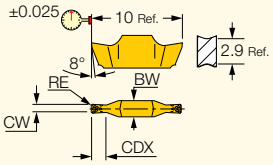
For tools, see pages: AVC-GEAIR/L (389) • E-GEHIR / E-GHIR (383) • GEAIR/L (383) • GEHIR/L (381) • GEHIR/L-SC (382) • GEHSR (427) • GEHSR/L-SL (426)

CUTGRIP

GEPI (W<M)

Precision Ground Double-Ended Inserts for Internal Grooving







Designation	Dimensions						Tough ↔ Hard			Recommended Machining Data
	CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	BW	IC528	IC08	IC908	f groove (mm/rev)
GEPI 1.00-0.10	1.00	0.10	0.020	0.030	1.60	1.80	●	●	●	0.01-0.03
GEPI 1.00-0.50	1.00	0.50	0.020	0.030	1.60	1.80			●	0.01-0.04
GEPI 1.04-0.00	1.04	0.00	0.020	0.030	1.60	1.80	●	●	●	0.01-0.03
GEPI 1.20-0.00	1.20	0.00	0.020	0.030	1.80	1.80	●	●	●	0.01-0.03
GEPI 1.25-0.10	1.25	0.10	0.020	0.030	2.00	1.80	●	●	●	0.02-0.04
GEPI 1.40-0.00	1.40	0.00	0.020	0.030	2.00	1.80	●	●	●	0.02-0.04
GEPI 1.47-0.00	1.47	0.00	0.020	0.030	2.00	1.80	●	●	●	0.02-0.04
GEPI 1.50-0.10	1.50	0.10	0.020	0.030	2.00	1.80	●	●	●	0.02-0.04
GEPI 1.57-0.15	1.57	0.15	0.020	0.030	2.00	1.80	●	●	●	0.02-0.05
GEPI 1.70-0.05	1.70	0.05	0.020	0.030	2.50	1.80	●	●	●	0.02-0.05
GEPI 1.78-0.15	1.78	0.15	0.020	0.030	2.50	1.80	●	●	●	0.02-0.05

• E12 GEHIR 16-1 seat needs to be modified according to insert profile to ensure clearance • DMIN for internal application=11.5mm

• For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

(3) Cutting depth maximum

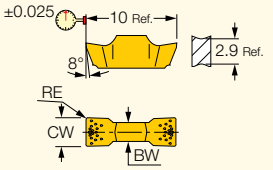
For tools, see pages: E-GEHIR / E-GHIR (383) • GEHIMR/L (380) • GEHIMR/L-SC (380)

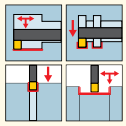
CUTGRIP

GEPI

Precision Ground Double Ended Inserts for Internal and External Grooving







Designation	Dimensions						Tough ↔ Hard			Recommended Machining Data		
	CW	RE	CWTOL(2)	RETOL(3)	CDX(4)	BW	IC528	IC08	IC908	a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GEPI 1.85-0.10 (1)	1.85	0.10	0.020	0.030	2.50	1.80	●	●	●	0.15-0.50	0.05-0.07	0.03-0.05
GEPI 1.96-0.10	1.96	0.10	0.020	0.030	2.50	1.80	●	●	●	0.15-0.50	0.05-0.07	0.03-0.05
GEPI 1.96-0.15	1.96	0.15	0.020	0.030	2.50	1.80	●		●	0.20-0.50	0.05-0.07	0.03-0.05
GEPI 2.00-0.10	2.00	0.10	0.020	0.030	9.00	1.80	●	●	●	0.15-0.60	0.05-0.07	0.03-0.05
GEPI 2.22-0.10	2.22	0.10	0.020	0.030	9.00	1.80	●	●	●	0.15-0.60	0.06-0.08	0.04-0.06
GEPI 2.22-0.15	2.22	0.15	0.020	0.030	9.00	1.80	●			0.20-0.60	0.06-0.08	0.04-0.06
GEPI 2.39-0.10	2.39	0.10	0.020	0.030	9.00	2.20	●			0.15-1.00	0.07-0.09	0.04-0.06
GEPI 2.39-0.15	2.39	0.15	0.020	0.030	9.00	2.20	●	●	●	0.20-1.00	0.07-0.09	0.04-0.06
GEPI 2.47-0.20	2.47	0.20	0.020	0.030	9.00	2.20	●	●	●	0.25-1.10	0.08-0.11	0.04-0.07
GEPI 2.50-0.10	2.50	0.10	0.020	0.030	9.00	2.20	●			0.15-1.10	0.07-0.09	0.04-0.07
GEPI 2.50-0.20	2.50	0.20	0.020	0.030	9.00	2.20	●	●	●	0.25-1.10	0.08-0.11	0.05-0.08
GEPI 2.70-0.20	2.70	0.20	0.020	0.030	9.00	2.20	●	●	●	0.25-1.20	0.09-0.12	0.05-0.08
GEPI 3.00-0.20	3.00	0.20	0.020	0.030	9.00	2.20	●	●	●	0.25-1.30	0.10-0.14	0.05-0.09
GEPI 3.18-0.20	3.18	0.20	0.020	0.030	9.00	2.20	●		●	0.25-1.40	0.11-0.14	0.06-0.10

• DMIN for internal application=11.5mm • For cutting speed recommendations and user guide, see pages 475-492

(1) Tool pocket should be modified

(2) Cutting width tolerance (+/-)

(3) Corner radius tolerance (+/-)

(4) Cutting depth maximum

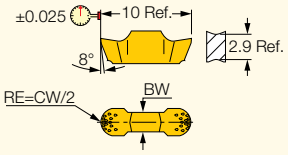
For tools, see pages: AVC-GEAIR/L (389) • E-GEHIR / E-GHIR (383) • GEAIR/L (383) • GEHIMR/L (380) • GEHIMR/L-SC (380) • GEHIR/L (381) • GEHIR/L-SC (382) • GEHSR (427) • GEHSR/L-SL (426)

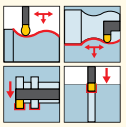
CUTGRIP

GEPI (full radius)

Precision Double-Ended Full Radius Inserts for Internal and External Profiling and Grooving







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	BW	Tough ↔ Hard IC528	IC08	IC908	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GEPI 2.00-1.00	2.00	1.00	0.020	0.050	5.00	1.80	●	●	●	0.00-0.60	0.08-0.12	0.04-0.07
GEPI 3.00-1.50	3.00	1.50	0.020	0.050	5.00	2.20	●	●	●	0.00-1.50	0.13-0.20	0.05-0.11
GEPI 3.18-1.59	3.18	1.59	0.020	0.050	5.00	2.20		●	●	0.00-1.59	0.13-0.21	0.06-0.11

- DMIN for internal application=11.5mm
- For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

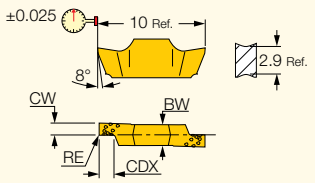
For tools, see pages: AVC-GEAIR/L (389) • E-GEHIR / E-GHIR (383) • GEAIR/L (383) • GEHIR/L (381) • GEHIR/L-SC (382) • GEHIUR/L (382) • GEHSR (427) • GEHSR/L-SL (426)

CUTGRIP

GEPI-RX/LX

Precision Double-Ended Inserts for Internal Grooving Next to Shoulder







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	BW	Tough ↔ Hard IC528	IC908	Recommended Machining Data f groove (mm/rev)
GEPI 0.80-0.00RX	0.80	0.00	0.020	0.030	1.50	1.80		●	0.01-0.02
GEPI 1.00-0.10 R/LX	1.00	0.10	0.020	0.030	1.50	1.80	●		0.01-0.03
GEPI 1.57-0.15RX	1.57	0.15	0.020	0.030	2.00	1.80		●	0.02-0.05

- Toolholder seat needs to be modified according to insert profile to ensure clearance
- DMIN for internal application=11.5mm
- For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

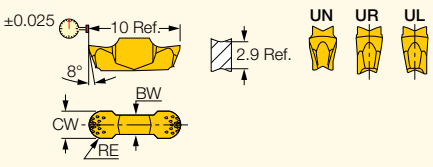
For tools, see pages: GEHIMR/L (380) • GEHIMR/L-SC (380)

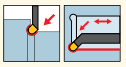
CUTGRIP

GEPI-UN/UR/UL

Precision Double-Ended Inserts for Internal Undercutting







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	BW	Tough ↔ Hard IC528	IC08	Recommended Machining Data f groove (mm/rev)
GEPI 3.00-1.50UN	3.00	1.50	0.020	0.050	2.00	2.20	●		0.03-0.12
GEPI 2.00-1.00UR/L	2.00	1.00	0.020	0.050	2.00	1.80	●	●	0.03-0.12

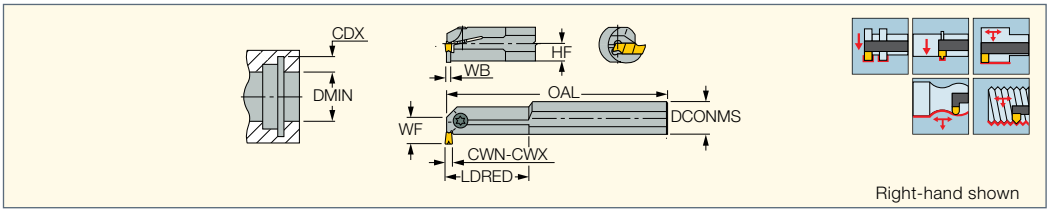
- For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

For tools, see page: GEHIUR/L (382)

CUT-GRIP

GHIR/L (W=1.9-6.4)
Internal Grooving and Turning Bars



Designation	CWN(1)	CWX(2)	DCONMS	DMIN	CDX(3)	OAL	LDRED	WF	HF	WB
GHIR/L 20-3	1.90	3.50	20.00	20.00	4.50	160.00	16.0	14.50	9.0	1.55
GHIR/L 20-20-3	2.00	3.50	20.00	20.00	4.50	200.00	40.0	14.50	9.0	1.60
GHIR/L 20-4	3.00	4.80	20.00	20.00	4.50	160.00	25.0	14.50	9.0	2.60
GHIR/L 20-20-4	3.00	4.80	20.00	20.00	4.50	200.00	40.0	14.50	9.0	2.60
GHIR/L 25-25-4	2.50	4.00	25.00	25.00	5.00	200.00	50.0	17.50	11.5	2.10
GHIR/L 32-4	2.50	4.00	32.00	38.00	5.00	250.00	-	21.30	14.5	2.10
GHIR/L 25-5	3.20	5.30	25.00	26.00	6.00	160.00	25.0	18.50	11.5	2.80
GHIR/L 25-25-6	4.00	6.40	25.00	25.00	5.00	200.00	50.0	17.50	11.5	3.60
GHIR/L 32-6	4.00	6.40	32.00	39.00	6.50	250.00	-	22.80	14.5	3.60
GHIR/L 40-6	4.00	6.40	40.00	49.00	8.00	300.00	-	28.30	18.0	3.60

• When using TIPI inserts, toolholder seat needs to be modified according to insert profile to ensure clearance. • For user guide, see pages 475-492
(1) Minimum cutting width
(2) Maximum cutting width
(3) Cutting depth maximum

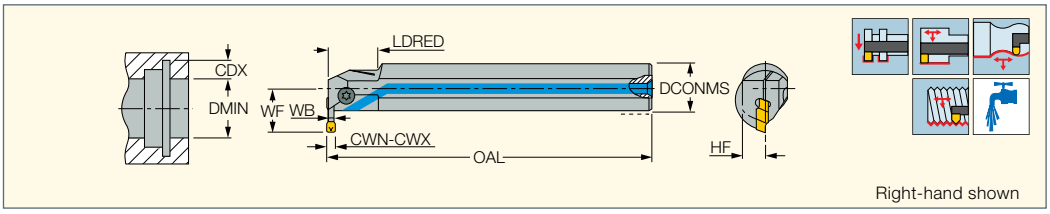
For inserts, see pages: GIFI (395) • GIFI-E (392) • GIFI-E (full radius) (392) • GIMIY (391) • GINI-E (393) • GIPI (394)
• GIPI (CW<BW) (393) • GIPI (full radius CW<BW) (394) • GIPI (full radius) (395) • GIPI-E (392) • GIPI-RX/LX (395) • TIPI-MT (728)
• TIPI-WT (719)

Spare Parts

Designation		
GHIR/L 20-3	SR 76-1021	T-20/5
GHIR/L 20-20-3	SR 76-1021	T-20/5
GHIR/L 20-4	SR 76-1021	T-20/5
GHIR/L 20-20-4	SR 76-1021	T-20/5
GHIR/L 25-25-4	SR 76-1022	T-20/5
GHIL 32-4	SR 76-1021	T-20/5
GHIR 32-4	SR 76-1022	T-20/5
GHIR/L 25-5	SR 76-1022	T-20/5
GHIR/L 25-25-6	SR 76-1022	T-20/5
GHIR/L 32-6	SR 76-1022	T-20/5
GHIL 40-6	SR 76-1022	T-20/5
GHIR 40-6	SR 76-1021	T-20/5

CUT-GRIP

GHIR/L-C (W=4-6.4)
Grooving and Turning Bars with Internal Coolant Holes



Designation	DCONMS	CWN(1)	CWX(2)	DMIN	CDX(3)	HF	OAL	LDRED	WF	WB	Inlet			
GHIR/L 25C-510	25.00	4.00	5.30	32.00	10.00	11.5	160.00	25.0	22.50	3.50	R1/8	SR 76-1022	T-20/5	PL 25
GHIR/L 32C-610	32.00	4.80	6.40	43.00	10.00	14.5	200.00	-	26.20	4.40	R1/8	SR 76-1022	T-20/5	PL 32
GHIR/L 40C-612	40.00	4.80	6.40	53.00	12.00	18.0	250.00	-	32.20	4.40	R1/8	SR 76-1022	T-20/5	PL 40

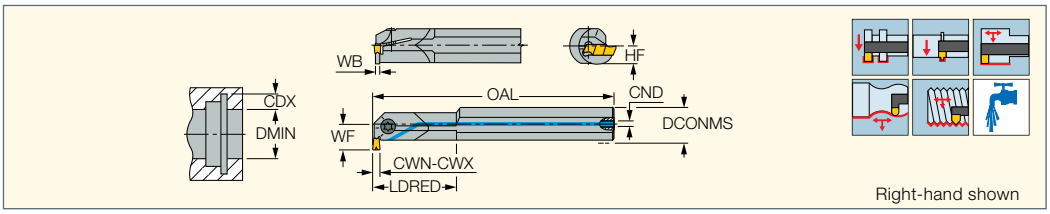
• When using TIPI inserts, toolholder seat needs to be modified according to insert profile to ensure clearance. • For user guide, see pages 475-492
(1) Minimum cutting width
(2) Maximum cutting width
(3) Cutting depth maximum

For inserts, see pages: GIFI (395) • GIFI-E (392) • GIFI-E (full radius) (392) • GIMIY (391) • GINI-E (393) • GIPI (394)
• GIPI (full radius) (395) • GIPI-E (392) • TIPI-MT (728)

CUTGRIP

GHIR/L-SC (W=2-4.8)

Grooving and Turning Solid Carbide Bars with Internal Coolant Holes



Designation	CWN(1)	CWX(2)	DCONMS	DMIN	CDX(3)	OAL	LDRED	WF	HF	CND(4)	WB			
GHIR/L 20SC-3	2.00	3.50	20.00	20.00	4.50	200.00	60.0	14.50	9.0	8.5	1.60	SR 76-1021	T-20/5	PL 20
GHIR/L 20SC-4	3.00	4.80	20.00	20.00	4.50	200.00	60.0	14.50	9.0	8.5	2.60	SR 76-1021	T-20/5	PL 20

- Tool head is made of steel.
- When using TIPI inserts, toolholder seat needs to be modified according to insert profile to ensure clearance.
- For user guide, see pages 475-492

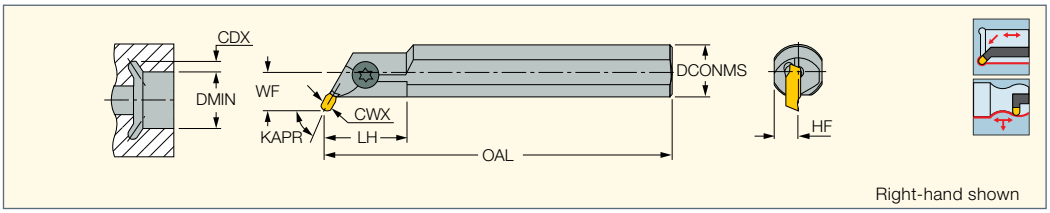
(1) Minimum cutting width
(2) Maximum cutting width
(3) Cutting depth maximum
(4) Coolant entry diameter

For inserts, see pages: GIFI (395) • GIFI-E (392) • GIFI-E (full radius) (392) • GIMIY (391) • GINI-E (393) • GIPI (394) • GIPI (full radius CW<BW) (394) • GIPI (full radius) (395) • GIPI-E (392) • GIPI-RX/LX (395) • TIPI-MT (728) • TIPI-WT (719)

CUTGRIP

GHIUR/L

Undercutting and Turning Boring Bars



Designation	CWX(1)	DCONMS	DMIN	CDX(2)	OAL	LH	WF	HF	KAPR(3)		
GHIUR/L 20U	4.80	20.00	20.00	2.50	160.00	40.0	12.50	9.0	45.0	SR 76-1021	T-20/5
GHIUR/L 20-20-5	4.80	20.00	20.00	3.00	200.00	51.0	13.00	9.0	60.0	SR 76-1021	T-20/5
GHIUR/L 25U	6.40	25.00	25.00	3.00	160.00	50.0	15.50	11.5	45.0	SR 76-1022	T-20/5
GHIUR/L 25-25-6	6.40	25.00	25.00	3.50	200.00	60.0	16.00	11.5	60.0	SR 76-1022	T-20/5

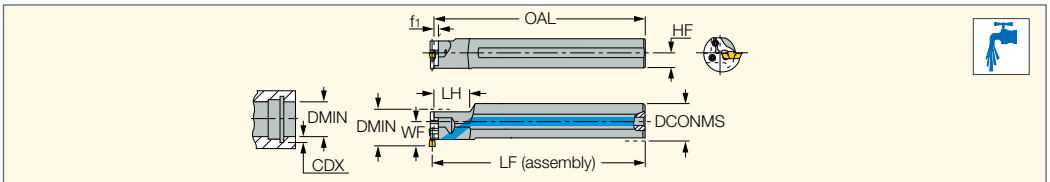
(1) Maximum cutting width
(2) Cutting depth maximum
(3) Tool cutting edge angle

For inserts, see page: GIPI-UR/UL (396)

CUTGRIP

GHAIR/L-GI

Bars with Coolant Holes for Internal Grooving and Turning Adapters



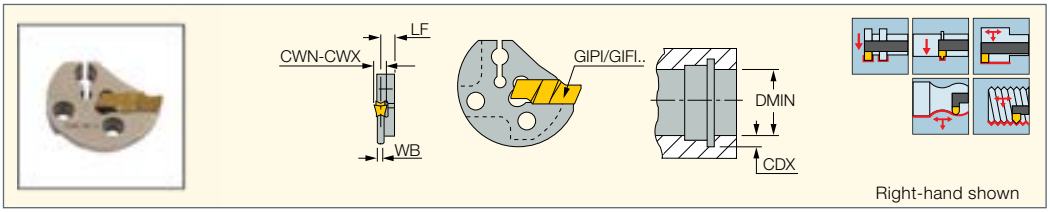
Designation	DCONMS	LH	OAL	WF	HF	f1	Adapter				
GHAIR/L 25-32	25.00	25.0	200.00	19.70	11.5	3.0	GAIR/L 32..	SR 16-236 P	T-15/5	PL 25	
GHAIR/L 32-32	32.00	32.0	200.00	23.20	14.5	3.0	GAIR/L 32..	SR 16-236 P	T-15/5	PL 32	
GHAIR/L 32-40	32.00	40.0	200.00	24.00	14.5	3.0	GAIR/L 40..	SR 16-212	T-20/5	PL 32	SR 14-519

- For DMIN & CDX refer to GAIR/L adapters

For tools, see page: GAIR/L (389)

CUTGRIP

GAIR/L
Internal Grooving and Turning Adapters



Designation	DMIN	CWN(1)	CWX(2)	CDX(3)	LF	WB
GAIR/L 32-2	32.00	1.50	2.10	3.00	3.80	1.20
GAIR/L 32-3	32.00	2.10	3.00	3.00	4.10	1.80
GAIR/L 32-4	32.00	3.00	4.50	5.00	4.50	2.50
GAIR/L 32-5	32.00	4.50	6.40	5.00	5.20	4.00
GAIR/L 40-2	40.00	1.50	2.10	3.00	3.80	1.20
GAIR/L 40-3	40.00	2.10	3.00	4.00	4.10	1.80
GAIR/L 40-4	40.00	3.00	4.50	7.00	4.50	2.50
GAIR/L 40-5	40.00	4.50	6.40	7.00	5.20	4.00

• When using TIPI inserts, toolholder seat needs to be modified according to insert profile to ensure clearance • For user guide, see pages 475-492

(1) Minimum cutting width

(2) Maximum cutting width

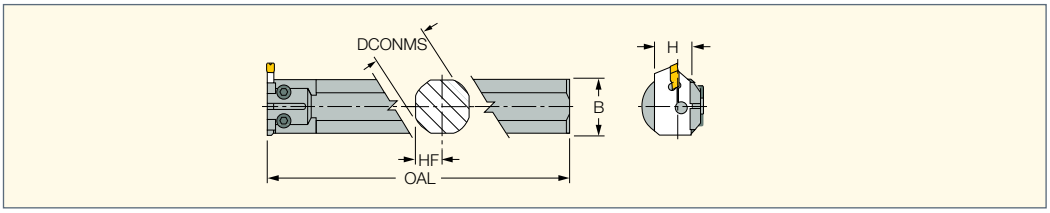
(3) Cutting depth maximum

For inserts, see pages: GIMIY (391) • GIPI-E (392) • GIFI-E (392) • GIFI-E (full radius) (392) • GINI-E (393) • GIPI (CW<BW) (393) • GIPI (394) • GIPI (full radius CW<BW) (394) • GIPI (full radius) (395) • GIFI (395) • GIPI-RX/LX (395) • TIPI-MT (728) • TIPI-WT (719)

For holders, see pages: C#-GHAIR/L (703) • GHAIR/L-GI (388)

CUTGRIP

GHIC-50
Boring Bars for Internal Grooving and Turning Blades, DMIN=50 mm



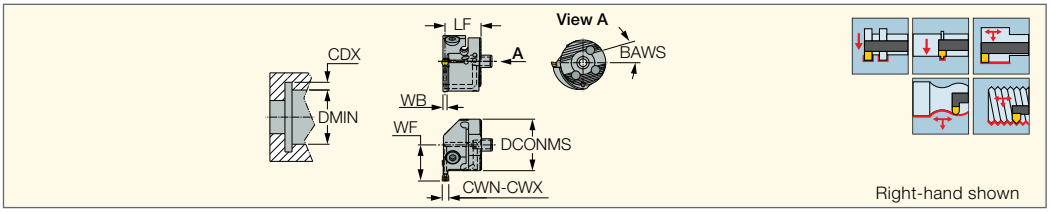
Designation	H	DCONMS	OAL	HF	B		
GHIC 32-50	26.0	32.00	220.00	14.5	29.0	SR M5X16 DIN912	HW 4.0
GHIC 40-50	26.0	40.00	260.00	18.0	36.0	SR M5X16 DIN912	HW 4.0

• For both right and left hand applications

For tools, see page: CGIN 26 (391)

CUTGRIP

AVC-GEAIR/L
Internal Grooving, Turning and Threading Adapters



Designation	DMIN	CWN(1)	CWX(2)	DCONMS	CDX(3)	WF	LF	WB	BAWS	MIID(4)
AVC-D16-GEAIR/L-2	21.00	1.90	2.40	16.00	3.00	12.00	14.50	1.60	45	GEPI 2.00-0.10
AVC-D16-GEAIR/L-3	21.00	2.40	2.70	16.00	3.00	12.00	14.50	2.00	45	GEPI 3.00-0.20
AVC-D20-GEAIR/L-2	26.00	1.90	2.40	20.00	3.00	14.70	13.50	1.60	15	GEPI 2.00-0.10
AVC-D20-GEAIR/L-3	26.00	2.40	3.18	20.00	3.00	14.70	13.50	2.00	15	GEPI 3.00-0.20
AVC-D25-GEAIR/L-2	31.00	1.90	2.40	25.00	4.00	17.50	17.50	1.60	15	GEPI 2.00-0.10
AVC-D25-GEAIR/L-3	31.00	2.40	3.18	25.00	4.00	17.50	17.50	2.00	15	GEPI 3.00-0.20

• Using the adapters with CAMFIX & SH-D holders is possible in case the machine has an option to rotate the holders • For user guide, see pages 475-492

(1) Minimum cutting width

(2) Maximum cutting width

(3) Cutting depth maximum

(4) Master insert identification

For inserts, see pages: GEMI (384) • GEMI (full radius) (384) • GEPI (385) • GEPI (full radius) (386) • GEPI-MT (727) • GEPI-WT (718)

For holders, see pages: AV-D (117) • C#-AV-C (118) • C#-SH-E-JHP (704) • C#-SH-JHP (704)

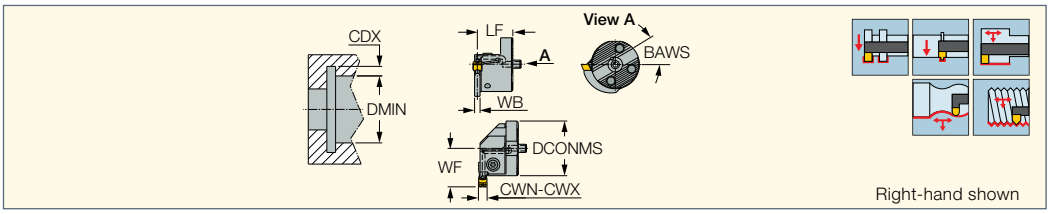
Spare Parts

Designation					
AVC-D16-GEAIR/L-2	SR 14-551				T-9/5
AVC-D16-GEAIR/L-3	SR 14-551				T-9/5
AVC-D20-GEAIR/L-2	SR 34-510		SW6-SD	BLD T15/M7	
AVC-D20-GEAIR/L-3	SR 34-510		SW6-SD	BLD T15/M7	
AVC-D25-GEAIR/L-2	SR M4X14 DIN912	HW 3.0			
AVC-D25-GEAIR/L-3	SR M4X14 DIN912	HW 3.0			

CUTGRIP

AVC-GAIR/L

Internal Grooving Turning and Threading Adapters



Designation	DMIN	CWN[2]	CWX[3]	DCONMS	CDX[4]	WF	LF	WB	BAWS
AVC-D32-GAIR/L-2	37.00	1.50	2.10	32.00	3.00	20.00	23.00	1.20	30
AVC-D32-GAIR/L-3	37.00	2.10	3.00	32.00	3.00	20.00	23.00	1.80	30
AVC-D32-GAIR/L-4	39.00	3.00	4.50	32.00	5.00	22.00	23.00	2.50	30
AVC-D32-GAIR/L-5	39.00	4.50	6.40	32.00	5.00	22.00	26.00	4.00	30
AVC-D40-GAIR/L-2 [1]	45.00	1.50	2.10	40.00	3.00	24.00	23.00	1.20	30
AVC-D40-GAIR/L-3 [1]	46.00	2.10	3.00	40.00	4.00	25.00	23.00	1.80	30
AVC-D40-GAIR/L-4	49.00	3.00	4.50	40.00	7.00	28.00	23.00	2.50	30
AVC-D40-GAIR/L-5	49.00	4.50	6.40	40.00	7.00	28.00	26.00	4.00	30

• When using TIPI inserts, toolholder seat needs to be modified according to insert profile to ensure clearance • Using the adapters with CAMFIX & SH-D holders is possible in case the machine has an option to rotate the holders

• For user guide, see pages 475-492

[1] DMIN of 50mm shank is DMIN of requested head + 10mm • DMIN of 60mm shanks is DMIN of requested head + 20mm

[2] Minimum cutting width

[3] Maximum cutting width

[4] Cutting depth maximum

For inserts, see pages: GIFI (395) • GIFI-E (392) • GIFI-E (full radius) (392) • GINI-E (393) • GIPI (394) • GIPI (CW<BW) (393) • GIPI (full radius CW<BW) (394) • GIPI (full radius) (395) • GIPI-E (392) • GIPI-RX/LX (395) • TIPI-MT (728) • TIPI-WT (719)

For holders, see pages: AV-D (117) • C#-AV-C (118) • C#-SH-E-JHP (704) • C#-SH-JHP (704) • SH-D (116)

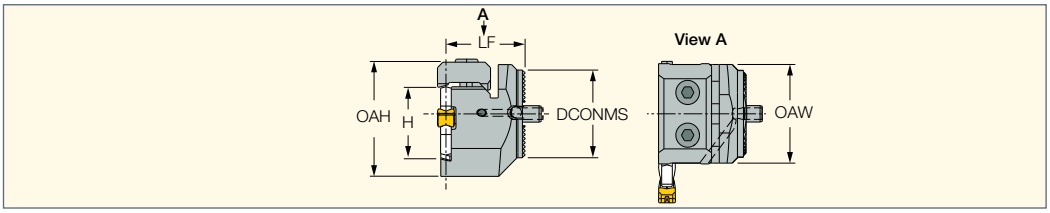
Spare Parts

Designation			
AVC-GAIR/L	SR 76-1021	T-20/5	SR M3X3DIN913

CUTGRIP

AVC-GAIC

Adapters for Internal Grooving, Turning and Threading Blades



Designation	DCONMS	LF	H	OAH	OAW
AVC-D32-GAIC-50	32.00	29.50	26.0	41.70	36.00
AVC-D40-GAIC-50 [1]	40.00	29.50	26.0	41.70	36.00

• For CGIN 26 blades

[1] When using 50mm shank, DMIN=DMIN of CGIN blade + 10mm • When using 60mm shank, DMIN=DMIN of CGIN blade + 20mm

For tools, see page: CGIN 26 (391)

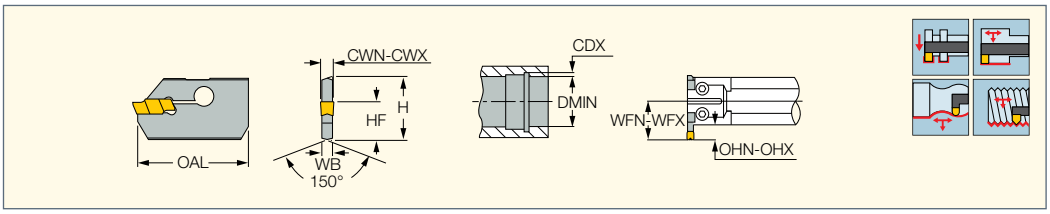
Spare Parts

Designation						
AVC-D32-GAIC-50	SR M3X8 DIN913	SR M5X20DIN912	HW 2.0	SR M4X8 DIN913	HW 4.0	HW 1.5
AVC-D40-GAIC-50	SR M3X8 DIN913		HW 2.0	SR M4X8 DIN913	HW 4.0	HW 1.5

CUT-GRIP

CGIN 26

Internal Grooving and Turning Blades for GHIC...-50 Bars



Designation	CWN[1]	CWX[2]	WB	WFN[3]	WFX[4]	OHN[5]	OHX[6]	HF	LF	H	DMIN
CGIN 26K-3	2.80	4.00	2.40	28.0	33.0	10.0	15.0	15.8	45.00	26.0	50.00
CGIN 26K-4	3.60	4.50	3.20	28.0	33.0	10.0	15.0	15.8	45.00	26.0	50.00
CGIN 26K-5	4.40	6.40	4.00	28.0	33.0	10.0	15.0	15.8	45.00	26.0	54.00
CGIN 26A-3	2.80	4.00	2.40	32.5	37.5	14.5	19.5	15.8	49.50	26.0	54.00
CGIN 26A-4	3.60	4.50	3.20	32.5	37.5	14.5	19.5	15.8	49.50	26.0	54.00
CGIN 26A-5	4.40	6.40	4.00	32.5	37.5	14.5	19.5	15.8	49.50	26.0	54.00

• WFN-WFX and OHN-OHX are the blade's extension range • Grooving depth (CDX) varies in conformance with blade's overhang (OHN-OHX) and depends on the bore diameter(D).For grooving capacity, see chart below

• When using TIPI inserts toolholder seat needs to be modified according to insert profile to ensure clearance • For user guide, see pages 475-492

(1) Minimum cutting width

(2) Maximum cutting width

(3) Adjustable extension

(4) Adjustable extension

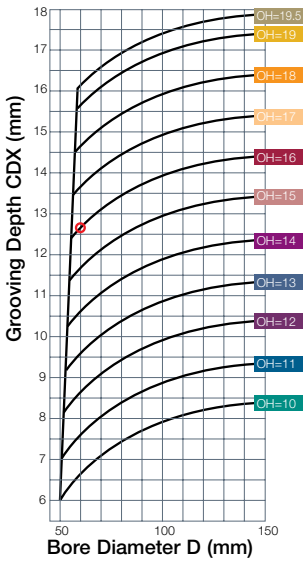
(5) Minimum overhang for adjustable extension

(6) Maximum overhang for adjustable extension

For inserts, see pages: GIFI (395) • GIFI-E (392) • GIFI-E (full radius) (392) • GIMIY (391) • GINI-E (393) • GIPI (394) • GIPI (full radius) (395) • GIPI-E (392) • TIPI-MT (728)

For holders, see pages: AVC-GAIC (390) • GHIC-50 (389)

Internal Grooving Capacity for CGIN Blades



Example:

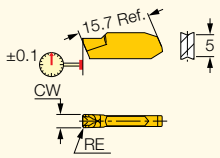
For grooving depth CDX=12.7 mm and grooving width=4 mm in bore øD=60, use blade CGIN 26A-4 and adjust overhang to OH=16 mm.

CUT-GRIP

GIMIY

Utility Single-Ended Inserts for Internal Grooving and Turning





Designation	Dimensions CW	RE	CWTOL[1]	RETOL[2]	Tough ↔ Hard IC830	IC808	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIMIY 304	3.00	0.40	0.020	0.050	•	•	0.50-1.50	0.10-0.14	0.05-0.08
GIMIY 404	4.00	0.40	0.020	0.050	•	•	0.50-2.00	0.13-0.19	0.06-0.11

• DMIN for internal applications=20 mm • For cutting speed recommendations and user guide, see pages 475-492

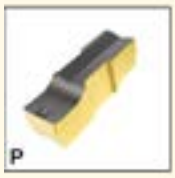
(1) Cutting width tolerance (+/-)

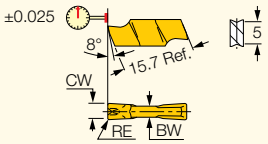
(2) Corner radius tolerance (+/-)

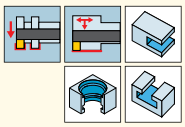
For tools, see pages: CGIN 26 (391) • E-GEHIR / E-GHIR (383) • GAIR/L (389) • GHIR/L (W=1.9-6.4) (387) • GHIR/L-C (W=4-6.4) (387) • GHIR/L-SC (W=2-4.8) (388)

CUTGRIP

GIPI-E
Precision Double-Ended Inserts for Internal Grooving and Turning







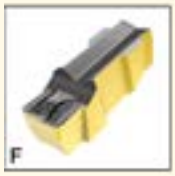
Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	CDX(3)	Tough ↔ Hard IC830	IC8250	IC808	IC908	IC20	IC20N	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIPI 3.00E-0.40	3.00	0.40	0.020	0.030	2.40	15.50	●	●	●	●	●	●	0.50-1.50	0.14-0.18	0.06-0.12
GIPI 4.00E-0.40	4.00	0.40	0.020	0.030	3.20	15.50	●	●	●	●	●		0.50-2.00	0.15-0.21	0.08-0.15
GIPI 5.00E-0.50	5.00	0.50	0.020	0.050	4.00	15.50	●	●	●		●		0.70-3.10	0.19-0.33	0.11-0.20
GIPI 6.35E-0.55	6.35	0.55	0.020	0.050	4.80	15.50		●			●		0.70-3.10	0.23-0.30	0.13-0.21

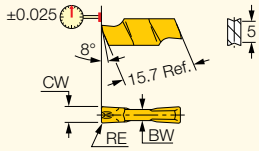
• DMIN for internal applications = 20 mm • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

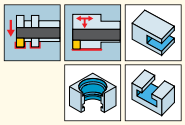
For tools, see pages: AVC-GAIR/L (390) • CGIN 26 (391) • E-GEHIR / E-GHIR (383) • GAIR/L (389) • GHIR/L (W=1.9-6.4) (387) • GHIR/L-C (W=4-6.4) (387) • GHIR/L-SC (W=2-4.8) (388)

CUTGRIP

GIFI-E
Precision Double-Ended Inserts for Internal Grooving and Turning







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	CDX(3)	Tough ↔ Hard IC830	IC8250	IC808	IC908	IC20	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIFI 4.00E-0.40	4.00	0.40	0.020	0.050	3.20	15.50	●	●	●	●	●	0.50-2.00	0.13-0.19	0.06-0.11
GIFI 5.00E-0.50	5.00	0.50	0.020	0.050	4.00	15.50	●	●			●	0.60-2.50	0.16-0.24	0.08-0.14
GIFI 6.00E-0.80	6.00	0.80	0.020	0.050	4.80	15.50		●				1.00-3.00	0.19-0.34	0.09-0.18

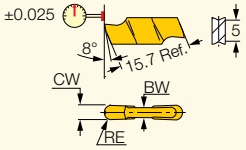
• DMIN for internal applications = 20 mm • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

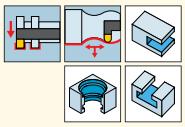
For tools, see pages: AVC-GAIR/L (390) • CGIN 26 (391) • GAIR/L (389) • GHIR/L (W=1.9-6.4) (387) • GHIR/L-C (W=4-6.4) (387) • GHIR/L-SC (W=2-4.8) (388)

CUTGRIP

GIFI-E (full radius)
Precision Double-Ended Full Radius Inserts for Internal Profiling and Grooving







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	CDX(3)	Tough ↔ Hard IC830	IC8250	IC808	IC908	IC20	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIFI 4.00E-2.00	4.00	2.00	0.020	0.050	3.20	14.00	●	●	●	●	●	0.00-2.00	0.14-0.27	0.06-0.12
GIFI 5.00E-2.50	5.00	2.50	0.020	0.050	4.00	13.50	●	●	●		●	0.00-2.50	0.18-0.34	0.08-0.15

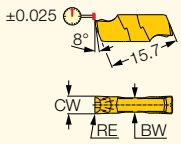
• DMIN for internal applications = 20 mm • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

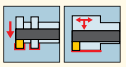
For tools, see pages: AVC-GAIR/L (390) • CGIN 26 (391) • GAIR/L (389) • GHIR/L (W=1.9-6.4) (387) • GHIR/L-C (W=4-6.4) (387) • GHIR/L-SC (W=2-4.8) (388)

CUTGRIP

GINI-E
Precision Double-Ended Inserts for Internal Grooving and Turning of Ductile Materials







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	CDX(3)	IC808	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GINI 3.00E-0.40	3.00	0.40	0.020	0.050	2.40	15.50	•	0.50-1.20	0.08-0.13	0.03-0.09
GINI 4.00E-0.40	4.00	0.40	0.020	0.050	3.20	15.50	•	0.50-1.60	0.10-0.17	0.04-0.12
GINI 5.00E-0.50	5.00	0.50	0.020	0.050	4.00	15.50	•	0.50-2.00	0.12-0.20	0.05-0.14

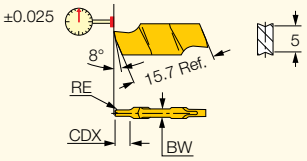
• DMIN for internal applications=20 mm • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

For tools, see pages: AVC-GAIR/L (390) • CGIN 26 (391) • E-GEHIR / E-GHIR (383) • GAIR/L (389) • GHIR/L (W=1.9-6.4) (387) • GHIR/L-C (W=4-6.4) (387) • GHIR/L-SC (W=2-4.8) (388)

CUTGRIP

GIPI (CW<BW)
Precision Double-Ended Inserts for Internal Grooving and Recessing







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	BW	Tough ↔ Hard IC830	IC808	IC908	IC20	IC806	Recommended Machining Data f groove (mm/rev)
GIPI 1.57-0.15	1.57	0.15	0.020	0.030	2.50	2.20	•	•		•	•	0.03-0.05
GIPI 1.70-0.00	1.70	0.00	0.020	0.030	2.50	2.20	•	•		•		0.03-0.06
GIPI 1.78-0.10	1.78	0.10	0.020	0.030	2.50	2.20	•	•	•	•		0.03-0.06
GIPI 1.96-0.10	1.96	0.10	0.020	0.030	2.50	2.20		•	•	•		0.04-0.06
GIPI 1.96-0.15	1.96	0.15	0.020	0.030	2.50	2.20	•	•	•			0.04-0.06

• The tool pocket should be modified • DMIN for internal application=20 mm • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

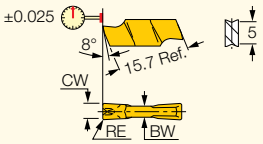
For tools, see pages: AVC-GAIR/L (390) • GAIR/L (389) • GHIR/L (W=1.9-6.4) (387)

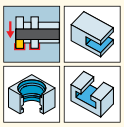
CUTGRIP

GIPI

Precision Double-Ended Inserts for Internal Grooving and Recessing







Designation	Dimensions						Tough ↔ Hard						Recommended Machining Data
	CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	BW	IC830	IC8250	IC808	IC908	IC20	IC20N	f groove (mm/rev)
GIPI 2.22-0.10	2.22	0.10	0.020	0.030	2.50	2.20	●		●	●	●		0.04-0.07
GIPI 2.22-0.15	2.22	0.15	0.020	0.030	2.50	2.20			●	●			0.04-0.07
GIPI 2.30-0.20	2.30	0.20	0.020	0.030	3.00	2.20	●				●		0.05-0.08
GIPI 2.39-0.15	2.39	0.15	0.020	0.030	6.40	2.40	●		●	●	●		0.04-0.07
GIPI 2.50-0.20	2.50	0.20	0.020	0.030	6.00	2.40	●				●		0.05-0.09
GIPI 2.70-0.10	2.70	0.10	0.020	0.030	-	2.40	●		●	●	●	●	0.05-0.08
GIPI 2.70-0.15	2.70	0.15	0.020	0.030	-	2.40			●	●			0.05-0.08
GIPI 3.00-0.40	3.00	0.40	0.020	0.030	-	2.40					●		0.06-0.11
GIPI 3.18-0.20	3.18	0.20	0.020	0.030	-	2.40	●	●	●	●	●	●	0.06-0.11
GIPI 3.30-0.10	3.30	0.10	0.020	0.030	-	2.40	●	●	●		●		0.06-0.10
GIPI 3.96-0.20	3.96	0.20	0.020	0.030	-	3.20		●		●	●		0.08-0.13
GIPI 4.23-0.10	4.23	0.10	0.020	0.030	-	3.20		●			●		0.08-0.13
GIPI 4.78-0.55	4.78	0.55	0.020	0.050	-	4.00	●	●	●		●		0.08-0.15

• DMIN for internal application = 20 mm • For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

(3) Cutting depth maximum

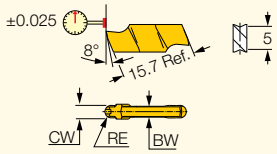
For tools, see pages: AVC-GAIR/L (390) • CGIN 26 (391) • E-GEHIR / E-GHIR (383) • GAIR/L (389) • GHIR/L (W=1.9-6.4) (387) • GHIR/L-C (W=4-6.4) (387) • GHIR/L-SC (W=2-4.8) (388)

CUTGRIP

GIPI (full radius CW<BW)

Precision Double-Ended Full Radius Inserts for Internal Grooving and Recessing







Designation	Dimensions						Tough ↔ Hard				Recommended Machining Data
	CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	BW	IC830	IC808	IC908	IC20	f groove (mm/rev)
GIPI 2.39-1.20	2.39	1.20	0.020	0.050	6.40	2.40	●	●	●	●	0.05-0.10

• The tool pocket should be modified • DMIN for internal applications= 20 mm • For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

(3) Cutting depth maximum

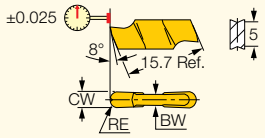
For tools, see pages: AVC-GAIR/L (390) • GAIR/L (389) • GHIR/L (W=1.9-6.4) (387) • GHIR/L-SC (W=2-4.8) (388)

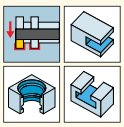
CUT-GRIP

GIPI (full radius)

Precision Double-Ended Full Radius Inserts for Internal Grooving and Recessing







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	Tough ↔ Hard IC8250	IC20	Recommended Machining Data f groove (mm/rev)
GIPI 3.18-1.59	3.18	1.59	0.020	0.050	2.40	●	●	0.06-0.13
GIPI 3.96-1.98	3.96	1.98	0.020	0.050	3.20	●		0.08-0.16
GIPI 4.78-2.39	4.78	2.39	0.020	0.050	4.00	●	●	0.08-0.16
GIPI 6.35-3.18	6.35	3.18	0.020	0.050	4.80	●		0.11-0.21

• Dmin for internal application= 20 mm • For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

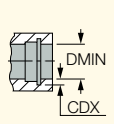
For tools, see pages: AVC-GAIR/L (390) • CGIN 26 (391) • GAIR/L (389) • GHIR/L (W=1.9-6.4) (387) • GHIR/L-C (W=4-6.4) (387) • GHIR/L-SC (W=2-4.8) (388)

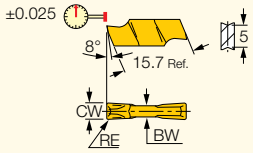
CUT-GRIP

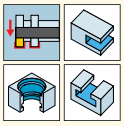
GIFI

Precision Double-Ended Inserts for Internal Grooving and Recessing









Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	CDX(3)	Tough ↔ Hard IC830	IC8250	IC20	Recommended Machining Data f groove (mm/rev)
GIFI 4.78-0.55	4.78	0.55	0.020	0.050	4.00	15.50	●	●	●	0.07-0.13
GIFI 5.28-0.20	5.28	0.20	0.020	0.030	4.00	15.50		●	●	0.08-0.13

• DMIN for internal applications = 20 mm • For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

(3) Cutting depth maximum

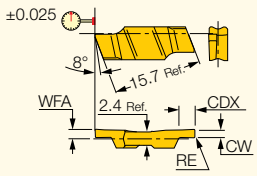
For tools, see pages: AVC-GAIR/L (390) • CGIN 26 (391) • GAIR/L (389) • GHIR/L (W=1.9-6.4) (387) • GHIR/L-C (W=4-6.4) (387) • GHIR/L-SC (W=2-4.8) (388)

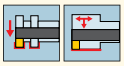
CUT-GRIP

GIPI-RX/LX

Precision Double-Ended Inserts for Internal Grooving Next to a Shoulder







RX shown

Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	WFA	CDX(3)	Tough ↔ Hard IC830	IC808	Recommended Machining Data f groove (mm/rev)
GIPI 0.78-0.1LX	0.78	0.10	0.020	0.030	1.60	1.30		●	0.02-0.04
GIPI 1.00-0.00R/LX	1.00	0.00	0.020	0.030	1.60	2.00	●		0.02-0.04
GIPI 1.19-0.1LX	1.19	0.10	0.020	0.030	1.60	2.00		●	0.03-0.05
GIPI 1.57-0.15LX	1.57	0.15	0.020	0.030	1.70	2.80		●	0.03-0.05
GIPI 1.57-0.79LX	1.57	0.79	0.020	0.050	1.70	2.80		●	0.03-0.06
GIPI 2.00-0.10R/LX	2.00	0.10	0.020	0.030	1.70	2.70	●		0.04-0.06
GIPI 2.39-0.2LX	2.39	0.20	0.020	0.030	1.70	3.90		●	0.05-0.08
GIPI 2.39-1.19LX	2.39	1.19	0.020	0.050	1.70	3.90		●	0.05-0.10

• Tool's pocket should be modified • For grooving and recessing only • For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

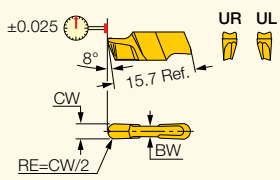
(3) Cutting depth maximum

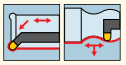
For tools, see pages: AVC-GAIR/L (390) • GAIR/L (389) • GHIR/L (W=1.9-6.4) (387) • GHIR/L-SC (W=2-4.8) (388)

CUTGRIP

GIPI-UR/UL
Precision Double-Ended Inserts for Internal Undercutting







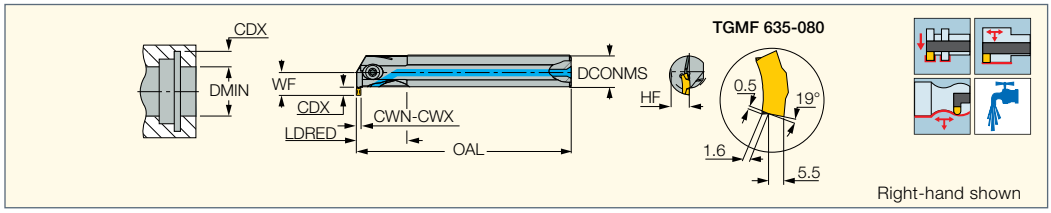
Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	Tough ↔ Hard IC8250	IC20	Recommended Machining Data f groove (mm/rev)
GIPI 3.00-1.5UR/L	3.00	1.50	0.020	0.050	2.40	•	•	0.05-0.15
GIPI 4.00-2.0UR/L	4.00	2.00	0.020	0.050	3.20	•	•	0.05-0.15

• Tool's pocket should be modified • For cutting speed recommendations and user guide, see pages 475-492
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)

For tools, see page: GHIUR/L (388)

TOP-GRIP

TGIR/L-C
Grooving and Turning Bars with Coolant Holes Carrying TOP-GRIP Utility Inserts



Designation	DCONMS	CWN(1)	CWX(2)	DMIN	CDX(3)	HF	OAL	LDRED	WF	Inlet	MIID(4)
TGIR/L 16C-3	16.00	3.00	3.00	20.50	5.50	7.5	150.00	25.0	12.00	M6	TGMF 3
TGIR/L 20C-3	20.00	3.00	3.00	25.00	5.50	9.0	180.00	32.0	14.20	M6	TGMF 3
TGIR/L 25C-3	25.00	3.00	3.00	32.00	8.00	11.5	200.00	40.0	18.80	R1/8	TGMF 3
TGIR/L 25C-4	25.00	4.00	5.00	32.50	8.50	11.5	200.00	40.0	19.50	R1/8	TGMF 4, TGMF/P 5
TGIR/L 32C-4	32.00	4.00	5.00	42.00	11.00	14.5	220.00	50.0	25.50	R1/8	TGMF 4, TGMF/P 5
TGIR/L 32C-6	32.00	6.00	6.35	57.00 (5)	17.50	14.5	220.00	50.0	29.00	R1/8	TGMF 6
TGIR/L 40C-6	40.00	6.00	6.35	57.00	17.50	18.0	300.00	60.0	35.20	R1/8	TGMF 6

• For user guide, see pages 475-492
(1) Minimum cutting width
(2) Maximum cutting width
(3) Cutting depth maximum
(4) Master insert identification
(5) For Dmin 47 mm, modify insert according to sketch

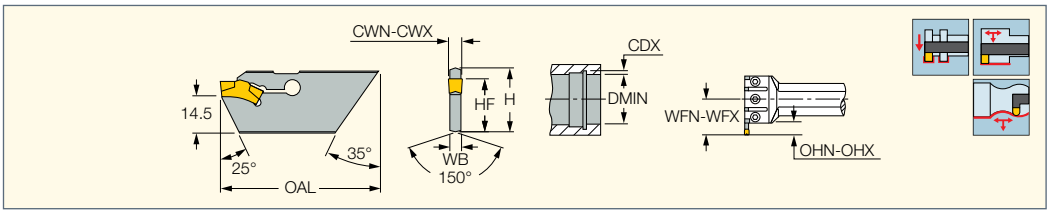
For inserts, see pages: TGMA (299) • TGMF (full radius) (299) • TGMF/P (299)

Spare Parts

Designation				
TGIR/L 16C-3	SR 76-1400	T-20/5		PL 16
TGIR/L 20C-3	SR 76-1400	T-20/5		PL 20
TGIR/L 25C-3	SR M5X16 DIN912		HW 4.0	PL 25
TGIR/L 25C-4	SR M5X16 DIN912		HW 4.0	PL 25
TGIR/L 32C-4	SR M6X20 DIN912		HW 5.0	PL 32
TGIR/L 32C-6	SR M6X20 DIN912		HW 5.0	PL 32
TGIR/L 40C-6	SR M6X25DIN912		HW 5.0	PL 40

TOP-GRIP

TGHN 26-M
Internal Grooving and Turning Blades for GHIC...-70 Bars



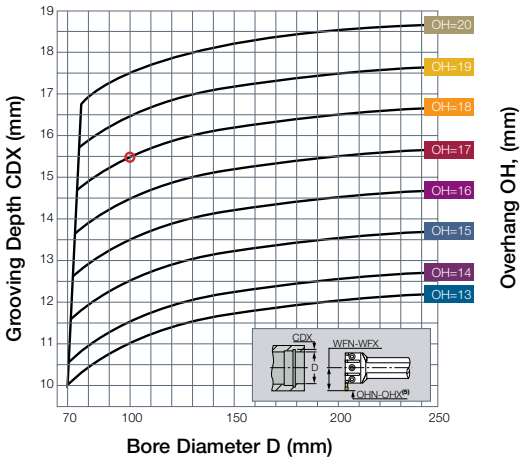
Designation	CWN(1)	CWX(2)	WB	WFN(3)	WFX(4)	OHN(5)	OHX(6)	DMIN	HF	OAL	H
TGHN 26-3M	3.00	3.00	2.40	40.0	41.5	13.5	15.0	70.00	21.4	63.00	26.0
TGHN 26-4M	4.00	5.00	3.20	40.0	41.5	13.5	15.0	70.00	21.4	63.00	26.0
TGHN 26-5M	5.00	5.00	4.00	40.0	46.5	13.5	20.0	70.00	21.4	63.00	26.0

- Grooving depth (CDX) varies in conformance with blade's overhang (WFN-WFX and OHN-OHX) and depends on the bore diameter (D)
- TGHN 26...-M can be modified from external double-sided TGHN blades • For user guide, see pages 475-492

(1) Minimum cutting width
(2) Maximum cutting width
(3) Adjustable extension
(4) Adjustable extension
(5) Minimum overhang for adjustable extension
(6) Maximum overhang for adjustable extension

For inserts, see pages: TGMA (299) • TGMF (full radius) (299) • TGMF/P (299)
For holders, see pages: C#-GHIC (702) • GHIC-70 (398)

Internal Grooving Capacity for TGHN Blades



Example:

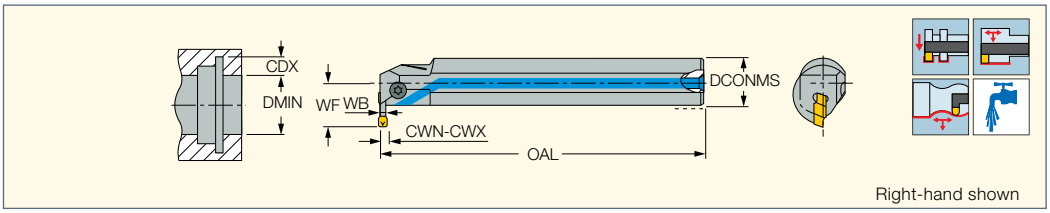
For grooving depth CDX=15.5 mm
and grooving width=5 mm
in bore øD=100, use blade
TGHN 26-5M and adjust overhang to OH=18 mm.



TGHN 26-...M

HELI-GRIP

HELIIR/L
Grooving and Turning Bars with Coolant Holes for HELI-GRIP Utility Inserts



Designation	DCONMS	CWN(1)	CWX(2)	DMIN	CDX(3)	OAL	WF	Inlet	MIID(4)			
HELIIR/L 20C-305	20.00	3.00	3.18	26.00	5.00	160.00	15.20	M6	GRIP 3	SR 76-1400	PL 20	T-20/5
HELIIR/L 25C-305	25.00	3.00	3.18	31.00	5.00	160.00	17.70	R1/8	GRIP 3	SR M5X16 DIN912	PL 25	HW 4.0
HELIIR/L 25C-410	25.00	4.00	4.76	43.00	10.00	160.00	22.70	R1/8	GRIP 4	SR M5X16 DIN912	PL 25	HW 4.0
HELIIR/L 25C-510	25.00	5.00	5.00	43.00	10.00	160.00	22.70	R1/8	GRIP 5	SR M5X16 DIN912	PL 25	HW 4.0
HELIIR/L 25C-610	25.00	6.00	6.35	43.00	10.00	160.00	22.70	R1/8	GRIP 6	SR M5X16 DIN912	PL 25	HW 4.0
HELIIR/L 32C-410	32.00	4.00	4.76	43.00	10.00	200.00	26.20	R1/8	GRIP 4	SR M5X16 DIN912	PL 32	HW 4.0
HELIIR/L 32C-510	32.00	5.00	5.00	43.00	10.00	200.00	26.20	R1/8	GRIP 5	SR M5X16 DIN912	PL 32	HW 4.0
HELIIR/L 32C-610	32.00	6.00	6.35	43.00	10.00	200.00	26.20	R1/8	GRIP 6	SR M5X16 DIN912	PL 32	HW 4.0
HELIIR/L 40C-412	40.00	4.00	4.76	53.00	12.00	250.00	32.20	R1/8	GRIP 4	SR M5X16 DIN912	PL 40	HW 4.0
HELIIR/L 40C-512	40.00	5.00	5.00	53.00	12.00	250.00	32.20	R1/8	GRIP 5	SR M5X16 DIN912	PL 40	HW 4.0
HELIIR/L 40C-612	40.00	6.00	6.35	53.00	12.00	250.00	32.20	R1/8	GRIP 6	SR M5X16 DIN912	PL 40	HW 4.0

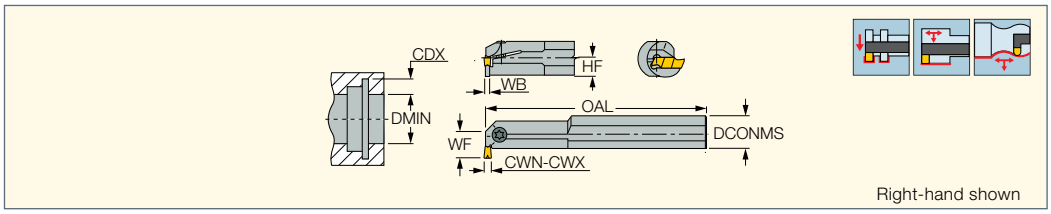
- For user guide, see pages 475-492

(1) Minimum cutting width
(2) Maximum cutting width
(3) Cutting depth maximum
(4) DO-GRIP DGN inserts may be used only for grooving: DGN 4.. (DMIN=51 mm), DGN 5.. (DMIN=57 mm) and DGN 6.. (DMIN=62 mm)

For inserts, see pages: GRIP (294) • GRIP (full radius) (295) • GRIP-T (295) • GRIPA (296) • GRIPA (full radius) (296)
For holders, see page: HSK A63TM ABB (839)

CUTGRIP

GHIR/L (W=7.0-8.3)
Internal Grooving and Turning Boring Bars



Designation	CWN(1)	CWX(2)	DCONMS	DMIN	CDX(3)	OAL	WF	HF	WB		
GHIR/L 40-815	7.00	8.30	40.00	64.00	15.00	300.00	36.00	18.0	6.00	SR M8X20DIN912	HW 6.0
GHIR/L 40-820	7.00	8.30	40.00	65.00	20.00	300.00	41.00	18.0	6.00	SR M8X20DIN912	HW 6.0

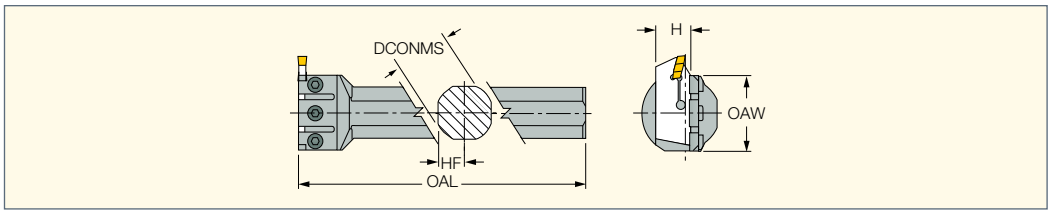
- For user guide, see pages 475-492

(1) Minimum cutting width
(2) Maximum cutting width
(3) Cutting depth maximum

For inserts, see pages: GDMA (332) • GDMF (317) • GDMM-CC (664) • GDMN (319) • GDMT (317) • GDMU (319) • GDMY (318) • GDMY (full radius) (320) • GDMY-F (321) • GIA-K (long pocket) (330) • GIF-E (W=8,10 full radius) (324) • GIF-E (W=8,10) (322) • GIPA/GIDA 8 (full radius) (334)
For holders, see page: HSK A63TM ABB (839)

CUTGRIP

GHIC-70
Boring Bars for Internal Grooving and Turning Blades, DMIN=70 mm



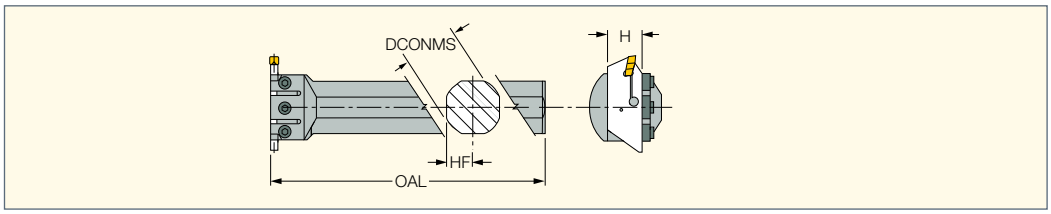
Designation	H	DCONMS	OAL	HF	OAW		
GHIC 40-70	26.0	40.00	260.00	18.0	53.0	SR M6X16 DIN912	HW 5.0
GHIC 50-70	26.0	50.00	300.00	23.0	53.0	SR M6X16 DIN912	HW 5.0

- For both right and left hand applications

For tools, see pages: CGHN 26-M (399) • TGHN 26-M (397)

CUTGRIP

GHIC-85
Boring Bars for Internal Grooving and Turning Blades, DMIN=85 mm



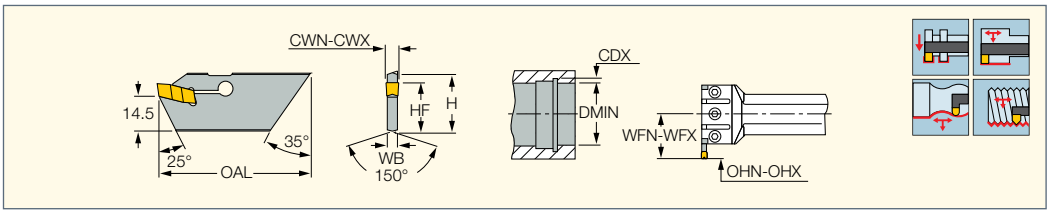
Designation	H	DCONMS	OAL	HF		
GHIC 40-85	32.0	40.00	260.00	18.0	SR M6X16 DIN912	HW 5.0
GHIC 50-85	32.0	50.00	300.00	23.0	SR M6X16 DIN912	HW 5.0

- For both right and left hand applications

For tools, see pages: CGHN 32-DGM (400) • CGHN 32-M (400)

CUTGRIP

CGHN 26-M
Internal Grooving and Turning
Blades for GHIC...-70 Bars



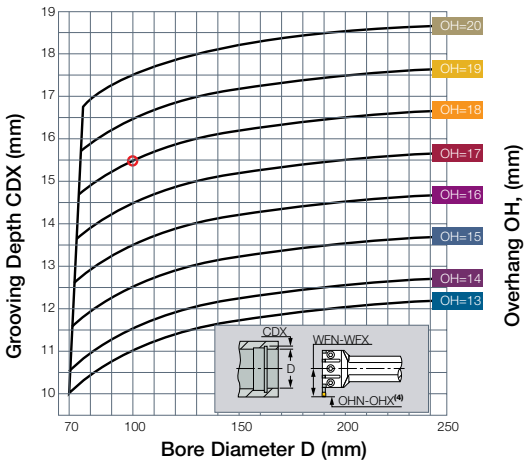
Designation	CWN(1)	CWX(2)	WB	DMIN	WFN(3)	OHN(4)	WFX(5)	OHX(6)	HF	OAL	H
CGHN 26-3M	2.80	4.00	2.40	70.00	40.0	13.5	46.5	20.0	21.4	63.00	26.0
CGHN 26-4M	3.60	4.50	3.20	70.00	40.0	13.5	46.5	20.0	21.4	63.00	26.0
CGHN 26-5M	4.40	6.40	4.00	70.00	40.0	13.5	46.5	20.0	21.4	63.00	26.0

- Grooving depth (CDX) varies in conformance with blade's overhang (WFN-WFX and OHN-OHX) and depends on the bore diameter (D)
- CGHN 26...-M can be modified from external double-sided CGHN blades • When TIP inserts are used the seat needs to be modified to ensure clearance
- When using GIVR/L inserts, tool holder's seat needs to be modified • For user guide, see pages 475-492

(1) Minimum cutting width
(2) Maximum cutting width
(3) Adjustable extension
(4) Minimum overhang for adjustable extension
(5) Adjustable extension
(6) Maximum overhang for adjustable extension

For inserts, see pages: GIVR/L (316) • GIMF (317) • GIMY (318) • GIMN (319) • GIMY (full radius) (320) • GIMY-F (321) • GIF-E (W=4-6) (322)
• GIF-E (W=4-6 full radius) (324) • GIP-E (323) • GIP-E (full radius) (325) • GIP (327) • GIP (full radius) (327) • GIF (328)
• GIF (full radius) (329) • GIA-K (W=3-6) (329) • GITM (330) • GITM (full radius) (331) • GIPY (331) • GIPA (full radius W=3-6) (333)
• GIPA (W=3-6) (332) • GIM-C (587) • GIM-J (587) • GIM-J-RA/LA (588) • GIM-UT (589) • GIM-UT-RA/LA (590) • GIM-W (588) • GIM-W-RA/LA (589)
• GIMT (316) • GIPM-A46 / GIP-1250 (430) • TIP-MT (727) • TIP-WT (718)
For holders, see pages: C#-GHIC (702) • GHIC-70 (398)

Internal Grooving Capacity for CGHN 26 Blades



Example:

For grooving depth CDX=15.5 mm
and grooving width=5 mm
in bore øD=100, use blade
CGHN 26-5M and adjust overhang to OH=18 mm.



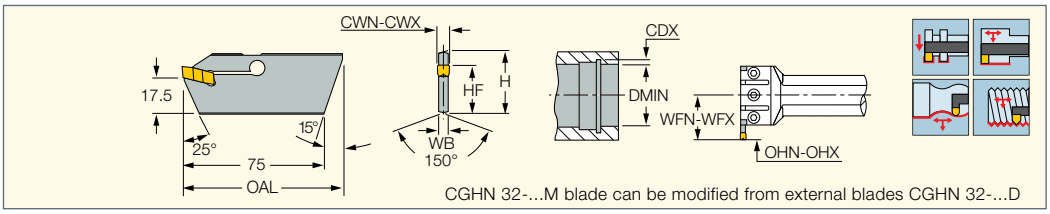
CGHN 26-...M



CUTGRIP

CGHN 32-M

Internal Grooving and Turning Blades



CGHN 32-...M blade can be modified from external blades CGHN 32-...D

Designation	CWN(1)	CWX(2)	WB	WFN(3)	WFX(4)	OHN(5)	OHX(6)	HF	OAL	H	DMIN
CGHN 32-3M	2.80	4.00	2.40	44.0	48.0	15.0	19.0	24.8	82.00	32.0	85.00
CGHN 32-4M	3.60	5.00	3.20	44.0	50.0	15.0	21.0	24.8	82.00	32.0	85.00
CGHN 32-5M	4.40	6.40	4.00	44.0	55.0	15.0	26.0	24.8	82.00	32.0	85.00
CGHN 32-6M	5.60	6.40	5.20	44.0	55.0	15.0	26.0	24.8	82.00	32.0	85.00

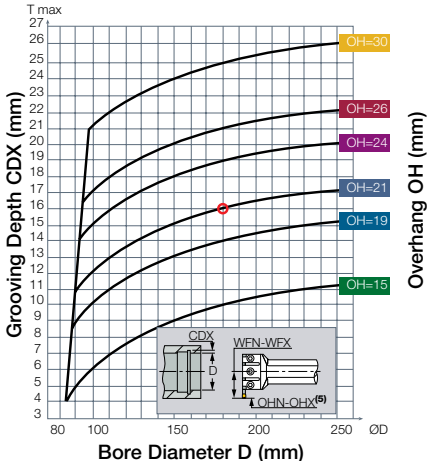
- WFN-WFX and OHN-OHX are the blade's extension range
- Grooving depth (CDX) varies in conformance with blade's overhang (OHN-OHX) and depends on the bore diameter(D). For grooving capacity, see graph
- When using TIP inserts, the toolholder seat needs to be modified • When using GIVR/L inserts, toolholder's seat needs to be modified
- For user guide, see pages 475-492

(1) Minimum cutting width
(2) Maximum cutting width
(3) Adjustable extension
(4) Adjustable extension
(5) Minimum overhang for adjustable extension
(6) Maximum overhang for adjustable extension

For inserts, see pages: GIA-K (W=3-6) (329) • GIF (328) • GIF (full radius) (329) • GIF-E (W=4-6 full radius) (324) • GIF-E (W=4-6) (322) • GIM-C (587) • GIM-J (587) • GIM-J-RA/LA (588) • GIM-UT (589) • GIM-UT-RA/LA (590) • GIM-W (588) • GIM-W-RA/LA (589) • GIMF (317) • GIMN (319) • GIMT (316) • GIMY (318) • GIMY (full radius) (320) • GIMY-F (321) • GIP (327) • GIP (full radius) (327) • GIP-E (323) • GIP-E (full radius) (325) • GIPA (full radius W=3-6) (333) • GIPA (W=3-6) (332) • GIPM-A46 / GIP-1250 (430) • GIPY (331) • GITM (330) • GITM (full radius) (331) • GIVR/L (316) • TIP-MT (727) • TIP-WT (718)

For holders, see pages: GHIC-85 (398)

Internal Machining Grooving Capacity for CGHN 32 Blades



Example:

For grooving depth CDX=16 and grooving width= 4 in bore øD=180, use blade CGHN-32-4M/DGM and adjust overhang to OH=21 mm.

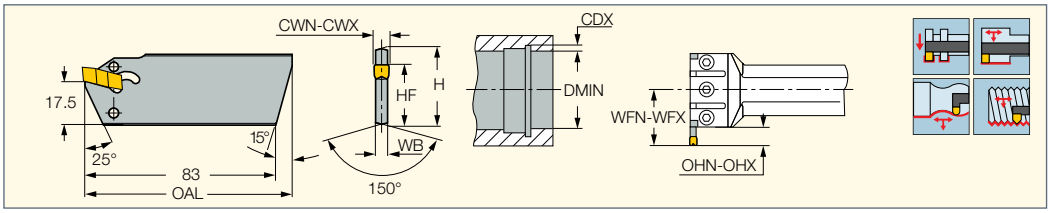


CGHN 32-...M/DGM

CUTGRIP

CGHN 32-DGM

Internal Grooving and Turning Blades for GHIC...-85 Bars (self-clamping)



Designation	CWN(1)	CWX(2)	WB	WFN(3)	WFX(4)	OHN(5)	OHX(6)	HF	OAL	H	DMIN	
CGHN 32-3DGM	2.80	4.00	2.40	53.0	59.0	24.0	30.0	24.8	90.00	32.0	93.00	EDG 44A*
CGHN 32-4DGM	3.50	5.00	3.20	53.0	59.0	24.0	30.0	24.8	90.00	32.0	93.00	EDG 44A*
CGHN 32-5DGM	4.40	6.40	4.00	53.0	59.0	24.0	30.0	24.8	90.00	32.0	93.00	EDG 44A*
CGHN 32-6DGM	5.60	6.40	5.20	53.0	59.0	24.0	30.0	24.8	90.00	32.0	93.00	EDG 44A*

- Grooving depth (CDX) varies in conformance with blade's overhang (WFN-WFX and OHN-OHX) and it depends on the bore diameter (D)
- CGHN 32...DGM can be modified from external double-sided CGHN -DG blades • When TIP inserts are used,the seat needs to be modified to ensure clearance
- When using GIVR/L inserts, tool holder's seat needs to be modified • For user guide, see pages 475-492

(1) Minimum cutting width
(2) Maximum cutting width
(3) Adjustable extension
(4) Adjustable extension
(5) Minimum overhang for adjustable extension
(6) Maximum overhang for adjustable extension
* Optional, to be ordered separately

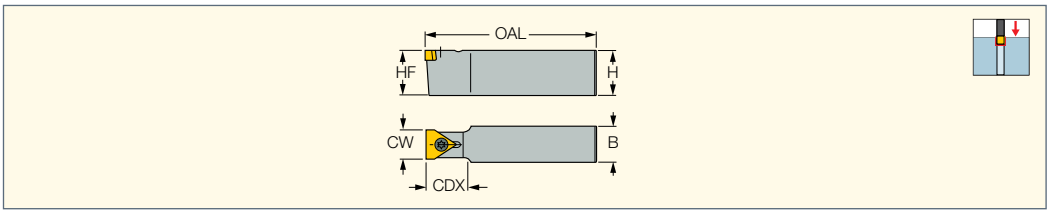
For inserts, see pages: GIA-K (W=3-6) (329) • GIF (328) • GIF (full radius) (329) • GIF-E (W=4-6 full radius) (324) • GIF-E (W=4-6) (322) • GIM-C (587) • GIM-J (587) • GIM-J-RA/LA (588) • GIM-UT (589) • GIM-UT-RA/LA (590) • GIM-W (588) • GIM-W-RA/LA (589) • GIMF (317) • GIMN (319) • GIMT (316) • GIMY (318) • GIMY (full radius) (320) • GIMY-F (321) • GIP (327) • GIP (full radius) (327) • GIP-E (323) • GIP-E (full radius) (325) • GIPA (full radius W=3-6) (333) • GIPA (W=3-6) (332) • GIPM-A46 / GIP-1250 (430) • GIPY (331) • GITM (330) • GITM (full radius) (331) • GIVR/L (316) • TIP-MT (727) • TIP-WT (718)

For holders, see page: GHIC-85 (398)

V-LOCK

SXCNN

External Toolholders for Specially Tailored Wide Profile Grooving Inserts



Designation	CW	CDX(1)	HF	H	B	OAL	Insert		
SXCNN 1212 K10-06	10.40	17.00	12.0	12.0	12.0	125.00	XNUW 10	SR 76-2067	T-15/5
SXCNN 1616 K10-06	10.40	17.00	16.0	16.0	16.0	125.00	XNUW 10	SR 76-2067	T-15/5
SXCNN 2020 P10-06	10.40	17.00	20.0	20.0	20.0	170.00	XNUW 10	SR 76-2067	T-15/5
SXCNN 2525 P10-06	10.40	17.00	25.0	25.0	25.0	170.00	XNUW 10	SR 76-2067	T-15/5
SXCNN 1212 K13-05	13.00	20.00	12.0	12.0	12.0	125.00	XNUW 13	SR 76-2068	T-20/5
SXCNN 1414 K13-05	13.00	23.00	14.0	14.0	14.0	125.00	XNUW 13	SR 76-2068	T-20/5
SXCNN 1616 K13-05	13.00	23.00	16.0	16.0	16.0	125.00	XNUW 13	SR 14-591	T-20/5
SXCNN 2020 P13-05	13.00	23.00	20.0	20.0	20.0	170.00	XNUW 13	SR 14-591	T-20/5
SXCNN 2525 P13-05	13.00	23.00	25.0	25.0	25.0	170.00	XNUW 13	SR 14-591	T-20/5
SXCNN 1212 K14-03	14.50	-	12.0	12.0	12.0	125.00	XNUW 14	SR 76-2067	T-15/5
SXCNN 1616 K14-03	14.50	17.00	16.0	16.0	16.0	125.00	XNUW 14	SR 76-2067	T-15/5
SXCNN 2020 P14-03	14.50	17.00	20.0	20.0	20.0	170.00	XNUW 14	SR 76-2067	T-15/5
SXCNN 2525 P14-03	14.50	17.00	25.0	25.0	25.0	170.00	XNUW 14	SR 76-2067	T-15/5
SXCNN 1616 K20-05	20.50	-	16.0	16.0	16.0	125.00	XNUW 20	SR 14-591	T-20/5
SXCNN 2020 P20-05	20.50	24.00	20.0	20.0	20.0	170.00	XNUW 20	SR 14-591	T-20/5
SXCNN 2525 P20-05	20.50	24.00	25.0	25.0	25.0	170.00	XNUW 20	SR 14-591	T-20/5
SXCNN 3232 P20-05	20.50	24.00	32.0	32.0	32.0	170.00	XNUW 20	SR 14-591	T-20/5
SXCNN 2525 P24-05	24.50	28.00	25.0	25.0	25.0	170.00	XNUW 24	SR 14-591	T-20/5
SXCNN 3232 P36-10	36.50	-	32.0	32.0	32.0	170.00	XNUW 36	SR 14-519	T-20/5

- Toolholder seat needs to be modified according to insert profile to ensure clearance

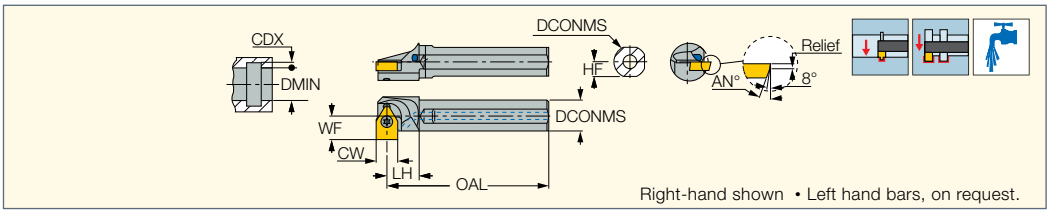
(1) Cutting depth maximum

For inserts, see page: XNUW (402)
For holders, see page: SBTH-JHP (421)

V-LOCK

SXCIR

Internal Toolholders for Specially Tailored Profile Inserts



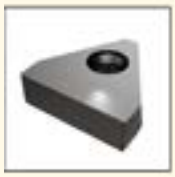
Designation	CW	DCONMS	OAL	LH	WF	DMIN	CDX(2)	HF	AN(3)	Relief(4)			
SXCIR 16-10 (1)	10.40	16.00	125.00	20.0	11.50	25.00	3.00	7.5	15.0	1.5	SR 76-2067	T-15/5	PL 16
SXCIR 20-10 (1)	10.40	20.00	150.00	25.0	13.00	25.00	3.00	9.0	15.0	1.5	SR 76-2067	T-15/5	PL 20
SXCIR 16-13	13.00	16.00	125.00	20.0	13.00	30.00	3.00	7.5	20.0	2.0	SR 76-2068	T-20/5	PL 16
SXCIR 25-13	13.00	25.00	170.00	30.0	17.00	30.50	4.00	11.5	20.0	2.0	SR 76-2068	T-20/5	PL 25
SXCIR 32-13	13.00	32.00	200.00	35.0	20.00	37.00	4.00	14.5	20.0	2.0	SR 76-2068	T-20/5	PL 32
SXCIR 25-14 (1)	14.50	25.00	170.00	30.0	15.50	30.00	3.00	11.5	15.0	2.0	SR 76-2067	T-15/5	PL 25
SXCIR 20-20	20.50	20.00	150.00	25.0	15.00	40.00	4.00	9.0	15.0	2.5	SR 14-591	T-20/5	PL 20
SXCIR 32-20	20.50	32.00	200.00	35.0	20.50	40.00	4.00	14.5	15.0	2.5	SR 14-591	T-20/5	PL 32
SXCIR 25-24	24.50	25.00	170.00	30.0	17.50	40.00	4.00	11.5	15.0	2.5	SR 14-591	T-20/5	PL 25

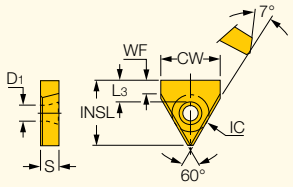
(1) On request.
(2) Cutting depth maximum
(3) Blank insert reference dimensions
(4) Blank insert reference dimensions

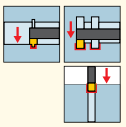
For inserts, see page: XNUW (402)

V-LOCK

XNUW
Blank Inserts for Wide Profile Grooving





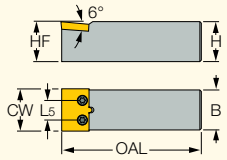


Designation	Dimensions							Tough ↔ Hard				
	CW	WF	L3	IC	S	D1	INSL	IC28	IC54	IC08	IC20	IC07
XNUW 1003-06	10.40	6.00	10.50	6.35	3.18	4.53	17.00	●		●		
XNUW 1305-05	13.00	5.00	11.40	12.70	5.35	5.50	20.60	●	●	●	●	
XNUW 14T3-03	14.50	3.00	3.70	9.52	3.97	4.40	14.00	●	●	●	●	
XNUW 2006-05	20.50	4.80	5.00	12.70	6.35	5.50	20.30	●	●	●	●	●
XNUW 2406-05	24.50	5.00	6.00	15.87	6.35	5.50	25.00	●	●	●	●	●
XNUW 3606-10	36.50	5.40	10.00	19.05	6.35	6.50	34.60	●		●	●	

For tools, see pages: SXCIR (401) • SXCNN (401)

FORMTOOL

FTHN
Square Shank Toolholders for FTB Profile Turning Inserts





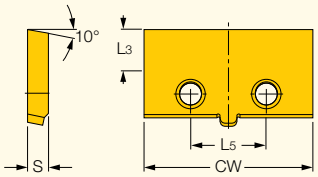
Designation	CW	H	HF	B	OAL	L5		
FTHN 2525M-3010	30.40	25.0	25.0	25.0	150.00	14.00	SR 14-591	T-20/5
FTHN 2525M-3510	35.40	25.0	25.0	25.0	150.00	14.00	SR 14-591	T-20/5
FTHN 3232P-4510	45.40	32.0	32.0	32.0	170.00	18.00	SR 14-591	T-20/5
FTHN 3232P-5107	51.40	32.0	32.0	32.0	170.00	21.90	SR 14-591	T-20/5

For inserts, see page: FTB (402)

FORMTOOL

FTB
Blank Inserts for Wide Profile Grooving







Designation	Dimensions				IC08
	CW	L3	S	L5	
FTB 3010	30.40	10.00	5.00	14.00	●
FTB 3510	35.40	10.00	5.00	14.00	●
FTB 4010	40.40	10.00	5.00	18.00	●
FTB 4510	45.40	10.00	5.00	18.00	●
FTB 5107	51.40	7.00	5.00	21.90	●

For tools, see page: FTHN (402)

TOOLS FOR MINIATURE PARTS



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QUICK-SWISS 415
CUT-GRIP 426
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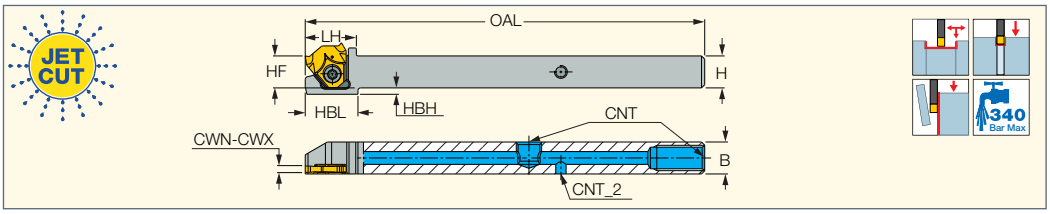
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QUICK2CUT MINI

TGVR/L-JHP
Grooving, Parting and Recessing Tools Carrying TGV Inserts with Channels for High-Pressure Coolant



Designation	H	HF	B	CWN(1)	CWX(2)	OAL	LH	HBL	HBH	CNT	CNT_2	MIID(3)
TGVR/L 1010-JHP	10.0	10.0	10.0	0.33	2.00	125.00	16.0	16.5	2.0	UNF 5/16-24	M4	TGV N/R/L 0.33-3.0
TGVR/L 1212-JHP	12.0	12.0	12.0	0.33	2.00	125.00	16.0	-	-	UNF 5/16-24	M4	TGV N/R/L 0.33-3.0
TGVR/L 1616-JHP	16.0	16.0	16.0	0.33	2.00	125.00	16.0	-	-	UNF 5/16-24	M4	TGV N/R/L 0.33-3.0

NEW

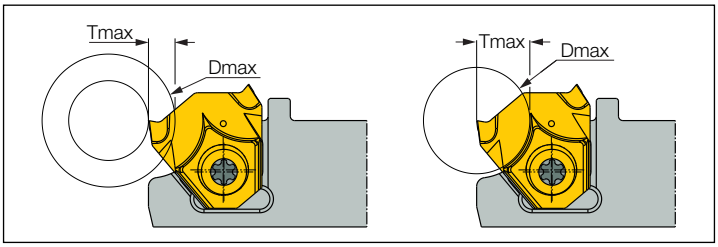
- For user guide and accessories see pages 475-496

(1) Minimum cutting width
(2) Maximum cutting width
(3) Master insert identification

For inserts, see pages: TGV N (406) • TGV R/L (406)

Depth Capacity

Determining depth of cut (Tmax) as function of workpiece diameter (Dmax.)



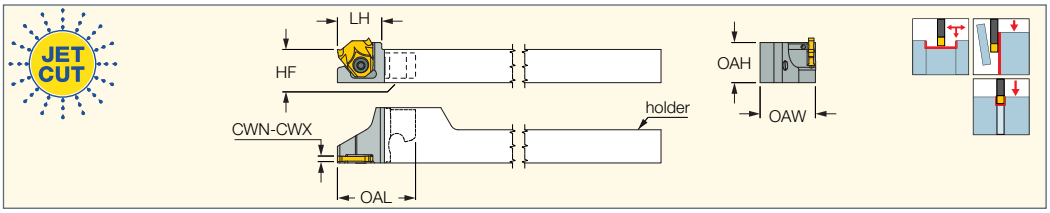
W (insert)	Tmax	Dmax	T≤0.5	T≤1.0	T≤1.5	T≤2.0	T≤2.5	T≤3.0	T≤3.5	T≤4.0	T≤4.5	T≤5.0	T≤5.5	T≤6.0
0.33	2.0	24.0	72	45	31	24	-	-	-	-	-	-	-	-
0.50	2.5	20.0					-	-	-	-	-	-	-	-
0.75	3.0	18.0					20	18	-	-	-	-	-	-
1.00	4.0	15.0							16	15	-	-	-	-
2.00	6.0	12.0									14	13	13	12

Spare Parts

Designation					
TGVR/L-JHP	SR M3.5X0.6-L8.5 IP10	IP-10/5	SR 5/16UNF TL360	SR M4X4 DIN913 TL360	HW 5/32"

NEOSWISS

NQCH-TGVR/L-JHP
Screw Lock JETCUT Modular Heads Carrying Grooving, Parting and Recessing TGV Inserts for Swiss-Type Machines



Designation	CWN(1)	CWX(2)	OAL	HF	LH	OAW	OAH	MIID(3)
NQCH12-TGVR/L-JHP	0.33	2.00	25.80	12.0	16.0	20.00	14.50	TGV..
NQCH12R-TGVL-JHP	0.33	2.00	25.80	12.0	16.0	20.00	14.50	TGV..
NQCH16-TGVR/L-JHP	0.33	2.00	25.80	16.0	16.0	20.00	16.50	TGV..
NQCH16R-TGVL-JHP	0.33	2.00	25.80	16.0	16.0	20.00	16.50	TGV..

NEW

- Use only RH Shank with RH Head and LH Shank with LH Head

(1) Minimum cutting width
(2) Maximum cutting width
(3) Master insert identification

For inserts, see pages: TGV N (406) • TGV R/L (406)
For holders, see pages: NQCH-JHP (424)

Spare Parts

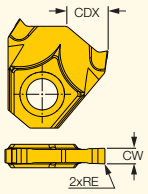
Designation		
NQCH-TGVR/L-JHP	SR M3.5X0.6-L8.5 IP10	IP-10/5

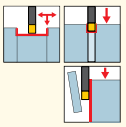
QUICK2CUT MINI

TGV N

Double Sided Tangential Insert for SWISS Type Machines, Intended for Grooving, Parting and Recessing Small Parts







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX	IC1010	Recommended Machining Data f groove (mm/rev)
TGV N033P-000	0.33	0.00	0.020	0.030	2.00	●	0.02-0.04
TGV N050P-000	0.50	0.00	0.020	0.030	2.50	●	0.03-0.05
TGV N075P-005	0.75	0.05	0.020	0.030	3.00	●	0.03-0.06
TGV N1.00P-005	1.00	0.05	0.020	0.030	4.00	●	0.03-0.08
TGV N2.00P-0.1	2.00	0.10	0.020	0.030	6.00	●	0.03-0.10

NEW

- Cutting edge with high positive rake, suitable for parting small and miniature parts
- For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

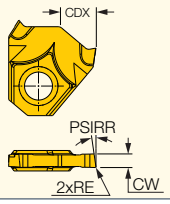
For tools, see pages: NQCH-TGVR/L-JHP (405) • TGVR/L-JHP (405)

QUICK2CUT MINI

TGV R/L

Double Sided Tangential Insert with Lead Angle Cutting Edge to minimize Burr size, Intended for Parting Small Parts







Designation	Dimensions CW	PSIRL(1)	PSIRR(2)	RE	CDX	IC1010	Recommended Machining Data f groove (mm/rev)
TGV L1.00P-0.05-8D	1.00	8.0	-	0.05	4.00	●	0.03-0.06
TGV R1.00P-0.05-8D	1.00	-	8.0	0.05	4.00	●	0.03-0.06
TGV L2.00P-0.05-8D	2.00	8.0	-	0.05	6.00	●	0.03-0.08
TGV R2.00P-0.05-8D	2.00	-	8.0	0.05	6.00	●	0.03-0.08

NEW

- Cutting edge with high positive rake, suitable for parting small and miniature parts
- For cutting speed recommendations and user guide, see pages 475-492

(1) Lead angle type for minimal burr size (left)

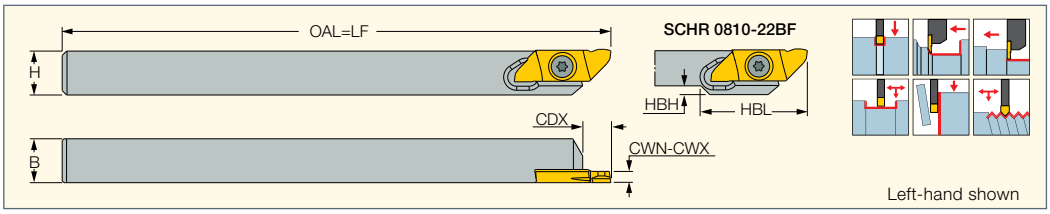
(2) Lead angle type for minimal burr size (right)

For tools, see pages: NQCH-TGVR/L-JHP (405) • TGVR/L-JHP (405)

SWISSCUT INNOVAL LINE

SCHR/L-22BF

Grooving and Turning Tools with Back and Front Clamping for Swiss-Type and Automatic Machines



Designation	H	B	OAL	HBH	HBL	CDX(1)	CWN(2)	CWX(3)		
SCHR/L 0810-22BF	8.0	10.0	125.00	2.0	24.0	8.00	0.50	2.50	SR M4X0.7-19425	T-8/5
SCHR/L 10-22BF	10.0	10.0	125.00	-	-	8.00	0.50	2.50	SR M4X0.7-19425	T-8/5
SCHR/L 12-22BF	12.0	12.0	125.00	-	-	8.00	0.50	2.50	SR M4X0.7-19425	T-8/5
SCHR/L 16-22BF	16.0	16.0	125.00	-	-	8.00	0.50	2.50	SR M4X0.7-19425	T-8/5

- Recommended tightening torque = 0.8-1.2 Nm

(1) See insert dimensions

(2) Minimum cutting width

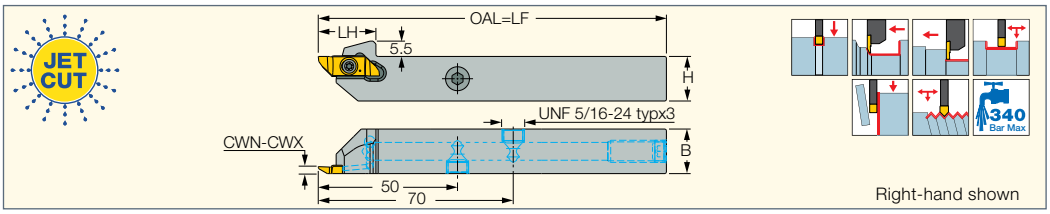
(3) Maximum cutting width

For inserts, see pages: SCIR-22-MTR-ISO (742) • SCIR/L-22-AD (409) • SCIR/L-22-AR/AL (409) • SCIR/L-22-BR/BL/BRA/BLA (409) • SCIR/L-22-ER/EL/ERA/ELA (410) • SCIR/L-22-MTR/MTL (726) • SCIR/L-22-N/R/L (411) • SCIR/L-22-NP (412) • SCIR/L-22-NX (412)

SWISSCUT INNOVAL LINE

SCHR/L-22BF-JHP

Grooving and Turning Tools with High-Pressure Coolant Channels for Swiss-Type and Automatic Machines



Designation	H	B	OAL	LH	CWN(1)	CWX(2)	CDX(3)				
SCHR/L 10-22BF-JHP	10.0	10.0	125.00	20.7	0.50	2.50	8.00	SR M4X0.7-19425	T-8/5	SR 5/16UNF TL360	HW 5/32"
SCHR/L 12-22BF-JHP	12.0	12.0	125.00	20.7	0.50	2.50	8.00	SR M4X0.7-19425	T-8/5	SR 5/16UNF TL360	HW 5/32"
SCHR/L 16-22BF-JHP	16.0	16.0	125.00	20.7	0.50	2.50	8.00	SR M4X0.7-19425	T-8/5	SR 5/16UNF TL360	HW 5/32"

- Note: Coolant ports of the left-hand tools are in the same position as those of the right-hand tools

(1) Minimum cutting width

(2) Maximum cutting width

(3) See insert dimensions

For inserts, see pages: SCIR-22-MTR-ISO (742) • SCIR/L-22-AD (409) • SCIR/L-22-AR/AL (409) • SCIR/L-22-BR/BL/BRA/BLA (409) • SCIR/L-22-ER/EL/ERA/ELA (410) • SCIR/L-22-MTR/MTL (726) • SCIR/L-22-N/R/L (411) • SCIR/L-22-NP (412) • SCIR/L-22-NX (412)

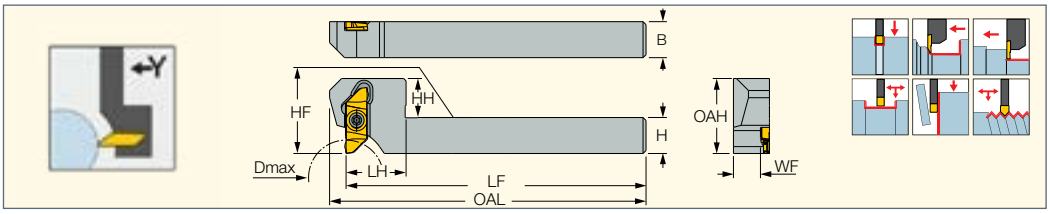
Flow Rate vs. Pressure

Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
SCHR/L 10-22BF-JHP	1-3	2-4	3-5
SCHR/L 12-22BF-JHP	3-5	4-6	5-7
SCHR/L 16-22BF-JHP	6-8	7-9	8-10

NEOSWISS AXIS

Y-SCHR-22BF

Y-Axis Screw Lock Integral Tools Carrying SWISSCUT Inserts for Grooving and Turning on Swiss-Type Machines



Designation	H	B	HH	LH	HF	WF	OAH	LF	OAL	D max(1)		
Y-SCHR 12-22BF	12.0	12.0	13.0	20.0	12.0	9.00	25.00	100.00	105.50	25.0 (2)	SR M4X0.7-19425	T-8/5
Y-SCHR 16-22BF	16.0	16.0	9.0	20.0	16.0	13.00	25.00	125.00	130.50	38.0 (2)	SR M4X0.7-19425	T-8/5

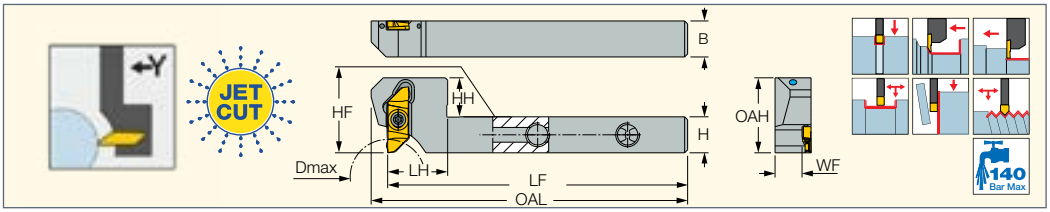
(1) Maximum workpiece diameter for grooving operation

(2) for grooving

For inserts, see pages: SCIR-22-MTR-ISO (742) • SCIR/L-22-AD (409) • SCIR/L-22-AR/AL (409) • SCIR/L-22-BR/BL/BRA/BLA (409) • SCIR/L-22-ER/EL/ERA/ELA (410) • SCIR/L-22-MTR/MTL (726) • SCIR/L-22-N/R/L (411) • SCIR/L-22-NP (412) • SCIR/L-22-NX (412)

NEOSWISS AXIS

Y-SCHR-22BF-JHP
Y-Axis Screw Lock JETCUT Integral Tools for SWISSCUT Inserts for Grooving and Turning on Swiss-Type Machines



Designation	H	B	HH	LH	HF	WF	OAH	LF	OAL	D max(1)
Y-SCHR 12-22BF-JHP	12.0	12.0	13.0	20.0	12.0	9.00	25.00	100.00	105.50	25.0 (2)
Y-SCHR 16-22BF-JHP	16.0	16.0	9.0	20.0	16.0	13.00	25.00	125.00	130.50	38.0 (2)

(1) Maximum workpiece diameter for grooving operation
(2) for grooving

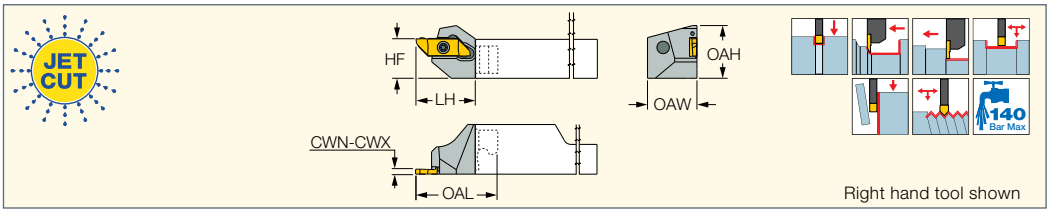
For inserts, see pages: SCIR-22-MTR-ISO (742) • SCIR/L-22-AD (409) • SCIR/L-22-AR/AL (409) • SCIR/L-22-BR/BL/BRA/BLA (409) • SCIR/L-22-ER/EL/ERA/ELA (410) • SCIR/L-22-MTR/MTL (726) • SCIR/L-22-N/R/L (411) • SCIR/L-22-NP (412) • SCIR/L-22-NX (412)

Spare Parts

Designation				
Y-SCHR 12-22BF-JHP	HW 5/32"	T-8/5	SR M4X0.7-19425	SR 5/16UNF TL360
Y-SCHR 16-22BF-JHP	HW 5/32"	T-8/5	SR M4X0.7-19425	SR 5/16UNF TL360

NEOSWISS

NQCH-SCHR/L-BF-JHP
Screw Lock JETCUT Modular Heads Carrying SWISSCUT Inserts for Grooving and Turning on Swiss-Type Machines



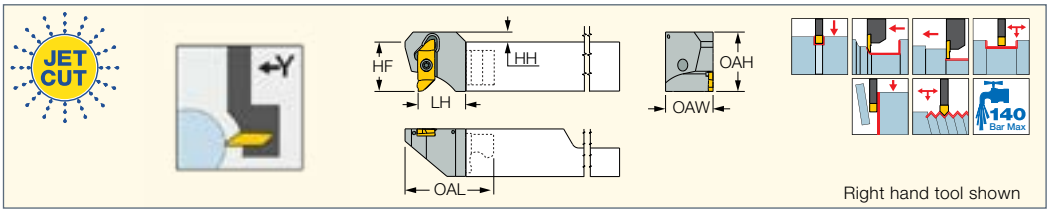
Designation	HF	OAW	LH	OAH	OAL	CWN(2)	CWX(3)	Insert		
NQCH12-SCHR/L-22BF-JHP	12.0	20.00	24.0	17.30	32.80	0.50	2.50	SCIR/L-22	SR M4X0.7-19425	T-8/5
NQCH12R-SCHL-22BF-JHP (1)	12.0	20.00	24.0	17.30	32.80	0.50	2.50	SCIR/L-22	SR M4X0.7-19425	T-8/5
NQCH16-SCHR/L-22BF-JHP	16.0	20.00	24.0	21.10	32.80	0.50	2.50	SCIR/L-22	SR M4X0.7-19425	T-8/5
NQCH16R-SCHL-22BF-JHP (1)	16.0	20.00	24.0	21.10	32.80	0.50	2.50	SCIR/L-22	SR M4X0.7-19425	T-8/5

• Use only RH Shank with RH Head and LH Shank with LH Head exept NQCH12R/16R... heads.
(1) The head is dedicated for the right hand machines and to be mounted on the right hand holder only.
(2) Minimum cutting width
(3) Maximum cutting width

For inserts, see pages: SCIR-22-MTR-ISO (742) • SCIR/L-22-AD (409) • SCIR/L-22-AR/AL (409) • SCIR/L-22-BR/BL/BRA/BLA (409) • SCIR/L-22-ER/EL/ERA/ELA (410) • SCIR/L-22-MTR/MTL (726) • SCIR/L-22-N/R/L (411) • SCIR/L-22-NP (412) • SCIR/L-22-NX (412)
For holders, see pages: NQCH-JHP (424)

NEOSWISS

NQCH-Y-SCHR-BF-JHP
Screw Lock JETCUT Modular Heads Carrying SWISSCUT Inserts for Grooving and Turning in Y-Axis on Swiss-Type Machines



Designation	HF	OAH	LH	OAW	HH	OAL	CWN(1)	CWX(2)	Insert		
NQCH12-Y-SCHR-22BF-JHP	12.0	25.00	20.0	20.00	13.0	34.30	0.50	2.50	SCIR/L-22-N/R/L	SR M4X0.7-19425	T-8/5
NQCH16-Y-SCHR-22BF-JHP	16.0	25.00	20.0	20.00	9.0	34.30	0.50	2.50	SCIR/L-22-N/R/L	SR M4X0.7-19425	T-8/5

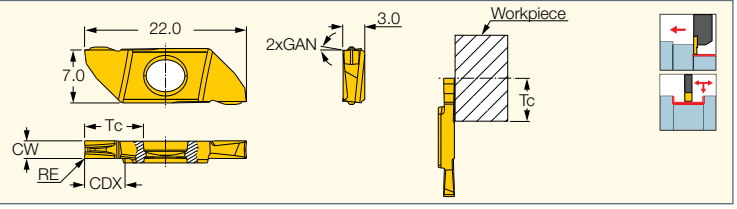
• Use only RH Shank with RH Head and LH Shank with LH Head
(1) Minimum cutting width
(2) Maximum cutting width

For inserts, see pages: SCIR-22-MTR-ISO (742) • SCIR/L-22-AD (409) • SCIR/L-22-AR/AL (409) • SCIR/L-22-BR/BL/BRA/BLA (409) • SCIR/L-22-ER/EL/ERA/ELA (410) • SCIR/L-22-MTR/MTL (726) • SCIR/L-22-N/R/L (411) • SCIR/L-22-NP (412) • SCIR/L-22-NX (412)
For holders, see pages: NQCH-JHP (424)

SWISSCUT INNOVAL LINE

SCIR/L-22-AD
Turning Inserts with a Front Relief Angle





Designation	Dimensions CW	RE	Tc	GAN	CDX(1)	Tough ↔ Hard IC1008	IC07	IC1007	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
SCIR/L 22-AD08-24K8	2.40	0.08	8.0	8.0	5.50	●	●	●	0.12-3.80	0.01-0.15	0.01-0.06

- For cutting speed recommendations and user guide, see pages 475-492

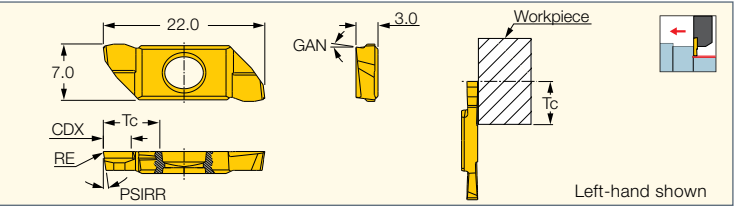
(1) Cutting depth maximum

For tools, see pages: NQCH-SCHR/L-BF-JHP (408) • NQCH-Y-SCHR-BF-JHP (408) • SCHR/L-22BF (407) • SCHR/L-22BF-JHP (407) • Y-SCHR-22BF (407) • Y-SCHR-22BF-JHP (408)

SWISSCUT INNOVAL LINE

SCIR/L-22-AR/AL
Turning Inserts with a Front Relief Angle





Designation	Dimensions RE	Tc	PSIRL	PSIRR	GAN	CDX(1)	Tough ↔ Hard IC1008	IC07	IC1007	Recommended Machining Data a_p (mm)	f turn (mm/rev)
SCIL 22-AL00-25K16	0.00	8.0	8.0	-	16.0	3.80	●	●	●	0.05-3.80	0.01-0.15
SCIR 22-AR00-25K16	0.00	8.0	-	8.0	16.0	3.80	●	●	●	0.05-3.80	0.01-0.15
SCIL 22-AL10-25K8	0.10	8.0	12.0	-	8.0	3.80	●	●	●	0.12-3.80	0.01-0.15
SCIR 22-AR10-25K8	0.10	8.0	-	12.0	8.0	3.80	●	●	●	0.12-3.80	0.01-0.15

- For cutting speed recommendations and user guide, see pages 475-492

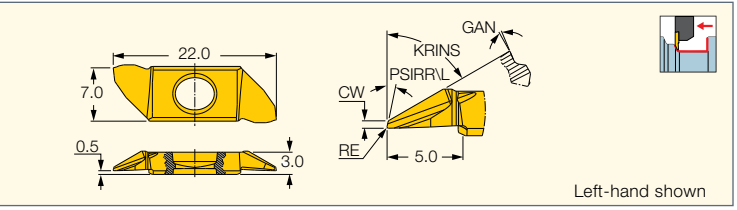
(1) Cutting depth maximum

For tools, see pages: NQCH-SCHR/L-BF-JHP (408) • NQCH-Y-SCHR-BF-JHP (408) • SCHR/L-22BF (407) • SCHR/L-22BF-JHP (407) • Y-SCHR-22BF (407) • Y-SCHR-22BF-JHP (408)

SWISSCUT INNOVAL LINE

SCIR/L-22-BR/BL/BRA/BLA
Back Turning Inserts





Designation	Dimensions CW	GAN	RE	PSIRL	PSIRR	KRINS(1)	Tough ↔ Hard IC1008	IC07	IC1007	Recommended Machining Data a_p (mm)	f turn (mm/rev)
SCIL 22-BL00-05K7	0.50	7.0	0.00	12.0	-	60.0	●			0.05-3.00	0.01-0.15
SCIL 22-BL10-05K7	0.50	7.0	0.10	12.0	-	60.0	●			0.12-3.00	0.01-0.15
SCIR 22-BR00-05K7	0.50	7.0	0.00	-	12.0	60.0	●			0.05-3.00	0.01-0.15
SCIR 22-BR10-05K7	0.50	7.0	0.10	-	12.0	60.0	●			0.12-3.00	0.01-0.15
SCIL 22-BLA00-05K8	0.50	8.0	0.00	20.0	-	60.0		●	●	0.05-3.00	0.01-0.15
SCIL 22-BLA08-05K8	0.50	8.0	0.08	20.0	-	60.0		●	●	0.10-3.00	0.01-0.15
SCIR 22-BRA00-05K8	0.50	8.0	0.00	-	20.0	60.0		●	●	0.05-3.00	0.01-0.15
SCIR 22-BRA08-05K8	0.50	8.0	0.08	-	20.0	60.0		●	●	0.10-3.00	0.01-0.15
SCIR 22-BR10-05K15	0.50	15.0	0.10	-	12.0	60.0	●			0.12-3.00	0.01-0.15
SCIL 22-BL08-10K7	1.00	7.0	0.08	12.0	-	60.0	●			0.10-3.00	0.01-0.15
SCIR 22-BR08-10K7	1.00	7.0	0.08	-	12.0	60.0	●			0.10-3.00	0.01-0.15
SCIR 22-BR08-10K15	1.00	15.0	0.08	-	12.0	60.0	●			0.10-3.00	0.01-0.15

- For cutting speed recommendations and user guide, see pages 475-492

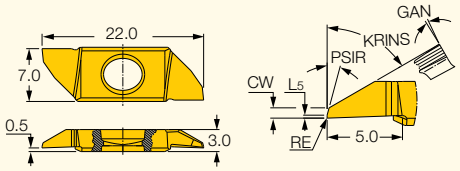
(1) Edge angle related to the wiper

For tools, see pages: NQCH-SCHR/L-BF-JHP (408) • NQCH-Y-SCHR-BF-JHP (408) • SCHR/L-22BF (407) • SCHR/L-22BF-JHP (407) • Y-SCHR-22BF (407) • Y-SCHR-22BF-JHP (408)

SWISSCUT INNOVAL LINE

SCIR/L-22-ER/EL/ERA/ELA
Back Turning Inserts for
Short Chipping Materials





Left-hand shown

Designation	Dimensions RE	CW	L5	GAN	KRINS(1)	PSIRL	PSIRR	Tough ↔ Hard IC1008	IC07	IC1007	Recommended Machining Data a_p (mm)	f turn (mm/rev)
SCIL 22-EL00-03K0	0.00	0.30	0.20	0.0	60.0	6.0	-	●			0.05-2.50	0.01-0.15
SCIR 22-ER00-03K0	0.00	0.30	0.20	0.0	60.0	6.0	-	●			0.05-2.50	0.01-0.15
SCIL 22-EL00-07K0	0.00	0.70	0.20	0.0	60.0	-	15.0	●			0.05-2.50	0.01-0.15
SCIR 22-EL00-07K0	0.00	0.70	0.20	0.0	60.0	15.0	-	●			0.05-2.50	0.01-0.15
SCIR 22-ER00-07K0	0.00	0.70	0.20	0.0	60.0	-	15.0	●			0.05-2.50	0.01-0.15
SCIL 22-EL00-07K10	0.00	0.70	0.20	10.0	60.0	3.0	-	●			0.05-2.50	0.01-0.15
SCIR 22-ER00-07K10	0.00	0.70	0.20	10.0	60.0	3.0	-	●			0.05-2.50	0.01-0.15
SCIL 22-ELA00-08K0	0.00	0.80	0.30	0.0	70.0	3.0	-		●	●	0.05-2.50	0.01-0.15
SCIR 22-ERA00-08K0	0.00	0.80	0.30	0.0	70.0	3.0	-		●	●	0.05-2.50	0.01-0.15

• For cutting speed recommendations and user guide, see pages 475-492

(1) Edge angle related to the wiper

For tools, see pages: NQCH-SCHR/L-BF-JHP (408) • NQCH-Y-SCHR-BF-JHP (408) • SCHR/L-22BF (407) • SCHR/L-22BF-JHP (407) • Y-SCHR-22BF (407) • Y-SCHR-22BF-JHP (408)

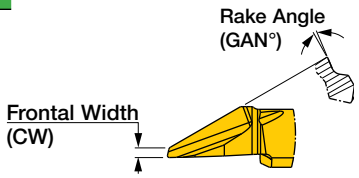
Rake Angle (GAN°) Selection Guide

	Brass	Ledloy	Steel	St. Steel	Titanium	Aluminum
0°						
8°						
15°						

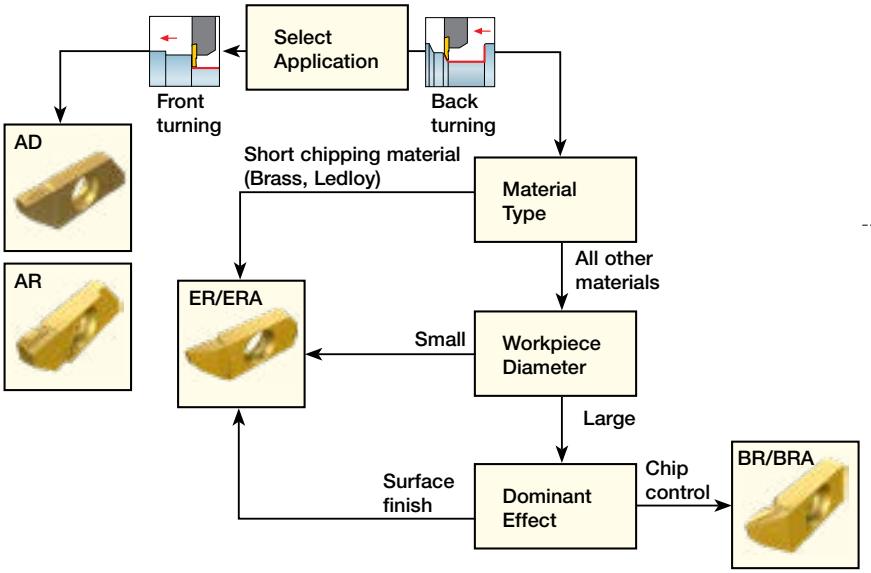
For brittle workpieces and small diameters always prefer GAN=0°

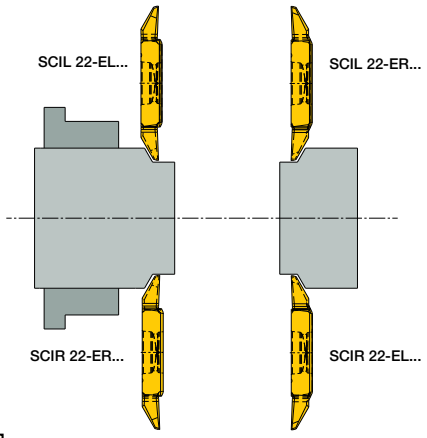
Frontal Width Selection Guide

- Small diameters and brittle workpiece: small CW (less radial force)
- Large diameters: larger CW (stronger cutting edge)



Turning Insert Selection Process

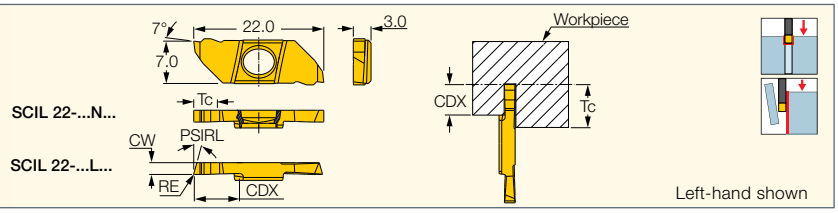




SWISSCUT INNOVAL LINE

SCIR/L-22-N/R/L
Grooving and Parting Inserts



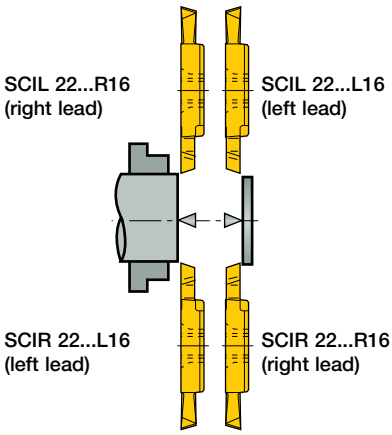


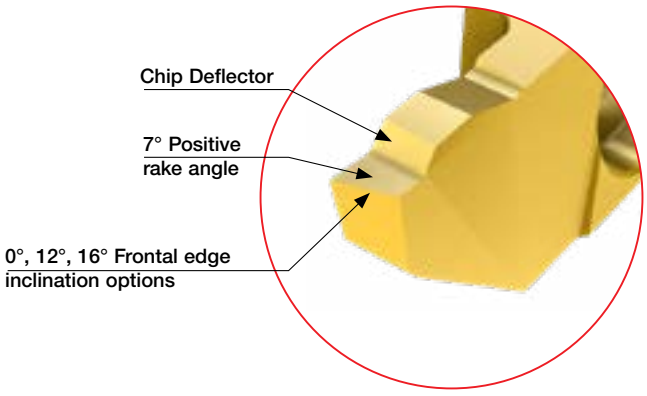
Designation	Dimensions								Tough ↔ Hard			Recommended Machining Data
	CW	CWTOL(1)	PSIRL	PSIRR	RE	RETOL(2)	CDX(3)	Tc	IC1008	IC07	IC1007	f groove (mm/rev)
SCIL 22-050N-00	0.50	0.020	0.0	0.0	0.00	0.030	1.80	5.5	●	●	●	0.02-0.04
SCIR 22-050N-00	0.50	0.020	0.0	0.0	0.00	0.030	1.80	5.5	●	●	●	0.02-0.04
SCIL 22-100N-00	1.00	0.020	0.0	0.0	0.00	0.030	4.00	5.5	●	●	●	0.03-0.05
SCIR 22-100N-00	1.00	0.020	0.0	0.0	0.00	0.030	4.00	5.5	●	●	●	0.03-0.05
SCIL 22-150N-00	1.50	0.020	0.0	0.0	0.00	0.030	5.50	8.0	●		●	0.03-0.07
SCIR 22-150N-00	1.50	0.020	0.0	0.0	0.00	0.030	5.50	8.0	●	●	●	0.03-0.07
SCIL 22-200N-10	2.00	0.020	0.0	0.0	0.10	0.030	7.00	8.0	●	●	●	0.03-0.09
SCIR 22-200N-10	2.00	0.020	0.0	0.0	0.10	0.030	7.00	8.0	●	●	●	0.03-0.09
SCIL 22-050L12-00	0.50	0.020	12.0	-	0.00	0.030	2.00	5.5	●			0.01-0.03
SCIL 22-050R12-00	0.50	0.020	-	12.0	0.00	0.030	2.00	5.5	●			0.01-0.03
SCIR 22-050L12-00	0.50	0.020	12.0	-	0.00	0.030	2.00	5.5	●			0.01-0.03
SCIR 22-050R12-00	0.50	0.020	-	12.0	0.00	0.030	2.00	5.5	●			0.01-0.03
SCIL 22-100L16-00	1.00	0.020	16.0	-	0.00	0.030	4.00	5.5	●			0.02-0.04
SCIL 22-100R16-00	1.00	0.020	-	16.0	0.00	0.030	4.00	5.5	●			0.02-0.04
SCIR 22-100L16-00	1.00	0.020	16.0	-	0.00	0.030	4.00	5.5	●			0.02-0.04
SCIR 22-100R16-00	1.00	0.020	-	16.0	0.00	0.030	4.00	5.5	●			0.02-0.04
SCIL 22-150L16-00	1.50	0.020	16.0	-	0.00	0.030	5.50	8.0	●			0.03-0.06
SCIL 22-150R16-00	1.50	0.020	-	16.0	0.00	0.030	5.50	8.0	●			0.03-0.06
SCIR 22-150L16-00	1.50	0.020	16.0	-	0.00	0.030	5.50	8.0	●			0.03-0.06
SCIR 22-150R16-00	1.50	0.020	-	16.0	0.00	0.030	5.50	8.0	●			0.03-0.06
SCIL 22-200L16-00	2.00	0.020	16.0	-	0.00	0.030	7.00	8.0	●			0.03-0.07
SCIL 22-200R16-00	2.00	0.020	-	16.0	0.00	0.030	7.00	8.0	●			0.03-0.07
SCIR 22-200L16-00	2.00	0.020	16.0	-	0.00	0.030	7.00	8.0	●			0.03-0.07
SCIR 22-200R16-00	2.00	0.020	-	16.0	0.00	0.030	7.00	8.0	●			0.03-0.07

- For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

For tools, see pages: NQCH-SCHR/L-BF-JHP (408) • NQCH-Y-SCHR-BF-JHP (408) • SCHR/L-22BF (407) • SCHR/L-22BF-JHP (407) • Y-SCHR-22BF (407) • Y-SCHR-22BF-JHP (408)



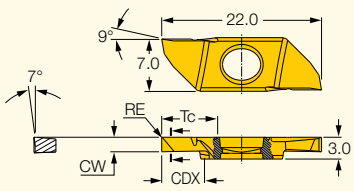


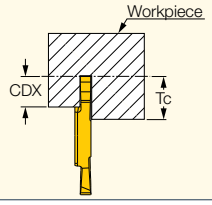
SWISSCUT INNOVAL LINE

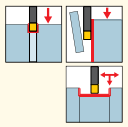
SCIR/L-22-NP

Grooving, Turning and Parting Inserts









Left-hand shown

Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	Tc	Tough ↔ Hard IC1008	IC07	IC1007	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
SCIR/L 22-080NP00	0.80	0.00	0.020	0.020	2.50	8.0	●	●	●	0.05-0.70	0.02-0.06	0.02-0.05
SCIR/L 22-100NP08	1.00	0.08	0.020	0.020	3.00	8.0	●	●	●	0.05-0.80	0.02-0.08	0.02-0.06
SCIR/L 22-150NP05	1.50	0.05	0.020	0.020	6.00	8.0	●	●	●	0.05-1.80	0.02-0.11	0.02-0.07
SCIR/L 22-200NP05	2.00	0.05	0.020	0.020	6.00	8.0	●	●	●	0.05-2.50	0.03-0.15	0.03-0.09
SCIR/L 22-250NP05	2.50	0.05	0.020	0.020	6.00	8.0	●	●	●	0.05-3.10	0.03-0.19	0.03-0.11

- For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

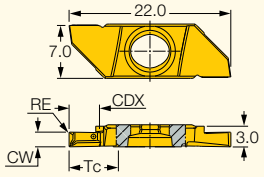
For tools, see pages: NQCH-SCHR/L-BF-JHP (408) • NQCH-Y-SCHR-BF-JHP (408) • SCHR/L-22BF (407) • SCHR/L-22BF-JHP (407) • Y-SCHR-22BF (407) • Y-SCHR-22BF-JHP (408)

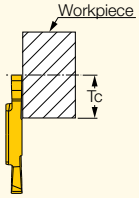
SWISSCUT INNOVAL LINE

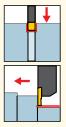
SCIR/L-22-NX

Grooving and Turning Inserts with a Chipformer









Right-hand shown

Designation	Dimensions CW	CWTOL(1)	RE	RETOL(2)	CDX(3)	Tc(4)	IC1008	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
SCIR/L 22-150NX080	1.50	0.020	0.08	0.020	4.30	6.8	●	0.05-1.80	0.02-0.11	0.02-0.07
SCIR/L 22-200NX080	2.00	0.020	0.08	0.020	4.30	6.8	●	0.05-2.50	0.03-0.15	0.03-0.09
SCIR/L 22-250NX080	2.50	0.020	0.08	0.020	4.30	6.8	●	0.05-3.10	0.03-0.19	0.03-0.11

- For cutting speed recommendations and user guide, see pages 475-492

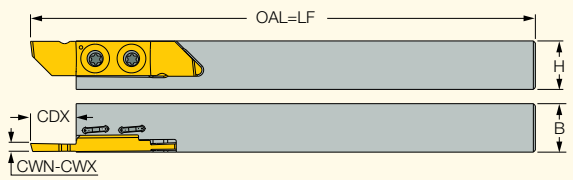
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum
(4) Maximum 32 mm diameter for face turning

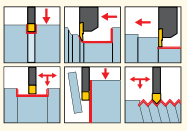
For tools, see pages: NQCH-SCHR/L-BF-JHP (408) • NQCH-Y-SCHR-BF-JHP (408) • SCHR/L-22BF (407) • SCHR/L-22BF-JHP (407) • Y-SCHR-22BF (407) • Y-SCHR-22BF-JHP (408)

SWISSCUT EXTRA LONG

SCHR/L-41BF

Grooving and Turning Tools with Back and Front Clamping for Swiss-Type and Automatic Machines





Right-hand shown

Designation	CWX(1)	CDX(2)	B	OAL					
SCHR/L 12-41BF	3.00	11.00	12.0	125.00	SR M4.5X0.75-L7.9	BLD T15/S7	SR M2X0.4-L3.5	BLD T10/S7	SW6-SD
SCHR/L 16-41BF	3.00	11.00	16.0	125.00	SR M4.5X0.75-L7.9	BLD T15/S7	SR M2X0.4-L3.5	BLD T10/S7	SW6-SD

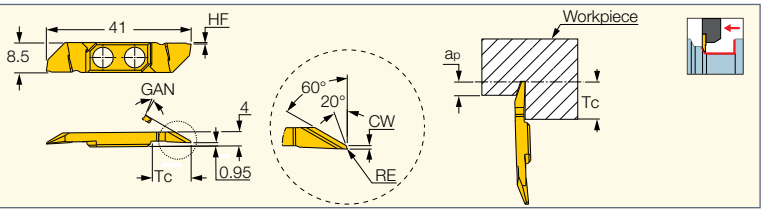
(1) Maximum cutting width
(2) See insert data

For inserts, see pages: SCIR/L-41-AD (413) • SCIR/L-41-AR/AL (413) • SCIR/L-41-BRA/BLA (413) • SCIR/L-41-ERA/ELA (413) • SCIR/L-41-MTR/MTL (726) • SCIR/L-41-N/R/L (414) • SCIR/L-41-NP (414)

SWISSCUT EXTRA LONG

SCIR/L-41-BRA/BLA
Back Turning Inserts





Designation	Dimensions CW	RE	HF(1)	Tc	GAN	IC1008	Recommended Machining Data ap (mm)	f turn (mm/rev)
SCIL 41-BLA08-05K8	0.50	0.08	0.5	11.0	8.0	●	0.10-4.20	0.02-0.15
SCIR 41-BRA08-05K8	0.50	0.08	0.5	11.0	8.0	●	0.10-4.20	0.02-0.15
SCIL 41-BLA08-10K8	1.00	0.08	0.5	11.0	8.0	●	0.10-4.20	0.02-0.15
SCIR 41-BRA08-10K8	1.00	0.08	0.5	11.0	8.0	●	0.10-4.20	0.02-0.15

- For cutting speed recommendations and user guide, see pages 475-492

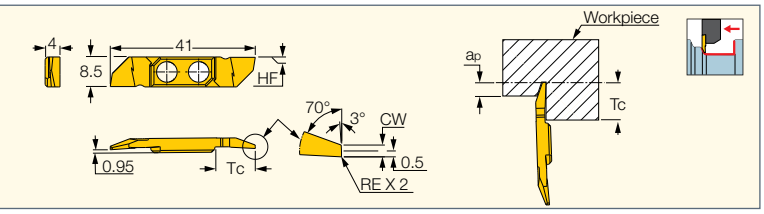
(1) Cutting edge below center

For tools, see pages: SCHR/L-41BF (412)

SWISSCUT EXTRA LONG

SCIR/L-41-ERA/ELA
Back Turning Inserts for Short Chipping Materials





Designation	Dimensions CW	RE	HF(1)	Tc	IC1008	Recommended Machining Data ap (mm)	f turn (mm/rev)
SCIL 41-ELA00-10K0	1.00	0.00	0.2	11.0	●	0.05-5.00	0.02-0.15
SCIR 41-ERA00-10K0	1.00	0.00	0.2	11.0	●	0.05-5.00	0.02-0.15
SCIL 41-ELA08-10K0	1.00	0.08	0.2	11.0	●	0.10-5.00	0.02-0.15
SCIR 41-ERA08-10K0	1.00	0.08	0.2	11.0	●	0.10-5.00	0.02-0.15

- For cutting speed recommendations and user guide, see pages 475-492

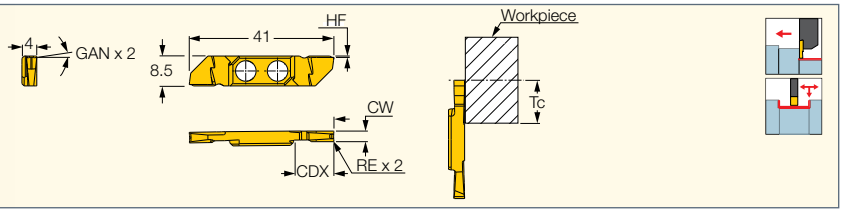
(1) Cutting edge below center

For tools, see pages: SCHR/L-41BF (412)

SWISSCUT EXTRA LONG

SCIR/L-41-AD
Turning Inserts





Designation	Dimensions CW	CWTOL(1)	RE	RETOL(2)	HF(3)	CDX	Tc	GAN	IC1008	Recommended Machining Data ap (mm)	f turn (mm/rev)	f groove (mm/rev)
SCIR/L 41-AD08-30K8	3.00	0.020	0.08	0.020	0.5	11.00	11.0	8.0	●	0.12-4.00	0.02-0.15	0.01-0.06

- For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

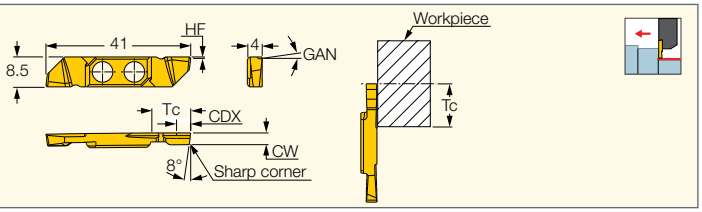
(3) Cutting edge below center

For tools, see pages: SCHR/L-41BF (412)

SWISSCUT EXTRA LONG

SCIR/L-41-AR/AL
Turning Inserts with a Front Relief Angle





Designation	Dimensions CW	HF(1)	CDX	Tc	GAN	IC1008	Recommended Machining Data ap (mm)	f turn (mm/rev)
SCIL 41-AL00-33K16	3.30	0.5	4.00	11.0	16.0	●	0.05-4.00	0.02-0.15
SCIR 41-AR00-33K16	3.30	0.5	4.00	11.0	16.0	●	0.05-4.00	0.02-0.15

- For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting edge below center

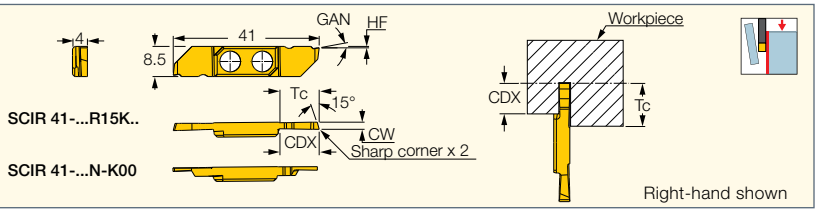
For tools, see pages: SCHR/L-41BF (412)

SWISSCUT EXTRA LONG

SCIR/L-41-N/R/L

Grooving and Parting Inserts





Designation	Dimensions CW	CWTOL(1)	GAN	HF(2)	CDX	Tc	IC1008	Recommended Machining Data f groove (mm/rev)
SCIL 41-100L15K00	1.00	0.020	0.0	0.2	6.00	11.0	●	0.02-0.04
SCIR/L 41-100N-K00	1.00	0.020	0.0	0.1	6.15	11.0	●	0.03-0.05
SCIR 41-100R15K00	1.00	0.020	0.0	0.2	6.00	11.0	●	0.02-0.04
SCIL 41-150L15K00	1.50	0.020	0.0	0.2	8.00	11.0	●	0.03-0.06
SCIR/L 41-150N-K00	1.50	0.020	0.0	0.1	8.15	11.0	●	0.03-0.07
SCIR 41-150R15K00	1.50	0.020	0.0	0.2	8.00	11.0	●	0.03-0.06
SCIL 41-150L15K7	1.50	0.020	7.0	0.5	8.00	11.0	●	0.03-0.06
SCIR 41-150R15K7	1.50	0.020	7.0	0.5	8.00	11.0	●	0.03-0.06
SCIL 41-200L15K00	2.00	0.020	0.0	0.2	10.00	11.0	●	0.03-0.07
SCIR/L 41-200N-K00	2.00	0.020	0.0	0.1	11.00	11.0	●	0.03-0.09
SCIR 41-200R15K00	2.00	0.020	0.0	0.2	10.00	11.0	●	0.03-0.07
SCIL 41-200L15K7	2.00	0.020	7.0	0.5	10.00	11.0	●	0.03-0.07
SCIR 41-200R15K7	2.00	0.020	7.0	0.5	10.00	11.0	●	0.03-0.07
SCIL 41-250L15K00	2.50	0.020	0.0	0.2	10.00	11.0	●	0.03-0.07
SCIR/L 41-250N-K00	2.50	0.020	0.0	0.1	11.00	11.0	●	0.03-0.09
SCIR 41-250R15K00	2.50	0.020	0.0	0.2	10.00	11.0	●	0.03-0.07
SCIL 41-250L15K7	2.50	0.020	7.0	0.5	10.00	11.0	●	0.03-0.07
SCIR 41-250R15K7	2.50	0.020	7.0	0.5	10.00	11.0	●	0.03-0.07
SCIL 41-300L15K00	3.00	0.020	0.0	0.2	10.00	11.0	●	0.03-0.08
SCIR/L 41-300N-K00	3.00	0.020	0.0	0.1	11.00	11.0	●	0.03-0.10
SCIR 41-300R15K00	3.00	0.020	0.0	0.2	10.00	11.0	●	0.03-0.08

- For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Cutting edge below center

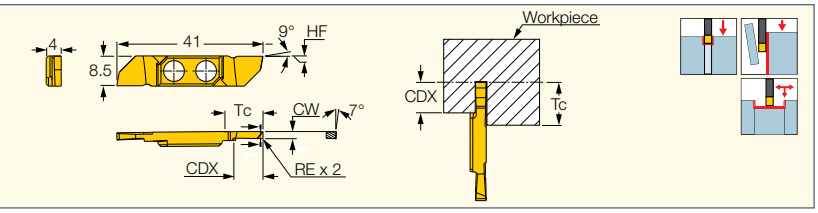
For tools, see pages: SCHR/L-41BF (412)

SWISSCUT EXTRA LONG

SCIR/L-41-NP

Grooving, Turning and Parting Inserts





Designation	Dimensions CW	CWTOL(1)	RE	RETOL(2)	HF(3)	CDX	Tc	IC1008	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
SCIR/L 41-150NP08	1.50	0.020	0.08	0.020	0.2	8.00	11.0	●	0.10-1.80	0.02-0.10	0.02-0.07
SCIR/L 41-200NP08	2.00	0.020	0.08	0.020	0.2	8.00	11.0	●	0.10-2.50	0.02-0.15	0.02-0.09
SCIR/L 41-250NP08	2.50	0.020	0.08	0.020	0.2	10.00	11.0	●	0.10-3.00	0.02-0.17	0.02-0.11
SCIR/L 41-300NP08	3.00	0.020	0.08	0.020	0.2	10.00	11.0	●	0.10-4.00	0.02-0.20	0.02-0.12

- When turning to the opposite side of chipformer, maximum D.O.C. is 0.5 mm

(1) Cutting width tolerance (+/-)

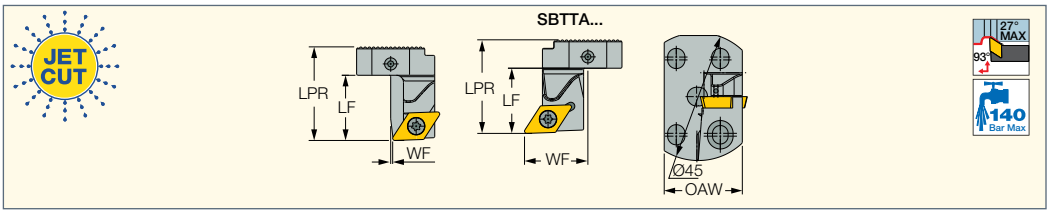
(2) Corner radius tolerance (+/-)

(3) Cutting edge below center

For tools, see pages: SCHR/L-41BF (412)

QUICKSWISS

SBTT#-SDJCR/L-JHP
Screw Lock JETCUT Modular Heads Mount 7° Clearance 55° Rhombic Inserts for Back-End Machining on Swiss-Type Machines



Designation	LF	LPR	OAW	WF	MIID(1)			
SBTT-SDJCR/L07-JHP	23.00	33.00	27.50	0.17	DCGT 070202	SR 14-548	T-7/5	SR M5X30 DIN7984
SBTT-SDJCR/L11-JHP	23.00	33.00	27.50	0.70	DCGT 11T302	SR 16-236	T-15/5	SR M5X30 DIN7984
SBTTA-SDJCR/L11-JHP	23.00	33.00	28.00	22.30	DCGT 11T302	SR 16-236	T-15/5	SR M5X30 DIN7984
SBTTL-SDJCR/L07-JHP	40.00	50.00	27.50	0.17	DCGT 070202	SR 14-548	T-7/5	SR M5X45 DIN7984
SBTTL-SDJCR/L11-JHP	40.00	50.00	27.50	0.70	DCGT 11T302	SR 16-236	T-15/5	SR M5X45 DIN7984

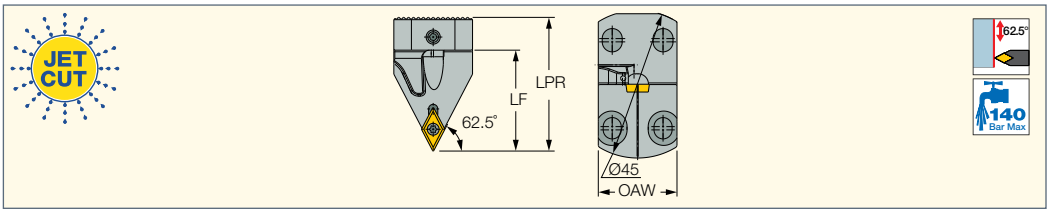
NEW

(1) Master insert identification

For inserts, see pages: DCGT-AF (271) • DCGT-AS (270) • DCGT-F1M-12P (243) • DCGT-F1M-20P (244) • DCMT-14 (247) • DCMT-CERMET (243) • DCMT-F3P (240) • DCMT-M3M (241) • DCMT-M3P (241) • DCMT/DCGT (246) • DCMT/DCGT-PF (245) • DCMT/DCGT-SM (246)
For holders, see pages: SBTB-JHP-T/R (422) • SBTS##S-JHP (423)

QUICKSWISS

SBTT-SDNCN-JHP
Screw Lock JETCUT Modular Heads Mount 7° Clearance 55° Rhombic Inserts for Back-End Machining on Swiss-Type Machines



Designation	LF	LPR	OAW	MIID(1)			
SBTT-SDNCN07-JHP	31.00	41.00	24.00	DCGT 070204	SR 14-548	SR M5X25 DIN7984	T-7/5
SBTT-SDNCN11-JHP	31.00	41.00	24.00	DCGT 11T302	SR 16-236	SR M5X25 DIN7984	T-15/5

NEW

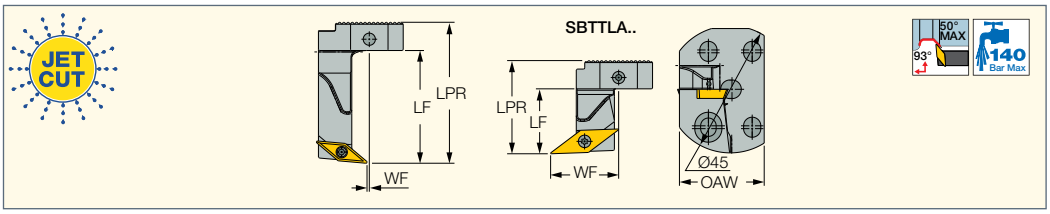
(1) Master insert identification

For inserts, see pages: DCGT-AF (271) • DCGT-AS (270) • DCGT-F1M-12P (243) • DCGT-F1M-20P (244) • DCMT-14 (247) • DCMT-CERMET (243) • DCMT-F3P (240) • DCMT-M3M (241) • DCMT-M3P (241) • DCMT/DCGT (246) • DCMT/DCGT-PF (245) • DCMT/DCGT-SM (246)
For holders, see pages: SBTB-JHP-T/R (422) • SBTS##S-JHP (423)



QUICKSWISS

SBTT#-SVJCR/L-JHP
Screw Lock JETCUT Modular Heads Mount 7° Clearance 35° Rhombic Inserts for Back-End Machining on Swiss-Type Machines



Designation	LF	LPR	OAW	WF	MIID(2)			
SBTT-SVJCR/L11-JHP	23.00	33.00	30.00	0.80	VCMT 110302-F3P	SR 14-560	T-8/5	SR M5X30 DIN7984
SBTTA-SVJCR13-JHP (1)	23.00	33.00	27.00	24.00	VCGT 130302-PF	SR 14-513	T-8/5	SR M5X30 DIN7984
SBTTL-SVJCR/L11-JHP	40.00	50.00	30.00	0.80	VCMT 110302-F3P	SR 14-560	T-8/5	SR M5X45 DIN7984

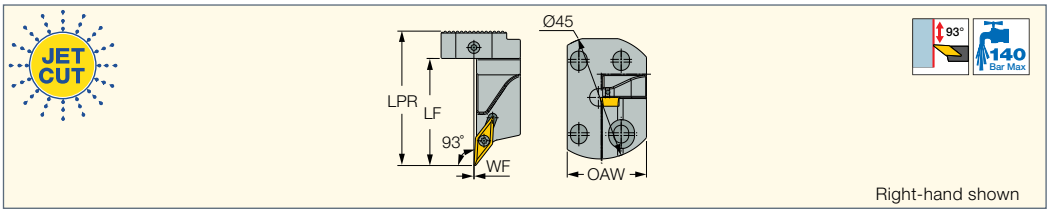
NEW

(1) Available on request
(2) Master insert identification

For inserts, see pages: VCGT-AS (269) • VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCMT-F3M (249) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-SM (251)
For holders, see pages: SBTB-JHP-T/R (422) • SBTS##S-JHP (423)

QUICKSWISS

SBTT#-SVUCR/L-JHP
Screw Lock JETCUT Modular Heads Mount 7° Clearance 35° Rhombic Inserts for Back-End Machining on Swiss-Type Machines



Designation	LF	LPR	OAW	WF	MIID(2)			
SBTT-SVUCR/L11-JHP	23.00	33.00	29.00	0.00	VCMT 110302-F3M	SR 14-560	T-8/5	SR M5X25 DIN7984
SBTTL-SVUCR11-JHP (1)	40.00	50.00	29.00	0.00	VCMT 110302-F3M	SR 14-560	T-8/5	SR M5X40 DIN7984

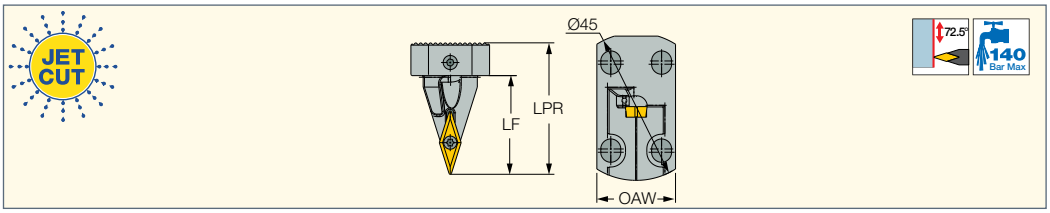
NEW

(1) Available on request
(2) Master insert identification

For inserts, see pages: VCGT-AS (269) • VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCMT-F3M (249) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-SM (251)
For holders, see pages: SBTB-JHP-T/R (422) • SBTS##S-JHP (423)

QUICKSWISS

SBTT-SVVCN-JHP
Screw Lock JETCUT Modular Heads Mount 7° Clearance 35° Rhombic Inserts for Back-End Machining on Swiss-Type Machines



Designation	LF	LPR	OAW	MIID(1)		
SBTT-SVVCN11-JHP	30.00	40.00	24.00	VCMT 110302-F3P	SR 14-560	T-8/5

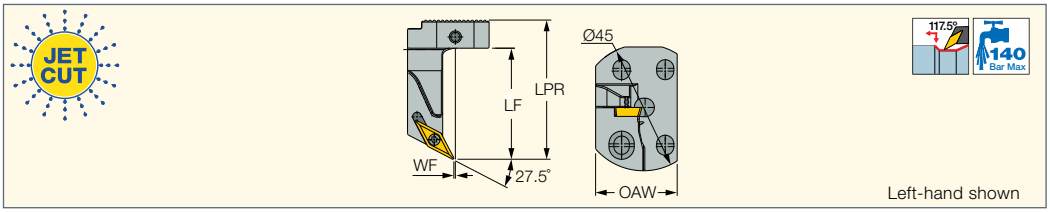
NEW

(1) Master insert identification

For inserts, see pages: VCGT-AS (269) • VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCMT-F3M (249) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-SM (251)
For holders, see pages: SBTB-JHP-T/R (422) • SBTS##S-JHP (423)

QUICKSWISS

SBTT#-SVQCR/L-JHP
Screw Lock JETCUT Modular Heads Mount 7° Clearance 35° Rhombic Inserts for Back-End Machining on Swiss-Type Machines



Designation	LF	LPR	OAW	WF	MIID[2]			
SBTT-SVQCR/L11-JHP	23.00	33.00	29.00	0.50	VCMT 110302-F3P	SR 14-560	T-8/5	SR M5X30 DIN7984
SBTTL-SVQCR/L11-JHP [1]	40.00	50.00	29.00	0.50	VCMT 110302-F3P	SR 14-560	T-8/5	SR M5X45 DIN7984

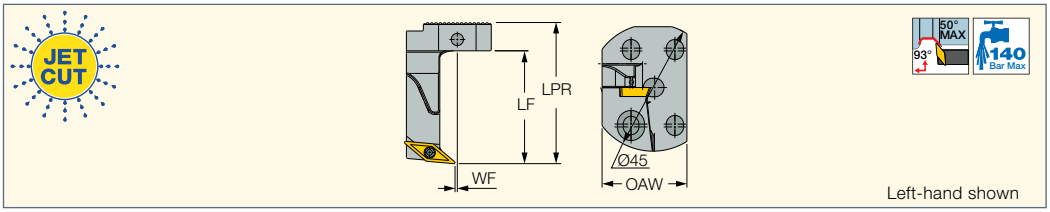
NEW

[1] Available on request
[2] Master insert identification

For inserts, see pages: VCGT-AS (269) • VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCMT-F3M (249) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-SM (251)
For holders, see pages: SBTB-JHP-T/R (422) • SBTS##S-JHP (423)

QUICKSWISS

SBTT#-SVJBR/L-JHP
Screw Lock JETCUT Modular Heads Mount 5° Clearance 35° Rhombic Inserts for Back-End Machining on Swiss-Type Machines



Designation	LF	LPR	OAW	WF	MIID[2]			
SBTT-SVJBR/L11-JHP [1]	23.00	33.00	30.00	0.80	VBGW 110304-F2	SO 250651	T-7/5	SR M5X30 DIN7984
SBTTM-SVJBR/L11-JHP [1]	31.00	41.00	30.00	0.80	VBGW 110304-F2	SO 250651	T-7/5	SR M5X35 DIN7984
SBTTM-SVJBR1102-JHP [1]	31.00	41.00	30.00	0.80	VBGW 110204-F	SO 250651	T-7/5	SR M5X35 DIN7984
SBTTL-SVJBR/L11-JHP [1]	40.00	50.00	30.00	0.80	VBGW 110304-F2	SO 250651	T-7/5	SR M5X45 DIN7984

NEW

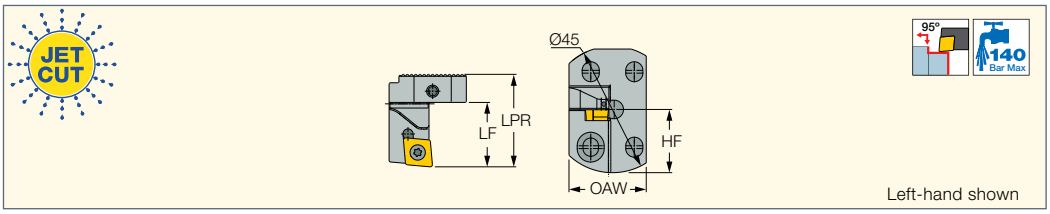
[1] Available on request
[2] Master insert identification

For inserts, see ISCAR CBN PCD catalog
For holders, see pages: SBTB-JHP-T/R (422) • SBTS##S-JHP (423)



QUICKSWISS

SBTT#-SCLCR/L-JHP
Screw Lock JETCUT Modular Heads Mount 7° Clearance 80° Rhombic Inserts for Back-End Machining on Swiss-Type Machines



Designation	LF	LPR	HF	OAW	MIID(2)			
SBTT-SCLCR/L06-JHP (1)	23.00	33.00	22.5	28.00	CCMT 060202-PF	SR 14-548	T-7/5	SR M5X30 DIN7984
SBTT-SCLCR/L09-JHP	23.00	33.00	22.5	27.50	CCMT 09T302-PF	SR 16-236	T-15/5	SR M5X30 DIN7984
SBTTL-SCLCR09-JHP	39.00	49.00	22.5	27.50	CCMT 09T302-PF	SR 16-236	T-15/5	SR M5X45 DIN7984

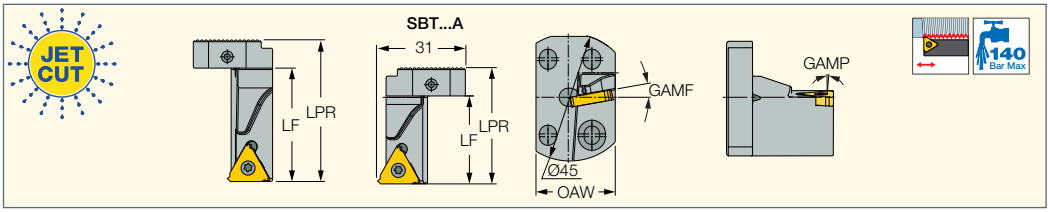
NEW

(1) Available on request
(2) Master insert identification

For inserts, see pages: CCET-WF (238) • CCGT-AF (270) • CCGT-AS (270) • CCGT-F1M-12P (232) • CCGT-F1M-20P (233) • CCMT-14 (237) • CCMT-CERMET (235) • CCMT-F3M (234) • CCMT-F3P (233) • CCMT-M3M (235) • CCMT-M3P (234) • CCMT-PF (236) • CCMT-WG (238) • CCMT/CCGT (237) • CCMT/CCGT-SM (236)
For holders, see pages: SBTB-JHP-T/R (422) • SBTS##S-JHP (423)

QUICKSWISS

SBTT#-16ER/L-JHP
Screw Lock JETCUT Modular Heads Mount ISO Laydown Threading Inserts for Back-End Machining on Swiss-Type Machines



Designation	LF	LPR	OAW	GAMP	GAMF	MIID(2)			
SBTT-16ER-0-JHP (1)	31.00	41.00	28.00	0.0	10.0	16ER A 60	SR 5-40-L9.7-S16S	T-10/5	SR M5X35 DIN7984
SBTT-16ER-15-JHP	31.00	41.00	28.00	1.5	10.0	16ER A 60	SR 5-40-L9.7-S16S	T-10/5	SR M5X35 DIN7984
SBTT-16ER-3-JHP	31.00	41.00	28.00	3.0	10.0	16ER A 60	SR 5-40-L9.7-S16S	T-10/5	SR M5X35 DIN7984
SBTTA-16ER-0-JHP (1)	31.00	41.00	28.00	0.0	10.0	16ER A 60	SR 5-40-L9.7-S16S	T-10/5	SR M5X35 DIN7984
SBTTA-16ER-15-JHP (1)	31.00	41.00	28.00	1.5	10.0	16ER A 60	SR 5-40-L9.7-S16S	T-10/5	SR M5X35 DIN7984
SBTTA-16ER-3-JHP (1)	31.00	41.00	28.00	3.0	10.0	16ER A 60	SR 5-40-L9.7-S16S	T-10/5	SR M5X35 DIN7984
SBTTL-16EL-15-JHP	40.00	50.00	28.00	1.5	10.0	16EL A 60	SR 5-40-L9.7-S16S	T-10/5	SR M5X45 DIN7984
SBTTL-16ER-0-JHP	40.00	50.00	28.00	0.0	10.0	16ER A 60	SR 5-40-L9.7-S16S	T-10/5	SR M5X45 DIN7984
SBTTL-16ER-15-JHP	40.00	50.00	28.00	1.5	10.0	16ER A 60			
SBTTL-16ER-3-JHP	40.00	50.00	28.00	3.0	10.0	16ER A 60	SR 5-40-L9.7-S16S	T-10/5	SR M5X45 DIN7984
SBTTLA-16ER-15-JHP (1)	40.00	50.00	28.00	1.5	10.0	16ER A 60	SR 5-40-L9.7-S16S	T-10/5	SR M5X45 DIN7984

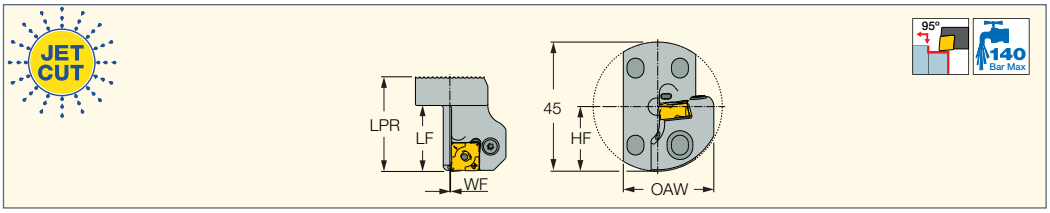
NEW

(1) Available on request
(2) Master insert identification

For inserts, see pages: ER/L-55° (715) • ER/L-60° (721) • ER/L-ACME (771) • ER/L-API RD (786) • ER/L-BSPT (766) • ER/L-ISO (734) • ER/L-NPT (761) • ER/L-SAGE (783) • ER/L-UN (745) • ER/L-UNJ (775) • ER/L-W (755) • GTGA (365) • GTMA (366)
For holders, see pages: SBTB-JHP-T/R (422) • SBTS##S-JHP (423)

QUICKSWISS

SBTT-PCLXR/L09-JHP
Lever Lock JETCUT Modular Heads on which Double-Sided 80° Rhombic Inserts are Mounted for Back-End Machining



Designation	LF	HF	LPR	OAW	WF	MIID(1)			
SBTT-PCLXR/L09-JHP	23.00	22.5	33.00	31.60	0.25	CXMG 090408	SR M6XL11.5V	LR 3X SET	T-8/5

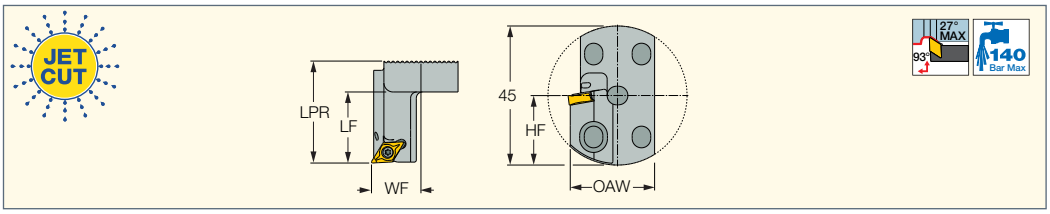
NEW

(1) Master insert identification

For inserts, see pages: CXMG-F3M (230) • CXMG-F3P (229) • CXMG-M3M (230) • CXMG-M3P (229)
For holders, see pages: SBTB-JHP-T/R (422) • SBTS##S-JHP (423)

QUICKSWISS

SBTT/L/A-SDJNR/L07-JHP
Screw Lock JETCUT Modular Heads on which Positive Double-Sided 55° Rhombic Inserts are Mounted for Back-End Machining



Designation	LF	HF	LPR	OAW	WF	MIID[1]
SBTT-SDJNL07-JHP	23.00	22.5	33.00	27.00	0.25	DNGP 070302R
SBTT-SDJNR07-JHP	23.00	22.5	33.00	27.00	0.25	DNGP 070302L
SBTTA-SDJNL07-JHP	23.00	22.5	33.00	27.30	16.00	DNGP 070302R
SBTTA-SDJNR07-JHP	23.00	22.5	33.00	27.30	16.00	DNGP 070302L
SBTTL-SDJNL07-JHP	40.00	22.5	50.00	27.00	0.25	DNGP 070302R
SBTTL-SDJNR07-JHP	40.00	22.5	50.00	27.00	0.25	DNGP 070302L

NEW

(1) Master insert identification

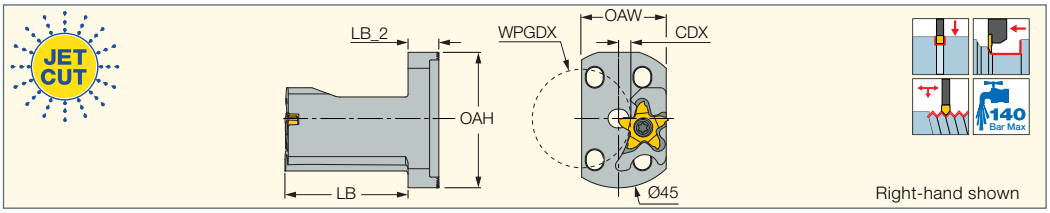
For inserts, see pages: DNGP-F2M (197) • DNGP-F2P (195)
For holders, see pages: SBTB-JHP-T/R (422) • SBTS##S-JHP (423)

Spare Parts

Designation		
SBTT/L/A-SDJNR/L07-JHP	SR 34-514	T-7/5

QUICKSWISS

SBTT#-PCHRS/LS-17-JHP
Screw Lock JETCUT Modular Heads Mount PENTA 17 Grooving Inserts for Back-End Machining on Swiss-Type Machines



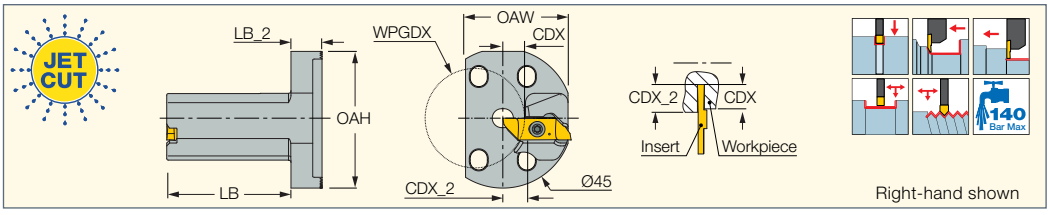
Designation	LB	LB_2	OAW	OAH	CDX	WPGDX	MIID[1]		
SBTT-PCHRS17-JHP	23.00	10.00	27.50	44.00	4.00	32.0	PENTA 17...RS	SR M4-39432L	T-15/5
SBTT-PCHLS17-JHP	23.00	10.00	27.50	44.00	4.00	32.0	PENTA 17...LS	SR M4-39432	T-15/5
SBTTL-PCHRS17-JHP	40.00	10.00	27.50	44.00	4.00	32.0	PENTA 17...RS	SR M4-39432L	T-15/5
SBTTL-PCHLS17-JHP	40.00	10.00	27.50	44.00	4.00	32.0	PENTA 17...LS	SR M4-39432	T-15/5

NEW

(1) Master insert identification

QUICKSWISS

SBTT#-SCHR/L22-JHP
Screw Lock JETCUT Modular Heads Mount SWISSCUT Groove-Turn Inserts for Back-End Machining on Swiss-Type Machines



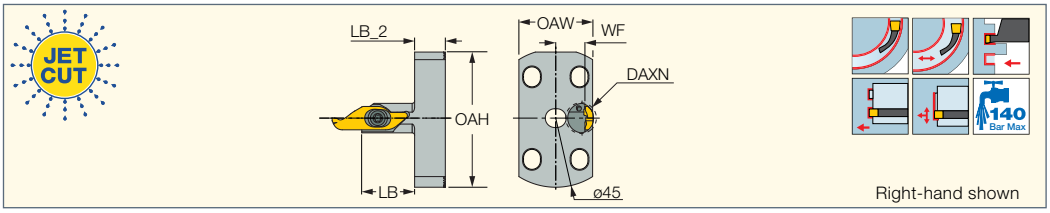
Designation	LB	LB_2	OAW	OAH	CDX	CDX_2	WPGDX	MIID[1]		
SBTT-SCHR22-JHP	23.00	10.00	33.00	44.00	7.00	8.00	32.0	SCIR 22-...		
SBTT-SCHL22-JHP	23.00	10.00	33.00	44.00	7.00	8.00	32.0	SCIL 22-...	SR M4X0.7-19425	T-8/5
SBTTL-SCHR22-JHP	40.00	10.00	33.00	44.00	7.00	8.00	32.0	SCIR 22-...		
SBTTL-SCHL22-JHP	40.00	10.00	33.00	44.00	7.00	8.00	32.0	SCIL 22-...	SR M4X0.7-19425	T-8/5

NEW

(1) Master insert identification

QUICKSWISS

SBTT#-MIFHR-JHP
Screw Lock JETCUT Modular Heads Mount MINCUT Face Grooving Inserts for Back-End Machining on Swiss-Type Machines



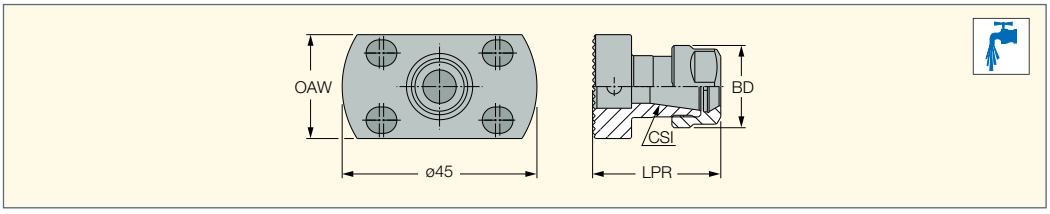
Designation	LB	LB_2	OAW	WF	OAH	DAXN(1)	MIID(2)		
SBTT-MIFHR-8-JHP	12.50	10.00	24.00	7.50	44.00	8.0	MIFR 8-...	SR 14-297	T-8/5
SBTT-MIFHR-10-JHP	17.20	10.00	24.00	9.50	44.00	10.0	MIFR 10-...	SR 34-506 M3X0.5	T-9/5
SBTTM-MIFHR-15-JHP	15.00	10.00	24.00	7.70	44.00	18.5	MIFR 15-...	SR 34-506/L	T-9/5

NEW

(1) Minimum axial grooving diameter
(2) Master insert identification

QUICKSWISS

SBTH-ER
DIN6499 ER Collet Chuck Holders for Height adjustable Modular Back-End Machining System for Swiss-Type Machines



Designation	BD	CSI	OAW	LPR
SBTH-ER11	19.00	ER11	24.00	31.60
SBTH-ER16	22.00	ER16	24.00	42.00

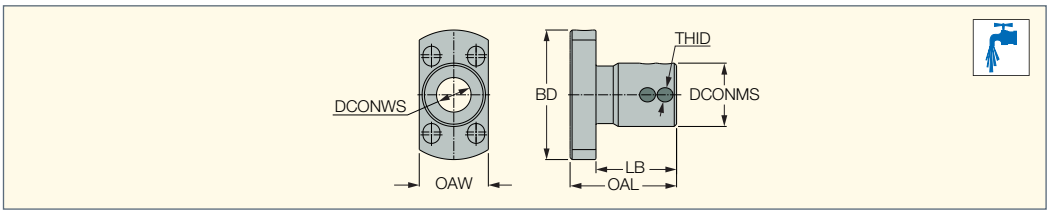
NEW

Spare Parts

Designation					
SBTH-ER11	SBTA-IK-SP1	SBTA-ZEN1	SBTA-QR5.28X1.78	NUT ER11 UM	SR M5X0.5X16 DIN913
SBTH-ER16	SBTA-IK-SP1	SBTA-ZEN1	SBTA-QR5.28X1.78	NUT ER16 MINI	SR M5X0.5X16 DIN913

QUICKSWISS

SBTH-PICCO
Height-Adjustable Modular Back-End Machining System for Swiss -Type Machines with Round Shank Holders



Designation	DCONMS	DCONWS	BD	OAL	LB	OAW	THID
SBTH-PICCO	22.00	12.00	45.00	37.00	28.00	24.00	M5x0.5

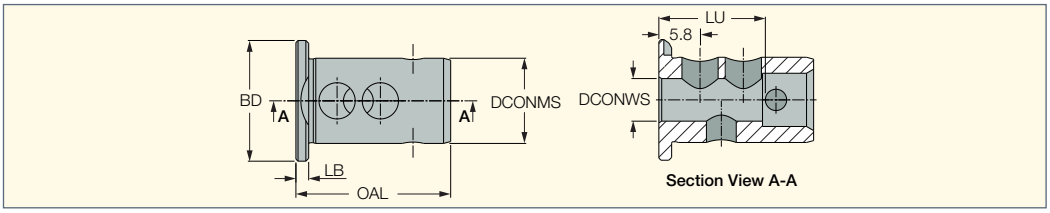
NEW

Spare Parts

Designation					
SBTH-PICCO	SR M5X0.5X16 DIN913	SBTA-IK-SP1	SBTA-ZEN1	SBTA-QR5.28X1.78	SR M5X0.5X8 DIN913

QUICKSWISS

SC-PICCO
Reduction Sleeves for Round Shank Holders for Modular Back-End Machining System

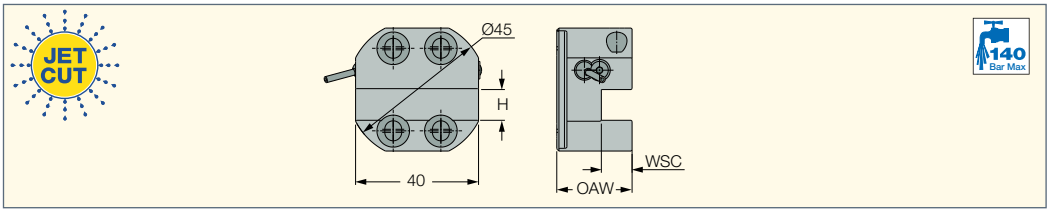


Designation	DCONMS	DCONWS	LSCMS	LU	BD	OAL	LB
SC-12-4-PICCO	12.00	4.00	15.00	15.00	17.00	21.80	1.80
SC-12-5-PICCO	12.00	5.00	15.00	15.00	17.00	21.80	1.80
SC-12-6-PICCO	12.00	6.00	15.00	15.00	17.00	21.80	1.80
SC-12-7-PICCO	12.00	7.00	15.00	15.00	17.00	21.80	1.80
SC-12-8-PICCO	12.00	8.00	15.00	15.00	17.00	21.80	1.80

NEW

QUICKSWISS

SBTH-JHP
Square Shank Tool Holders
for Height Adjustable Modular
Back-End Machining Systems
for Swiss-Type Machines



Designation	WSC	OAW	H
SBTH-1010-JHP	10.0	24.50	10.0
SBTH-1212-JHP	12.0	24.50	12.0

NEW

(1) Minimum axial grooving diameter

(2) Master insert identification

- Due to assembly parts' tolerances a possible deviation of ±0.5° may occur. When using grooving tools, the surface flatness should be checked and preset manually if needed.

Spare Parts

Designation										
SBTH-1010-JHP	SBTA-IK-SP1	SBTA-ZEN1	HW 3.0	SBTA-QR5.28X1.78	FLAT RING-SW-S5	SBTA-BALL-5.5	SBTA-BCN-L16	SR M5X16 DIN7984	SR M5X30 DIN7984	SR M6X12 DIN916
SBTH-1212-JHP	SBTA-IK-SP1	SBTA-ZEN2	HW 3.0	SBTA-QR5.28X1.78	FLAT RING-SW-S5	SBTA-BALL-5.5	SBTA-BCN-L16	SR M5X14 DIN7984	SR M5X35 DIN7984	SR M7X12 DIN916

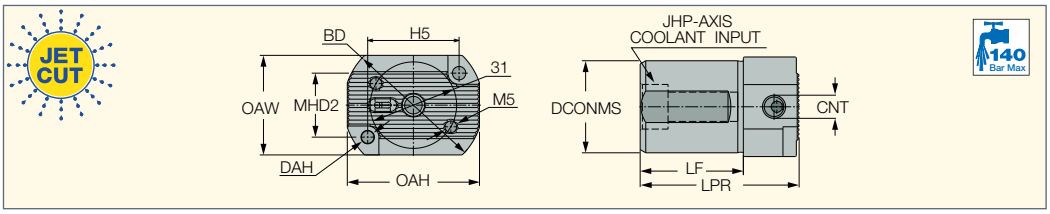
Spare Parts

Designation						
SBTH-1010-JHP	SR M5X0.5X16 DIN913	SCREW DIN 7991 M3 X 8	SR M6X20 DIN916			
SBTH-1212-JHP	SR M5X0.5X12 DIN913	SCREW DIN 7991 M3 X 8	SR M7X16 DIN916	SR M5X8 DIN7984	SBTA-1212AP	



QUICKSWISS

SBTB-JHP-T/R
JETCUT Base Holders for Back-End Machining Heads Intended for Swiss-Type Machines



Designation	DCONMS	BD	LF	LPR	MHD2	MHD	DAH	OAH	OAW	CNT
SBTB1620SRWD	16.00	45.00	20.00	30.00	-	-	-	-	24.00	-
SBTB1660-JHP-R	16.00	45.00	60.00	70.00	-	-	-	-	24.00	M8X1(JHP-AXIS)
SBTB1960-JHP-R	19.05	45.00	60.00	70.00	-	-	-	-	24.00	G1/8(JHP-AXIS)
SBTB20125-JHP-R	20.00	45.00	120.00	130.00	-	-	-	-	24.00	G1/8(JHP-AXIS)
SBTB2060-JHP-R	20.00	45.00	60.00	70.00	-	-	-	-	24.00	G1/8(JHP-AXIS)
SBTB2270-JHP-R	22.00	45.00	70.00	80.00	-	-	-	-	24.00	G1/8(JHP-AXIS)
SBTB2225SW-JHP-T	22.00	47.00	25.00	45.00	25.0	30.00	4.50	37.50	32.50	M8X1(JHP-T)
SBTB2225SRWD	22.00	48.00	25.00	35.00	26.9	26.90	5.50	-	38.00	-
SBTB2225SRR-JHP-T	22.00	52.00	25.00	45.00	13.7	37.60	5.50	-	28.00	M8X1(JHP-T)
SBTB25100-JHP-R	25.00	45.00	100.00	110.00	-	-	-	-	24.00	G1/8(JHP-AXIS)
SBTB2560-JHP-R	25.00	45.00	60.00	70.00	-	-	-	-	24.00	G1/8(JHP-AXIS)
SBTB2670-JHP-R	25.40	45.00	70.00	80.00	-	-	-	-	24.00	G1/8(JHP-AXIS)
SBTB2885-JHP-R (1)	28.00	45.00	85.00	95.00	-	-	-	-	24.00	M12X1.5(JHP-AXIS)
SBTB2885-JHP-T	28.00	45.00	85.00	105.00	-	-	-	-	24.00	M8X1(T) M12X1.5(AXIS)
SBTB2836CT20-JHP-T (1)	28.00	46.00	36.00	56.00	27.0	27.00	4.50	36.00	34.50	M8X1(JHP-T)
SBTB3115CIT-JHP-T	31.00	60.00	15.00	35.00	23.5	40.70	5.50	59.00	34.00	M8X1(JHP-T)
SBTB3225HA32-JHP-T	32.00	50.00	25.00	45.00	28.4	28.40	4.50	39.00	39.00	M8X1(JHP-T)
SBTB3337HA20-JHP-T	33.00	50.00	37.00	57.00	22.9	32.80	4.50	47.40	35.70	M8X1(JHP-T)
SBTB3440-JHP-T	34.00	50.00	44.00	64.00	29.7	29.70	4.50	37.50	37.50	M8X1(JHP-T)

NEW

(1) Available on request

For tools, see pages: SBTT#-16ER/L-JHP (418) • SBTT#-SCLCR/L-JHP (418) • SBTT#-SDJCR/L-JHP (415) • SBTT#-SVJBR/L-JHP (417) • SBTT#-SVJCR/L-JHP (416) • SBTT#-SVQCR/L-JHP (417) • SBTT#-SVUCR/L-JHP (416) • SBTT-PCLXR/L09-JHP (418) • SBTT-SDNCN-JHP (415) • SBTT-SVVCN-JHP (416) • SBTT/L/A-SDJNR/L07-JHP (419)

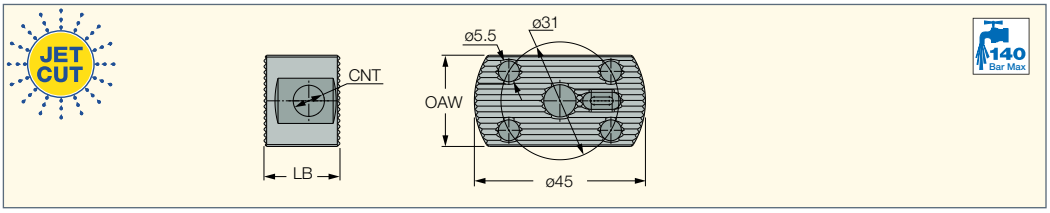
Designation	Machines
SBTB1620SRWD	STAR SR16 / SST16 / SR20 / RNC16
SBTB2225SRWD	STAR SR32 / SR32J (old)
SBTB2225SRR-JHP-T	STAR SR10J / SB16 / SB20 / SR20J / SR20JN / SR20 R / II / III / SR32J / SR32JN / ECAS12 / ECAS20 / SR20R IV (Positions T21 - T24)
SBTB2225SW-JHP-T	STAR SB12R / SB20R / SR20R IV / SW20 / SV20R / SR32J II / SR38 / SW12R II / SR20J II
SBTB3440-JHP-T	STAR SV38R / ECAS32, MAIER
SBTB1660-JHP-R	STAR, TRAUB, MANURHIN
SBTB1960-JHP-R	CITIZEN L20/C16/M16
SBTB2060-JHP-R	CITIZEN B12, TSUGAMI BS12 / BS20
SBTB20125-JHP-R	TORNOS DECO, MANURHIN Swing 7-13
SBTB2270-JHP-R	STAR (most 12/16/20/32mm machines), TORNOS DELTA20 / GAMMA20
SBTB2560-JHP-R	CITIZEN L20, TORNOS, HANWHA STL32 / STL35H / STL33 / STL35J, TSUGAMI BS12 / BS20, MANURHIN Swing
SBTB25100-JHP-R	TORNOS DECO , MANURHIN KMX 5/20 / KMX 5/26 / KMX 5/32 / Swing 7-20 / Swing 7-26
SBTB2670-JHP-R	CITIZEN M32 / C32 / L32
SBTB2836CT20-JHP-T	TORNOS CT20
SBTB2885-JHP-R	TRAUB TNL 12 / TNL16
SBTB2885-JHP-T	TRAUB TNL 12 / TNL16
SBTB3115CIT-JHP-T	CITIZEN A32-VII / L32
SBTB3225HA32-JHP-T	HANWHA STL38H
SBTB3337HA20-JHP-T	HANWHA XD20H /XD20J / XD32H / XD32J

Spare Parts

Designation									
SBTB1620SRWD	SBTA-IK-HOP	SBTA-EXB	SBTA-QR5.28X1.78	HW 3.0	FLAT RING-SW-S5	SR M5X18 DIN7984			
SBTB1660-JHP-R	SBTA-IK-HOP	SBTA-EXB	SBTA-QR5.28X1.78	HW 3.0	FLAT RING-SW-S5	SR M5X18 DIN7984	SR M8X1X6 DIN913		
SBTB1960-JHP-R	SBTA-IK-HOP	SBTA-EXB	SBTA-QR5.28X1.78	HW 3.0	FLAT RING-SW-S5	SR M5X18 DIN7984	PLG G1/8 TL360		
SBTB20125-JHP-R	SBTA-IK-HOP	SBTA-EXB	SBTA-QR5.28X1.78	HW 3.0	FLAT RING-SW-S5	SR M5X18 DIN7984	PLG G1/8 TL360		
SBTB2060-JHP-R	SBTA-IK-HOP	SBTA-EXB	SBTA-QR5.28X1.78	HW 3.0	FLAT RING-SW-S5	SR M5X18 DIN7984	PLG G1/8 TL360		
SBTB2270-JHP-R	SBTA-IK-HOP	SBTA-EXB	SBTA-QR5.28X1.78	HW 3.0	FLAT RING-SW-S5	SR M5X18 DIN7984	PLG G1/8 TL360		
SBTB2225SW-JHP-T	SBTA-IK-HOP	SBTA-EXB	SBTA-QR5.28X1.78	HW 3.0	FLAT RING-SW-S5	SR M5X18 DIN7984	SR M8X1X8 DIN906		SR M4X10DIN912
SBTB2225SRWD	SBTA-IK-HOP	SBTA-EXB	SBTA-QR5.28X1.78	HW 3.0	FLAT RING-SW-S5	SR M5X18 DIN7984			SR M5X10 DIN7984
SBTB2225SRR-JHP-T	SBTA-IK-HOP	SBTA-EXB	SBTA-QR5.28X1.78	HW 3.0	FLAT RING-SW-S5	SR M5X18 DIN7984	SR M8X1X8 DIN906		SR M5X10 DIN7984
SBTB25100-JHP-R	SBTA-IK-HOP	SBTA-EXB	SBTA-QR5.28X1.78	HW 3.0	FLAT RING-SW-S5	SR M5X18 DIN7984	PLG G1/8 TL360		
SBTB2560-JHP-R	SBTA-IK-HOP	SBTA-EXB	SBTA-QR5.28X1.78	HW 3.0	FLAT RING-SW-S5	SR M5X18 DIN7984	PLG G1/8 TL360		
SBTB2670-JHP-R	SBTA-IK-HOP	SBTA-EXB	SBTA-QR5.28X1.78	HW 3.0	FLAT RING-SW-S5	SR M5X18 DIN7984	PLG G1/8 TL360		
SBTB2885-JHP-R	SBTA-IK-HOP	SBTA-EXB	SBTA-QR5.28X1.78	HW 3.0	FLAT RING-SW-S5	SR M5X18 DIN7984	SR M12X1.5X10 DIN913		
SBTB2885-JHP-T	SBTA-IK-HOP	SBTA-EXB	SBTA-QR5.28X1.78	HW 3.0	FLAT RING-SW-S5	SR M5X18 DIN7984	SR M8X1X8 DIN906	SR M12X1.5X10 DIN913	
SBTB2836CT20-JHP-T	SBTA-IK-HOP	SBTA-EXB	SBTA-QR5.28X1.78	HW 3.0	FLAT RING-SW-S5	SR M5X18 DIN7984	SR M8X1X8 DIN906		SR M4X10DIN912
SBTB3115CIT-JHP-T	SBTA-IK-HOP	SBTA-EXB	SBTA-QR5.28X1.78	HW 3.0	FLAT RING-SW-S5	SR M5X18 DIN7984	SR M8X1X8 DIN906		
SBTB3225HA32-JHP-T	SBTA-IK-HOP	SBTA-EXB	SBTA-QR5.28X1.78	HW 3.0	FLAT RING-SW-S5	SR M5X18 DIN7984	SR M8X1X8 DIN906		SR M4X20 DIN912
SBTB3337HA20-JHP-T	SBTA-IK-HOP	SBTA-EXB	SBTA-QR5.28X1.78	HW 3.0	FLAT RING-SW-S5	SR M5X18 DIN7984	SR M8X1X8 DIN906		SR M4X25DIN912
SBTB3440-JHP-T	SBTA-IK-HOP	SBTA-EXB	SBTA-QR5.28X1.78	HW 3.0	FLAT RING-SW-S5	SR M5X18 DIN7984	SR M8X1X8 DIN906		SR M4X10DIN912

QUICKSWISS

SBTS##S-JHP
Spacer for Tool Extension for Height Adjustable Modular Back-End Machining System for Swiss-Type Machines



Designation	OAW	LB	CNT
SBTS10S [1]	24.00	10.00	-
SBTS15S-JHP	24.00	15.00	M8X1
SBTS20S-JHP	24.00	20.00	M8X1
SBTS25S-JHP	24.00	25.00	M8X1
SBTS30S-JHP	24.00	30.00	M8X1

NEW

[1] Without coolant connection

Spare Parts

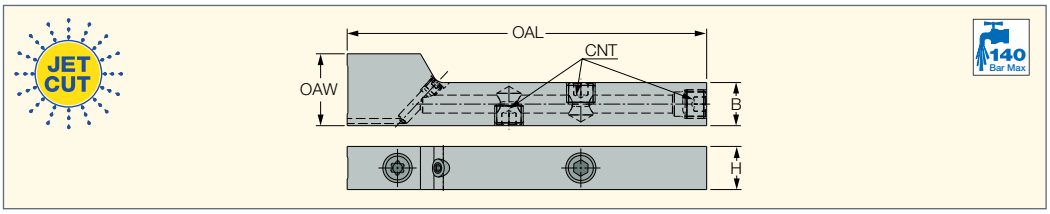
Designation							
SBTS10S	SBTA-IK-HOP	SBTA-IK-SP1	SBTA-IK-SP2	SBTA-ZEN10	SBTA-EXB10	SBTA-QR5.28X1.78	FLAT RING-SW-S5
SBTS15S-JHP	SBTA-IK-HOP	SBTA-IK-SP1	SBTA-IK-SP2	SBTA-ZEN15	SBTA-EXB15	SBTA-QR5.28X1.78	FLAT RING-SW-S5
SBTS20S-JHP	SBTA-IK-HOP	SBTA-IK-SP1	SBTA-IK-SP2	SBTA-ZEN20	SBTA-EXB20	SBTA-QR5.28X1.78	FLAT RING-SW-S5
SBTS25S-JHP	SBTA-IK-HOP	SBTA-IK-SP1	SBTA-IK-SP2	SBTA-ZEN25	SBTA-EXB25	SBTA-QR5.28X1.78	FLAT RING-SW-S5
SBTS30S-JHP	SBTA-IK-HOP	SBTA-IK-SP1	SBTA-IK-SP2	SBTA-ZEN30	SBTA-EXB30	SBTA-QR5.28X1.78	FLAT RING-SW-S5

Spare Parts

Designation							
SBTS10S	SR M5X25 DIN7984	SR M5X35 DIN7984	SR M5X40 DIN7984	SR M5X45 DIN7984	SR M5X50 DIN7984	SR M5X55 DIN7984	
SBTS15S-JHP	SR M5X30 DIN7984	SR M5X40 DIN7984	SR M5X45 DIN7984	SR M5X50 DIN7984	SR M5X55 DIN7984	SR M5X60 DIN7984	SR M8X1X8 DIN906
SBTS20S-JHP	SR M5X35 DIN7984	SR M5X45 DIN7984	SR M5X50 DIN7984	SR M5X55 DIN7984	SR M5X60 DIN7984	SR M5X65 DIN7984	SR M8X1X8 DIN906
SBTS25S-JHP	SR M5X45 DIN7984	SR M5X50 DIN7984	SR M5X55 DIN7984	SR M5X60 DIN7984	SR M5X65 DIN7984	SR M5X70 DIN7984	SR M8X1X8 DIN906
SBTS30S-JHP		SR M5X45 DIN7984	SR M5X55 DIN7984	SR M5X65 DIN7984	SR M5X70 DIN7984	SR M5X75 DIN7984	SR M8X1X8 DIN906

NEOSWISS

NQCH-JHP
JETCUT Square Shanks for NEOSWISS Modular Heads intended for Swiss-Type Machines



Designation	B	H	OAL	OAW	CNT				
NQCH-1010-JHP	10.0	10.0	100.00	20.00	UNF 5/16-24	SR 5/16UNF TL360			NQCH PLUG*
NQCH-1212-JHP (1)	12.0	12.0	100.00	20.00	UNF 5/16-24	SR 5/16UNF TL360	SW6-T-SH	BLD IP20/S7	NQCH PLUG*
NQCH-1616-JHP (1)	16.0	16.0	100.00	20.00	UNF 5/16-24	SR 5/16UNF TL360	SW6-T-SH	BLD IP20/S7	NQCH PLUG*

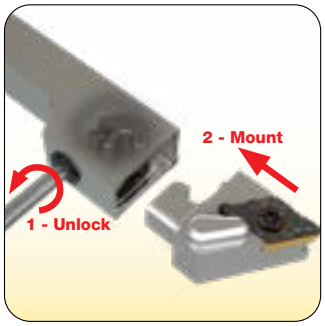
• Recommended torque for clamping screw 7-8 N*m • Replacing the clamping screw should be performed by an ISCAR qualified technician

(1) The shank is neutral and can be used for both left and right hand head

* Optional, to be ordered separately

For tools, see pages: NQCH-DGTR/L-D22-SH-JHP (530) • NQCH-GHSR/L-JHP (428) • NQCH-PCHR/L-24-JHP (348) • NQCH-PCHR/L-S-JHP (433) • NQCH-PCLXR/L-S-JHP (67) • NQCH-PTJNR/L-S-JHP (48) • NQCH-SCACR/L-S-JHP (72) • NQCH-SCHR/L-BF-JHP (408) • NQCH-SDACR/L-S-JHP (79) • NQCH-SDJCR/L-S-JHP (76) • NQCH-SDJNR/L-S-JHP (36) • NQCH-SDNCN-S-JHP (84) • NQCH-SER/L-JHP (800) • NQCH-SVACR/L-S-JHP (89) • NQCH-SVJCR/L-S-JHP (85) • NQCH-SVVCN-S-JHP (512) • NQCH-SWLNR/L-S-JHP (11) • NQCH-TGVR/L-JHP (405) • NQCH-Y-SCHR-BF-JHP (408) • NQCH-Y-SDJCR-S-JHP (77) • NQCH-Y-SVJCR-S-JHP (86)

Clamping Operational Steps





Recommended Torque 7-8 Nm

• Replacing clamping screw should be performed by an ISCAR qualified technician.
• To avoid damage, avoid excessive force when opening or clamping.
• Do not disassemble the tool to avoid damage to the clamping mechanism.

Supplied Accessories

Item No: 7003805
SW6-T-SH



Item No: 7002553
BLD IP20/S7



Recommended Accessories (optional)

Item No: 7007221
TSA 6 5-14 Nm



Item No: 7007027
BLD 6 T20IP



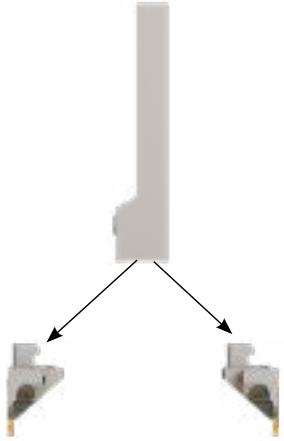


Shank's left-hand orientation for the left-hand tool machine
Example: NQCH1212/1616



Left hand head
Example: NQCH12/16-DGTL...

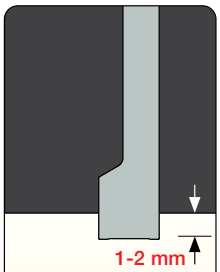
Shank's right-hand orientation for the right-hand tool machine
Example: NQCH1212/1616



Left hand head for Shank's right-hand orientation

Right hand head
Example: NQCH12/16-DGTR...

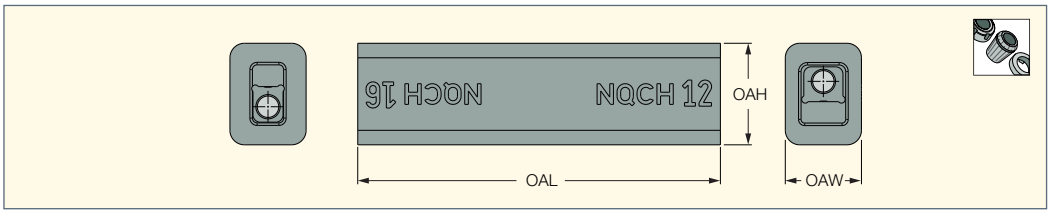
GANG / TOOL POST



Tool shank overhang (excluding its head) from the tool post should be set at a maximum distance of 1-2mm.

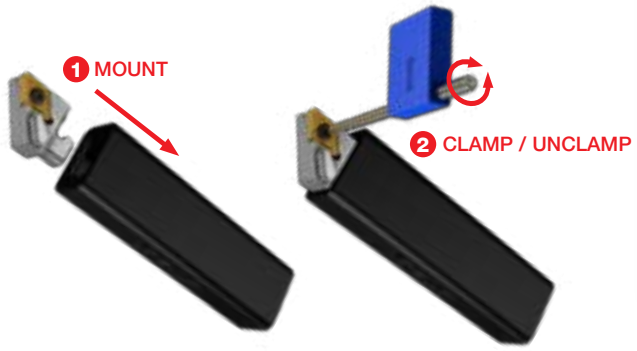
Accessories

NQCH FIXTURE
Auxiliary handle for easy insert replacement

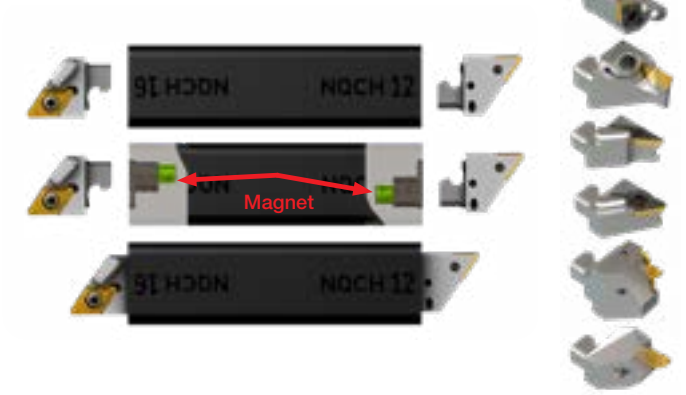


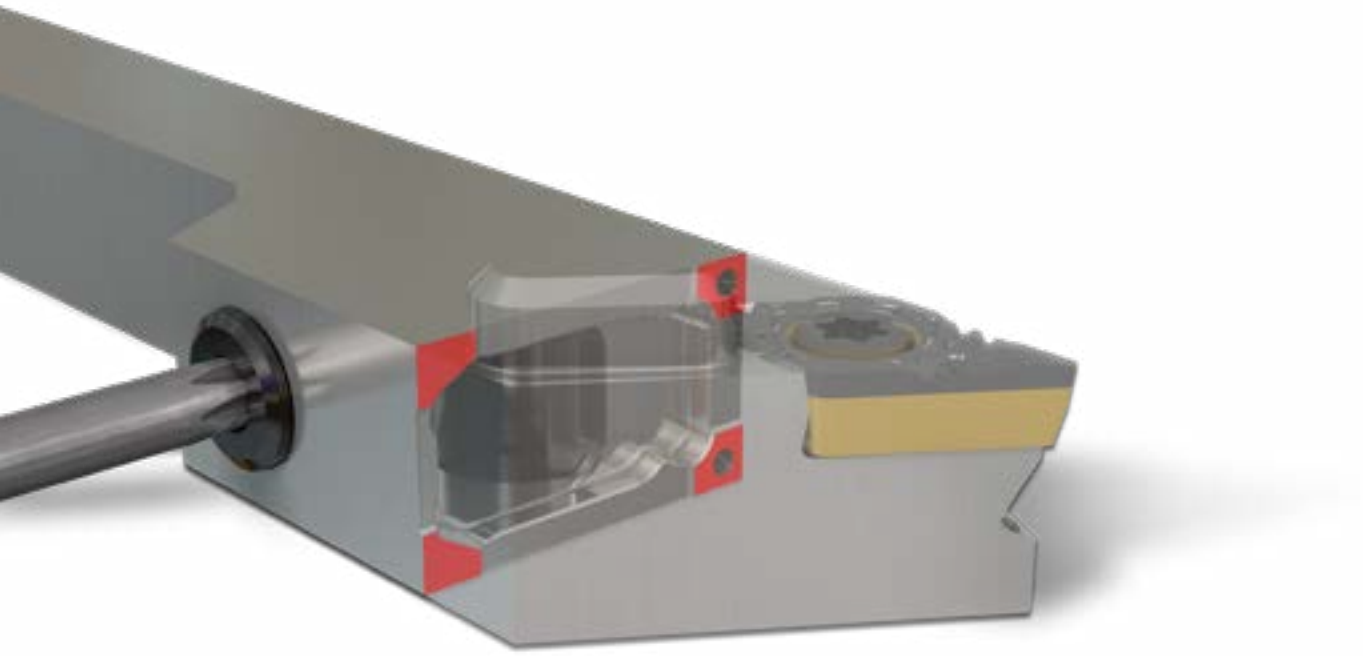
Designation	OAL	OAH	OAW
NQCH UNI.INS.REP.ADAPTER	100.00	28.00	21.00

Auxiliary Handle for Easy Insert Indexing NQCH Head



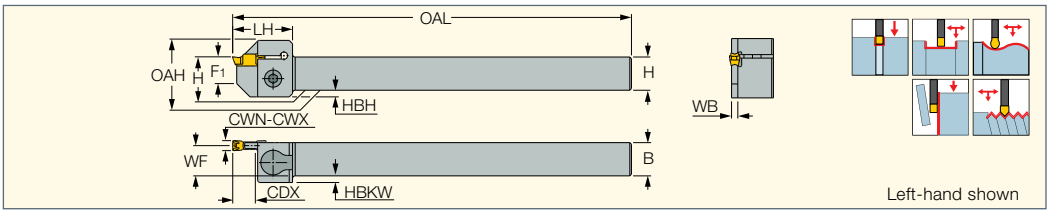
Double-Sided Handle, for Both 12 and 16 Head Sizes





CUTGRIP

GEHSR/L-SL
External Machining Tools with Side Clamping Mechanism for Swiss-Type and Automatic Machines



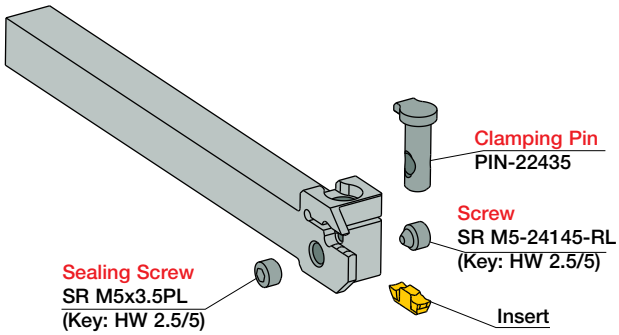
Designation	H	CWN(1)	CWX(2)	CDX(3)	B	OAL	WF	HBH	HBKW	WB	LH	F1	OAH
GEHSR/L 10-2-SL	10.0	2.20	3.20	6.80	10.0	120.00	9.10	2.0	2.00	1.80	18.0	8.0	15.0
GEHSR/L 12-2-SL	12.0	2.20	3.20	6.80	12.0	120.00	11.10	-	-	1.80	18.0	8.0	17.0
GEHSR/L 16-2-SL	16.0	2.20	3.20	6.80	16.0	120.00	15.10	-	-	1.80	18.0	8.0	21.0

- For user guide, see pages 475-492

(1) Minimum cutting width
(2) Maximum cutting width
(3) Cutting depth maximum

For inserts, see pages: GEMI (384) • GEMI (full radius) (384) • GEPI (385) • GEPI (full radius) (386) • GEPI-MT (727) • GEPI-WT (718)
For holders, see pages: SBTH-JHP (421)







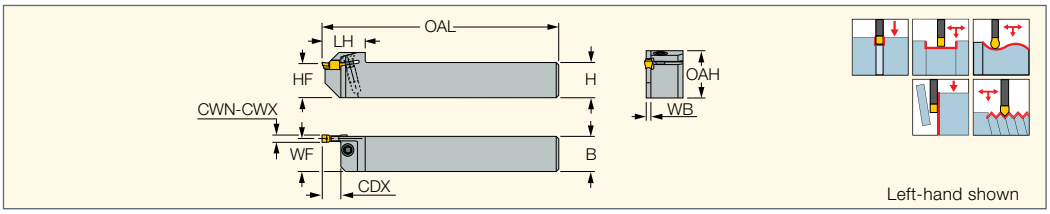
Spare Parts

Designation				
GEHSL 10-2-SL	PIN-22435 INJ			
GEHSR/L 10-2-SL		SR M5-24145-RL	HW 2.5/5	SR M5X3.5PL
GEHSR 10-2-SL	PIN-22435 INJ			
GEHSR/L 12-2-SL	PIN-22435 INJ	SR M5-24145-RL	HW 2.5/5	SR M5X3.5PL
GEHSL 16-2-SL	PIN-22435 INJ		HW 2.5/5	SR M5X3.5PL
GEHSR 16-2-SL	PIN-22435 INJ	SR M5-24145-RL	HW 2.5/5	SR M5X3.5PL

CUTGRIP

GEHSR

External Machining Holders
for Swiss-Type and
Automatic Machines



Designation	H	CWN(1)	CWX(2)	CDX(3)	HF	B	OAL	WF	WB	LH	OAH		
GEHSR 20-2	20.0	2.20	3.20	6.80	20.0	20.0	120.00	19.10	1.80	20.0	24.0	SR 16-236 P	T-15/3
GEHSR 25-2	25.0	2.20	3.20	6.80	25.0	25.0	120.00	24.10	1.80	20.0	29.0	SR 16-236 P	T-15/3

- For user guide, see pages 475-492

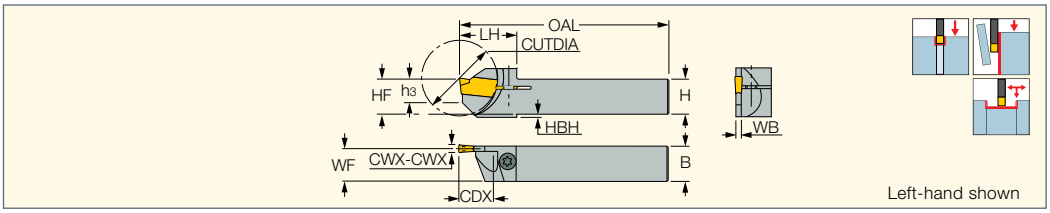
(1) Minimum cutting width
(2) Maximum cutting width
(3) Cutting depth maximum

For inserts, see pages: GEMI (384) • GEMI (full radius) (384) • GEPI (385) • GEPI (full radius) (386) • GEPI-MT (727) • GEPI-WT (718)

CUTGRIP

PHSR/L

External Machining Holders
for Swiss-Type and
Automatic Machines



Designation	CWN(1)	CWX(2)	CUTDIA(3)	H	HF	B	OAL	WF	h3	LH	HBH	WB		
PHSR/L 10-2.4	2.40	3.18	20.0	10.0	10.0	10.0	150.00	9.00	8.0	18.0	2.0	1.90	SR 16-236 P	T-15/3
PHSR/L 12-2.4	2.40	3.18	25.0	12.0	12.0	12.0	150.00	11.10	7.0	20.0	-	1.90	SR 16-236 P	T-15/3
PHSR/L 16-2.4	2.40	3.18	32.0	16.0	16.0	16.0	150.00	15.10	8.0	24.1	-	1.90	SR 16-236 P	T-15/3

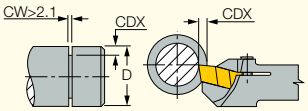
- CDX=Max depth capacity, see chart below • For user guide, see pages 475-492

(1) Minimum cutting width
(2) Maximum cutting width
(3) Limited by part diameter

For inserts, see pages: GDMW 2.4 (339)
For holders, see pages: SBTH-JHP (421)

Grooving Depth

Grooving Depth CDX per
Diameter for Width > 2.1 mm



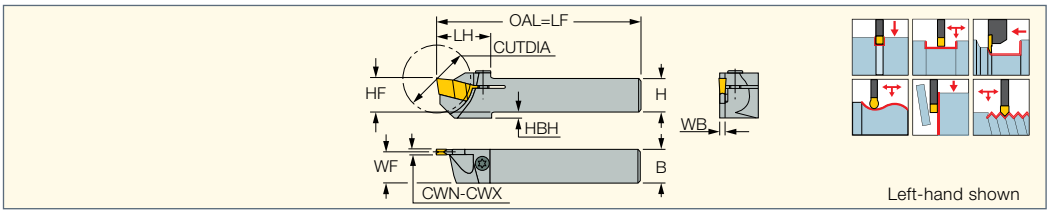
Tmax	5.0	4.5	4.0	3.5	3.0	2.5	2.3	2.0	1.7
D	10.5	10.8	11.5	12.6	14.5	17	20	25	34

Tmax is also limited by insert

CUTGRIP

GHSR/L

External Grooving and Turning Holders for Swiss-Type and Automatic Machines



Designation	CWN(1)	CWX(2)	CUTDIA(3)	H	HF	B	OAL	WF	LH	HBH	WB		
GHSR/L 10-2	2.20	3.15	20.0	10.0	10.0	10.0	120.00	9.10	18.0	2.0	1.80	SR 16-236 P	T-15/3
GHSR/L 12-2	2.20	3.15	25.0	12.0	12.0	12.0	120.00	11.10	20.0	2.0	1.80	SR 16-236 P	T-15/3
GHSR/L 14-2	2.20	3.15	26.0	14.0	14.0	14.0	120.00	13.10	20.0	-	1.80	SR 16-236 P	T-15/3
GHSR/L 16-2	2.20	3.15	32.0	16.0	16.0	16.0	120.00	15.10	26.0	-	1.80	SR 16-212	T-20/3

- When using GIVR/L inserts, tool holder's seat needs to be modified
- For user guide, see pages 475-492

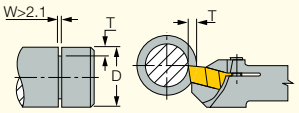
(1) Minimum cutting width
(2) Maximum cutting width
(3) For CW>2.1 mm: grooving depth depends on part diameter

For inserts, see pages: GIG (326) • GIM-J (587) • GIM-J-RA/LA (588) • GIMT (316) • GIMY (318) • GIMY (full radius) (320) • GIMY-F (321) • GIP (327) • GIP (full radius CW<BW) (326) • GIP (full radius) (327) • GIP-E (323) • GIP-E (full radius) (325) • GIPA (full radius W=3-6) (333) • GIPA (W=3-6) (332) • GIPM-A46 / GIP-1250 (430) • GIPY (331) • GITM (330) • GITM (full radius) (331) • GIVR/L (316) • TIP-MT (727) • TIP-P-BSPT (768) • TIP-P-BSW (759) • TIP-P-ISO (743) • TIP-P-NPT (763) • TIP-P-UN (753) • TIP-WT (718)

For holders, see pages: SBTH-JHP (421)

Grooving Depth

Grooving Depth Tmax per Diameter for Width > 2.1 mm



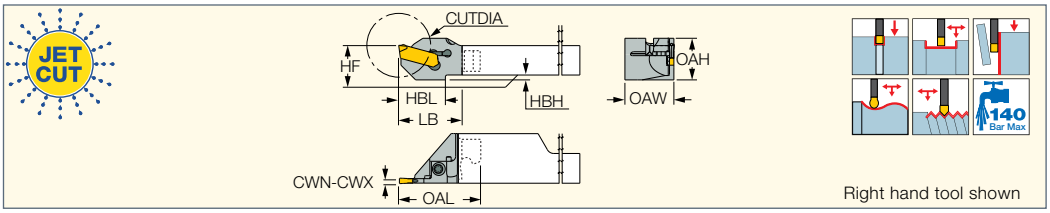
Tmax	5.0	4.5	4.0	3.5	3.0	2.5	2.3	2.0	1.7
D	10.5	10.8	11.5	12.6	14.5	17	20	25	34

Tmax is also limited by insert

NEOSWISS

NQCH-GHSR/L-JHP

Screw Lock JETCUT Modular Heads Carrying CUTGRIP Inserts for Grooving and Turning on Swiss-Type Machines



Designation	HF	OAW	LB	OAH	HBH	OAL	HBL	CWN(2)	CWX(3)	CUTDIA	Insert
NQCH12-GHSR/L-2-JHP	12.0	20.00	26.00	17.00	2.0	32.80	24.0	2.20	3.00	25.0	GIP 2
NQCH12R-GHSL-2-JHP (1)	12.0	20.00	26.00	17.00	2.0	32.80	24.0	2.20	3.00	25.0	GIP 2
NQCH16-GHSR/L-2-JHP	16.0	20.00	26.00	19.00	2.0	32.80	24.0	2.20	3.00	25.0	GIP 2
NQCH16R-GHSL-2-JHP (1)	16.0	20.00	26.00	19.00	2.0	32.80	24.0	2.20	3.00	25.0	GIP 2

- Use only RH Shank with RH Head and LH Shank with LH Head exept NQCH12R/16R... heads.
- When using GIVR/L inserts, tool holder's seat needs to be modified

(1) The head is dedicated for the right hand machines and to be mounted on the right hand holder only.
(2) Minimum cutting width
(3) Maximum cutting width

For inserts, see pages: GIG (326) • GIM-J (587) • GIM-J-RA/LA (588) • GIMT (316) • GIMY (318) • GIMY (full radius) (320) • GIMY-F (321) • GIP (327) • GIP (full radius CW<BW) (326) • GIP (full radius) (327) • GIP-E (323) • GIP-E (full radius) (325) • GIPA (full radius W=3-6) (333) • GIPA (W=3-6) (332) • GIPM-A46 / GIP-1250 (430) • GIPY (331) • GITM (330) • GITM (full radius) (331) • GIVR/L (316) • TIP-MT (727) • TIP-P-BSPT (768) • TIP-P-BSW (759) • TIP-P-ISO (743) • TIP-P-NPT (763) • TIP-P-UN (753) • TIP-WT (718)

For holders, see pages: NQCH-JHP (424)

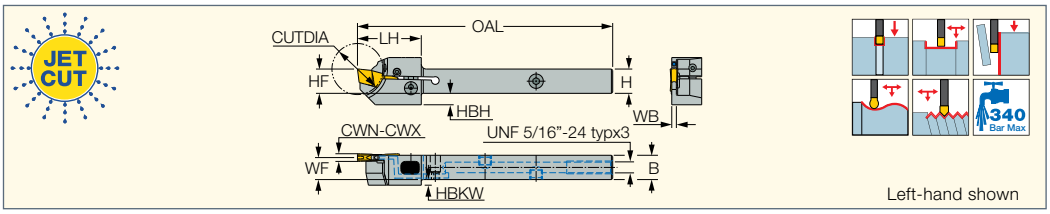
Spare Parts

Designation		
NQCH-GHSR/L-JHP	SR 16-236 P	T-15/3

CUTGRIP

GHSR/L-JHP-SL

Grooving and Turning Side Lock Tools with Channels for High-Pressure Coolant on Swiss-Type and Automatic Machines



Designation	CWN(1)	CWX(2)	H	B	CUTDIA(3)	OAL	LH	WF	HBKW	WB	HF
GHSR/L 10-2-JHP-SL	2.20	3.00	10.0	10.0	20.0	100.00	25.0	9.10	2.2	1.80	10.0
GHSL 12-2-JHP-SL	2.20	3.00	12.0	12.0	25.0	100.00	25.0	11.10	-	1.80	12.0
GHSR 12-2-JHP-SL	2.20	3.00	12.0	12.0	25.0	100.00	25.0	11.10	-	0.00	12.0
GHSR/L 16-2-JHP-SL	2.20	3.00	16.0	16.0	25.0	120.00	27.0	15.10	-	1.80	16.0
GHSR/L 12-3-JHP-SL	2.80	4.00	12.0	12.0	25.0	100.00	25.0	10.80	-	2.40	12.0
GHSR/L 16-3-JHP-SL	2.80	4.00	16.0	16.0	25.0	120.00	27.0	14.80	-	2.40	16.0

• When using GIVR/L inserts, tool holder's seat needs to be modified • For user guide and accessories, see pages 475-492

(1) Minimum cutting width

(2) Maximum cutting width

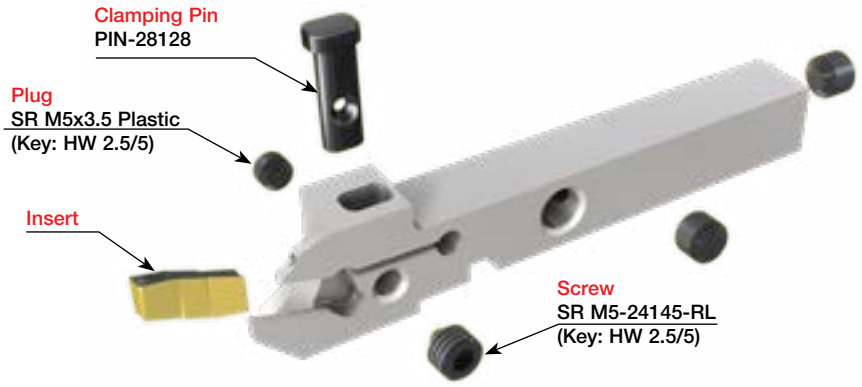
(3) Maximum workpiece diameter for grooving operation

For inserts, see pages: GIF (328) • GIF-E (W=4-6) (322) • GIG (326) • GIM-J (587) • GIM-J-RA/LA (588) • GIMT (316) • GIMY (318) • GIMY (full radius) (320) • GIMY-F (321) • GIP (327) • GIP (full radius CW<BW) (326) • GIP (full radius) (327) • GIP-E (323) • GIP-E (full radius) (325) • GIPA (full radius W=3-6) (333) • GIPA (W=3-6) (332) • GIPM-A46 / GIP-1250 (430) • GIPY (331) • GITM (330) • GITM (full radius) (331) • GIVR/L (316) • TIP-MT (727) • TIP-P-BSPT (768) • TIP-P-BSW (759) • TIP-P-ISO (743) • TIP-P-NPT (763) • TIP-P-UN (753) • TIP-WT (718)

For holders, see pages: SBTH-JHP (421)

Flow Rate vs. Pressure

Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
GHSR/L...-JHP-SL	4-6	7-9	9-11



Spare Parts

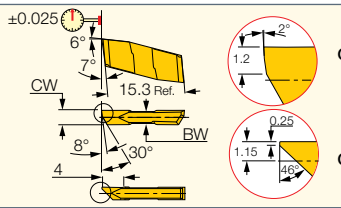
Designation						
GHSL 10-2-JHP-SL	PIN-28128 INJ	SR M5-24145-RL	SR M5X3.5PL	HW 2.5/5	SR 5/16UNF TL360	HW 5/32"
GHSR 10-2-JHP-SL	PIN-28128 INJ	SR M5-24145	SR M5X3.5PL	HW 2.5/5	SR 5/16UNF TL360	HW 5/32"
GHSR/L 12-2-JHP-SL	PIN-28128 INJ	SR M5-24145-RL	SR M5X3.5PL	HW 2.5/5	SR 5/16UNF TL360	HW 5/32"
GHSR/L 16-2-JHP-SL	PIN-28128 INJ	SR M5-24145-RL	SR M5X3.5PL	HW 2.5/5	SR 5/16UNF TL360	HW 5/32"
GHSR/L 12-3-JHP-SL	PIN-28128 INJ	SR M5-24145-RL	SR M5X3.5PL	HW 2.5/5	SR 5/16UNF TL360	HW 5/32"
GHSR/L 16-3-JHP-SL	PIN-28128 INJ	SR M5-24145-RL	SR M5X3.5PL	HW 2.5/5	SR 5/16UNF TL360	HW 5/32"

CUTGRIP

GIPM-A46 / GIP-1250

Precision Ground Back Turning Inserts for External Machining on Swiss-Type and Automatic Machines





Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	Tough ↔ Hard IC328	IC908	IC20	Recommended Machining Data a_p (mm)	f turn (mm/rev)
GIPM 2.35-A46R/L	2.35	0.05	0.050	0.030	2.20	●	●		0.10-1.00	0.02-0.15
GIP 3.00-1250R/L	3.00	0.00	0.050	0.030	2.40	●		●	0.10-1.00	0.02-0.15

• Toolholder seat needs to be modified according to insert profile to ensure clearance • For grooving, reduce cutting speed by 30% and feed by 50% • For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

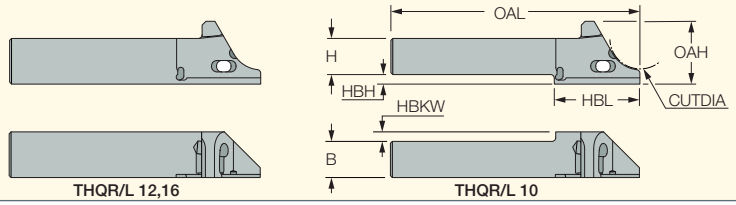
(2) Corner radius tolerance (+/-)

For tools, see pages: C#-GHDR/L (301) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-S (309) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300) • GHSR/L (428) • GHSR/L-JHP-SL (429) • NQCH-GHSR/L-JHP (428)

SWISSGRIP NARROW WIDTHS

THQR/L

Parting and Grooving Holder for a SELF-GRIP Mini Blades (SGAQ), Suitable for Swiss-Type Machines

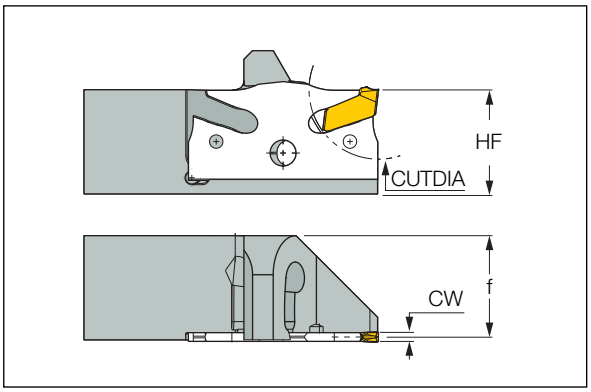


Designation	H	OAL	HF	OAH	HBL	HBH	CUTDIA	HBKW	B
THQR/L 10-D16	10.0	100.00	10.0	16.50	22.6	2.0	16.0	2.00	10.0
THQR/L 12-D16	12.0	100.00	12.0	16.50	-	-	16.0	-	12.0
THQR/L 16-D16	16.0	100.00	16.0	20.50	-	-	16.0	-	16.0

For tools, see pages: SGAQ (431)

Designation	CW	CUTDIA	f
THQL/R 10-D16 + SGAQ 0.6	0.6	10	9.68
THQL/R 10-D16 + SGAQ 0.8	0.8	10	9.68
THQL/R 12-D16 + SGAQ 0.6	0.6	10	11.68
THQL/R 12-D16 + SGAQ 0.8	0.8	10	11.68
THQL/R 16-D16 + SGAQ 0.6	0.6	10	15.68
THQL/R 16-D16 + SGAQ 0.8	0.8	10	15.68

Designation	CW	CUTDIA	f
THQL/R 10-D16 + SGAQ 1.0	1	16	9.60
THQL/R 10-D16 + SGAQ 1.2	1.2	16	9.68
THQL/R 12-D16 + SGAQ 1.0	1	16	11.60
THQL/R 12-D16 + SGAQ 1.2	1.2	16	11.68
THQL/R 16-D16 + SGAQ 1.0	1	16	15.60
THQL/R 16-D16 + SGAQ 1.2	1.2	16	15.68



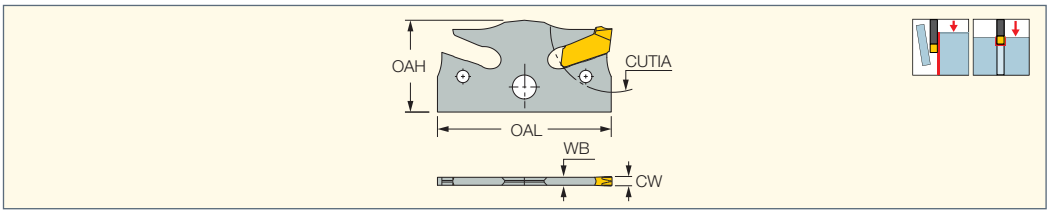
Spare Parts

Designation	
THQR/L	ESG-SWISS 0.6-1.2

SWISSGRIP NARROW WIDTHS

SGAQ

SELF-GRIP Mini Blades for Parting and Grooving, Suitable for Swiss-Type Machines



Designation	OAH	OAL	CUTDIA	WB	CW	MIID[1]	
SGAQ D10-0.6	11.50	21.80	10.0	0.50	0.60	GFT 0.6J-0.1	ESG-SLM*
SGAQ D10-0.8	11.50	21.80	10.0	0.68	0.80	GFT 0.8J-0.1	ESG-SLM*
SGAQ D16-1.0	11.50	21.80	16.0	0.85	1.00	GFT 1.0J-0.1	ESG-SLM*
SGAQ D16-1.2	11.50	21.80	16.0	1.00	1.20	GFT 1.2J-0.14	ESG-SLM*

- For user guide, see pages 475-492

(1) Master insert identification

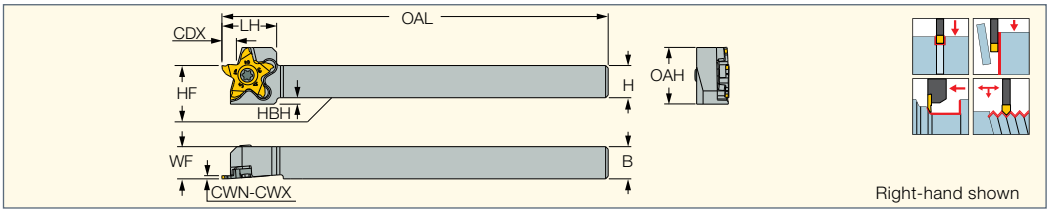
* Optional, to be ordered separately

For inserts, see pages: GFT-J (585)
For holders, see pages: THQR/L (430)

PENTACUT

PCHRS/LS-17

Tools Carrying Inserts with 5 Cutting Edges for Grooving, Parting and Recessing Next to High Shoulders



Designation	H	B	CWN[1]	CWX[2]	WF	OAL	LH	HBH	OAH	CDX	HF
PCHR/LS 0810-17	8.0	10.0	0.25	3.18	10.00	120.00	17.0	4.0	13.60	4.00	8.0
PCHR/LS 10-17	10.0	10.0	0.25	3.18	10.00	120.00	17.0	2.0	15.60	4.00	10.0
PCHR/LS 12-17	12.0	12.0	0.25	3.18	12.00	120.00	17.0	-	17.60	4.00	12.0
PCHR/LS 16-17	16.0	16.0	0.25	3.18	16.00	120.00	17.0	-	21.60	4.00	16.0
PCHR/LS 20-17	20.0	20.0	0.25	3.18	20.00	120.00	17.0	-	25.60	4.00	20.0
PCHR/LS 25-17	25.0	25.0	0.25	3.18	25.00	120.00	17.0	-	30.60	4.00	25.0

- Use right-hand inserts on right-hand tools and vice versa

(1) Minimum cutting width

(2) Maximum cutting width

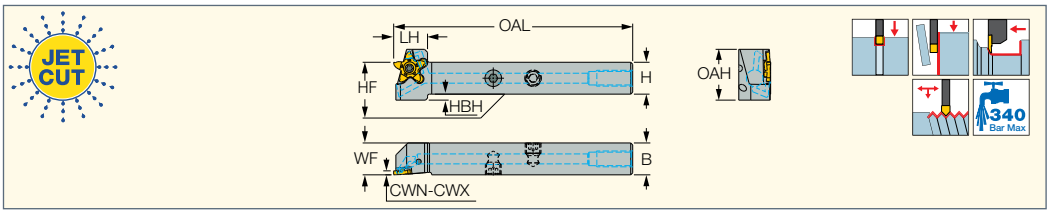
For inserts, see pages: PENTA 17-ER/EL (344) • PENTA 17-MT-RS/LS (438) • PENTA 17-NP-RS/LS (344) • PENTA 17-NX-RS (345) • PENTA 17-P-RS/LS (341) • PENTA 17-P-RS/LS (full radius) (343) • PENTA 17-WT-RS/LS (438) • PENTA 17R/L-P-RS (342)
For holders, see pages: SBTH-JHP (421)

Spare Parts

Designation		
PCHLS 0810-17	SR M4-39432	T-1508/5
PCHRS 0810-17	SR M4-39432L	T-1508/5
PCHLS 10-17	SR M4-39432	T-1508/5
PCHRS 10-17	SR M4-39432L	T-1508/5
PCHLS 12-17	SR M4-39432	T-1508/5
PCHRS 12-17	SR M4-39432L	T-1508/5
PCHLS 16-17	SR M4-39432	T-1508/5
PCHRS 16-17	SR M4-39432L	T-1508/5
PCHLS 20-17	SR M4-39432	T-1508/5
PCHRS 20-17	SR M4-39432L	T-1508/5
PCHLS 25-17	SR M4-39432	T-1508/5
PCHRS 25-17	SR M4-39432L	T-1508/5

PENTACUT

PCHRS/LS-17-JHP
Tools Carrying Inserts with 5 Cutting Edges for Shallow Profiling Next to High Shoulders



Designation	H	B	WF	OAL	LH	HBH	HF	OAH	CDX
PCHR/LS 10-17-JHP	10.0	10.0	10.00	100.00	17.0	8.0	10.0	24.50	4.00
PCHR/LS 12-17-JHP	12.0	12.0	12.00	100.00	17.0	6.0	12.0	24.50	4.00
PCHR/LS 16-17-JHP	16.0	16.0	16.00	120.00	17.0	3.0	16.0	25.50	4.00
PCHR/LS 20-17-JHP	20.0	20.0	20.00	120.00	17.0	-	20.0	26.50	4.00
PCHR/LS 25-17-JHP	25.0	25.0	25.00	120.00	17.0	-	25.0	31.50	4.00

- Use right-hand inserts on right-hand tools and vice versa

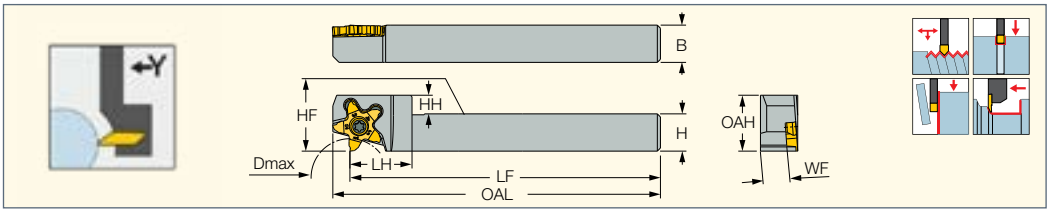
For inserts, see pages: PENTA 17-ER/EL (344) • PENTA 17-MT-RS/LS (438) • PENTA 17-NP-RS/LS (344) • PENTA 17-NX-RS (345) • PENTA 17-P-RS/LS (341) • PENTA 17-P-RS/LS (full radius) (343) • PENTA 17-WT-RS/LS (438) • PENTA 17R/L-P-RS (342) • PENTA 17R/L-SP-RS (342)

Spare Parts

Designation				
PCHLS 10-17-JHP	SR M4-39432	T-1508/5	HW 5/32"	SR 5/16UNF TL360
PCHRS 10-17-JHP	SR M4-39432L	T-1508/5	HW 5/32"	SR 5/16UNF TL360
PCHLS 12-17-JHP	SR M4-39432	T-1508/5	HW 5/32"	SR 5/16UNF TL360
PCHRS 12-17-JHP	SR M4-39432L	T-1508/5	HW 5/32"	SR 5/16UNF TL360
PCHLS 16-17-JHP	SR M4-39432	T-1508/5	HW 5/32"	SR 5/16UNF TL360
PCHRS 16-17-JHP	SR M4-39432L	T-1508/5	HW 5/32"	SR 5/16UNF TL360
PCHLS 20-17-JHP	SR M4-39432	T-1508/5	HW 5.0	PLG G1/8 TL360
PCHRS 20-17-JHP	SR M4-39432L	T-1508/5	HW 5.0	PLG G1/8 TL360
PCHLS 25-17-JHP	SR M4-39432	T-1508/5		
PCHRS 25-17-JHP	SR M4-39432L	T-1508/5		

NEOYSWISS AXIS

Y-PCHRS-17
Y-Axis Screw Lock Integral Tools Carrying 5 Edged Inserts for Grooving, Parting, and Recessing on Swiss-Type Machines



Designation	H	B	HH	LH	HF	WF	OAH	LF	OAL	D max(1)
Y-PCHRS 12-17	12.0	12.0	6.0	20.0	12.0	8.60	18.00	100.00	105.50	25.0 (2)
Y-PCHRS 16-17	16.0	16.0	2.0	20.0	16.0	12.30	18.00	125.00	130.50	38.0 (2)

- Use right-hand inserts on right-hand tools and vice versa

(1) Maximum workpiece diameter for grooving operation

(2) for grooving

For inserts, see pages: PENTA 17-ER/EL (344) • PENTA 17-MT-RS/LS (438) • PENTA 17-NP-RS/LS (344) • PENTA 17-NX-RS (345) • PENTA 17-P-RS/LS (341) • PENTA 17-P-RS/LS (full radius) (343) • PENTA 17-WT-RS/LS (438) • PENTA 17R/L-P-RS (342)

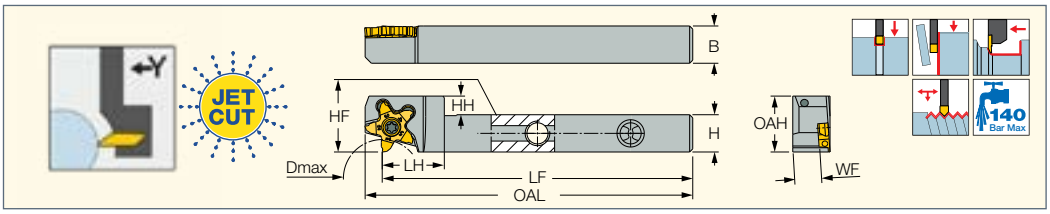
Spare Parts

Designation		
Y-PCHRS-17	SR M4-39432L	T-1508/5

NEOYSWISS AXIS

Y-PCHRS-17-JHP

Y-Axis Screw Lock JETCUT Integral Tools for 5 Edged Inserts for Grooving, Parting, and Recessing on Swiss-Type Machines



Designation	H	B	HH	LH	HF	WF	OAH	LF	OAL	D max(1)
Y-PCHRS 12-17-JHP	12.0	12.0	6.0	20.0	12.0	8.60	18.00	100.00	105.50	25.0 (2)
Y-PCHRS 16-17-JHP	16.0	16.0	2.0	20.0	16.0	12.30	18.00	125.00	130.50	38.0 (2)

- Use right-hand inserts on right-hand tools and vice versa

(1) Maximum workpiece diameter for grooving operation

(2) for grooving

For inserts, see pages: PENTA 17-ER/EL (344) • PENTA 17-MT-RS/LS (438) • PENTA 17-NP-RS/LS (344) • PENTA 17-NX-RS (345) • PENTA 17-P-RS/LS (341) • PENTA 17-P-RS/LS (full radius) (343) • PENTA 17-WT-RS/LS (438) • PENTA 17R/L-P-RS (342)

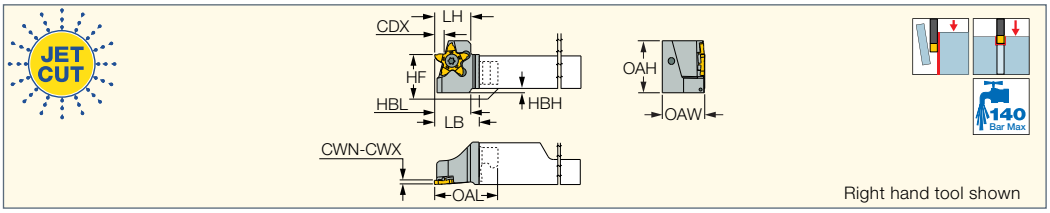
Spare Parts

Designation				
Y-PCHRS-17-JHP	SR M4-39432L	T-1508/5	HW 5/32"	SR 5/16UNF TL360

NEOSWISS

NQCH-PCHR/L-S-JHP

Screw Lock JETCUT Modular Heads Carrying PENTA Inserts for Grooving, Parting, and Recessing on Swiss-Type Machines



Designation	HF	OAW	LB	OAH	HBH	LH	OAL	HBL	CWN(2)	CWX(3)	CDX	Insert
NQCH12-PCHR/LS-17-JHP	12.0	20.00	21.00	24.40	6.0	17.0	29.80	17.0	0.25	3.18	4.00	PENTA 17
NQCH12R-PCHLS-17-JHP (1)	12.0	20.00	21.00	24.40	6.0	17.0	29.80	17.0	0.25	3.18	4.00	PENTA 17
NQCH16-PCHR/LS-17-JHP	16.0	20.00	21.00	24.50	2.0	17.0	29.80	17.0	0.25	3.18	4.00	PENTA 17
NQCH16R-PCHLS-17-JHP (1)	16.0	20.00	21.00	24.50	2.0	17.0	29.80	17.0	0.25	3.18	4.00	PENTA 17

- Use only RH Shank with RH Head and LH Shank with LH Head exept NQCH12R/16R... heads.

(1) The head is dedicated for the right hand machines and to be mounted on the right hand holder only.

(2) Minimum cutting width

(3) Maximum cutting width

For inserts, see pages: PENTA 17-ER/EL (344) • PENTA 17-MT-RS/LS (438) • PENTA 17-NP-RS/LS (344) • PENTA 17-NX-RS (345) • PENTA 17-P-RS/LS (341) • PENTA 17-P-RS/LS (full radius) (343) • PENTA 17-WT-RS/LS (438) • PENTA 17R/L-P-RS (342)

For holders, see pages: NQCH-JHP (424)

Spare Parts

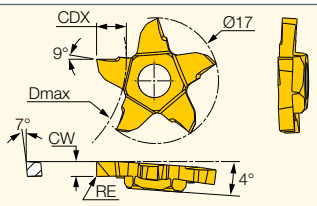
Designation		
NQCH12-PCHLS-17-JHP	SR M4-39432	T-1508/5
NQCH12-PCHRS-17-JHP	SR M4-39432L	T-1508/5
NQCH12R-PCHLS-17-JHP	SR M4-39432	T-1508/5
NQCH16-PCHLS-17-JHP	SR M4-39432	T-1508/5
NQCH16-PCHRS-17-JHP	SR M4-39432L	T-1508/5
NQCH16R-PCHLS-17-JHP	SR M4-39432	T-1508/5

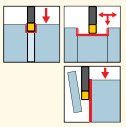
PENTACUT

PENTA 17-NP-RS/LS

Pentagonal Inserts for Precision Grooving and Turning Next to High Shoulder Applications







Designation	Dimensions CW	CWTOL(1)	RE	RETOL(2)	CDX	D max(3)	IC1008	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
PENTA 17-100NP08R/LS	1.00	0.020	0.08	0.020	3.00	32.0 (4)	●	0.05-0.70	0.02-0.06	0.03-0.06
PENTA 17-200NP08R/LS	2.00	0.020	0.08	0.020	4.00	32.0 (4)	●	0.05-2.50	0.05-0.15	0.05-0.09
PENTA 17-300NP08R/LS	3.00	0.020	0.08	0.020	4.00	32.0 (4)	●	0.05-3.10	0.05-0.19	0.05-0.11

• When turning to the opposite side of chipformer, maximum CDX is 0.5 mm • For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

(3) Maximum workpiece diameter for grooving operation

(4) for grooving

For tools, see pages: NQCH-PCHR/L-S-JHP (433) • PCADRS/LS-JHP (354) • PCHRS/LS-17 (339) • PCHRS/LS-17-JHP (340) • Y-PCHRS-17 (340) • Y-PCHRS-17-JHP (341)

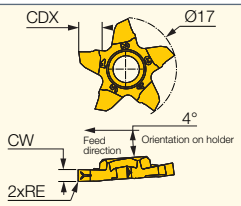
Designation	Dimensions CW	RE	CDX	Dmax as a function of depth of cut (CDX) CDX≤2.5	CDX≤3.0	CDX≤3.5	CDX≤3.8	CDX≤4.0
PENTA 17-100NP08-R/LS	1.00	0.08	3.00	N.L.	100	-	-	-
PENTA 17-200NP08-R/LS	2.00	0.08	4.00	N.L.	100	75	45	32
PENTA 17-300NP08-R/LS	3.00	0.08	4.00	N.L.	100	75	45	32

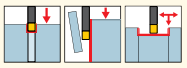
PENTACUT

PENTA 17-NX-RS

Pentagonal Inserts for Precision Grooving and Parting Off for Next to Shoulder Applications







Designation	Dimensions CW	CWTOL(1)	RE	RETOL(2)	CDX	IC1008	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
PENTA 17N150NX080RS	1.50	0.020	0.08	0.020	4.00	●	0.05-1.80	0.02-0.11	0.02-0.07
PENTA 17N200NX080RS	2.00	0.020	0.08	0.020	4.00	●	0.05-2.50	0.03-0.15	0.03-0.09
PENTA 17N250NX080RS	2.50	0.020	0.08	0.020	4.00	●	0.05-3.10	0.03-0.19	0.03-0.11

NEW

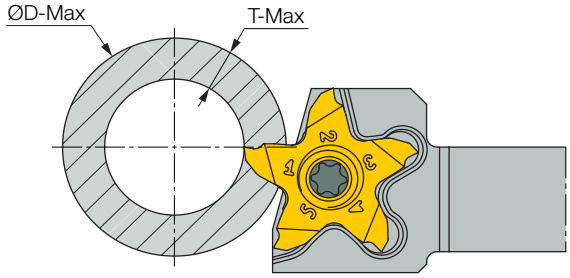
• For cutting speed recommendations and user guide, see pages 475-492

(1) Cutting width tolerance (+/-)

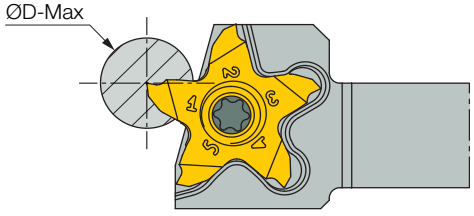
(2) Corner radius tolerance (+/-)

For tools, see pages: NQCH-PCHR/L-S-JHP (433) • PCADRS/LS-JHP (354) • PCHRS/LS-17 (339) • PCHRS/LS-17-JHP (340) • Y-PCHRS-17 (340) • Y-PCHRS-17-JHP (341)

Grooving & Parting hollow bars



Parting to center



PENTA 17...NX...RS - Precision Grooving & Parting Inserts

Designation	CW	RE	T-Max	D-Max as a Function of Depth of Cut (T) T ≤ 2.3	T ≤ 2.5	T ≤ 3.0	T ≤ 3.5	T ≤ 3.8	T ≤ 4.0	Parting to Center D-Max
PENTA 17N150NX080RS	1.5	0.08	4.0	N.L.	400	100	55	32	25	8
PENTA 17N200NX080RS	2.0									
PENTA 17N250NX080RS	2.5									

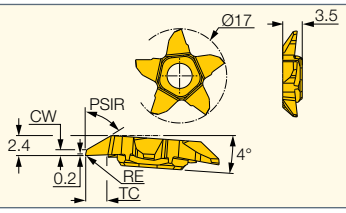
1. N.L. = NO LIMIT
2. * - For precision grooving Dmax = N.L.
3. PENTA 17...RS to be clamped on PCHRS ...-17 holders

PENTACUT

PENTA 17-ER/EL

Back Turning Pentagonal Inserts for Short Chipping Materials







Designation	Dimensions CW	RE	PSIR	Tc	IC1008	Recommended Machining Data a_p (mm)	f turn (mm/rev)
PENTA 17EL00-07K0LS	0.70	0.00	60.0	4.0	●	0.05-2.50	0.01-0.15
PENTA 17ER00-07K0RS	0.70	0.00	60.0	4.0	●	0.05-2.50	0.01-0.15
PENTA 17EL08-07K0LS	0.70	0.08	60.0	4.0	●	0.05-2.50	0.01-0.15
PENTA 17ER08-07K0RS	0.70	0.08	60.0	4.0	●	0.05-2.50	0.01-0.15

- For cutting speed recommendations and user guide, see pages 475-492

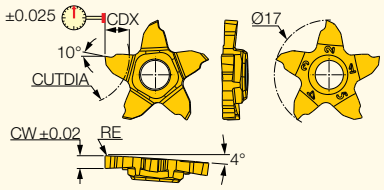
For tools, see pages: NQCH-PCHR/L-S-JHP (433) • PCHRS/LS-17 (339) • PCHRS/LS-17-JHP (340) • Y-PCHRS-17 (340) • Y-PCHRS-17-JHP (341)

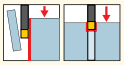
PENTACUT

PENTA 17-P-RS/LS

Pentagonal Inserts for Grooving and Parting Soft Materials, Thin Walled and Miniature Parts







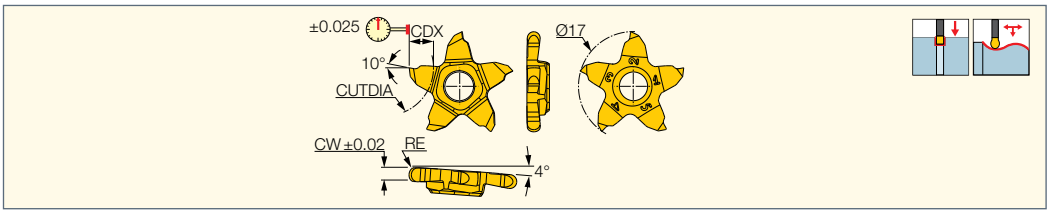
Designation	Dimensions CW	RE	CDX	CUTDIA	IC1008	Recommended Machining Data f groove (mm/rev)
PENTA 17N025P000R/LS	0.25	0.00	0.60	1.2	●	0.02-0.03
PENTA 17N030P000R/LS	0.30	0.00	0.60	1.2	●	0.02-0.03
PENTA 17N033P000R/LS	0.33	0.00	0.60	1.2	●	0.02-0.03
PENTA 17N043P000R/LS	0.43	0.00	1.00	2.0	●	0.02-0.04
PENTA 17N050P000R/LS	0.50	0.00	2.00	4.0	●	0.02-0.04
PENTA 17N075P000R/LS	0.75	0.00	2.50	5.0	●	0.02-0.04
PENTA 17N080P000R/LS	0.80	0.00	2.50	5.0	●	0.02-0.04
PENTA 17N095P000R/LS	0.95	0.00	3.00	6.0	●	0.02-0.05
PENTA 17N100P010R/LS	1.00	0.10	3.00	6.0	●	0.02-0.05
PENTA 17N120P010R/LS	1.20	0.10	3.00	6.0	●	0.02-0.05
PENTA 17N140P010R/LS	1.40	0.10	3.00	6.0	●	0.02-0.05
PENTA 17N150P010R/LS	1.50	0.10	4.00	8.0	●	0.02-0.07
PENTA 17N157P010R/LS	1.57	0.10	4.00	8.0	●	0.02-0.07
PENTA 17N170P010R/LS	1.70	0.10	4.00	8.0	●	0.02-0.07
PENTA 17N178P010R/LS	1.78	0.10	4.00	8.0	●	0.02-0.07
PENTA 17N196P010R/LS	1.96	0.10	4.00	8.0	●	0.02-0.08
PENTA 17N200P010R/LS	2.00	0.10	4.00	8.0	●	0.02-0.08
PENTA 17N222P010R/LS	2.22	0.10	4.00	8.0	●	0.02-0.08
PENTA 17N230P010R/LS	2.30	0.10	4.00	8.0	●	0.02-0.08
PENTA 17N239P010R/LS	2.39	0.10	4.00	8.0	●	0.02-0.08
PENTA 17N247P010R/LS	2.47	0.10	4.00	8.0	●	0.02-0.08
PENTA 17N250P010R/LS	2.50	0.10	4.00	8.0	●	0.02-0.08
PENTA 17N270P010R/LS	2.70	0.10	4.00	8.0	●	0.02-0.09
PENTA 17N287P010R/LS	2.87	0.10	4.00	8.0	●	0.02-0.10
PENTA 17N300P010R/LS	3.00	0.10	4.00	8.0	●	0.02-0.10
PENTA 17N318P010R/LS	3.18	0.10	4.00	8.0	●	0.02-0.10

- For cutting speed recommendations and user guide, see pages 475-492

For tools, see pages: NQCH-PCHR/L-S-JHP (433) • PCADRS/LS-JHP (354) • PCHRS/LS-17 (339) • PCHRS/LS-17-JHP (340) • Y-PCHRS-17 (340) • Y-PCHRS-17-JHP (341)

PENTACUT

PENTA 17-P-RS/LS
(full radius)
Precision Grooving
Pentagonal Full Radius
Inserts for Soft Materials



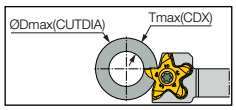
Designation	Dimensions CW	RE	CDX	CUTDIA	IC1008	Recommended Machining Data f groove (mm/rev)
PENTA 17N080P040R/LS	0.80	0.40	2.50	5.0	●	0.02-0.04
PENTA 17N100P050R/LS	1.00	0.50	3.00	6.0	●	0.02-0.05
PENTA 17N157P079R/LS	1.57	0.79	4.00	8.0	●	0.02-0.07
PENTA 17N200P100R/LS	2.00	1.00	4.00	8.0	●	0.02-0.08
PENTA 17N239P120R/LS	2.39	1.20	4.00	8.0	●	0.02-0.08

• For cutting speed recommendations and user guide, see pages 475-492

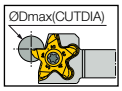
For tools, see pages: NQCH-PCHR/L-S-JHP (433) • PCADRS/LS-JHP (354) • PCHRS/LS-17 (339) • PCHRS/LS-17-JHP (340) • Y-PCHRS-17 (340) • Y-PCHRS-17-JHP (341)

Designation	Dmax as a function of depth of cut (T) W ±0.02	R	Tmax	T<2.3	T<2.5	T<3.0	T<3.5	T<3.8	T<4.0	Parting to center Dmax.
PENTA 17N025P000RS/LS	0.25	0.00	0.6*	---	---	---	---	---	---	1.2
PENTA 17N030P000RS/LS	0.30	0.00	0.6*	---	---	---	---	---	---	1.2
PENTA 17N033P000RS/LS	0.33	0.00	0.6*	---	---	---	---	---	---	1.2
PENTA 17N043P000RS/LS	0.43	0.00	1.0*	---	---	---	---	---	---	2
PENTA 17N050P000RS/LS	0.50	0.00	2.0*	---	---	---	---	---	---	4
PENTA 17N075P000RS/LS	0.75	0.00	2.5	N.L.		---	---	---	---	5
PENTA 17N080P000RS/LS	0.80	0.00	2.5	N.L.		---	---	---	---	
PENTA 17N095P000RS/LS	0.95	0.00		N.L.			---	---	---	
PENTA 17N100P010RS/LS	1.00	0.10		N.L.	400		---	---	---	
PENTA 17N100P050RS/LS	1.00	0.50	3.0	N.L.		100	---	---	---	6
PENTA 17N120P010RS/LS	1.20	0.10		N.L.			---	---	---	
PENTA 17N140P010RS/LS	1.40	0.10		N.L.			---	---	---	
PENTA 17N150P010RS/LS	1.50	0.10		N.L.						
PENTA 17N157P010RS/LS	1.57	0.10		N.L.						
PENTA 17N157P079RS/LS	1.57	0.79		N.L.						
PENTA 17N170P010RS/LS	1.70	0.10		N.L.						
PENTA 17N178P010RS/LS	1.78	0.10		N.L.						
PENTA 17N196P010RS/LS	1.96	0.10		N.L.						
PENTA 17N200P010RS/LS	2.00	0.10		N.L.						
PENTA 17N200P100RS/LS	2.00	1.00		N.L.						
PENTA 17N222P010RS/LS	2.22	0.10	4.0	N.L.	400	100	55	32	20	8
PENTA 17N230P010RS/LS	2.30	0.10		N.L.						
PENTA 17N239P010RS/LS	2.39	0.10		N.L.						
PENTA 17N239P120RS/LS	2.39	1.20		N.L.						
PENTA 17N247P010RS/LS	2.47	0.10		N.L.						
PENTA 17N250P010RS/LS	2.50	0.10		N.L.						
PENTA 17N270P010RS/LS	2.70	0.10		N.L.						
PENTA 17N287P010RS/LS	2.87	0.10		N.L.						
PENTA 17N300P010RS/LS	3.00	0.10		N.L.						
PENTA 17N318P010RS/LS	3.18	0.10		N.L.	400	100	55	32	25	

Parting Hollow Bars



Parting to Center

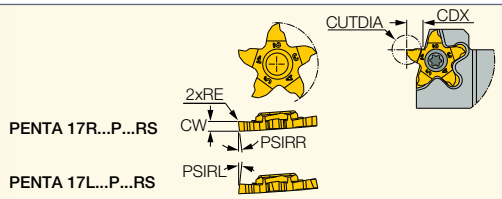


1. N.L. = NO LIMIT
2. *For precision grooving Dmax = N.L.
3. PENTA 17...RS to be clamped on PCHRS ...-17 holders, PENTA 17...LS to be clamped on PCHLS ...-17 holders.

PENTACUT

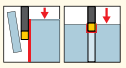
PENTA 17R/L-P-RS
Lead Angle Edge Pentagonal Inserts (5 edges) for Parting Miniature Parts





PENTA 17R...P...RS

PENTA 17L...P...RS



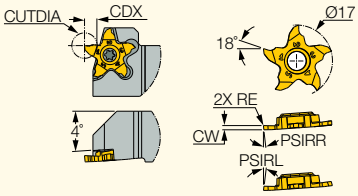
Designation	Dimensions CW	RE	CDX	CUTDIA	PSIRL	PSIRR	IC1008	Recommended Machining Data f groove (mm/rev)
PENTA 17L100P-15D-RS	1.00	0.05	3.00	6.0	15.0	-	●	0.02-0.03
PENTA 17L100P-6D-RS	1.00	0.05	3.00	6.0	6.0	-	●	0.02-0.04
PENTA 17R100P-15D-RS	1.00	0.05	3.00	6.0	-	15.0	●	0.02-0.03
PENTA 17R100P-6D-RS	1.00	0.05	3.00	6.0	-	6.0	●	0.02-0.04
PENTA 17L150P-15D-RS	1.50	0.05	4.00	8.0	15.0	-	●	0.02-0.03
PENTA 17L150P-6D-RS	1.50	0.05	4.00	8.0	6.0	-	●	0.02-0.04
PENTA 17R150P-15D-RS	1.50	0.05	4.00	8.0	-	15.0	●	0.02-0.03
PENTA 17R150P-6D-RS	1.50	0.05	4.00	8.0	-	6.0	●	0.02-0.04
PENTA 17L200P-15D-RS	2.00	0.05	4.00	8.0	15.0	-	●	0.02-0.03
PENTA 17L200P-6D-RS	2.00	0.05	4.00	8.0	6.0	-	●	0.02-0.04
PENTA 17R200P-15D-RS	2.00	0.05	4.00	8.0	-	15.0	●	0.02-0.03
PENTA 17R200P-6D-RS	2.00	0.05	4.00	8.0	-	6.0	●	0.02-0.04

For tools, see pages: NQCH-PCHR/L-S-JHP (433) • PCADRS/LS-JHP (354) • PCHRS/LS-17 (339) • PCHRS/LS-17-JHP (340) • Y-PCHRS-17 (340) • Y-PCHRS-17-JHP (341)

PENTACUT

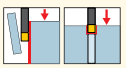
PENTA 17R/L-SP-RS
Pentagonal Inserts (5 edges) with a High Positive Rake for Parting Soft Materials





PENTA 17R...SP...RS

PENTA 17L...SP...RS



Designation	Dimensions CW	RE	CDX	CUTDIA	PSIRL	PSIRR	IC1007	Recommended Machining Data f groove (mm/rev)
PENTA 17L03SP6D-RS	0.30	0.00	0.60	1.2	6.0	-	●	0.02-0.03
PENTA 17R03SP6D-RS	0.30	0.00	0.60	1.2	-	6.0	●	0.02-0.03
PENTA 17L05SP6D-RS	0.50	0.00	2.00	4.0	6.0	-	●	0.02-0.04
PENTA 17R05SP6D-RS	0.50	0.00	2.00	4.0	-	6.0	●	0.02-0.04
PENTA 17L08SP6D-RS	0.80	0.00	2.50	5.0	6.0	-	●	0.02-0.04
PENTA 17R08SP6D-RS	0.80	0.00	2.50	5.0	-	6.0	●	0.02-0.04
PENTA 17L10SP6D-RS	1.00	0.00	3.00	6.0	6.0	-	●	0.02-0.05
PENTA 17R10SP6D-RS	1.00	0.00	3.00	6.0	-	6.0	●	0.02-0.05

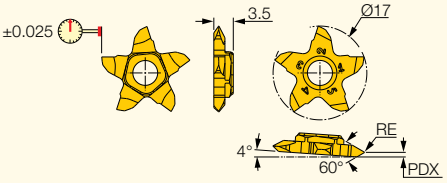
For tools, see pages: PCADRS/LS-JHP (354) • PCHRS/LS-17-JHP (340)

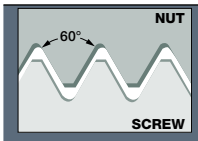
PENTACUT THREADING LINE

PENTA 17-MT-RS/LS

Precision Ground Pentagonal External Threading Inserts with a 60° Partial Profile for General Applications







Designation	Dimensions TPIN(1)	TPIX(2)	TPN(3)	TPX(4)	RE	PDX	IC1008
PENTA 17-MTL008LS	8.00	36.00	0.700	3.000	0.08	1.40	●
PENTA 17-MTR008RS	8.00	36.00	0.700	3.000	0.08	1.40	●
PENTA 17-MTL003LS	17.00	80.00	0.300	1.500	0.03	0.80	●
PENTA 17-MTR003RS	17.00	80.00	0.300	1.500	0.03	0.80	●

• DIN13 , ISO 68-1, ISO 965 (1&2) - External tolerance: 6g • ANSI/ASME B1.1 - External tolerance: 2A

(1) Threads per inch minimum

(2) Threads per inch maximum

(3) Thread pitch minimum (mm)

(4) Thread pitch maximum (mm)

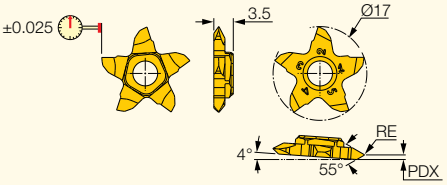
For tools, see pages: NQCH-PCHR/L-S-JHP (433) • PCADRS/LS-JHP (354) • PCHRS/LS-17 (339) • PCHRS/LS-17-JHP (340) • Y-PCHRS-17 (340) • Y-PCHRS-17-JHP (341)

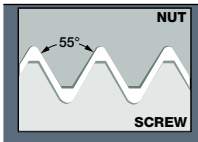
PENTACUT THREADING LINE

PENTA 17-WT-RS/LS

Precision Ground Pentagonal External Threading Inserts with a 55° Partial Profile for General Applications







Designation	Dimensions TPIX(1)	TPIN(2)	RE	PDX	IC1008
PENTA 17-WTL003LS	72.00	16.00	0.03	0.80	●
PENTA 17-WTR003RS	72.00	16.00	0.03	0.80	●
PENTA 17-WTL008LS	31.00	8.00	0.08	1.40	●
PENTA 17-WTR008RS	31.00	8.00	0.08	1.40	●

(1) Threads per inch maximum

(2) Threads per inch minimum

For tools, see pages: NQCH-PCHR/L-S-JHP (433) • PCADRS/LS-JHP (354) • PCHRS/LS-17 (339) • PCHRS/LS-17-JHP (340) • Y-PCHRS-17 (340) • Y-PCHRS-17-JHP (341)

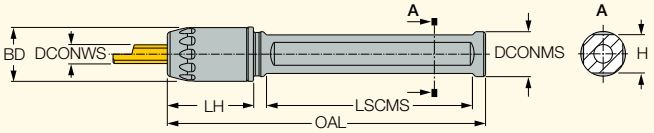
PICCO LINES



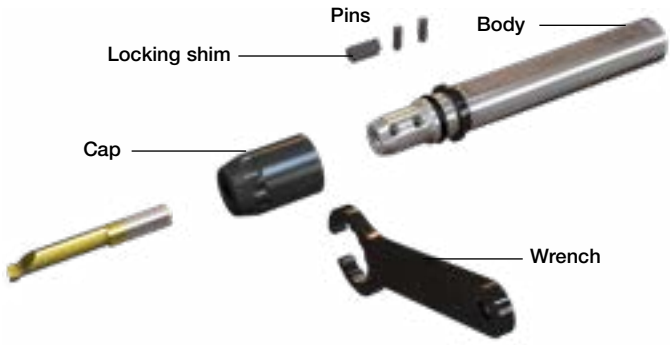
ACECUT PICCOCUT HOLDER

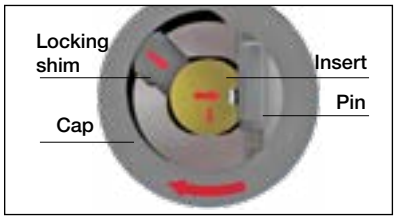
PICCO ACE

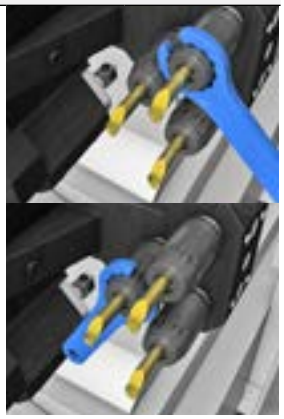
Holders for PICCO-CUT Inserts



Designation	DCONMS	DCONWS	BD	OAL	LH	LSCMS	H		
PICCO ACE 12-4	12.00	4.00	14.50	85.00	23.00	53.00	10.3	PL 16 M6-D5	WRENCH ACE 4-5
PICCO ACE 12-5	12.00	5.00	14.50	85.00	23.00	53.00	10.3	PL 16 M6-D5	WRENCH ACE 4-5
PICCO ACE 16-4	16.00	4.00	14.50	85.00	21.50	53.50	14.0	PL 16 M6-D5	WRENCH ACE 4-5
PICCO ACE 16-5	16.00	5.00	14.50	85.00	21.50	53.00	14.0	PL 16 M6-D5	WRENCH ACE 4-5
PICCO ACE 16-6	16.00	6.00	19.90	85.00	23.00	53.50	14.0	PL 16 M6-D5	WRENCH ACE 6-7
PICCO ACE 16-7	16.00	7.00	19.90	85.00	23.00	53.50	14.0	PL 16 M6-D5	WRENCH ACE 6-7
PICCO ACE 20-4	20.00	4.00	14.50	150.00	21.50	118.00	18.0	PL 16 M6-D5	WRENCH ACE 4-5
PICCO ACE 20-5	20.00	5.00	14.50	150.00	21.50	118.00	18.0	PL 16 M6-D5	WRENCH ACE 4-5
PICCO ACE 20-6	20.00	6.00	19.90	150.00	21.50	118.00	18.0	PL 16 M6-D5	WRENCH ACE 6-7
PICCO ACE 20-7	20.00	7.00	19.90	150.00	21.50	118.00	18.0	PL 16 M6-D5	WRENCH ACE 6-7
PICCO ACE 22-4	22.00	4.00	14.50	150.00	21.50	118.00	20.0	PL 16 M6-D5	WRENCH ACE 4-5
PICCO ACE 22-5	22.00	5.00	14.50	150.00	21.50	118.00	20.0	PL 16 M6-D5	WRENCH ACE 4-5
PICCO ACE 22-6	22.00	6.00	19.90	150.00	21.50	118.00	20.0	PL 16 M6-D5	WRENCH ACE 6-7
PICCO ACE 22-7	22.00	7.00	19.90	150.00	21.50	118.00	20.0	PL 16 M6-D5	WRENCH ACE 6-7
PICCO ACE 25-4	25.00	4.00	14.50	150.00	21.50	118.00	20.0	PL 16 M6-D5	WRENCH ACE 4-5
PICCO ACE 25-5	25.00	5.00	14.50	150.00	21.50	118.00	20.0	PL 16 M6-D5	WRENCH ACE 4-5
PICCO ACE 25-6	25.00	6.00	19.90	150.00	21.50	118.00	20.0	PL 16 M6-D5	WRENCH ACE 6-7
PICCO ACE 25-7	25.00	7.00	19.90	150.00	21.50	118.00	20.0	PL 16 M6-D5	WRENCH ACE 6-7

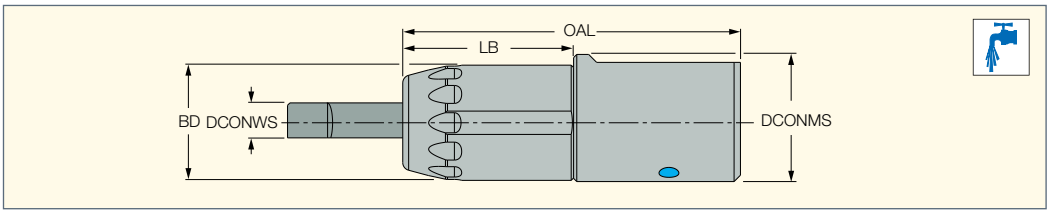






PICCOACE

PICCO ACE-BH
Holders with Short Shanks for ITS BORE System. Tools on which PICCO Inserts are Mounted.



Designation	DCONMS	DCONWS	BD	OAL	LB	
PICCO ACE-BH 16-4	16.00	4.00	14.50	42.50	21.50	WRENCH ACE 4-5
PICCO ACE-BH 16-5	16.00	5.00	14.50	42.50	21.50	WRENCH ACE 4-5
PICCO ACE-BH 16-6	16.00	6.00	19.90	43.50	21.50	WRENCH ACE 6-7
PICCO ACE-BH 16-7	16.00	7.00	19.90	43.50	21.50	WRENCH ACE 6-7

- Holders are suitable for right- and left-hand PICCO inserts

The PICCO-ACE-BH Holders Can Carry a Wide Range of PICCOCUT & PICCOJET Insert Geometries


PICCO 050


PICCO 050C


PICJ 90


PICCO 050 IB55 (CBN)


PICJ CH


PICJ 45

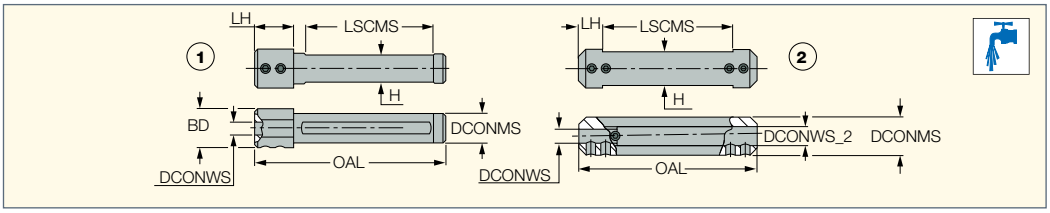

PICCO MF


PICCO 010


PICCO 020

PASSCUT
PICCOCUT HOLDER

PICCO/MG PCO (Holder)
Holders for PICCO-CUT Inserts and Small Diameter Boring Bars

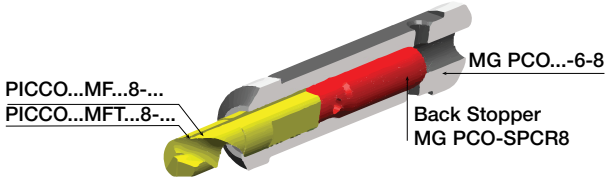


Designation	DCONMS	DCONWS	DCONWS_2	OAL	LH	LSCMS	H	BD	Fig.					
PICCO 12-4-5	12.00	4.00	5.00	75.00	10.00	55.00	10.3	-	2	SR M5X4-PF	HW 2.5		PIN 2X8 ISO2338B	
PICCO 16-4-5	16.00	4.00	5.00	75.00	10.00	55.00	14.0	-	2	SR M5X6-PF	HW 2.5		PIN 2X12 ISO2338B	
PICCO 20-4-5	20.00	4.00	5.00	90.00	10.00	70.00	18.0	-	2	SR M5X6-PF	HW 2.5		PIN 3X16 ISO2338B	
PICCO 22-4-5 (1)	22.00	4.00	5.00	90.00	10.00	70.00	20.0	-	2	SR M5X6-PF	HW 2.5		PIN 3X18 ISO2338B	
PICCO 16-6-7	16.00	6.00	7.00	75.00	10.00	55.00	14.0	-	2	SR M5X6-PF	HW 2.5		PIN 3X12 ISO2338B	
PICCO 20-6-7	20.00	6.00	7.00	90.00	10.00	70.00	18.0	-	2	SR M5X6-PF	HW 2.5		PIN 3X16 ISO2338B	
PICCO 22-6-7 (1)	22.00	6.00	7.00	90.00	10.00	70.00	20.0	-	2	SR M5X6-PF	HW 2.5		PIN 3X18 ISO2338B	
MG PCO-12-6	12.00	6.00	-	75.00	15.00	50.80	11.0	18.00	1	SR M5X6-PF	HW 2.5			
MG PCO-16-6-8	16.00	6.00	8.00	75.00	10.00	55.00	14.0	-	2	SR M5X6-PF	HW 2.5	MG PCO-SPCR8		
MG PCO-20-6-8	20.00	6.00	8.00	90.00	10.00	70.00	18.0	-	2	SR M5X6-PF	HW 2.5	MG PCO-SPCR8		
MG PCO-22-6-8 (1)	22.00	6.00	8.00	90.00	10.00	70.00	20.0	-	2	SR M5X6-PF	HW 2.5	MG PCO-SPCR8		
MG PCO-25-6-8	25.00	6.00	8.00	90.00	10.00	70.00	23.0	-	2	SR M5X6-PF	HW 2.5	MG PCO-SPCR8		
MG PCO-16-9	16.00	9.00	-	75.00	15.00	53.00	15.0	20.00	1	SR M5X6-PF	HW 2.5			PL 16

- Holders are suitable for right- and left-hand inserts, and boring bars

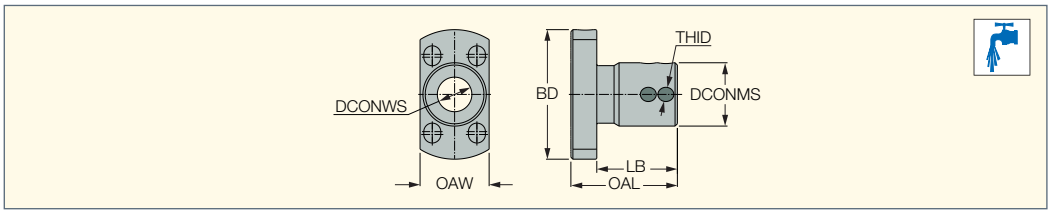
(1) Tools for Swiss-type CNC

For tools, see pages: PICIN-A-SIR/L (466) • PICIN-A-SWUBR/L (465)



QUICKSWISS

SBTH-PICCO
Height-Adjustable Modular Back-End Machining System for Swiss -Type Machines with Round Shank Holders



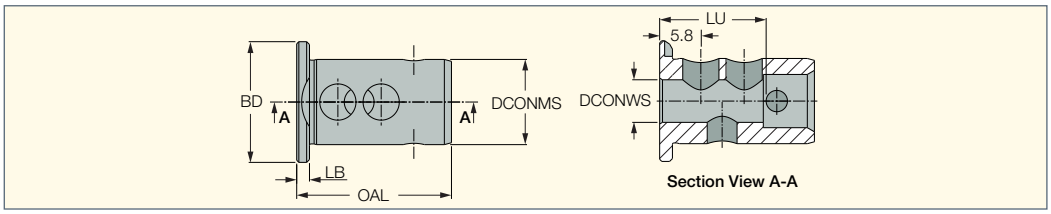
Designation	DCONMS	DCONWS	BD	OAL	LB	OAW	THID
SBTH-PICCO	22.00	12.00	45.00	37.00	28.00	24.00	M5x0.5

Spare Parts

Designation					
SBTH-PICCO	SR M5X0.5X16 DIN913	SBTA-IK-SP1	SBTA-ZEN1	SBTA-QR5.28X1.78	SR M5X0.5X8 DIN913

QUICKSWISS

SC-PICCO
Reduction Sleeves for Round Shank Holders for Modular Back-End Machining System

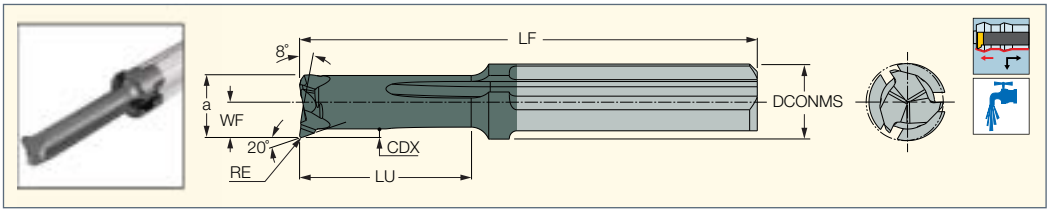


Designation	DCONMS	DCONWS	LSCMS	LU	BD	OAL	LB
SC-12-4-PICCO	12.00	4.00	15.00	15.00	17.00	21.80	1.80
SC-12-5-PICCO	12.00	5.00	15.00	15.00	17.00	21.80	1.80
SC-12-6-PICCO	12.00	6.00	15.00	15.00	17.00	21.80	1.80
SC-12-7-PICCO	12.00	7.00	15.00	15.00	17.00	21.80	1.80
SC-12-8-PICCO	12.00	8.00	15.00	15.00	17.00	21.80	1.80



PICCO 3CUT

PMC R/L
Inserts with Three Cutting Edges for Internal Turning and Chamfering



Designation	Dimensions								IC908
	DCONMS	D min	CDX	LU	RE	LF	a	WF	
PMC R/LT20D30R10-10	4.00	3.00	0.20	9.30	0.10	24.00	2.40	1.35	●
PMC R/LT20D30R10-15	4.00	3.00	0.20	14.30	0.10	29.00	2.40	1.35	●
PMC R/LT20D30R10-20	4.00	3.00	0.20	19.30	0.10	34.00	2.40	1.35	●
PMC R/LT20D40R10-10	4.00	4.00	0.30	9.30	0.10	24.00	3.30	1.85	●
PMC R/LT20D40R10-15	4.00	4.00	0.30	14.30	0.10	29.00	3.30	1.85	●
PMC R/LT20D40R10-20	4.00	4.00	0.30	19.30	0.10	34.00	3.30	1.85	●
PMC R/LT20D40R10-25	4.00	4.00	0.30	24.30	0.10	39.00	3.30	1.85	●
PMC R/LT20D50R15-10	5.00	5.00	0.50	9.30	0.15	25.00	4.00	2.30	●
PMC R/LT20D50R15-20	5.00	5.00	0.50	19.30	0.15	35.00	4.00	2.30	●
PMC R/LT20D50R15-25	5.00	5.00	0.50	24.30	0.15	40.00	4.00	2.30	●
PMC R/LT20D50R15-35	5.00	5.00	0.50	34.30	0.15	50.00	4.00	2.30	●
PMC R/LT20D60R15-15	6.00	6.00	0.50	14.30	0.15	30.00	5.00	2.80	●
PMC R/LT20D60R15-25	6.00	6.00	0.50	24.30	0.15	40.00	5.00	2.80	●
PMC R/LT20D60R15-30	6.00	6.00	0.50	29.30	0.15	45.00	5.00	2.80	●
PMC R/LT20D60R15-40	6.00	6.00	0.50	39.30	0.15	55.00	5.00	2.80	●
PMC R/LT20D70R15-20	7.00	7.00	0.60	19.30	0.15	35.00	5.90	3.30	●
PMC R/LT20D70R15-30	7.00	7.00	0.60	29.30	0.15	45.00	5.90	3.30	●
PMC R/LT20D70R15-40	7.00	7.00	0.60	39.30	0.15	55.00	5.90	3.30	●
PMC R/LT20D70R15-50	7.00	7.00	0.60	49.30	0.15	65.00	5.90	3.30	●

NEW

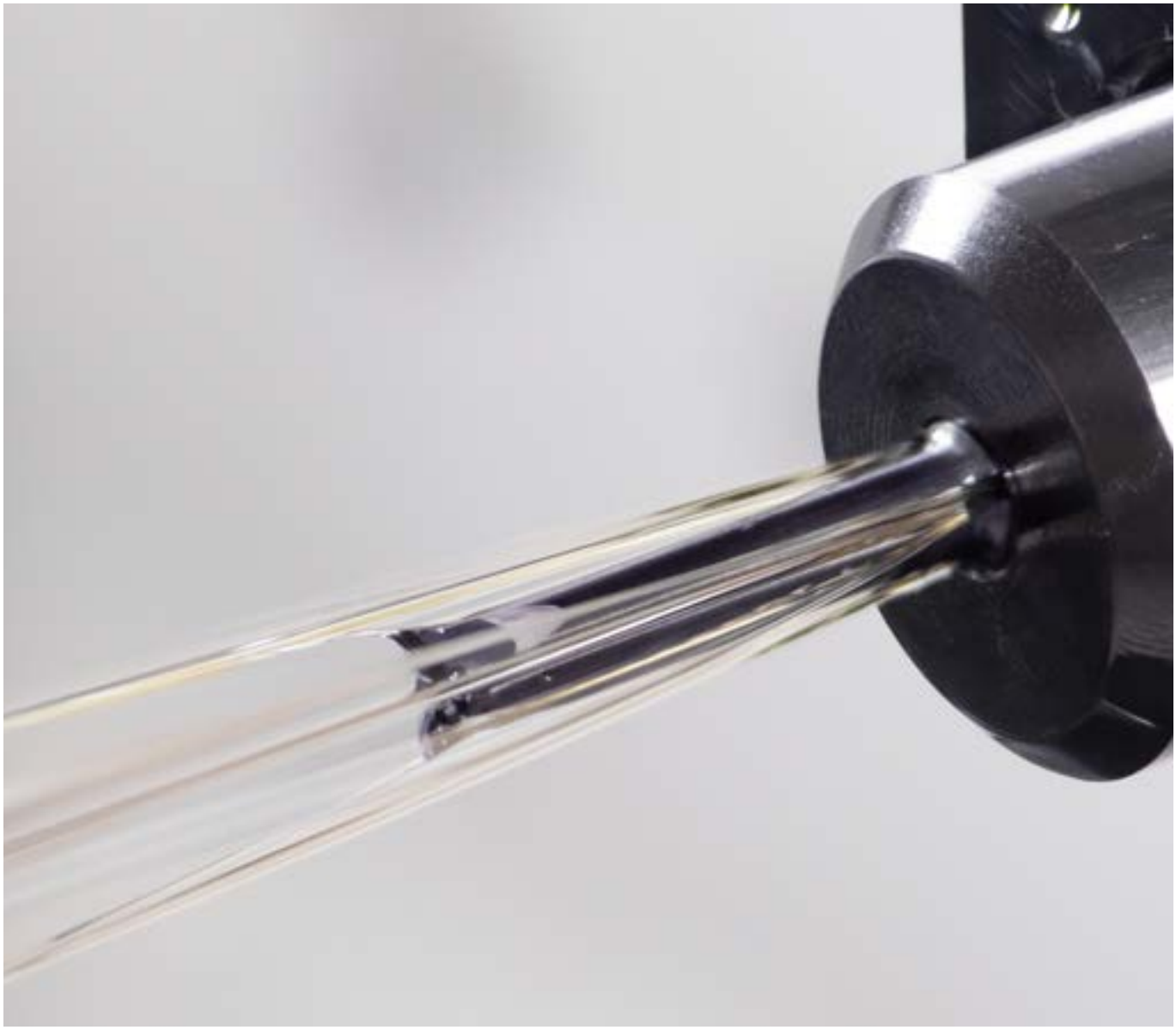
- Specify right- or left-hand bars



PICCOJET - Designation Key Code

PICJ	R	G	20	D60	R15	25	IC908
1	2	3	4	5	6	7	8

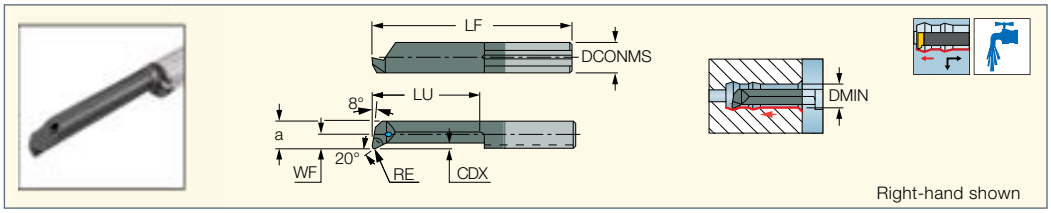
	Turning	Back Turning	Grooving	Profiling	Chamfering / Back Chamfering	Face Groove	Threading
1	PICJ - PICCOJET	PICJ - PICCOJET	PICJ - PICCOJET	PICJ - PICCOJET	PICJ - PICCOJET	PICJ - PICCOJET	PICJ - PICCOJET
2	RH / LH	RH / LH	RH / LH	RH / LH	RH / LH	RH / LH	RH / LH
3	T	BT	G	P	CH / BC	F	TH
4	Cutting Angle		Width	Width	Chamfering angle	Width	Max. Overhang
5	Min. Diameter	Min. Diameter	Min. Diameter	Min. Diameter	Min. Diameter	DAXN	I -ISO/UN(60 °) / W -Whitworth (BSW, BSF, BSP) (55°)
6	Radius size	Radius size	Radius size			Machining depth -CDX	TPN- Pitch minimum/nominal
7	Max. Overhang	Max. Overhang	Max. Overhang	Max. Overhang	Max. Overhang	Max. Overhang	Min. Diameter
8	Grade	Grade	Grade	Grade	Grade	Grade	Grade



PICCOJET
COOLANT THROUGH

PICJ R/LT20

Inserts with Inner Coolant Channel for Internal Turning and Chamfering



Right-hand shown

Designation	Dimensions								IC908
	DCONMS	DMIN	CDX(1)	LU	RE	LF	a	WF	
PICJ RT20D08R04-4	4.00	0.80	0.08	4.00	0.04	20.00	0.70	-1.30	•
PICJ RT20D10R05-5	4.00	1.00	0.10	4.50	0.05	20.00	0.90	-1.10	•
PICJ RT20D10R05-7	4.00	1.00	0.10	6.50	0.05	22.00	0.90	-1.10	•
PICJ RT20D15R05-5	4.00	1.50	0.10	4.00	0.05	19.00	1.30	-0.70	•
PICJ RT20D15R05-10	4.00	1.50	0.10	9.00	0.05	24.00	1.30	-0.70	•
PICJ RT20D20R05-5	4.00	2.00	0.10	4.00	0.05	19.00	1.70	-0.30	•
PICJ R/LT20D20R05-10	4.00	2.00	0.10	9.00	0.05	24.00	1.70	-0.30	•
PICJ R/LT20D20R05-15	4.00	2.00	0.10	14.00	0.05	29.00	1.70	-0.30	•
PICJ RT20D25R05-5	4.00	2.50	0.15	4.00	0.05	19.00	2.20	0.20	•
PICJ RT20D25R05-10	4.00	2.50	0.15	9.00	0.05	24.00	2.20	0.20	•
PICJ RT20D25R05-16	4.00	2.50	0.15	15.00	0.05	30.00	2.20	0.20	•
PICJ RT20D30R03-10	4.00	2.80	0.20	9.00	0.03	24.00	2.60	0.60	•
PICJ R/LT20D30R10-10	4.00	2.80	0.20	9.00	0.10	24.00	2.60	0.60	•
PICJ RT20D30R03-16	4.00	2.80	0.20	15.00	0.03	30.00	2.60	0.60	•
PICJ R/LT20D30R10-16	4.00	2.80	0.20	15.00	0.10	30.00	2.60	0.60	•
PICJ RT20D30R10-20	4.00	2.80	0.20	19.00	0.10	34.00	2.60	0.60	•
PICJ RT20D35R10-10	4.00	3.50	0.25	9.00	0.10	24.00	3.10	1.10	•
PICJ RT20D35R10-16	4.00	3.50	0.25	15.00	0.10	30.00	3.10	1.10	•
PICJ RT20D35R10-20	4.00	3.50	0.25	19.00	0.10	34.00	3.10	1.10	•
PICJ RT20D35R10-24	4.00	3.50	0.25	23.00	0.10	38.00	3.10	1.10	•
PICJ RT20D40R03-10	4.00	4.00	0.30	9.00	0.03	24.00	3.50	1.50	•
PICJ R/LT20D40R10-10	4.00	4.00	0.30	9.00	0.10	24.00	3.50	1.50	•
PICJ RT20D40R03-16	4.00	4.00	0.30	15.00	0.03	30.00	3.50	1.50	•
PICJ RT20D40R10-16	4.00	4.00	0.30	15.00	0.10	30.00	3.50	1.50	•
PICJ RT20D40R03-20	4.00	4.00	0.30	19.00	0.03	34.00	3.50	1.50	•
PICJ R/LT20D40R10-20	4.00	4.00	0.30	19.00	0.10	34.00	3.50	1.50	•
PICJ RT20D40R10-24	4.00	4.00	0.30	23.00	0.10	38.00	3.50	1.50	•
PICJ R/LT20D40R10-28	4.00	4.00	0.30	27.00	0.10	42.00	3.50	1.50	•
PICJ RT20D50R05-10	5.00	5.00	0.50	9.00	0.05	25.00	4.40	1.90	•
PICJ RT20D50R15-10	5.00	5.00	0.50	9.00	0.15	25.00	4.40	1.90	•
PICJ RT20D50R05-15	5.00	5.00	0.50	14.00	0.05	30.00	4.40	1.90	•
PICJ RT20D50R15-15	5.00	5.00	0.50	14.00	0.15	30.00	4.40	1.90	•
PICJ RT20D50R05-20	5.00	5.00	0.50	19.00	0.05	35.00	4.40	1.90	•
PICJ R/LT20D50R15-20	5.00	5.00	0.50	19.00	0.15	35.00	4.40	1.90	•
PICJ RT20D50R05-25	5.00	5.00	0.50	24.00	0.05	40.00	4.40	1.90	•
PICJ R/LT20D50R15-25	5.00	5.00	0.50	24.00	0.15	40.00	4.40	1.90	•
PICJ RT20D50R15-30	5.00	5.00	0.50	29.00	0.15	45.00	4.40	1.90	•
PICJ RT20D50R15-35	5.00	5.00	0.50	34.00	0.15	50.00	4.40	1.90	•
PICJ RT20D60R05-15	6.00	6.00	0.50	14.00	0.05	30.00	5.30	2.30	•
PICJ R/LT20D60R15-15	6.00	6.00	0.50	14.00	0.15	30.00	5.30	2.30	•
PICJ RT20D60R05-22	6.00	6.00	0.50	21.00	0.05	37.00	5.30	2.30	•
PICJ R/LT20D60R15-22	6.00	6.00	0.50	21.00	0.15	37.00	5.30	2.30	•
PICJ RT20D60R05-25	6.00	6.00	0.50	24.00	0.05	40.00	5.30	2.30	•
PICJ R/LT20D60R15-25	6.00	6.00	0.50	24.00	0.15	40.00	5.30	2.30	•
PICJ RT20D60R05-30	6.00	6.00	0.50	29.00	0.05	45.00	5.30	2.30	•
PICJ R/LT20D60R15-30	6.00	6.00	0.50	29.00	0.15	45.00	5.30	2.30	•
PICJ RT20D60R15-35	6.00	6.00	0.50	34.00	0.15	50.00	5.30	2.30	•
PICJ R/LT20D60R15-42	6.00	6.00	0.50	41.00	0.15	57.00	5.30	2.30	•
PICJ R/LT20D70R15-20	7.00	6.80	0.60	19.00	0.15	35.00	6.30	2.80	•
PICJ RT20D70R15-25	7.00	6.80	0.60	24.00	0.15	40.00	6.30	2.80	•
PICJ R/LT20D70R15-30	7.00	6.80	0.60	29.00	0.15	45.00	6.30	2.80	•
PICJ RT20D70R15-35	7.00	6.80	0.60	34.00	0.15	50.00	6.30	2.80	•
PICJ RT20D70R15-40	7.00	6.80	0.60	39.00	0.15	55.00	6.30	2.80	•
PICJ RT20D70R15-45	7.00	6.80	0.60	44.00	0.15	60.00	6.30	2.80	•
PICJ RT20D70R15-50	7.00	6.80	0.60	49.00	0.15	65.00	6.30	2.80	•

NEW

• Specify right- or left-hand bars • PICJ items are suitable for PICCO/MG PCO, PICCO ACE, SC-PICCO type holders only

(1) Cutting depth maximum

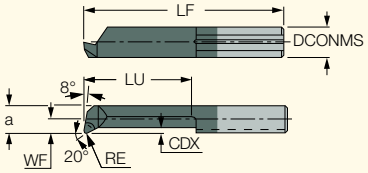


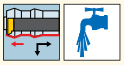
PICCOCUT

PICCO R/L 050, 053, 055

Inserts for Internal Turning and Chamfering







Right-hand shown

Designation	Dimensions								Tough ↔ Hard	
	DCONMS	DMIN	CDX(2)	LU	RE	LF	a	WF	IC228	IC908
PICCO R 050.06-2 (1)	4.00	0.60	0.08	2.00	0.04	20.00	0.50	-	•	•
PICCO R 050.06-3 (1)	4.00	0.60	0.08	3.00	0.04	20.00	0.50	-	•	•
PICCO R 050.08-4	4.00	0.80	0.08	4.00	0.04	20.00	0.70	-		•
PICCO R/L 050.1-5	4.00	1.00	0.10	4.50	0.05	20.00	0.90	-	•	•
PICCO R/L 050.1-7	4.00	1.00	0.10	6.50	0.05	22.00	0.90	-	•	•
PICCO R 050.15-5	4.00	1.50	0.10	5.00	0.05	19.00	1.30	-		•
PICCO R 050.15-10	4.00	1.50	0.10	10.00	0.06	24.00	1.30	-		•
PICCO R/L 050.2-5	4.00	2.00	0.10	4.00	0.05	19.00	1.70	-	•	•
PICCO R 055.2-5	4.00	2.00	0.10	5.00	0.05	19.00	1.70	-		•
PICCO R/L 050.2-10	4.00	2.00	0.10	9.00	0.05	24.00	1.70	-	•	•
PICCO R 055.2-10	4.00	2.00	0.10	10.00	0.05	24.00	1.70	-		•
PICCO L 050.2-15	4.00	2.00	0.10	15.00	0.05	29.00	1.70	-	•	•
PICCO R 050.2-15	4.00	2.00	0.10	14.00	0.05	29.00	1.70	-	•	•
PICCO R 055.2-15	4.00	2.00	0.10	15.00	0.05	29.00	1.70	-		•
PICCO R 050.25-5	4.00	2.50	0.15	5.00	0.05	19.00	2.20	0.20		•
PICCO R 050.25-10	4.00	2.50	0.15	10.00	0.07	24.00	2.20	0.20		•
PICCO R 050.25-16	4.00	2.50	0.15	16.00	0.07	30.00	2.20	0.20		•
PICCO R 053.3-10	4.00	2.80	0.20	9.00	0.03	24.00	2.60	0.60		•
PICCO R 055.3-10	4.00	2.80	0.20	10.00	0.05	24.00	2.60	0.60		•
PICCO R/L 050.3-10	4.00	2.80	0.20	9.00	0.10	24.00	2.60	0.60	•	•
PICCO R 053.3-16	4.00	2.80	0.20	15.00	0.03	30.00	2.60	0.60		•
PICCO R 055.3-16	4.00	2.80	0.20	16.00	0.05	30.00	2.60	0.60		•
PICCO R/L 050.3-16	4.00	2.80	0.20	15.00	0.10	30.00	2.60	0.60	•	•
PICCO R 053.3-20	4.00	2.80	0.20	19.00	0.03	34.00	2.60	0.60		•
PICCO R/L 050.3-20	4.00	2.80	0.20	19.00	0.10	34.00	2.60	0.60	•	•
PICCO R 050.35-10	4.00	3.50	0.25	10.00	0.10	24.00	3.10	1.10		•
PICCO R 050.35-16	4.00	3.50	0.25	16.00	0.10	30.00	3.10	1.10		•
PICCO R 050.35-20	4.00	3.50	0.25	20.00	0.10	34.00	3.10	1.10		•
PICCO R 050.35-24	4.00	3.50	0.25	24.00	0.10	38.00	3.10	1.10		•
PICCO R 053.4-10	4.00	4.00	0.30	9.00	0.03	24.00	3.50	1.50		•
PICCO R 055.4-10	4.00	4.00	0.30	10.00	0.05	24.00	3.50	1.50		•
PICCO R/L 050.4-10	4.00	4.00	0.30	9.00	0.10	24.00	3.50	1.50	•	•
PICCO R 053.4-16	4.00	4.00	0.30	15.00	0.03	30.00	3.50	1.50		•
PICCO R 055.4-16	4.00	4.00	0.30	16.00	0.05	30.00	3.50	1.50		•
PICCO R/L 050.4-16	4.00	4.00	0.30	15.00	0.10	30.00	3.50	1.50	•	•
PICCO R 053.4-20	4.00	4.00	0.30	19.00	0.03	34.00	3.50	1.50		•
PICCO R 055.4-20	4.00	4.00	0.30	20.00	0.05	34.00	3.50	1.50		•
PICCO R/L 050.4-20	4.00	4.00	0.30	19.00	0.10	34.00	3.50	1.50	•	•
PICCO R/L 050.4-24	4.00	4.00	0.30	23.00	0.10	38.00	3.50	1.50	•	•
PICCO R/L 050.4-28	4.00	4.00	0.30	27.00	0.10	42.00	3.50	1.50	•	•
PICCO R 055.4-28	4.00	4.00	0.50	28.00	0.05	42.00	3.50	1.50		•
PICCO R 055.5-10	5.00	5.00	0.50	9.00	0.05	25.00	4.40	1.90		•
PICCO R/L 050.5-10	5.00	5.00	0.50	9.00	0.15	25.00	4.40	1.90	•	•
PICCO R 055.5-15	5.00	5.00	0.50	14.00	0.05	30.00	4.40	1.90		•
PICCO R/L 050.5-15	5.00	5.00	0.50	14.00	0.15	30.00	4.40	1.90	•	•
PICCO R 055.5-20	5.00	5.00	0.50	19.00	0.05	35.00	4.40	1.90		•
PICCO R/L 050.5-20	5.00	5.00	0.50	19.00	0.15	35.00	4.40	1.90	•	•
PICCO R 055.5-25	5.00	5.00	0.50	24.00	0.05	40.00	4.40	1.90		•
PICCO R/L 050.5-25	5.00	5.00	0.50	24.00	0.15	40.00	4.40	1.90	•	•
PICCO R 055.5-30	5.00	5.00	0.50	29.00	0.05	45.00	4.40	1.90		•
PICCO R/L 050.5-30	5.00	5.00	0.50	29.00	0.15	45.00	4.40	1.90	•	•
PICCO R/L 050.5-35	5.00	5.00	0.50	34.00	0.15	50.00	4.40	1.90	•	•
PICCO R 055.6-15	6.00	6.00	0.50	14.00	0.05	30.00	5.30	2.30		•
PICCO R/L 050.6-15	6.00	6.00	0.50	14.00	0.15	30.00	5.30	2.30	•	•
PICCO R 055.6-22	6.00	6.00	0.50	21.00	0.05	37.00	5.30	2.30		•
PICCO R/L 050.6-22	6.00	6.00	0.50	21.00	0.15	37.00	5.30	2.30	•	•
PICCO R 055.6-25	6.00	6.00	0.50	24.00	0.05	40.00	5.30	2.30		•

• Specify right- or left-hand bars

(1) Maximum D.O.C.=0.01-0.03 mm, maximum feed=0.01 mm/rev. (2) Cutting depth maximum

For holders, see pages: PICCO ACE (440) • PICCO ACE-BH (441) • PICCO/MG PCO (Holder) (441) • SC-PICCO (442)

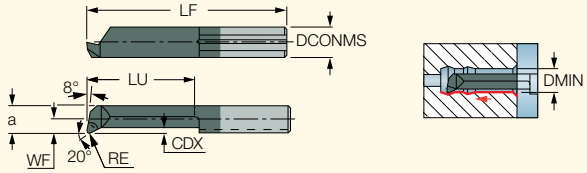
Continued

PICCOCUT

PICCO R/L 050, 053, 055

Inserts for Internal Turning and Chamfering





Right-hand shown

Designation	Dimensions DCONMS	DMIN	CDX(2)	LU	RE	LF	a	WF	Tough ↔ Hard IC228	IC908
PICCO R/L 050.6-25	6.00	6.00	0.50	24.00	0.15	40.00	5.30	2.30	•	•
PICCO R 055.6-30	6.00	6.00	0.50	29.00	0.05	45.00	5.30	2.30		•
PICCO R/L 050.6-30	6.00	6.00	0.50	29.00	0.15	45.00	5.30	2.30	•	•
PICCO R/L 050.6-35	6.00	6.00	0.50	34.00	0.15	50.00	5.30	2.30	•	•
PICCO R/L 050.6-42	6.00	6.00	0.50	41.00	0.15	57.00	5.30	2.30	•	•
PICCO R/L 050.7-20	7.00	6.80	0.60	19.00	0.15	35.00	6.30	2.80	•	•
PICCO R/L 050.7-25	7.00	6.80	0.60	24.00	0.15	40.00	6.30	2.80	•	•
PICCO R/L 050.7-30	7.00	6.80	0.60	29.00	0.15	45.00	6.30	2.80	•	•
PICCO R/L 050.7-35	7.00	6.80	0.60	34.00	0.15	50.00	6.30	2.80	•	•
PICCO R/L 050.7-40	7.00	6.80	0.60	39.00	0.15	55.00	6.30	2.80	•	•
PICCO R/L 050.7-45	7.00	6.80	0.60	44.00	0.15	60.00	6.30	2.80	•	•
PICCO R/L 050.7-50	7.00	6.80	0.60	49.00	0.15	65.00	6.30	2.80	•	•

• Specify right- or left-hand bars

(1) Maximum D.O.C.=0.01-0.03 mm, maximum feed=0.01 mm/rev. (2) Cutting depth maximum

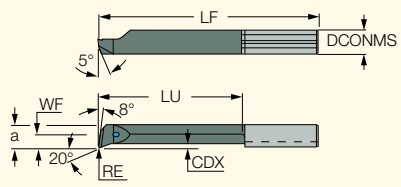
For holders, see pages: PICCO ACE (440) • PICCO ACE-BH (441) • PICCO/MG PCO (Holder) (441) • SC-PICCO (442)

PICCOJET COOLANT THROUGH

PICJ R/LT20-C

Inserts with Chipformers and Inner Coolant Channel for Internal Boring and Profiling





Right-hand shown

Designation	Dimensions DCONMS	DMIN	CDX	OHN(1)	RE	LF	a	WF	IC908
PICJ RT20D40R10-10C	4.00	4.00	0.30	9.0	0.10	24.00	3.50	1.50	•
PICJ RT20D40R10-20C	4.00	4.00	0.30	19.0	0.10	34.00	3.50	1.50	•
PICJ RT20D40R10-28C	4.00	4.00	0.30	27.0	0.10	42.00	3.50	1.50	•
PICJ RT20D50R15-20C	5.00	5.00	0.50	19.0	0.15	35.00	4.40	1.90	•
PICJ RT20D60R15-15C	6.00	6.00	0.50	14.0	0.15	30.00	5.30	2.30	•
PICJ RT20D60R15-22C	6.00	6.00	0.50	21.0	0.15	37.00	5.30	2.30	•
PICJ RT20D70R15-20C	7.00	6.80	0.60	19.0	0.15	35.00	6.30	2.80	•

NEW

• All left-hand inserts on request • PICJ items are suitable for PICCO/MG PCO, PICCO ACE, SC-PICCO type holders only

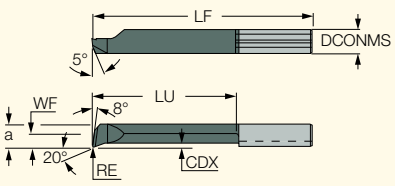
(1) Minimum overhang

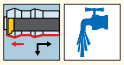


PICCOCUT

PICCO R/L 050-C
Inserts with Chipformers for Internal Boring and Profiling







Right-hand shown

Designation	Dimensions								IC908
	DCONMS	DMIN	CDX(1)	LU	RE	LF	a	WF	
PICCO R/L 050.4-10C	4.00	4.00	0.30	10.00	0.10	24.00	3.50	1.50	●
PICCO R/L 050.4-20C	4.00	4.00	0.30	20.00	0.10	34.00	3.50	1.50	●
PICCO R/L 050.4-24C	4.00	4.00	0.30	24.00	0.10	38.00	3.50	1.50	●
PICCO R/L 050.4-28C	4.00	4.00	0.30	28.00	0.10	42.00	3.50	1.50	●
PICCO R 050.4-16C	4.00	4.00	0.30	16.00	0.10	30.00	3.50	1.50	●
PICCO R/L 050.5-10C	5.00	5.00	0.50	10.00	0.15	25.00	4.40	1.90	●
PICCO R/L 050.5-20C	5.00	5.00	0.50	20.00	0.15	35.00	4.40	1.90	●
PICCO R/L 050.5-25C	5.00	5.00	0.50	25.00	0.15	40.00	4.40	1.90	●
PICCO R/L 050.5-30C	5.00	5.00	0.50	30.00	0.15	45.00	4.40	1.90	●
PICCO R 050.5-15C	5.00	5.00	0.50	15.00	0.15	30.00	4.40	1.90	●
PICCO R 050.5-35C	5.00	5.00	0.50	35.00	0.15	50.00	4.40	1.90	●
PICCO R/L 050.6-15C	6.00	6.00	0.50	15.00	0.15	30.00	5.30	2.30	●
PICCO R/L 050.6-22C	6.00	6.00	0.50	22.00	0.15	37.00	5.30	2.30	●
PICCO R/L 050.6-25C	6.00	6.00	0.50	25.00	0.15	40.00	5.30	2.30	●
PICCO R/L 050.6-30C	6.00	6.00	0.50	30.00	0.15	45.00	5.30	2.30	●
PICCO R/L 050.6-35C	6.00	6.00	0.50	35.00	0.15	50.00	5.30	2.30	●
PICCO R/L 050.6-42C	6.00	6.00	0.50	42.00	0.15	57.00	5.30	2.30	●
PICCO R/L 050.7-20C	7.00	6.80	0.60	20.00	0.15	35.00	6.30	2.80	●
PICCO R/L 050.7-35C	7.00	6.80	0.60	35.00	0.15	50.00	6.30	2.80	●
PICCO R/L 050.7-40C	7.00	6.80	0.60	40.00	0.15	55.00	6.30	2.80	●
PICCO L 050.7-50C	7.00	6.80	0.60	50.00	0.15	65.00	6.30	2.80	●
PICCO R 050.7-25C	7.00	6.80	0.60	25.00	0.15	40.00	6.30	2.80	●
PICCO R 050.7-30C	7.00	6.80	0.60	30.00	0.15	45.00	6.30	2.80	●

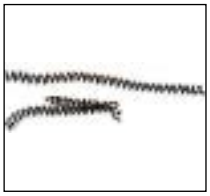
• All left-hand inserts on request
(1) Cutting depth maximum

For holders, see pages: PICCO ACE (440) • PICCO ACE-BH (441) • PICCO/MG PCO (Holder) (441) • SC-PICCO (442)

Stainless Steel 316L

PICCO R 050.6-35C with Chipbreaker

f= 0.03 mm/rev



f= 0.05 mm/rev



PICCO R 050.6-35 Standard

f= 0.03 mm/rev



f= 0.05 mm/rev

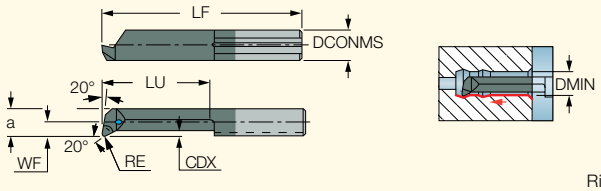


PICCOJET COOLANT THROUGH

PICJ R/LT2020

Inserts with Inner Coolant Channel for Internal Turning and Chamfering next to the Bottom of Blind Holes





Right-hand shown

Designation	Dimensions								IC908
	DCONMS	DMIN	CDX(1)	LU	RE	LF	a	WF	
PICJ RT2020D20R05-10	4.00	2.00	0.10	9.00	0.05	24.00	1.70	-	●
PICJ RT2020D30R10-10	4.00	2.80	0.20	9.00	0.10	24.00	2.60	0.60	●
PICJ RT2020D40R10-16	4.00	4.00	0.30	15.00	0.10	30.00	3.50	1.50	●
PICJ RT2020D50R15-20	5.00	5.00	0.50	19.00	0.15	35.00	4.40	1.90	●

NEW

• Specify right- or left-hand bars • PICJ items are suitable for PICCO/MG PCO, PICCO ACE, SC-PICCO type holders only

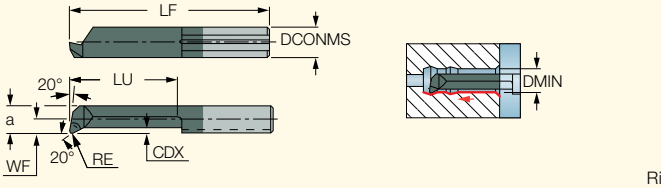
(1) Cutting depth maximum

PICCOCUT

PICCO R 050.20

Inserts for Internal Turning and Chamfering Next to the Bottom of Blind Holes





Right-hand shown

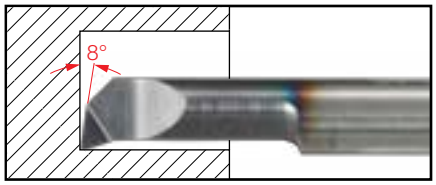
Designation	Dimensions								IC908
	DCONMS	DMIN	CDX(1)	LU	RE	LF	a	WF	
PICCO R 050.20.2-10	4.00	2.00	0.10	10.00	0.05	24.00	1.70	-	●
PICCO R 050.20.3-10	4.00	2.80	0.20	10.00	0.10	24.00	2.60	0.60	●
PICCO R 050.20.4-16	4.00	4.00	0.30	16.00	0.10	30.00	3.50	1.50	●
PICCO R 050.20.5-20	5.00	5.00	0.50	19.00	0.15	35.00	4.40	1.90	●

• Specify right- or left-hand bars

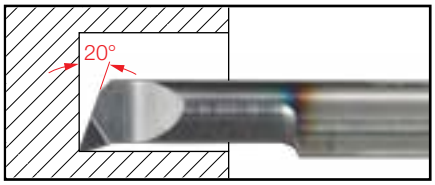
(1) Cutting depth maximum

For holders, see pages: PICCO ACE (440) • PICCO ACE-BH (441) • PICCO/MG PCO (Holder) (441) • SC-PICCO (442)

PICCO 050...



PICCO 050.20...

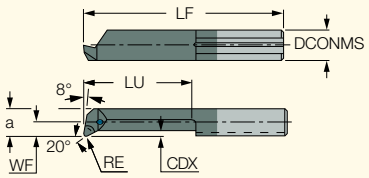


PICCOJET COOLANT THROUGH

PICJ R/LT20-H

Inserts with Inner Coolant Channel for Internal Turning and Chamfering of Hard Steel - Up to 65 HRC





Designation	Dimensions								IC902
	DCONMS	DMIN	CDX(1)	LU	RE	LF	a	WF	
PICJ RT20D30R10-16	4.00	2.80	0.20	15.00	0.10	30.00	2.60	0.60	●
PICJ RT20D40R10-20	4.00	4.00	0.30	19.00	0.10	34.00	3.50	1.50	●
PICJ RT20D70R15-20	7.00	6.80	0.60	19.00	0.15	35.00	6.30	2.80	●

NEW

- Specify right- or left-hand bars

(1) Cutting depth maximum

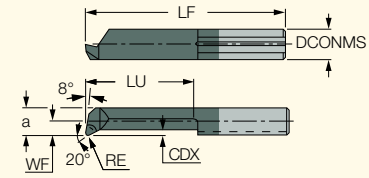


PICCOCUT

PICCO R/LHD 050

Inserts for Internal Turning and Chamfering Hard Steel - Up to 65 HRC





Designation	Dimensions								IC902
	DCONMS	DMIN	CDX(1)	LU	RE	LF	a	WF	
PICCO R/LHD 050.2-5	4.00	2.00	0.10	4.00	0.05	19.00	1.70	-	●
PICCO RHD 050.3-10	4.00	2.80	0.20	9.00	0.10	24.00	2.60	0.60	●
PICCO RHD 050.3-16	4.00	2.80	0.20	15.00	0.10	30.00	2.60	0.60	●
PICCO RHD 050.4-10	4.00	4.00	0.30	9.00	0.10	24.00	3.50	1.50	●
PICCO RHD 050.4-20	4.00	4.00	0.30	19.00	0.10	34.00	3.50	1.50	●
PICCO RHD 050.5-15	5.00	5.00	0.50	14.00	0.15	30.00	4.40	1.90	●
PICCO R/LHD 050.6-15	6.00	6.00	0.50	14.00	0.15	30.00	5.30	2.30	●
PICCO RHD 050.7-20	7.00	6.80	0.60	19.00	0.15	35.00	6.30	2.80	●
PICCO RHD 050.7-25	7.00	6.80	0.60	24.00	0.15	40.00	6.30	2.80	●
PICCO RHD 050.7-35	7.00	6.80	0.60	34.00	0.15	50.00	6.30	2.80	●

- Specify right- or left-hand bars

(1) Cutting depth maximum

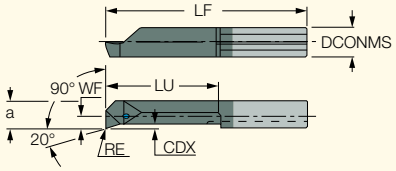
For holders, see pages: PICCO ACE (440) • PICCO ACE-BH (441) • PICCO/MG PCO (Holder) (441) • SC-PICCO (442)

PICCOJET
COOLANT THROUGH

PICJ R/LT90

Inserts with Inner Coolant Channel for Internal Turning and Profiling





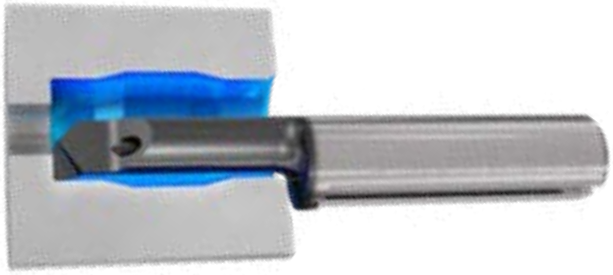
Right-hand shown

Designation	Dimensions								IC908
	DCONMS	DMIN	CDX(1)	LU	RE	LF	a	WF	
PICJ RT90D30R10-10	4.00	2.80	0.20	9.00	0.10	24.00	2.60	0.60	●
PICJ RT90D30R10-16	4.00	2.80	0.20	14.00	0.10	30.00	2.60	0.60	●
PICJ RT90D40R10-10	4.00	4.00	0.30	9.00	0.10	24.00	3.50	1.50	●
PICJ RT90D40R10-16	4.00	4.00	0.30	14.00	0.10	30.00	3.50	1.50	●
PICJ RT90D50R15-10	5.00	5.00	0.50	9.00	0.15	25.00	4.40	1.90	●
PICJ RT90D50R15-15	5.00	5.00	0.50	14.00	0.15	30.00	4.40	1.90	●
PICJ RT90D50R15-20	5.00	5.00	0.50	19.00	0.15	35.00	4.40	1.90	●

NEW

• Specify right- or left-hand bars • PICJ items are suitable for PICCO/MG PCO, PICCO ACE, SC-PICCO type holders only

(1) Cutting depth maximum

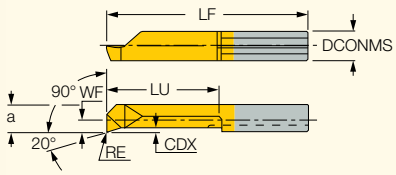


PICCOCUT

PICCO R/L 090

Inserts for Internal Turning and Profiling





Right-hand shown

Designation	Dimensions								IC228
	DCONMS	DMIN	CDX(1)	LU	RE	LF	a	WF	
PICCO R/L 090.3-10	4.00	2.80	0.20	9.00	0.10	24.00	2.60	0.60	●
PICCO R/L 090.3-16	4.00	2.80	0.20	15.00	0.10	30.00	2.60	0.60	●
PICCO R/L 090.4-10	4.00	4.00	0.30	9.00	0.10	24.00	3.50	1.50	●
PICCO R/L 090.4-16	4.00	4.00	0.30	15.00	0.10	30.00	3.50	1.50	●
PICCO R/L 090.5-10	5.00	5.00	0.50	9.00	0.15	25.00	4.40	1.90	●
PICCO R 090.5-15	5.00	5.00	0.50	14.00	0.15	30.00	4.40	1.90	●
PICCO R/L 090.5-20	5.00	5.00	0.50	19.00	0.15	35.00	4.40	1.90	●

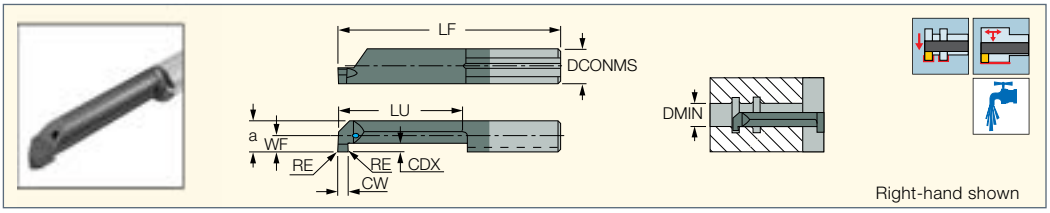
• Specify right- or left-hand bars

(1) Cutting depth maximum

For holders, see pages: PICCO ACE (440) • PICCO/MG PCO (Holder) (441) • SC-PICCO (442)

PICCOJET
COOLANT THROUGH

PICJ R/LG
Inserts with Inner Coolant Channel for Internal Grooving and Turning



Designation	Dimensions									IC908
	DCONMS	DMIN	CDX(1)	LU	RE	LF	a	WF	CW	
PICJ RG05D20R00-5	4.00	2.00	0.40	4.00	0.00	19.00	1.80	-0.20	0.50	•
PICJ RG05D20R00-10	4.00	2.00	0.40	9.00	0.00	24.00	1.80	-0.20	0.50	•
PICJ RG07D30R00-5	4.00	3.00	0.60	4.00	0.00	19.00	2.70	0.70	0.70	•
PICJ RG07D30R00-10	4.00	3.00	0.60	9.00	0.00	24.00	2.70	0.70	0.70	•
PICJ RG07D30R00-16	4.00	3.00	0.60	15.00	0.00	30.00	2.70	0.70	0.70	•
PICJ RG10D40R00-10	4.00	4.00	0.80	9.00	0.00	24.00	3.50	1.50	1.00	•
PICJ RG10D40R00-16	4.00	4.00	0.80	15.00	0.00	30.00	3.50	1.50	1.00	•
PICJ RG10D40R00-20	4.00	4.00	0.80	19.00	0.00	34.00	3.50	1.50	1.00	•
PICJ RG10D50R00-10	5.00	5.00	1.00	9.00	0.00	25.00	4.40	1.90	1.00	•
PICJ RG10D50R00-15	5.00	5.00	1.00	14.00	0.00	30.00	4.40	1.90	1.00	•
PICJ RG10D50R00-20	5.00	5.00	1.00	19.00	0.00	35.00	4.40	1.90	1.00	•
PICJ RG10D50R00-25	5.00	5.00	1.00	24.00	0.00	40.00	4.40	1.90	1.00	•
PICJ RG10D50R00-30	5.00	5.00	1.00	29.00	0.00	45.00	4.40	1.90	1.00	•
PICJ RG15D50R00-10	5.00	5.00	1.00	9.00	0.00	25.00	4.40	1.90	1.50	•
PICJ RG15D50R00-15	5.00	5.00	1.00	14.00	0.00	30.00	4.40	1.90	1.50	•
PICJ RG15D50R00-20	5.00	5.00	1.00	19.00	0.00	35.00	4.40	1.90	1.50	•
PICJ RG15D50R00-25	5.00	5.00	1.00	24.00	0.00	40.00	4.40	1.90	1.50	•
PICJ RG20D50R00-10	5.00	5.00	1.00	9.00	0.00	25.00	4.40	1.90	2.00	•
PICJ RG20D50R00-15	5.00	5.00	1.00	14.00	0.00	30.00	4.40	1.90	2.00	•
PICJ RG20D50R00-20	5.00	5.00	1.00	19.00	0.00	35.00	4.40	1.90	2.00	•
PICJ RG20D50R00-30	5.00	5.00	1.00	29.00	0.00	45.00	4.40	1.90	2.00	•
PICJ R/LG10D60R00-10	6.00	6.00	1.80	9.00	0.00	25.00	5.30	2.30	1.00	•
PICJ RG10D60R00-15	6.00	6.00	1.80	14.00	0.00	30.00	5.30	2.30	1.00	•
PICJ RG10D60R00-22	6.00	6.00	1.80	21.00	0.00	37.00	5.30	2.30	1.00	•
PICJ RG10D60R00-25	6.00	6.00	1.80	24.00	0.00	40.00	5.30	2.30	1.00	•
PICJ RG10D60R00-30	6.00	6.00	1.80	29.00	0.00	45.00	5.30	2.30	1.00	•
PICJ R/LG15D60R00-10	6.00	6.00	1.80	9.00	0.00	25.00	5.30	2.30	1.50	•
PICJ RG15D60R00-15	6.00	6.00	1.80	14.00	0.00	30.00	5.30	2.30	1.50	•
PICJ RG15D60R00-22	6.00	6.00	1.80	21.00	0.00	37.00	5.30	2.30	1.50	•
PICJ RG15D60R00-25	6.00	6.00	1.80	24.00	0.00	40.00	5.30	2.30	1.50	•
PICJ RG15D60R00-30	6.00	6.00	1.80	29.00	0.00	45.00	5.30	2.30	1.50	•
PICJ RG20D60R00-10	6.00	6.00	1.80	9.00	0.00	25.00	5.30	2.30	2.00	•
PICJ RG20D60R00-15	6.00	6.00	1.80	14.00	0.00	30.00	5.30	2.30	2.00	•
PICJ R/LG20D60R00-22	6.00	6.00	1.80	21.00	0.00	37.00	5.30	2.30	2.00	•
PICJ RG20D60R00-25	6.00	6.00	1.80	24.00	0.00	40.00	5.30	2.30	2.00	•
PICJ RG20D60R00-30	6.00	6.00	1.80	29.00	0.00	45.00	5.30	2.30	2.00	•
PICJ RG10D70R00-10	7.00	6.80	2.50	9.00	0.00	25.00	6.30	2.80	1.00	•
PICJ RG10D70R00-15	7.00	6.80	2.50	14.00	0.00	30.00	6.30	2.80	1.00	•
PICJ RG10D70R00-22	7.00	6.80	2.50	21.00	0.00	37.00	6.30	2.80	1.00	•
PICJ RG10D70R00-25	7.00	6.80	2.50	24.00	0.00	40.00	6.30	2.80	1.00	•
PICJ RG10D70R00-30	7.00	6.80	2.50	29.00	0.00	45.00	6.30	2.80	1.00	•
PICJ RG15D70R00-10	7.00	6.80	2.50	9.00	0.00	25.00	6.30	2.80	1.50	•
PICJ RG15D70R00-15	7.00	6.80	2.50	14.00	0.00	30.00	6.30	2.80	1.50	•
PICJ RG15D70R00-22	7.00	6.80	2.50	21.00	0.00	37.00	6.30	2.80	1.50	•
PICJ RG15D70R00-25	7.00	6.80	2.50	24.00	0.00	40.00	6.30	2.80	1.50	•
PICJ RG15D70R00-30	7.00	6.80	2.50	29.00	0.00	45.00	6.30	2.80	1.50	•
PICJ RG20D70R00-10	7.00	6.80	2.50	9.00	0.00	25.00	6.30	2.80	2.00	•
PICJ R/LG20D70R00-15	7.00	6.80	2.50	14.00	0.00	30.00	6.30	2.80	2.00	•
PICJ RG20D70R00-22	7.00	6.80	2.50	21.00	0.00	37.00	6.30	2.80	2.00	•
PICJ R/LG20D70R00-25	7.00	6.80	2.50	24.00	0.00	40.00	6.30	2.80	2.00	•
PICJ RG20D70R00-30	7.00	6.80	2.50	29.00	0.00	45.00	6.30	2.80	2.00	•

NEW

- All carbide bars with sharp corners • Specify right- or left-hand bars
- PICJ items are suitable for PICCO/MG PCO, PICCO ACE, SC-PICCO type holders only

(1) Cutting depth maximum

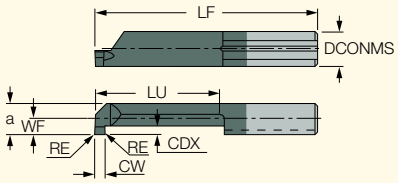


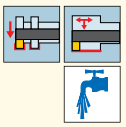
PICCOCUT

PICCO R/L 002-007

Inserts for Internal Grooving and Turning







Right-hand shown

Designation	Dimensions									Tough ↔ Hard	
	DCONMS	DMIN	CDX(1)	LU	RE	LF	a	WF	CW	IC228	IC908
PICCO R 002.0050-5	4.00	2.00	0.40	5.00	0.00	19.00	1.80	0.20	0.50		•
PICCO R 002.0050-10	4.00	2.00	0.40	10.00	0.00	24.00	1.80	0.20	0.50		•
PICCO R/L 002.0050-15	4.00	2.00	0.40	15.00	0.00	29.00	1.80	0.20	0.50		•
PICCO R 003.0070-5	4.00	3.00	0.60	5.00	0.00	19.00	2.70	0.70	0.70		•
PICCO R 003.0070-10	4.00	3.00	0.60	10.00	0.00	24.00	2.70	0.70	0.70		•
PICCO R 003.0070-16	4.00	3.00	0.60	15.00	0.00	29.00	2.70	0.70	0.70		•
PICCO R/L 004.0100-10	4.00	4.00	0.80	9.00	0.00	24.00	3.50	1.50	1.00	•	
PICCO R/L 004.0100-16	4.00	4.00	0.80	15.00	0.00	30.00	3.50	1.50	1.00	•	
PICCO R/L 004.0100-20	4.00	4.00	0.80	19.00	0.00	34.00	3.50	1.50	1.00	•	
PICCO R/L 005.0100-10	5.00	5.00	1.00	9.00	0.00	25.00	4.40	1.90	1.00	•	
PICCO R/L 005.0100-15	5.00	5.00	1.00	14.00	0.00	30.00	4.40	1.90	1.00	•	
PICCO R/L 005.0100-20	5.00	5.00	1.00	19.00	0.00	35.00	4.40	1.90	1.00	•	
PICCO R/L 005.0100-25	5.00	5.00	1.00	24.00	0.00	40.00	4.40	1.90	1.00	•	
PICCO R/L 005.0100-30	5.00	5.00	1.00	29.00	0.00	45.00	4.40	1.90	1.00	•	
PICCO R/L 005.0150-10	5.00	5.00	1.00	9.00	0.00	25.00	4.40	1.90	1.50	•	
PICCO R/L 005.0150-15	5.00	5.00	1.00	14.00	0.00	30.00	4.40	1.90	1.50	•	
PICCO R 005M0150-15	5.00	5.00	1.00	14.00	0.10	30.00	4.00	1.90	1.50		•
PICCO R/L 005.0150-20	5.00	5.00	1.00	19.00	0.00	35.00	4.40	1.90	1.50	•	
PICCO R/L 005.0150-25	5.00	5.00	1.00	24.00	0.00	40.00	4.40	1.90	1.50	•	
PICCO R 005.0150-30	5.00	5.00	1.00	29.00	0.00	45.00	4.40	1.90	1.50	•	
PICCO R/L 005.0200-10	5.00	5.00	1.00	9.00	0.00	25.00	4.40	1.90	2.00	•	
PICCO R/L 005.0200-15	5.00	5.00	1.00	14.00	0.00	30.00	4.40	1.90	2.00	•	
PICCO R/L 005.0200-20	5.00	5.00	1.00	19.00	0.00	35.00	4.40	1.90	2.00	•	
PICCO R 005.0200-25	5.00	5.00	1.00	24.00	0.00	40.00	4.40	1.90	2.00	•	
PICCO R 005.0200-30	5.00	5.00	1.00	29.00	0.00	45.00	4.40	1.90	2.00	•	
PICCO R/L 006.0100-10	6.00	6.00	1.80	9.00	0.00	25.00	5.30	2.30	1.00	•	
PICCO R/L 006.0100-15	6.00	6.00	1.80	14.00	0.00	30.00	5.30	2.30	1.00	•	
PICCO R/L 006.0100-22	6.00	6.00	1.80	21.00	0.00	37.00	5.30	2.30	1.00	•	
PICCO R/L 006.0100-25	6.00	6.00	1.80	24.00	0.00	40.00	5.30	2.30	1.00	•	
PICCO R/L 006.0100-30	6.00	6.00	1.80	29.00	0.00	45.00	5.30	2.30	1.00	•	
PICCO R/L 006.0150-10	6.00	6.00	1.80	9.00	0.00	25.00	5.30	2.30	1.50	•	
PICCO R/L 006.0150-15	6.00	6.00	1.80	14.00	0.00	30.00	5.30	2.30	1.50	•	
PICCO R/L 006.0150-22	6.00	6.00	1.80	21.00	0.00	37.00	5.30	2.30	1.50	•	
PICCO R/L 006.0150-25	6.00	6.00	1.80	24.00	0.00	40.00	5.30	2.30	1.50	•	
PICCO R 006.0150-30	6.00	6.00	1.80	29.00	0.00	45.00	5.30	2.30	1.50	•	
PICCO R/L 006.0200-10	6.00	6.00	1.80	9.00	0.00	25.00	5.30	2.30	2.00	•	
PICCO R/L 006.0200-15	6.00	6.00	1.80	14.00	0.00	30.00	5.30	2.30	2.00	•	
PICCO R 006M0200-15	6.00	6.00	1.80	14.00	0.10	30.00	5.30	2.30	2.00		•
PICCO R/L 006.0200-22	6.00	6.00	1.80	21.00	0.00	37.00	5.30	2.30	2.00	•	
PICCO R/L 006.0200-25	6.00	6.00	1.80	24.00	0.00	40.00	5.30	2.30	2.00	•	
PICCO R/L 006.0200-30	6.00	6.00	1.80	29.00	0.00	45.00	5.30	2.30	2.00	•	
PICCO R/L 007.0100-10	7.00	6.80	2.50	9.00	0.00	25.00	6.30	2.80	1.00	•	
PICCO R/L 007.0100-15	7.00	6.80	2.50	14.00	0.00	30.00	6.30	2.80	1.00	•	
PICCO R/L 007.0100-22	7.00	6.80	2.50	21.00	0.00	37.00	6.30	2.80	1.00	•	
PICCO R/L 007.0100-25	7.00	6.80	2.50	24.00	0.00	40.00	6.30	2.80	1.00	•	
PICCO R/L 007.0100-30	7.00	6.80	2.50	29.00	0.00	45.00	6.30	2.80	1.00	•	
PICCO R/L 007.0150-10	7.00	6.80	2.50	9.00	0.00	25.00	6.30	2.80	1.50	•	
PICCO R/L 007.0150-15	7.00	6.80	2.50	14.00	0.00	30.00	6.30	2.80	1.50	•	
PICCO R/L 007.0150-22	7.00	6.80	2.50	21.00	0.00	37.00	6.30	2.80	1.50	•	
PICCO R/L 007.0150-25	7.00	6.80	2.50	24.00	0.00	40.00	6.30	2.80	1.50	•	
PICCO R/L 007.0150-30	7.00	6.80	2.50	29.00	0.00	45.00	6.30	2.80	1.50	•	
PICCO R/L 007.0200-10	7.00	6.80	2.50	9.00	0.00	25.00	6.30	2.80	2.00	•	
PICCO R/L 007.0200-15	7.00	6.80	2.50	14.00	0.00	30.00	6.30	2.80	2.00	•	
PICCO R 007M0200-15	7.00	6.80	2.50	14.00	0.10	30.00	6.30	2.80	2.00		•
PICCO R/L 007.0200-22	7.00	6.80	2.50	21.00	0.00	37.00	6.30	2.80	2.00	•	
PICCO R/L 007.0200-25	7.00	6.80	2.50	24.00	0.00	40.00	6.30	2.80	2.00	•	
PICCO R/L 007.0200-30	7.00	6.80	2.50	29.00	0.00	45.00	6.30	2.80	2.00	•	

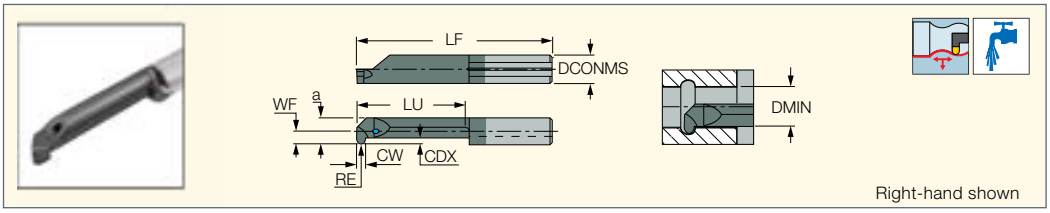
• All carbide bars with sharp corners • Specify right- or left-hand bars

(1) Cutting depth maximum

For holders, see pages: PICCO ACE (440) • PICCO/MG PCO (Holder) (441) • SC-PICCO (442) • SBTH-PICCO (442)

PICCOJET COOLANT THROUGH

PICJ R/LP
Full Radius Inserts with Inner Coolant Channel for Internal Profiling



Designation	Dimensions									IC908
	DCONMS	DMIN	CDX(1)	LU	RE	LF	a	WF	CW	
PICJ RP10D40-16	4.00	4.00	0.80	15.00	0.50	30.00	3.50	1.50	1.00	●
PICJ RP10D50-20	5.00	5.00	1.00	19.00	0.50	35.00	4.40	1.90	1.00	●
PICJ RP10D60-25	6.00	6.00	1.80	24.00	0.50	40.00	5.30	2.30	1.00	●
PICJ RP15D60-25	6.00	6.00	1.80	24.00	0.75	40.00	5.30	2.30	1.50	●
PICJ RP20D60-25	6.00	6.00	1.80	24.00	1.00	40.00	5.30	2.30	2.00	●
PICJ RP10D70-30	7.00	6.80	2.50	29.00	0.50	45.00	6.30	2.80	1.00	●
PICJ RP20D70-30	7.00	6.80	2.50	29.00	1.00	45.00	6.30	2.80	2.00	●

NEW

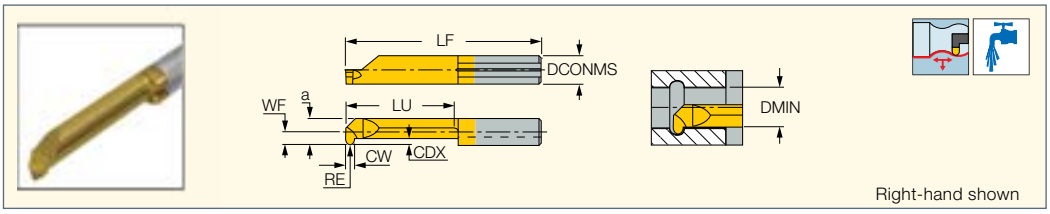
- Specify right- or left-hand bars
- PICJ items are suitable for PICCO/MG PCO, PICCO ACE, SC-PICCO type holders only

(1) Cutting depth maximum



PICCOCUT

PICCO R/L 004-007 (Radius)
Full Radius Inserts for Internal Profiling



Designation	Dimensions									IC228
	DCONMS	DMIN	CDX(1)	LU	RE	LF	a	WF	CW	
PICCO R/L 004.0.50-16	4.00	4.00	0.80	15.00	0.50	30.00	3.50	1.50	1.00	●
PICCO R/L 005.0.50-20	5.00	5.00	1.00	19.00	0.50	35.00	4.40	1.90	1.00	●
PICCO R/L 005.0.75-20	5.00	5.00	1.00	19.00	0.75	35.00	4.40	1.90	1.50	●
PICCO R/L 005.1.00-20	5.00	5.00	1.00	19.00	1.00	35.00	4.40	1.90	2.00	●
PICCO R/L 006.0.50-25	6.00	6.00	1.80	24.00	0.50	40.00	5.30	2.30	1.00	●
PICCO R/L 006.0.75-25	6.00	6.00	1.80	24.00	0.75	40.00	5.30	2.30	1.50	●
PICCO R/L 006.1.00-25	6.00	6.00	1.80	24.00	1.00	40.00	5.30	2.30	2.00	●
PICCO R/L 007.0.50-30	7.00	6.80	2.50	29.00	0.50	45.00	6.30	2.80	1.00	●
PICCO R/L 007.0.75-30	7.00	6.80	2.50	29.00	0.75	45.00	6.30	2.80	1.50	●
PICCO R/L 007.1.00-30	7.00	6.80	2.50	29.00	1.00	45.00	6.30	2.80	2.00	●

- Specify right- or left-hand bars

(1) Cutting depth maximum

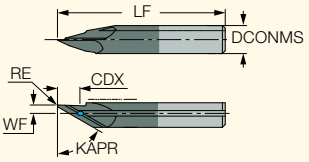
For holders, see pages: PICCO ACE (440) • PICCO/MG PCO (Holder) (441) • SC-PICCO (442)

PICCOJET
COOLANT THROUGH

PICJ R/LCH

Inserts with Inner Coolant Channel for Internal Chamfering





Designation	Dimensions							IC908
	DCONMS	DMIN	CDX	RE	LF	WF	KAPR(1)	
PICJ RCH45-15	5.00	1.00	3.50	0.20	30.00	1.50	45.0	●

NEW

- DMIN for internal applications=20 mm
- PICJ items are suitable for PICCO/MG PCO, PICCO ACE, SC-PICCO type holders only

(1) Tool cutting edge angle

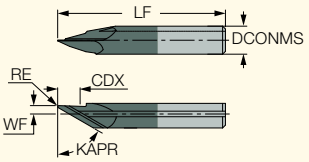


PICCOCUT

PICCO R/L 520

Inserts for Internal Chamfering





Right-hand shown

Designation	Dimensions							IC908
	DCONMS	DMIN	CDX	RE	LF	WF	KAPR(1)	
PICCO R/L 520.0045-15	5.00	1.00	3.50	0.20	30.00	1.50	45.0	●
PICCO R/L 520.0060-15	5.00	1.00	4.00	0.20	30.00	1.50	60.0	●

- Left hand inserts on request

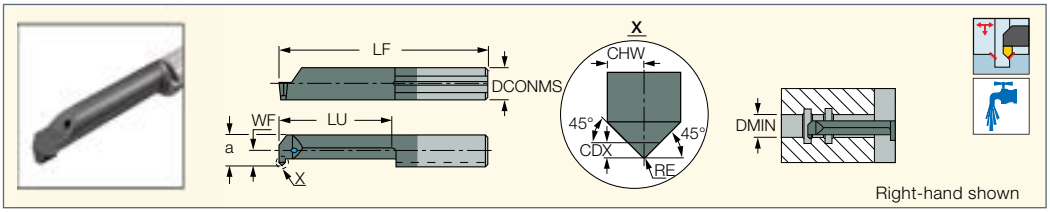
(1) Tool cutting edge angle

For holders, see pages: PICCO ACE (440) • PICCO ACE-BH (441) • PICCO/MG PCO (Holder) (441) • SC-PICCO (442)

PICCOJET
COOLANT THROUGH

PICJ R/LT45

Inserts with Inner Coolant Channel for Internal Turning and 45° Chamfering



Designation	Dimensions									IC908
	DCONMS	DMIN	CDX(1)	LU	RE	LF	a	WF	CHW	
PICJ RT45D50R20-15	5.00	5.00	0.70	14.00	0.20	30.00	4.40	1.90	1.0	●
PICJ RT45D50R20-20	5.00	5.00	0.70	19.00	0.20	35.00	4.40	1.90	1.0	●
PICJ RT45D70R20-20	7.00	6.80	0.70	19.00	0.20	35.00	6.30	2.80	1.0	●

NEW

- Specify right- or left-hand bars
- PICJ items are suitable for PICCO/MG PCO, PICCO ACE, SC-PICCO type holders only

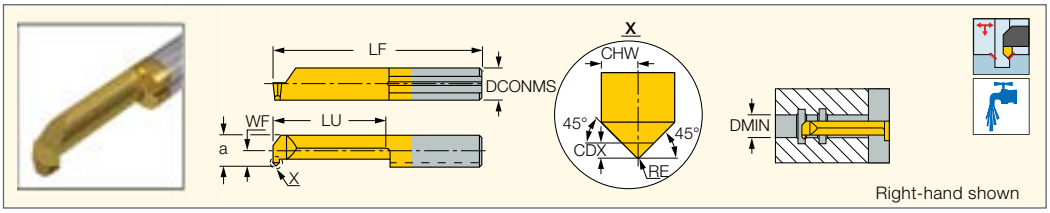
(1) Cutting depth maximum



PICCOCUT

PICCO R/L 060

Inserts for Internal Turning and 45° Chamfering



Designation	Dimensions									Tough ↔ Hard	
	DCONMS	DMIN	CDX(1)	LU	RE	LF	a	WF	CHW	IC228	IC908
PICCO R/L 060.5-15	5.00	5.00	0.70	14.00	0.20	30.00	4.40	1.90	1.0	●	
PICCO R/L 060.5-20	5.00	5.00	0.70	19.00	0.20	35.00	4.40	1.90	1.0	●	
PICCO R 060.6-20	6.00	6.00	0.70	20.00	0.20	35.00	5.30	2.30	1.0		●
PICCO R 060.6-25	6.00	6.00	0.70	25.00	0.20	40.00	5.30	2.30	1.0		●
PICCO R/L 060.7-20	7.00	6.80	0.70	19.00	0.20	35.00	6.30	2.80	1.0	●	
PICCO R 060.7-40	7.00	6.80	0.70	40.00	0.20	55.00	6.30	2.80	1.0		●

- Specify right- or left-hand bars

(1) Cutting depth maximum

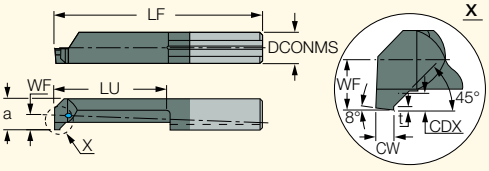
For holders, see pages: PICCO ACE (440) • PICCO ACE-BH (441) • PICCO/MG PCO (Holder) (441) • SC-PICCO (442)

PICCOJET COOLANT THROUGH

PICJ R/LBC

Back Chamfering Inserts with Inner Coolant Channel for Pre-Parting Operations





Right-hand shown

Designation	Dimensions									IC908
	DCONMS	DMIN	CDX(1)	LU	LF	a	WF	CW	t	
PICJ RBCD50-15	5.00	5.00	1.00	14.00	30.00	4.40	1.90	1.00	0.20	●
PICJ RBCD50-20	5.00	5.00	1.00	19.00	35.00	4.40	1.90	1.00	0.20	●

NEW

• All carbide bars with sharp corners • Specify right- or left-hand bars • PICJ items are suitable for PICCO/MG PCO, PICCO ACE, SC-PICCO type holders only

(1) Cutting depth maximum

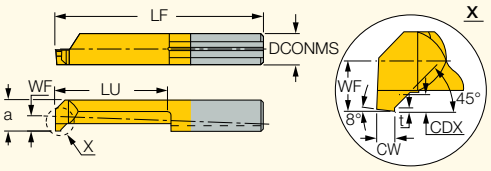


PICCOCUT

PICCO R/L 070

Back Chamfering Inserts for Pre-Parting Operations





Right-hand shown

Designation	Dimensions									IC228
	DCONMS	DMIN	CDX(1)	LU	LF	a	WF	CW	t	
PICCO R/L 070.5-15	5.00	5.00	1.00	15.00	30.00	4.40	1.90	1.00	0.20	●
PICCO R/L 070.5-20	5.00	5.00	1.00	20.00	35.00	4.40	1.90	1.00	0.20	●

• All carbide bars with sharp corners • Specify right- or left-hand bars

(1) Cutting depth maximum

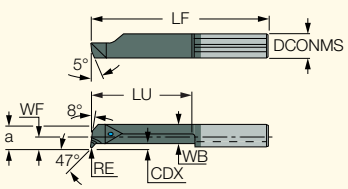
For holders, see pages: PICCO ACE (440) • PICCO/MG PCO (Holder) (441) • SC-PICCO (442)

PICCOJET COOLANT THROUGH

PICJ R/LT47

Inserts for Internal Deep Profiling





Designation	Dimensions									IC908
	DCONMS	DMIN	CDX	LU	RE	LF	a	WF	WB	
PICJ RT47D40R15-20	4.00	4.00	0.30	19.00	0.15	34.00	3.50	1.50	3.00	●
PICJ RT47D50R15-25	5.00	5.00	0.50	24.00	0.15	40.00	4.40	1.90	3.80	●
PICJ RT47D60R15-30	6.00	6.00	0.50	29.00	0.15	45.00	5.30	2.30	4.50	●
PICJ RT47D60R15T-22	6.00	6.00	1.80	19.00	0.15	37.00	5.30	2.30	3.40	●

NEW

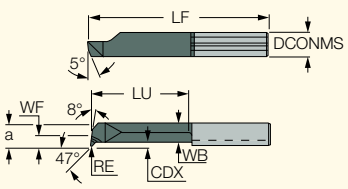
- Left hand inserts on request
- PICJ items are suitable for PICCO/MG PCO, PICCO ACE, SC-PICCO type holders only

PICCOCUT

PICCO R/L 047

Inserts for Internal Deep Profiling





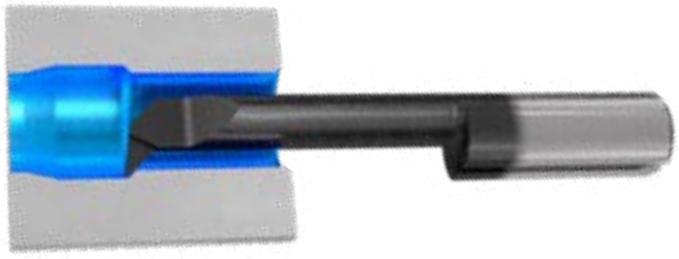
Right-hand shown

Designation	Dimensions									IC908
	DCONMS	DMIN	CDX[1]	LU	RE	LF	a	WF	WB	
PICCO R/L 047.4-20	4.00	4.00	0.30	20.00	0.15	34.00	3.50	1.50	3.00	●
PICCO R/L 047.5-25	5.00	5.00	0.50	25.00	0.15	40.00	4.40	1.90	3.80	●
PICCO R/L 047.6-30	6.00	6.00	0.50	30.00	0.15	45.00	5.30	2.30	4.50	●
PICCO R 047.T6-22	6.00	6.00	1.80	22.00	0.15	37.00	5.30	2.30	3.40	●
PICCO R 047.T6-30	6.00	6.00	1.80	30.00	0.15	45.00	5.30	2.30	3.40	●

- Left hand inserts on request

[1] Cutting depth maximum

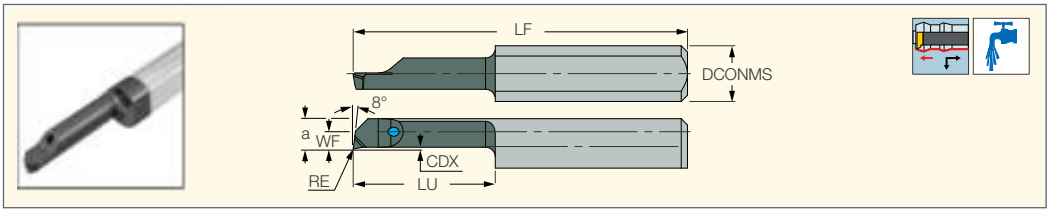
For holders, see pages: PICCO ACE (440) • PICCO/MG PCO (Holder) (441) • SC-PICCO (442)



PICCOCUT

PICCO R/LM

Profiling Inserts with Coolant Channel Optimized for Machining Medical Parts



Designation	Dimensions								Tough ↔ Hard	
	DCONMS	DMIN	CDX(1)	LU	RE	LF	a	WF	IC908	IC909
PICCO R/LM050.05-2	4.00	0.50	0.02	2.00	0.02	20.00	0.40	0.20		●
PICCO LM050.08-4	4.00	0.80	0.03	4.00	0.02	20.00	0.70	0.20		●
PICCO RM050.08-4	4.00	0.80	0.03	4.00	0.02	20.00	0.70	0.40		●
PICCO R/LM050.1-5	4.00	1.00	0.05	5.00	0.02	20.00	0.90	0.40		●
PICCO R/LM050.1-7	4.00	1.00	0.05	7.00	0.02	22.00	0.90	0.40		●
PICCO R/LM050.15-10	4.00	1.50	0.08	10.00	0.02	24.00	1.15	0.60		●
PICCO R/LM050.15-5	4.00	1.50	0.08	5.00	0.02	19.00	1.15	0.60		●
PICCO R/LM050.2-10	4.00	2.00	0.08	10.00	0.02	24.00	1.70	0.80		●
PICCO R/LM050.2-5	4.00	2.00	0.08	5.00	0.02	19.00	1.70	0.80		●
PICCO R/LM050.25-10	4.00	2.50	0.10	10.00	0.02	24.00	2.20	0.20		●
PICCO R/LM050.25-5	4.00	2.50	0.10	5.00	0.02	19.00	2.20	0.20		●
PICCO R/LM050.3-10	4.00	3.00	0.15	10.00	0.02	24.00	2.60	0.60		●
PICCO R/LM050.3-16	4.00	3.00	0.15	16.00	0.02	30.00	2.60	0.60		●
PICCO LM050.35-10	4.00	3.50	0.17	10.00	0.02	24.00	3.40	1.10		●
PICCO R/LM050.35-16	4.00	3.50	0.17	16.00	0.02	30.00	3.10	1.10		●
PICCO R/LM050.35-20	4.00	3.50	0.17	20.00	0.02	34.00	3.10	1.10		●
PICCO RM050.35-10	4.00	3.50	0.17	10.00	0.02	24.00	3.10	1.10		●
PICCO R/LM050.4-10	4.00	4.00	0.20	10.00	0.02	24.00	3.50	1.50		●
PICCO R/LM050.4-16	4.00	4.00	0.20	16.00	0.02	30.00	3.50	1.50		●
PICCO LM050.4-20	4.00	4.00	0.20	20.00	0.02	34.00	3.50	1.50		●
PICCO R/LM050.4-24	4.00	4.00	0.20	24.00	0.02	38.00	3.50	1.50		●
PICCO RM050.4-20	4.00	4.00	0.20	20.00	0.02	34.00	3.50	1.50	●	

• An optimized insert geometry and carbide grade for machining medical parts made from titanium, medical standard stainless steel and other difficult to machine materials.

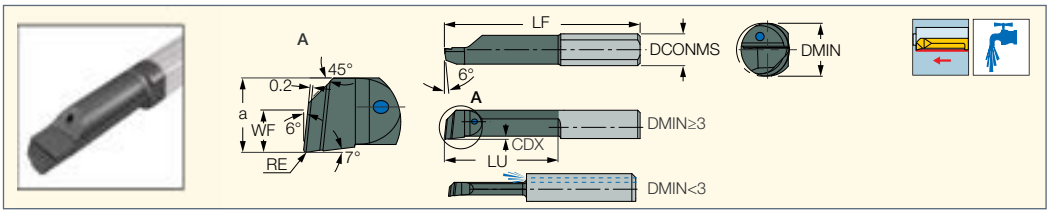
(1) Cutting depth maximum

For holders, see pages: PICCO ACE (440) • PICCO ACE-BH (441) • PICCO/MG PCO (Holder) (441) • SC-PICCO (442)

PICCOCUT

PICCO R/LX050

Reinforced Boring Inserts with Internal Coolant Holes



Designation	Dimensions								
	DCONMS	DMIN	CDX(1)	LU	RE	LF	a	WF	IC908
PICCO R/LX050.2-5R15	4.00	2.00	0.10	5.00	0.15	19.00	1.80	-	●
PICCO R/LX050.2-10R05	4.00	2.00	0.10	10.00	0.05	24.00	1.80	-	●
PICCO R/LX050.2-10R15	4.00	2.00	0.10	10.00	0.15	24.00	1.80	-	●
PICCO R/LX050.3-16R10	4.00	3.00	0.15	16.00	0.10	30.00	2.70	0.70	●
PICCO R/LX050.3-16R20	4.00	3.00	0.15	16.00	0.20	30.00	2.70	0.70	●
PICCO R/LX050.4-10R10	4.00	4.00	0.20	10.00	0.10	24.00	3.60	1.60	●
PICCO R/LX050.4-10R20	4.00	4.00	0.20	10.00	0.20	24.00	3.60	1.60	●
PICCO R/LX050.4-16R10	4.00	4.00	0.20	16.00	0.10	30.00	3.60	1.60	●
PICCO R/LX050.4-16R20	4.00	4.00	0.20	16.00	0.20	30.00	3.60	1.60	●
PICCO R/LX050.5-15R10	5.00	5.00	0.30	15.00	0.10	30.00	4.60	2.10	●
PICCO R/LX050.5-15R20	5.00	5.00	0.30	15.00	0.20	30.00	4.60	2.10	●
PICCO R/LX050.5-25R10	5.00	5.00	0.30	25.00	0.10	40.00	4.60	2.10	●
PICCO R/LX050.5-25R20	5.00	5.00	0.30	25.00	0.20	40.00	4.60	2.10	●
PICCO R/LX050.6-15R10	6.00	6.00	0.40	15.00	0.10	30.00	5.50	2.50	●
PICCO R/LX050.6-15R20	6.00	6.00	0.40	15.00	0.20	30.00	5.50	2.50	●
PICCO R/LX050.6-22R20	6.00	6.00	0.40	22.00	0.20	37.00	5.50	2.50	●
PICCO R/LX050.6-35R20	6.00	6.00	0.40	35.00	0.20	50.00	5.50	2.50	●

• Left-hand inserts on request

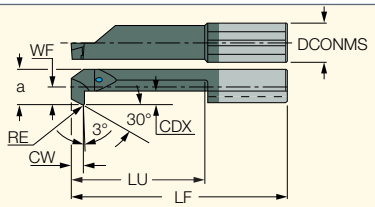
(1) Cutting depth maximum

For holders, see pages: PICCO ACE (440) • PICCO/MG PCO (Holder) (441) • SC-PICCO (442)

PICCOJET COOLANT THROUGH

PICJ R/LBT
Inserts for Internal Back Turning





Designation	Dimensions									IC908
	DCONMS	DMIN	CDX	LU	RE	LF	a	WF	CW	
PICJ RBTD30R10-15	4.00	3.00	0.50	14.00	0.10	30.00	2.60	0.60	1.50	●
PICJ RBTD40R15-15	4.00	4.00	0.80	14.00	0.15	30.00	3.50	1.50	1.50	●
PICJ RBTD50R20-20	5.00	5.00	1.00	19.00	0.20	35.00	4.40	1.90	1.50	●
PICJ RBTD60R20-20	6.00	6.00	1.80	19.00	0.20	35.00	5.30	2.30	1.50	●
PICJ RBTD60R20-30	6.00	6.00	1.80	29.00	0.20	45.00	5.30	2.30	1.50	●
PICJ RBTD70R20-20	7.00	7.00	2.50	19.00	0.20	35.00	6.30	2.80	1.50	●
PICJ RBTD70R20-30	7.00	7.00	2.50	29.00	0.20	45.00	6.30	2.80	1.50	●

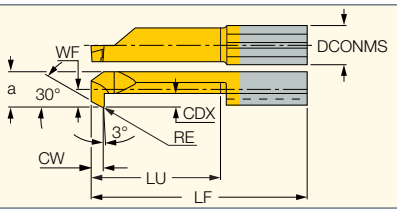
NEW

- Specify right- or left-hand bars
- PICJ items are suitable for PICCO/MG PCO, PICCO ACE, SC-PICCO type holders only

PICCOCUT

PICCO R/L 080
Inserts for Internal Back Turning





Right-hand shown

Designation	Dimensions									IC228
	DCONMS	DMIN	CDX[1]	LU	RE	LF	a	WF	CW	
PICCO R 080.0003-15	4.00	3.00	0.50	14.00	0.10	30.00	2.60	0.60	1.50	●
PICCO R/L 080.0003-20	4.00	3.00	0.50	19.00	0.10	34.00	2.60	0.60	1.50	●
PICCO R/L 080.0004-15	4.00	4.00	0.80	14.00	0.15	30.00	3.50	1.50	1.50	●
PICCO R/L 080.0004-25	4.00	4.00	0.80	24.00	0.15	39.00	3.50	1.50	1.50	●
PICCO R/L 080.0005-20	5.00	5.00	1.00	19.00	0.20	35.00	4.40	1.90	1.50	●
PICCO R/L 080.0005-30	5.00	5.00	1.00	29.00	0.20	45.00	4.40	1.90	1.50	●
PICCO R/L 080.0006-20	6.00	6.00	1.80	19.00	0.20	35.00	5.30	2.30	1.50	●
PICCO R/L 080.0006-30	6.00	6.00	1.80	29.00	0.20	45.00	5.30	2.30	1.50	●
PICCO R/L 080.0007-20	7.00	7.00	2.50	19.00	0.20	35.00	6.30	2.80	1.50	●
PICCO R/L 080.0007-30	7.00	7.00	2.50	29.00	0.20	45.00	6.30	2.80	1.50	●

- Specify right- or left-hand bars

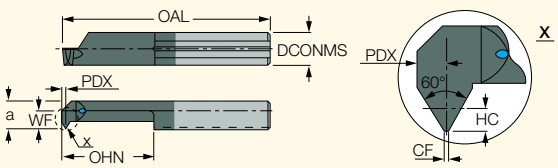
[1] Cutting depth maximum

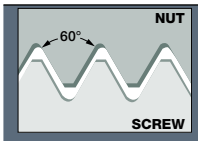
For holders, see pages: PICCO ACE (440) • SC-PICCO (442)

PICCOJET COOLANT THROUGH

PICJ R/LTH (60° Threading)
Inserts with a 60° Internal Thread Profile and Inner Coolant Channel for 2.4mm min. Bore Diameter







Designation	Dimensions													IC908
	DCONMS	DMIN	HC	CF	PDX	WF	a	OHN(1)	OAL	TPN(2)	TPX(3)	TPIN(4)	TPIX(5)	
PICJ RTH7I0.50D024 IC908	4.00	2.40	0.27	0.04	0.30	0.30	2.30	8.0	22.00	0.500	0.700	36.00	48.00	●
PICJ RTH9I0.50D032 IC908	4.00	3.20	0.27	0.09	0.40	1.00	3.00	10.0	24.00	0.500	0.750	36.00	48.00	●
PICJ RTH14I0.50D040 IC908	4.00	4.00	0.27	0.06	0.40	1.50	3.50	15.0	30.00	0.500	0.750	36.00	48.00	●
PICJ RTH14I0.50D050 IC908	5.00	5.00	0.27	0.06	0.40	1.90	4.40	15.0	30.00	0.500	0.750	36.00	48.00	●
PICJ RTH14I0.75D050 IC908	5.00	5.00	0.40	0.09	0.50	1.90	4.40	15.0	30.00	0.750	1.000	24.00	36.00	●
PICJ R/LTH14I1.00D048 IC908	5.00	4.80	0.55	0.12	0.60	1.90	4.40	15.0	30.00	1.000	1.250	20.00	24.00	●
PICJ RTH19I1.00D048 IC908	5.00	4.80	0.55	0.12	0.60	1.90	4.40	20.0	35.00	1.000	1.250	20.00	24.00	●
PICJ RTH14I1.00D060 IC908	6.00	6.00	0.55	0.12	0.60	2.30	5.30	15.0	30.00	1.000	1.250	20.00	24.00	●
PICJ RTH21I1.00D060 IC908	6.00	6.00	0.55	0.12	0.60	2.30	5.30	22.0	37.00	1.000	1.250	20.00	24.00	●
PICJ RTH14I1.25D060 IC908	6.00	6.00	0.68	0.15	0.70	2.30	5.30	15.0	30.00	1.250	1.500	16.00	20.00	●
PICJ RTH14I1.50D060 IC908	6.00	6.00	0.81	0.18	0.80	2.30	5.30	15.0	30.00	1.500	1.750	14.00	16.00	●
PICJ R/LTH14I1.5D070 IC908	7.00	7.00	0.81	0.18	0.80	2.70	6.30	15.0	30.00	1.500	1.750	14.00	16.00	●

NEW

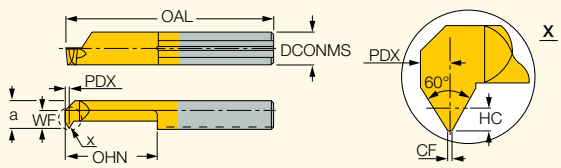
- DIN13 , ISO 68-1, ISO 965 (1&2) - Internal tolerance: 6H • ANSI/ASME B1.1 - Internal tolerance: 2B
- PICJ items are suitable for PICCO/MG PCO, PICCO ACE, SC-PICCO type holders only

(1) Minimum overhang
(2) Thread pitch minimum (mm)
(3) Thread pitch maximum (mm)
(4) Threads per inch minimum
(5) Threads per inch maximum

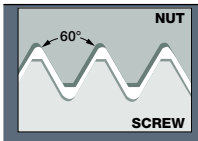
PICCOCUT

PICCO R/L-60°-Thread
Inserts with a 60° Internal Thread Profile for 2.4 mm Min. Bore Diameter





Right-hand shown



Designation	Dimensions													Tough ↔ Hard	
	DCONMS	DMIN	HC	CF	PDX	WF	a	OHN(1)	OAL	TPN(2)	TPX(3)	TPIN(4)	TPIX(5)	IC228	IC908
PICCO R 003.0105-8	4.00	2.40	0.27	0.04	0.30	0.30	2.30	8.0	22.00	0.500	0.700	36.00	48.00		●
PICCO R 004.0105-10	4.00	3.20	0.27	0.09	0.40	1.00	3.00	10.0	24.00	0.500	0.750	36.00	48.00		●
PICCO R/L 004.0205-15	4.00	4.00	0.27	0.06	0.40	1.50	3.50	15.0	30.00	0.500	0.750	36.00	48.00	●	
PICCO R/L 005.0205-15	5.00	5.00	0.27	0.06	0.40	1.90	4.40	15.0	30.00	0.500	0.750	36.00	48.00	●	
PICCO L 005.0407-15	5.00	5.00	0.40	0.09	0.50	1.90	4.40	15.0	30.00	0.750	1.000	24.00	36.00	●	
PICCO R 005.0407-15	5.00	5.00	0.40	0.09	0.50	1.90	4.40	15.0	30.00	0.750	1.000	24.00	36.00	●	●
PICCO R 005.0407-20	5.00	5.00	0.40	0.09	0.50	1.90	4.40	20.0	35.00	0.750	1.000	24.00	36.00		●
PICCO R/L 005.0510-15	5.00	4.80	0.55	0.12	0.60	1.90	4.40	15.0	30.00	1.000	1.250	20.00	24.00	●	
PICCO R 005.0510-20	5.00	4.80	0.55	0.12	0.60	1.90	4.40	20.0	35.00	1.000	1.250	20.00	24.00		●
PICCO R/L 006.0510-15	6.00	6.00	0.55	0.12	0.60	2.30	5.30	15.0	30.00	1.000	1.250	20.00	24.00	●	
PICCO R 006.0510-22	6.00	6.00	0.55	0.12	0.60	2.30	5.30	22.0	37.00	1.000	1.250	20.00	24.00		●
PICCO R/L 006.0612-15	6.00	6.00	0.68	0.15	0.70	2.30	5.30	15.0	30.00	1.250	1.500	16.00	20.00	●	
PICCO R 006.0612-22	6.00	6.00	0.68	0.15	0.70	2.30	5.30	22.0	37.00	1.250	1.500	16.00	20.00		●
PICCO R/L 006.0815-15	6.00	6.00	0.81	0.18	0.80	2.30	5.30	15.0	30.00	1.500	1.750	14.00	16.00	●	
PICCO R 006.0815-22	6.00	6.00	0.81	0.18	0.80	2.30	5.30	22.0	37.00	1.500	1.750	14.00	16.00		●
PICCO R/L 007.0815-15	7.00	7.00	0.81	0.18	0.80	2.70	6.30	15.0	30.00	1.500	1.750	14.00	16.00	●	

- DIN13 , ISO 68-1, ISO 965 (1&2) - Internal tolerance: 6H • ANSI/ASME B1.1 - Internal tolerance: 2B

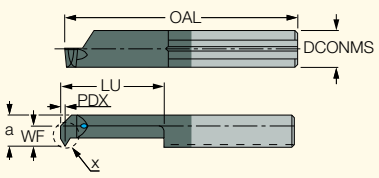
(1) Minimum overhang
(2) Thread pitch minimum (mm)
(3) Thread pitch maximum (mm)
(4) Threads per inch minimum
(5) Threads per inch maximum

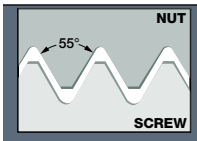
For holders, see pages: PICCO ACE (440) • PICCO/MG PCO (Holder) (441) • SBTH-PICCO (442) • SC-PICCO (442)

PICCOJET COOLANT THROUGH

PICJ RTH (55° Threading)
Inserts with Inner Coolant Channel for 55° Internal Threading Profile







Designation	Dimensions											IC908
	DCONMS	DMIN	HC	CF	PDX	WF	a	OHN(1)	OAL	TPIX(2)	TPIN(3)	
PICJ RTH14W24D060 IC908	6.00	6.00	0.81	0.12	0.80	2.30	5.30	15.0	30.00	24.00	16.00	●
PICJ RTH14W24D070IC908	7.00	7.00	0.81	0.12	0.80	2.80	6.30	15.0	30.00	24.00	16.00	●

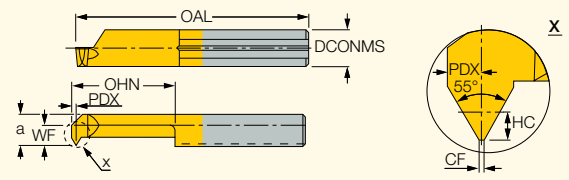
NEW

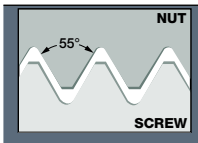
• All mini-bars have sharp corners • PICJ items are suitable for PICCO/MG PCO, PICCO ACE, SC-PICCO type holders only
(1) Minimum overhang
(2) Threads per inch maximum
(3) Threads per inch minimum

PICCOCUT

PICCO-55°-Thread
Inserts for 55° Internal Thread Profile







Designation	Dimensions											IC228
	DCONMS	DMIN	HC	CF	PDX	WF	a	OHN(1)	OAL	TPIN(2)	TPIX(3)	
PICCO R 005.5548-15	5.00	4.80	0.40	0.06	0.50	1.90	4.40	15.0	30.00	24.00	48.00	●
PICCO R 006.5548-15	6.00	6.00	0.40	0.06	0.50	2.30	5.30	15.0	30.00	24.00	48.00	●
PICCO R 006.5524-15	6.00	6.00	0.81	0.12	0.80	2.30	5.30	15.0	30.00	16.00	24.00	●
PICCO R 007.5524-15	7.00	7.00	0.81	0.12	0.80	2.80	6.30	15.0	30.00	16.00	24.00	●

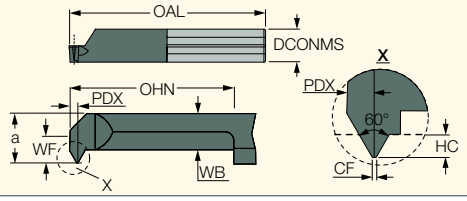
• All mini-bars have sharp corners
(1) Minimum overhang
(2) Threads per inch minimum
(3) Threads per inch maximum

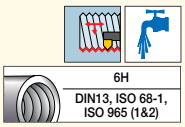
For holders, see pages: PICCO ACE (440) • PICCO/MG PCO (Holder) (441) • SBTH-PICCO (442) • SC-PICCO (442)

PICCOCUT

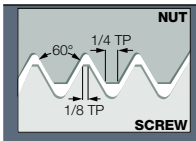
PICCO ISO Full Profile
ISO Standard Inserts for
Full Profile Threads







Right-hand shown



Designation	Dimensions											IC908
	DCONMS	DMIN	HC	CF	PDX	WF	a	WB	OHN(1)	OAL	TP(2)	
PICCO R/L 105.0510-15	5.00	4.80	0.54	0.12	0.60	1.90	4.40	3.30	15.0	30.00	1.000	●
PICCO R/L 106.0612-15	6.00	6.00	0.67	0.15	0.70	2.30	5.30	3.40	15.0	30.00	1.250	●
PICCO R/L 106.0815-15	6.00	6.00	0.81	0.18	0.80	2.30	5.30	3.40	15.0	30.00	1.500	●
PICCO R/L 107.0815-15	7.00	7.00	0.81	0.18	0.80	2.80	6.30	3.80	15.0	30.00	1.500	●

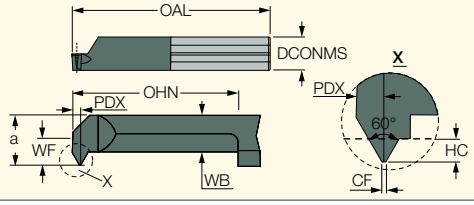
(1) Minimum overhang
(2) Thread pitch

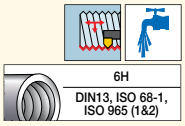
For holders, see pages: PICCO ACE (440) • PICCO/MG PCO (Holder) (441) • SC-PICCO (442)

PICCOCUT

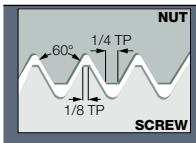
PICCO ISO Full Profile Fine
ISO Fine Pitch Inserts for
Full Profile Threads







Right-hand shown



Designation	Dimensions											IC908
	DCONMS	DMIN	HC	CF	PDX	WF	a	OHN(1)	WB	OAL	TP(2)	
PICCO R/L 104.0205-15	5.00	4.00	0.27	0.06	0.40	1.50	3.50	15.0	2.40	30.00	0.500	●
PICCO R/L 105.0205-15	5.00	5.00	0.27	0.06	0.40	1.90	4.40	15.0	3.30	30.00	0.500	●
PICCO R/L 105.0407-15	5.00	5.00	0.40	0.09	0.50	1.90	4.40	15.0	3.30	30.00	0.750	●
PICCO R/L 106.0510-15	6.00	6.00	0.54	0.12	0.60	2.30	5.30	15.0	3.40	30.00	1.000	●

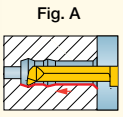
(1) Minimum overhang
(2) Thread pitch

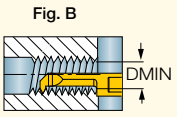
For holders, see pages: PICCO ACE (440) • PICCO/MG PCO (Holder) (441) • SC-PICCO (442)

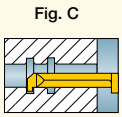
PICCOCUT

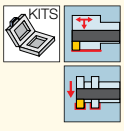
KIT PICCO SET
Contains 2 Toolholders and a Set
of Solid Carbide Miniature Turning
and Grooving Boring Bars











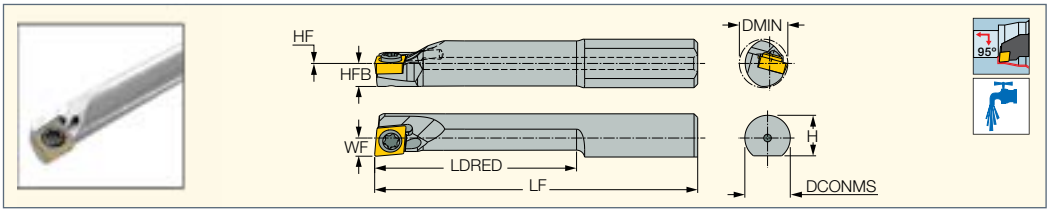
Designation	DMIN	Qty
KIT PICCO SET-1R	3.00	12

Designation	DMIN	OHN	CDX	CW	OAL	Pcs.	Fig.	Description
PICCO ACE 16-4	—	—	—	—	85	1	—	Holder
PICCO ACE 16-6	—	—	—	—	85	1	—	Holder
PICCO R 080.0004-25	4.0	24.0	0.80	1.5	39	1	A	Mini carbide bar
PICCO R 003.0070-16	3.0	15.0	0.60	0.7	29	1	C	Mini carbide bar
PICCO RM050.2-10	2.0	10.0	0.08	—	24	1	A	Mini carbide bar
PICCO R 050.1-5	1.0	4.5	0.10	—	20	1	A	Mini carbide bar
PICCO R 003.0070-5	3.0	5.0	0.60	0.7	19	1	C	Mini carbide bar
PICCO R 006.1.00-25	6.0	24.0	1.80	2.0	40	1	A	Mini carbide bar
PICCO R 006.0100-22	6.0	21.0	1.80	1.0	37	1	C	Mini carbide bar
PICCO R 050.6-15	6.0	14.0	0.50	—	30	1	A	Mini carbide bar
PICCO RX050.6-15R10	6.0	15.0	0.40	—	30	1	A	Mini carbide bar
PICCO R 006.0510-15	6.0	15.0	—	—	30	1	B	Mini carbide bar

PICCOINDEX INDEXABLE INSERTS

PICIN-A-SCLCR/L

PICCO Tools on which 80° Rhombic Inserts are Mounted



Designation	DCONMS	DMIN	LDRED	LF	WF	H	HF	HFB	MIID[1]
PICIN A05-T10-SCLCR/L-03	5.00	4.50	10.0	25.00	1.85	4.5	0.0	2.1	CCGT 03X101-F1P
PICIN A05-T20-SCLCR/L-03	5.00	4.50	20.0	35.00	1.85	4.5	0.0	2.1	CCGT 03X101-F1P
PICIN A06-T15-SCLCR/L-03	6.00	6.00	15.0	30.00	2.25	5.4	0.0	2.9	CCGT 03X101-F1P
PICIN A06-T25-SCLCR/L-03	6.00	6.00	25.0	40.00	2.25	5.4	0.0	2.9	CCGT 03X101-F1P

NEW

(1) Master insert identification

For inserts, see pages: CCGT-F1P (232)

For holders, see pages: PICCO ACE (440) • PICCO/MG PCO (Holder) (441) • SC-PICCO (442)

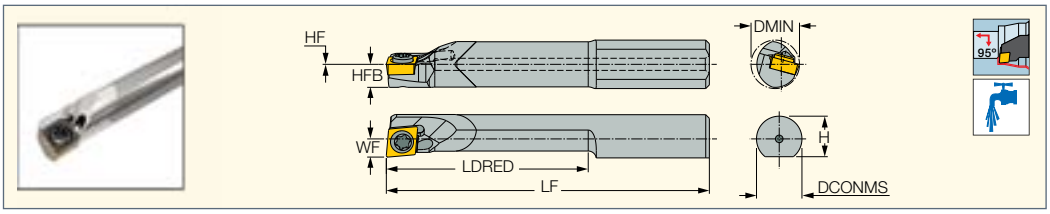
Spare Parts

Designation		
PICIN-A-SCLCR/L	CSTA-1.6	T-6/5

PICCOINDEX INDEXABLE INSERTS

PICIN-SCLCR/L

Solid Carbide PICCO Tools Carrying 80° Rhombic Inserts



Designation	DCONMS	DMIN	LDRED	LF	WF	H	HF	HFB	MIID[1]
PICIN E05-T20-SCLCR/L-03	5.00	4.50	20.0	35.00	1.85	4.5	0.0	2.1	CCGT 03X101-F1P
PICIN E05-T30-SCLCR/L-03	5.00	4.50	30.0	45.00	1.85	4.5	0.0	2.1	CCGT 03X101-F1P
PICIN E06-T25-SCLCR/L-03	6.00	6.00	25.0	40.00	2.25	5.4	0.0	2.9	CCGT 03X101-F1P
PICIN E06-T35-SCLCR/L-03	6.00	6.00	35.0	50.00	2.25	5.4	0.0	2.9	CCGT 03X101-F1P

(1) Master insert identification

For inserts, see pages: CCGT-F1P (232)

For holders, see pages: PICCO ACE (440) • PICCO/MG PCO (Holder) (441) • SC-PICCO (442)

Spare Parts

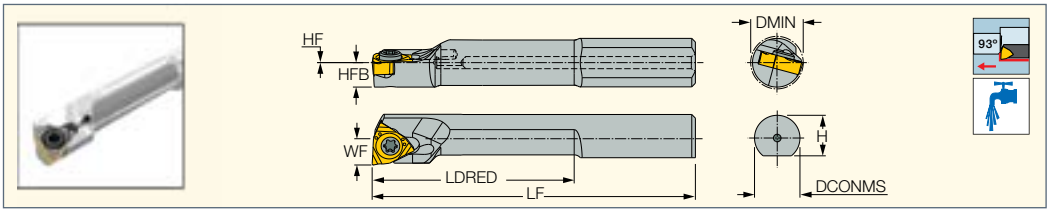
Designation		
PICIN-SCLCR/L	CSTA-1.6	T-6/5



PICCOINDEX
INDEXABLE INSERTS

PICIN-A-SWUBR/L

PICCO Tools on which Small WBMT/WBGT Trigon Inserts are mounted



Designation	DCONMS	DMIN	LDRED	LF	WF	H	HF	HFB	MIID[1]
PICIN A06-T15-SWUBL-06	6.00	6.50	15.0	30.00	3.25	5.4	0.0	3.0	WBMT 060101R
PICIN A06-T15-SWUBR-06	6.00	6.50	15.0	30.00	3.25	5.4	0.0	3.0	WBMT 060101L
PICIN A06-T25-SWUBL-06	6.00	6.50	25.0	40.00	3.25	5.4	0.0	3.0	WBMT 060101R
PICIN A06-T25-SWUBR-06	6.00	6.50	25.0	40.00	3.25	5.4	0.0	3.0	WBMT 060101L

NEW

- Use right-hand WBMT 06...R inserts on left-hand tools and left-hand WBMT 06...L inserts on right-hand tools

(1) Master insert identification

For inserts, see pages: WBGT (264) • WBMT (264)
For holders, see pages: PICCO ACE (440) • PICCO/MG PCO (Holder) (441) • SC-PICCO (442)

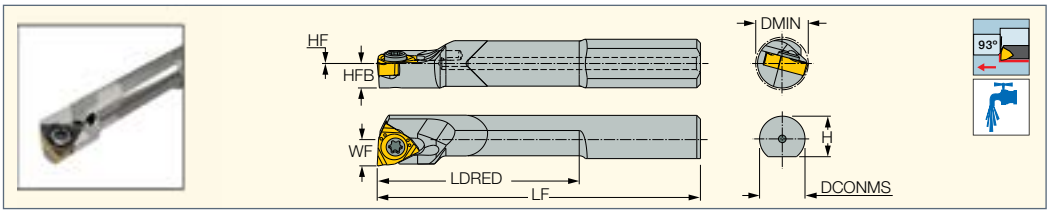
Spare Parts

Designation		
PICIN-A-SWUBR/L	SR 14-552	T-6/5

PICCOINDEX
INDEXABLE INSERTS

PICIN-SWUBR/L

Solid Carbide PICCO Tools Carrying Small WBMT/WBGT Trigon Inserts



Designation	DCONMS	DMIN	LDRED	LF	WF	H	HF	HFB	MIID[1]
PICIN E06-T25-SWUBL-06	6.00	6.50	25.0	40.00	3.25	5.4	0.0	3.0	WBMT 060101R
PICIN E06-T25-SWUBR-06	6.00	6.50	25.0	40.00	3.25	5.4	0.0	3.0	WBMT 060101L
PICIN E06-T35-SWUBL-06	6.00	6.50	35.0	50.00	3.25	5.4	0.0	3.0	WBMT 060101R
PICIN E06-T35-SWUBR-06	6.00	6.50	35.0	50.00	3.25	5.4	0.0	3.0	WBMT 060101L

- Use right-hand WBMT 06...R inserts on left-hand tools and left-hand WBMT 06...L inserts on right-hand tools

(1) Master insert identification

For inserts, see pages: WBGT (264) • WBMT (264)
For holders, see pages: PICCO ACE (440) • PICCO/MG PCO (Holder) (441) • SC-PICCO (442)

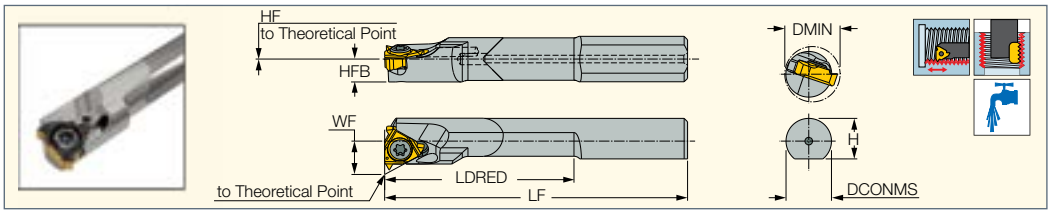
Spare Parts

Designation		
PICIN-SWUBR/L	SR 14-552	T-6/5

PICCOINDEX INDEXABLE INSERTS

PICIN-MGSIR/L

Solid Carbide PICCO Tools on which Internal Laydown Threading Inserts are Mounted



Designation	DCONMS	DMIN	LDRED	H	HFB	WF	HF	LF	MIID[1]		
PICIN E06-T25-MGSIL-06	6.00	7.30	25.0	5.4	3.0	4.41	0.0	40.00	06IL A 55	SR 14-552	T-6/5
PICIN E06-T25-MGSIR-06	6.00	7.30	25.0	5.4	3.0	4.41	0.0	40.00	06IR A 55		

• B-steel shank with coolant hole, CB-carbide shank with coolant hole • All toolholders provide 1.5 helix angle, either via the pocket or the anvil supplied • For GTGA inserts, use anvil AL 16-0

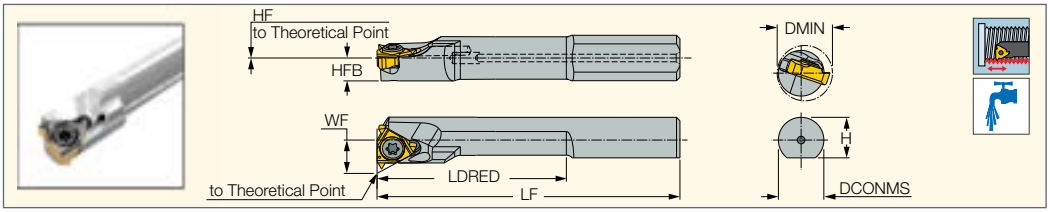
[1] Master insert identification

For inserts, see pages: IR/L-55° (716) • IR/L-60° (723) • IR/L-BSPT (767) • IR/L-ISO (737) • IR/L-NPT (762) • IR/L-NPTF (765) • IR/L-UN (749) • IR/L-W (757)
For holders, see pages: PICCO ACE (440) • PICCO/MG PCO (Holder) (441) • SC-PICCO (442)

PICCOINDEX INDEXABLE INSERTS

PICIN-A-SIR/L

PICCO Tools on which Internal Laydown Threading Inserts are Mounted



Designation	DCONMS	DMIN	LDRED	H	HFB	WF	LF	HF	MIID[1]		
PICIN A06-T15-SIR-06	6.00	7.30	15.0	5.4	3.0	4.41	30.00	0.1	06IL A 55	SR 14-552	T-6/5
PICIN A06-T25-SIR/L-06	6.00	7.30	25.0	5.4	3.0	4.41	40.00	0.1	06IL/R A 55	SR 14-552	T-6/5

NEW

• B-steel shank with coolant hole, CB-carbide shank with coolant hole • All toolholders provide 1.5 helix angle, either via the pocket or the anvil supplied • For GTGA inserts, use anvil AL 16-0

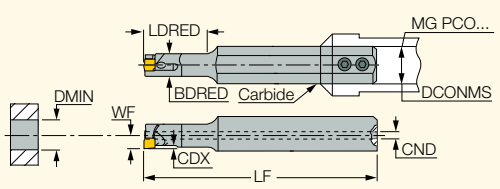
[1] Master insert identification

For inserts, see pages: IR/L-55° (716) • IR/L-60° (723) • IR/L-BSPT (767) • IR/L-ISO (737) • IR/L-NPT (762) • IR/L-NPTF (765) • IR/L-UN (749) • IR/L-W (757)
For holders, see pages: PICCO ACE (440) • PICCO/MG PCO (Holder) (441) • SC-PICCO (442)

MINICHAM

MGUHR

Solid Carbide Bars for Internal Turning and Threading at 4 mm Minimum Bore Diameter



Right-hand shown

Designation	DMIN	CDX[2]	WF[3]	DCONMS	OAL	LDRED	BDRED	CND[4]
MGUHR 06-04L10 [1]	4.00	0.50	2.17	6.00	62.00	10.0	3.45	1.3
MGUHR 06-04L20	4.00	0.50	2.17	6.00	62.00	20.0	3.45	1.3

[1] DMIN for turning 4.0 mm & CDX 0.43 mm; DMIN for threading 5.0 mm & CDX 1.00 mm
[2] Cutting depth maximum
[3] WF=2.17 for turning, WF=2.7 for threading
[4] Coolant entry diameter

For inserts, see pages: UMGR (467) • UMGR-A55 (468) • UMGR-A60 (468)
For holders, see pages: PICCO/MG PCO (Holder) (441) • SC-PICCO (442)

Mounting Operation



Dismounting Operation

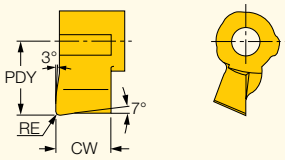


MINICHAM

UMGR

Miniature Indexable Inserts for Internal Turning





Right-hand shown

Designation	Dimensions CW	RE	PDY	DMIN	IC508
UMGR 4.0-0.0	1.63	0.00	2.20	4.00	•
UMGR 4.0-0.1	1.63	0.10	1.60	4.00	•

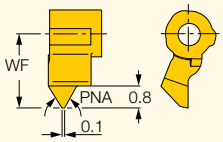
For tools, see pages: MGUHR (467)

MINICHAM

UMGR-A55

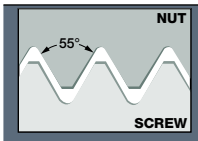
Mini Indexable Inserts with Whitworth Partial Profile for Threading in 5.2 mm and Larger Holes







Right-hand shown



Designation	Dimensions							IC508
	WF	PNA	TPIX(1)	TPIN(2)	TPN(3)	TPX(4)	DMIN	
UMGR 4.0-A55	2.70	55.0	40.00	24.00	0.500	1.400	5.20	●

(1) Threads per inch maximum
(2) Threads per inch minimum
(3) Thread pitch minimum (mm)
(4) Thread pitch maximum (mm)

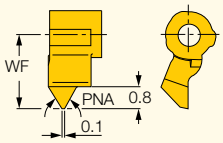
For tools, see pages: MGUHR (467)

MINICHAM

UMGR-A60

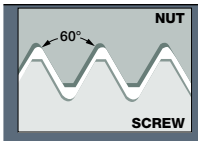
Mini Indexable Inserts with a 60° Partial Profile for Threading in 5.2 mm and Larger Holes







Right-hand shown



Designation	Dimensions							IC508
	PNA	WF	DMIN	TPN(1)	TPX(2)	TPIN(3)	TPIX(4)	
UMGR 4.0-A60	60.0	2.70	5.20	0.600	1.250	20.00	40.00	●

• DIN13 , ISO 68-1, ISO 965 (1&2) - Internal tolerance: 6H • ANSI/ASME B1.1 - Internal tolerance: 2B

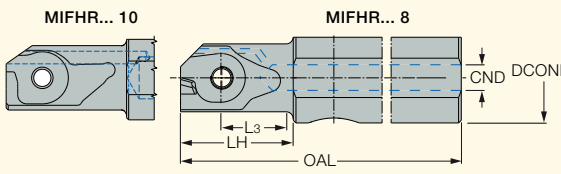
(1) Thread pitch minimum (mm)
(2) Thread pitch maximum (mm)
(3) Threads per inch minimum
(4) Threads per inch maximum

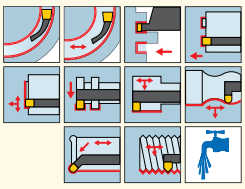
For tools, see pages: MGUHR (467)

MINICUT MINI FACE LINE

MIFHR

Bars for Face and Internal Grooving, Undercutting and Threading Inserts





Designation	DCONMS	CND(3)	WF	RADW	OAL	L3	LH	RE	Insert			
MIFHR 8SC-8-SRK (1)	8.00	1.2	1.4	3.70	75.00	7.40	11.7	3.80	MI.R 8	SR 14-297	T-8/5	
MIFHR 10C-8	10.00	5.0	1.4	4.50	102.50	7.40	12.5	3.80	MI.R 8	SR 14-297	T-8/5	
MIFHR 12C-8	12.00	5.0	1.4	5.50	102.50	7.40	12.5	3.80	MI.R 8	SR 14-297	T-8/5	
MIFHR 12C-10 (2)	12.00	6.0	2.4	5.50	90.00	11.20	17.2	4.60	MI.R 10	SR 34-506 M3X0.5	T-9/5	
MIFHR 16C-10 (2)	16.00	6.0	2.4	7.50	90.00	11.20	17.2	4.60	MI.R 10	SR 34-506 M3X0.5	T-9/5	
MIFHR 16C-15	16.00	8.0	2.7	7.50	100.00	12.50	19.0	10.30	MI.R 15	SR 34-506/L	T-9/5	PL 16
MIFHR 20C-15	20.00	8.5	4.7	9.00	100.00	12.50	19.0	11.30	MI.R 15	SR 34-506/L	T-9/5	PL 20

(1) Solid carbide shank
(2) Only face grooving inserts are available for this tool
(3) Coolant entry diameter

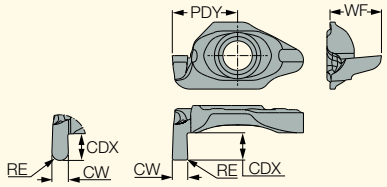
For inserts, see pages: MEFL (635) • MIFR (634) • MIGR 8 (469) • MITR 8-MT (731) • MIUR 8 (469)
For holders, see pages: PICCO/MG PCO (Holder) (441) • SC-PICCO (442)

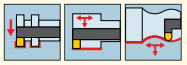
MIN CUT MINI FACE LINE

MIGR 8

Internal Shallow Grooving Inserts







Designation	Dimensions								IC908	Recommended Machining Data		
	CW	RE	CWTOL(1)	RETOL(2)	DMIN	CDX(3)	PDY	WF		a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
MIGR 8-0.50-0.00	0.50	-	0.020	0.020	8.50	1.40	6.30	4.00	●	0.05-0.50	0.03-0.10	0.01-0.03
MIGR 8-1.00-0.05	1.00	0.05	0.020	0.020	8.50	1.40	6.80	4.00	●	0.05-0.50	0.03-0.10	0.01-0.03
MIGR 8-1.20-0.05	1.20	0.05	0.020	0.020	9.20	2.10	6.80	4.70	●	0.05-0.50	0.03-0.10	0.01-0.03
MIGR 8-1.20-0.60	1.20	0.60	0.020	0.020	9.20	2.10	6.80	4.70	●	0.05-0.50	0.03-0.10	0.01-0.03
MIGR 8-1.50-0.05	1.50	0.05	0.020	0.020	9.20	2.10	6.80	4.70	●	0.05-0.50	0.03-0.10	0.01-0.03
MIGR 8-1.60-0.80	1.60	0.80	0.020	0.020	9.20	2.10	6.80	4.70	●	0.05-0.50	0.03-0.10	0.01-0.03
MIGR 8-2.00-0.10	2.00	0.10	0.020	0.020	8.90	1.80	6.80	4.40	●	0.05-0.50	0.03-0.10	0.01-0.03
MIGR 8-2.00-1.00	2.00	1.00	0.020	0.020	9.20	2.10	6.80	4.70	●	0.05-0.50	0.03-0.10	0.01-0.03

(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

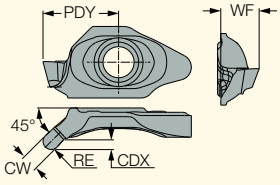
For tools, see pages: MIFHR (468)

MIN CUT MINI FACE LINE

MIUR 8

45° Full Radius Internal Undercutting Inserts







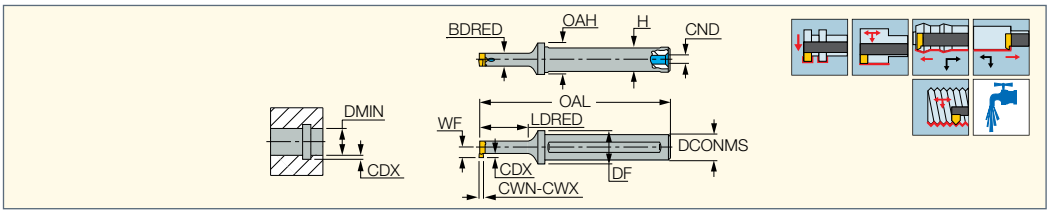
Designation	Dimensions								IC908	Recommended Machining Data		
	CW	RE	CWTOL(1)	RETOL(2)	DMIN	CDX(3)	PDY	WF		a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
MIUR 8-1.00-0.50	1.00	0.50	0.020	0.020	8.00	1.00	6.70	3.60	●	0.03-0.50	0.03-0.10	0.01-0.03
MIUR 8-1.5-0.75	1.50	0.75	0.020	0.020	8.10	1.10	6.70	3.60	●	0.03-0.50	0.03-0.10	0.01-0.03
MIUR 8-2.00-1.00	2.00	1.00	0.020	0.020	8.30	0.60	6.70	3.60	●	0.03-0.50	0.03-0.10	0.01-0.03

(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

For tools, see pages: MIFHR (468)

CHAMGROOVE

MG
Internal Grooving, Turning and Threading Bars



Designation	DCONMS	DMIN(1)	CDX(2)	BDRED	OAL	LDRED	WF(3)	H	CWN(4)	CWX(5)	OAH	DF	CND(6)	Insert	MIID(7)		
MG 12-08C16	12.00	8.00	1.50	6.00	92.00	16.0	4.80	11.0	0.50	3.00	16.3	18.00	6.0	GIQR/L 8	GIQR 8	SR 76-1499	T-8/5
MG 12-08C23	12.00	8.00	1.50	6.00	92.00	23.0	4.80	11.0	0.50	3.00	16.3	18.00	6.0	GIQR/L 8	GIQR 8	SR 76-1499	T-8/5
MG 12-11C25	12.00	11.00	2.30	8.00	92.50	25.0	6.70	11.0	0.50	3.00	16.3	18.00	6.0	GIQR/L 11	GIQR 11	SR M3.5-08134	T-9/5

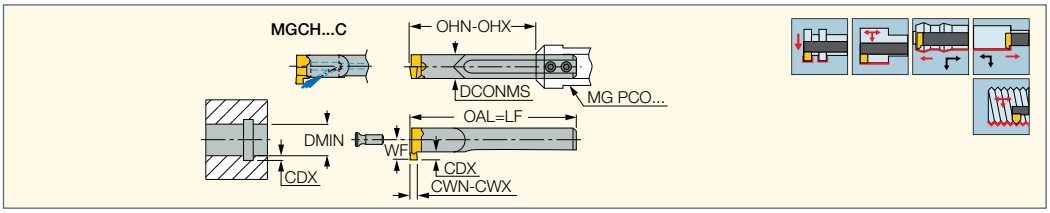
- The same tool applies on right and left machining

(1) Check according to specific insert data
(2) Check according to specific insert data
(3) Cutting edge radius on rotating tool
(4) Minimum cutting width
(5) Maximum cutting width
(6) Coolant entry diameter
(7) Master insert identification

For inserts, see pages: GIQR/L 8 (471) • GIQR/L 8-R (471) • GIQR/L 11 (472) • GIQR/L 11-R (472) • GIQR/L 11-15 (473) • GIQR/L 11-15-R (473) • GIQR/L-A18 (473) • GIQR/L-B18 (474) • GIQR/L-MT (474) • GIQR/L-WT (474)

CHAMGROOVE

MGCH
Solid Carbide Bars for Internal Grooving, Turning and Threading, DMIN 8 mm



Designation	DMIN(1)	CDX(2)	DCONMS	OAL	OHN(3)	OHX(4)	WF	CWN(5)	CWX(6)	CSP(7)	Insert	MIID(8)		
MGCH 06	8.00	1.50	6.00	62.00	16.0	42.0	4.80	0.50	4.00	0	GIQR/L 8	GIQR 8	SR 76-1499	T-8/5
MGCH 06C	8.00	1.50	6.00	62.00	16.0	42.0	4.80	0.50	4.00	1	GIQR/L 8	GIQR 8	SR 76-1499	T-8/5
MGCH 06-L100	8.00	1.50	6.00	100.00	16.0	80.0	4.80	0.50	4.00	0	GIQR/L 8	GIQR 8	SR 76-1499	T-8/5
MGCH 08	- (9)	- (10)	8.00	76.00	20.0	56.0	- (11)	0.50	5.00	0	GIQR/L 11/11-15	GIQR 11	SR M3.5-08134	T-9/5
MGCH 08C	- (9)	- (10)	8.00	76.00	20.0	56.0	- (11)	0.50	5.00	1	GIQR/L 11/11-15	GIQR 11	SR M3.5-08134	T-9/5
MGCH 08-L125	- (9)	- (10)	8.00	125.00	70.0	105.0	- (11)	0.50	5.00	0	GIQR/L 11/11-15	GIQR 11	SR M3.5-08134	T-9/5

- The same tool applies on right and left machining .

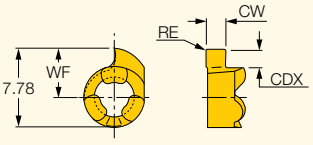
(1) Check according to specific insert data
(2) Check according to specific insert data
(3) Minimum overhang
(4) Maximum overhang
(5) Minimum cutting width
(6) Maximum cutting width
(7) 0 - Without coolant supply, 1 - With coolant supply
(8) Master insert identification
(9) DMIN=11 mm for GIQR 11, DMIN=15 mm for GIQR 11-15
(10) CDX=2.30 for GIQR 11, CDX=6.3 for GIQR 11-15
(11) WF=6.70 mm for GIQR 11, WF=10.6 mm for GIQR 11-15

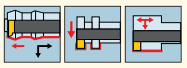
For inserts, see pages: GIQR/L 8 (471) • GIQR/L 8-R (471) • GIQR/L 11 (472) • GIQR/L 11-R (472) • GIQR/L 11-15 (473) • GIQR/L 11-15-R (473) • GIQR/L-A18 (473) • GIQR/L-B18 (474) • GIQR/L-MT (474) • GIQR/L-WT (474)
For holders, see pages: PICCO/MG PCO (Holder) (441) • SBB (158) • SC-PICCO (442)

CHAMGROOVE

GIQR/L 8
Precision Ground Single-Ended Inserts for Internal Grooving and Turning







Left-hand shown

Designation	Dimensions CW	RE	CWTOL[2]	RETOL[3]	CDX[4]	DMIN	WF	IC528	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIQR/L 8-0.50-0.00 [1]	0.50	0.00	0.020	0.030	0.70	8.00	4.80	●	-	-	0.01-0.03
GIQR/L 8-0.75-0.00 [1]	0.75	0.00	0.020	0.030	1.20	8.00	4.80	●	-	-	0.01-0.03
GIQR/L 8-0.85-0.00 [1]	0.85	0.00	0.020	0.030	1.20	8.00	4.80	●	-	-	0.01-0.03
GIQR/L 8-0.95-0.00 [1]	0.95	0.00	0.020	0.030	1.50	8.00	4.80	●	-	-	0.01-0.03
GIQR/L 8-1.00-0.00 [1]	1.00	0.00	0.020	0.030	1.50	8.00	4.80	●	-	-	0.01-0.03
GIQR/L 8-1.04-0.05 [1]	1.04	0.05	0.020	0.030	1.50	8.00	4.80	●	-	-	0.01-0.03
GIQR/L 8-1.20-0.05 [1]	1.20	0.05	0.020	0.030	1.50	8.00	4.80	●	-	-	0.01-0.03
GIQR/L 8-1.40-0.05 [1]	1.40	0.05	0.020	0.030	1.50	8.00	4.80	●	-	-	0.01-0.03
GIQR/L 8-1.47-0.05 [1]	1.47	0.05	0.020	0.030	1.50	8.00	4.80	●	-	-	0.01-0.03
GIQR/L 8-1.50-0.05 [1]	1.50	0.05	0.020	0.030	1.50	8.00	4.80	●	-	-	0.01-0.03
GIQR/L 8-1.70-0.10	1.70	0.10	0.020	0.030	1.50	8.00	4.80	●	0.12-0.68	0.02-0.05	0.01-0.03
GIQR/L 8-1.96-0.10	1.96	0.10	0.020	0.030	1.50	8.00	4.80	●	0.12-0.78	0.02-0.05	0.01-0.03
GIQR/L 8-2.00-0.10	2.00	0.10	0.020	0.030	1.50	8.00	4.80	●	0.12-0.80	0.02-0.05	0.01-0.03
GIQR/L 8-2.22-0.10	2.22	0.10	0.020	0.030	1.50	8.00	4.80	●	0.12-0.88	0.02-0.05	0.01-0.03
GIQR/L 8-2.50-0.20	2.50	0.20	0.020	0.030	1.50	8.00	4.80	●	0.24-1.00	0.02-0.05	0.01-0.03
GIQR/L 8-3.00-0.20	3.00	0.20	0.020	0.030	1.50	8.00	4.80	●	0.24-1.20	0.02-0.05	0.01-0.03
GIQR 8-3.50-0.20	3.50	0.20	0.020	0.030	1.50	8.00	4.80	●	0.24-1.40	0.02-0.05	0.01-0.03
GIQR 8-4.00-0.20	4.00	0.20	0.020	0.030	1.50	8.00	4.80	●	0.24-1.60	0.02-0.05	0.01-0.03

• According to retaining rings standard DIN 471/472. • Can be used for groove milling by circular interpolation

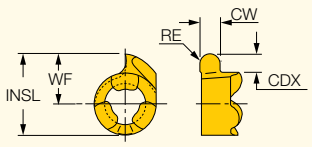
[1] For grooving only
[2] Cutting width tolerance (+/-)
[3] Corner radius tolerance (+/-)
[4] Cutting depth maximum

For tools, see pages: MG (470) • MGCH (470)

CHAMGROOVE

GIQR/L 8-R
Precision Ground Single-Ended Full Radius Inserts for Internal Grooving and Profiling







Left-hand shown

Designation	Dimensions CW	RE	CWTOL[1]	RETOL[2]	CDX[3]	DMIN	WF	INSL	IC528	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIQR/L 8-1.20-R060	1.20	0.60	0.020	0.030	1.50	8.00	4.80	7.78	●	0.30-0.60	0.02-0.05	0.01-0.03
GIQR/L 8-2.00-R100	2.00	1.00	0.020	0.030	1.50	8.00	4.80	7.78	●	0.50-1.00	0.02-0.05	0.01-0.03
GIQR 8-3.00-R150	3.00	1.50	0.020	0.030	1.50	8.00	4.80	7.78	●	0.70-1.50	0.02-0.05	0.01-0.03

• Comply to retaining rings DIN 471/472 • Can be used for groove milling by circular interpolation

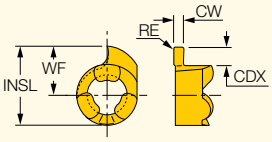
[1] Cutting width tolerance (+/-)
[2] Corner radius tolerance (+/-)
[3] Cutting depth maximum

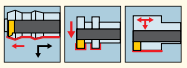
For tools, see pages: MG (470) • MGCH (470)

CHAMGROOVE

GIQR/L 11
Precision Ground Single-Ended Inserts for Internal Grooving and Turning, DMIN 11 mm







Left-hand shown

Designation	Dimensions CW	RE	CWTOL[2]	RETOL[3]	CDX[4]	DMIN	INSL	WF	IC528	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIQR/L 11-0.50-0.00 [1]	0.50	0.00	0.020	0.030	1.00	11.00	10.68	6.70	●	-	-	0.01-0.03
GIQR/L 11-0.75-0.00 [1]	0.75	0.00	0.020	0.030	1.50	11.00	10.68	6.70	●	-	-	0.01-0.03
GIQR 11-0.85-0.00 [1]	0.85	0.00	0.020	0.030	1.50	11.00	10.68	6.70	●	-	-	0.01-0.03
GIQR/L 11-0.95-0.00 [1]	0.95	0.00	0.020	0.030	1.80	11.00	10.68	6.70	●	-	-	0.01-0.03
GIQR/L 11-1.04-0.05 [1]	1.04	0.05	0.020	0.030	2.00	11.00	10.68	6.70	●	-	-	0.01-0.03
GIQR/L 11-1.20-0.05 [1]	1.20	0.05	0.020	0.030	2.30	11.00	10.68	6.70	●	-	-	0.01-0.03
GIQR/L 11-1.40-0.05 [1]	1.40	0.05	0.020	0.030	2.30	11.00	10.68	6.70	●	-	-	0.01-0.03
GIQR/L 11-1.50-0.05 [1]	1.50	0.05	0.020	0.030	2.30	11.00	10.68	6.70	●	-	-	0.01-0.03
GIQR/L 11-1.70-0.05 [1]	1.70	0.05	0.020	0.030	2.30	11.00	10.68	6.70	●	-	-	0.01-0.03
GIQR/L 11-1.96-0.10 [1]	1.96	0.10	0.020	0.030	2.30	11.00	10.68	6.70	●	-	-	0.01-0.03
GIQR/L 11-2.00-0.10 [1]	2.00	0.10	0.020	0.030	2.30	11.00	10.68	6.70	●	-	-	0.01-0.03
GIQR/L 11-2.22-0.10	2.22	0.10	0.020	0.030	2.30	11.00	10.68	6.70	●	0.12-0.88	0.03-0.07	0.02-0.05
GIQR/L 11-2.39-0.15	2.39	0.15	0.020	0.030	2.30	11.00	10.68	6.70	●	0.18-0.95	0.03-0.07	0.02-0.05
GIQR/L 11-2.47-0.20	2.47	0.20	0.020	0.030	2.30	11.00	10.68	6.70	●	0.24-0.98	0.03-0.07	0.02-0.05
GIQR/L 11-2.50-0.20	2.50	0.20	0.020	0.030	2.30	11.00	10.68	6.70	●	0.24-1.00	0.03-0.07	0.02-0.05
GIQR/L 11-2.70-0.20	2.70	0.20	0.020	0.030	2.30	11.00	10.68	6.70	●	0.24-1.08	0.03-0.07	0.02-0.05
GIQR/L 11-3.00-0.20	3.00	0.20	0.020	0.030	2.30	11.00	10.68	6.70	●	0.24-1.20	0.03-0.07	0.02-0.05
GIQR 11-3.18-0.20	3.18	0.20	0.020	0.030	2.30	11.00	10.68	6.70	●	0.24-1.27	0.03-0.07	0.02-0.05
GIQR 11-4.00-0.20	4.00	0.20	0.020	0.030	2.30	11.00	10.68	6.70	●	0.24-1.60	0.03-0.07	0.02-0.05
GIQR 11-5.00-0.20	5.00	0.20	0.020	0.030	2.30	11.00	10.68	6.70	●	0.24-2.00	0.03-0.07	0.02-0.05

• Comply to retaining rings DIN 471/472 • Can be used for groove milling by circular interpolation

[1] For grooving only

[2] Cutting width tolerance (+/-)

[3] Corner radius tolerance (+/-)

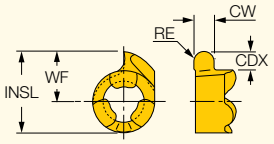
[4] Cutting depth maximum

For tools, see pages: MG (470) • MGCH (470)

CHAMGROOVE

GIQR/L 11-R
Precision Ground Single-Ended Full Radius Inserts for Internal Grooving and Profiling







Left-hand shown

Designation	Dimensions CW	RE	CWTOL[1]	RETOL[2]	CDX[3]	DMIN	WF	INSL	IC528	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIQR/L 11-1.20-R060	1.20	0.60	0.020	0.030	2.30	11.00	6.70	10.68	●	0.30-0.60	0.02-0.05	0.01-0.03
GIQR/L 11-1.80-R090	1.80	0.90	0.020	0.030	2.30	11.00	6.70	10.68	●	0.40-0.90	0.02-0.05	0.01-0.03
GIQR/L 11-2.00-R100	2.00	1.00	0.020	0.030	2.30	11.00	6.70	10.68	●	0.50-1.00	0.02-0.05	0.01-0.03
GIQR/L 11-3.00-R150	3.00	1.50	0.020	0.030	2.30	11.00	6.70	10.68	●	0.70-1.50	0.02-0.05	0.01-0.03
GIQR 11-4.00-R200	4.00	2.00	0.020	0.030	2.30	11.00	6.70	10.68	●	1.00-2.00	0.02-0.05	0.01-0.03

• Comply to retaining rings DIN 471/472 • Can be used for groove milling by circular interpolation

[1] Cutting width tolerance (+/-)

[2] Corner radius tolerance (+/-)

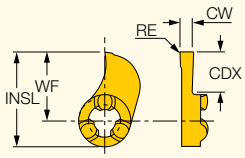
[3] Cutting depth maximum

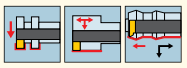
For tools, see pages: MG (470) • MGCH (470)

CHAMGROOVE

GIQR/L 11-15
Precision Ground Single-Ended Inserts for Internal Deep Grooving and Turning







Left-hand shown

Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	DMIN	INSL	WF	IC528	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIQR/L 11-15-1.50-0.05	1.50	0.05	0.020	0.030	6.30	15.00	14.60	10.60	●	0.10-0.40	0.02-0.05	0.02-0.06
GIQR/L 11-15-2.00-0.10	2.00	0.10	0.020	0.030	6.30	15.00	14.60	10.60	●	0.15-0.50	0.02-0.05	0.02-0.06
GIQR/L 11-15-2.50-0.20	2.50	0.20	0.020	0.030	6.30	15.00	14.60	10.60	●	0.25-0.65	0.02-0.05	0.02-0.06
GIQR/L 11-15-3.00-0.20	3.00	0.20	0.020	0.030	6.30	15.00	14.60	10.60	●	0.25-0.75	0.02-0.05	0.02-0.06

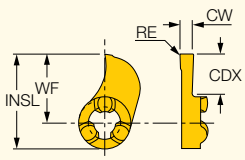
• Comply to retaining rings DIN 471/472 • Can be used for groove milling by circular interpolation
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

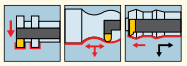
For tools, see pages: MG (470) • MGCH (470)

CHAMGROOVE

GIQR/L 11-15-R
Precision Ground Single-Ended Full Radius Inserts for Deep Internal Grooving and Profiling







Left-hand shown

Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	DMIN	WF	INSL	IC528	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIQR/L 11-15-2.00-R100	2.00	1.00	0.020	0.030	6.30	15.00	10.60	14.60	●	0.00-0.50	0.02-0.05	0.02-0.06
GIQR/L 11-15-2.50-R125	2.50	1.25	0.020	0.030	6.30	15.00	10.60	14.60	●	0.00-0.65	0.02-0.05	0.02-0.06
GIQR/L 11-15-3.00-R150	3.00	1.50	0.020	0.030	6.30	15.00	10.60	14.60	●	0.00-0.75	0.02-0.05	0.02-0.06

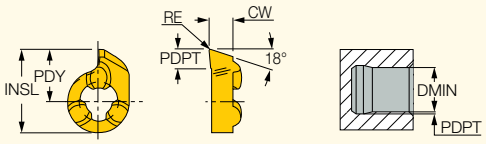
• Comply to retaining rings DIN 471/472 • Can be used for groove milling by circular interpolation
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

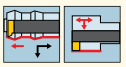
For tools, see pages: MG (470) • MGCH (470)

CHAMGROOVE

GIQR/L-A18
Internal Boring and Profiling Inserts







Left-hand shown

Designation	Dimensions DMIN	CW	RE	PDPT(1)	INSL	PDY	IC528	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIQR/L 8-A18-0.15	7.80	3.00	0.15	1.60	7.60	4.60	●	0.02-1.30	0.02-0.05	0.01-0.03
GIQR/L 11-A18-0.15	11.00	3.00	0.15	2.50	10.70	6.70	●	0.02-2.20	0.02-0.05	0.01-0.03

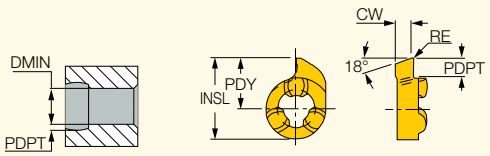
(1) Cutting depth maximum

For tools, see pages: MG (470) • MGCH (470)

CHAMGROOVE

GIQR/L-B18
Internal Back Boring and Profiling Inserts





Left-hand shown

Designation	Dimensions DMIN	CW	RE	PDPT(1)	PDY	INSL	IC528	Recommended Machining Data a_p (mm)	f turn (mm/rev)
GIQR/L 8-B18-0.15	7.80	2.50	0.15	1.30	4.60	7.60	●	0.02-1.00	0.02-0.05
GIQR/L 11-B18-0.15	11.00	2.50	0.15	2.30	6.70	10.70	●	0.02-2.00	0.02-0.05

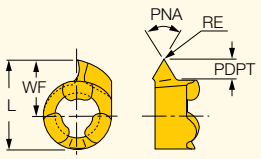
(1) Cutting depth maximum

For tools, see pages: MG (470) • MGCH (470)

CHAMGROOVE

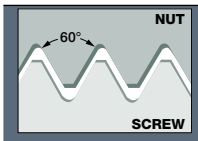
GIQR/L-MT
Internal Threading Inserts with a 60° Partial Profile for Threading in 8 mm and Larger Holes







Left-hand shown



Designation	Dimensions L	RE	PNA	PDPT(1)	WF	DMIN(2)	TPN(3)	TPX(4)	TPIN(5)	TPIX(6)	IC528
GIQR/L 8-MT-0.05	7.78	0.05	60.0	1.50	4.80	8.00	0.500	1.590	16.00	50.00	●
GIQR/L 11-MT-0.05	10.68	0.05	60.0	2.00	6.70	11.00	0.500	2.300	11.00	50.00	●

• Can be used for thread milling by circular interpolation • Pitch max 0.19xD • D-diameter of thread
• DIN13 , ISO 68-1, ISO 965 (1&2) - Internal tolerance: 6H • ANSI/ASME B1.1 - Internal tolerance: 2B

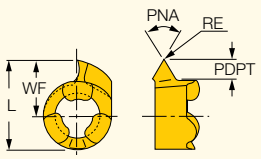
(1) Cutting depth maximum
(2) Minimum diameter
(3) Thread pitch minimum (mm)
(4) Thread pitch maximum (mm)
(5) Threads per inch minimum
(6) Threads per inch maximum

For tools, see pages: MG (470) • MGCH (470)

CHAMGROOVE

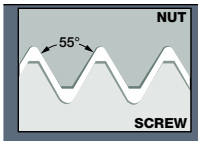
GIQR/L-WT
Internal Inserts with Whitworth Partial Profile for Threading in 8 mm and Larger Holes







Left-hand shown



Designation	Dimensions L	RE	PNA	PDPT(1)	WF	DMIN	TPIN(2)	TPIX(3)	IC528
GIQR/L 8-WT-0.05	7.78	0.05	55.0	1.50	4.80	8.00	16.00	50.00	●
GIQR/L 11-WT-0.05	10.68	0.05	55.0	2.00	6.70	11.00	11.00	50.00	●

• Can be used for thread milling by circular interpolation • TPI min D/5.9 • D-diameter of thread (pitch max<=W)

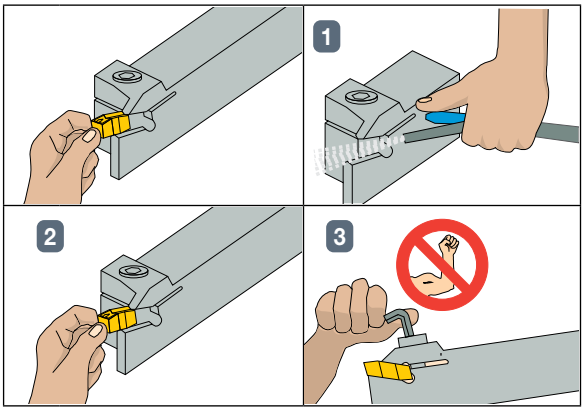
(1) Cutting depth maximum
(2) Threads per inch minimum
(3) Threads per inch maximum

For tools, see pages: MG (470) • MGCH (470)

What is a GRIP Insert?

A grip insert is a grooving, groove-turn or parting insert that is clamped between 2 prisms.
Clamping a grip insert correctly in the holder is necessary for stable machining.

1. Ensure that the seat is clean of dirt and swarf.
2. In the first stage of clamping, ease the insert gently into place. Make sure that the prismatic surfaces match.
3. Always use the wrench supplied with the tool.
   Use reasonable force to the point of resistance for final clamping.
   The maximum recommended clamping torque is 1.5xd Nm or 15xd Kgf x cm. d=clamping screw dia. in mm.

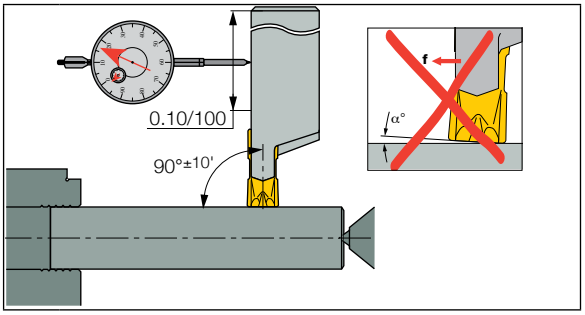


It is very important not to overtighten a grip insert, even though you may get the impression that the insert is more secure. When overtightened, the insert doesn't clamp into its correct and carefully designed clamping points, and therefore, is less stable.

Positioning the Tool on the Turret

Successful machining can be achieved only if the tool is properly positioned on the turret.
The following sequence should be followed:

- Position the grip holder perpendicular to the workpiece; deviation may be 0.10/100 mm along the holder
- Check to ensure that the frontal cutting edge is aligned parallel to the workpiece



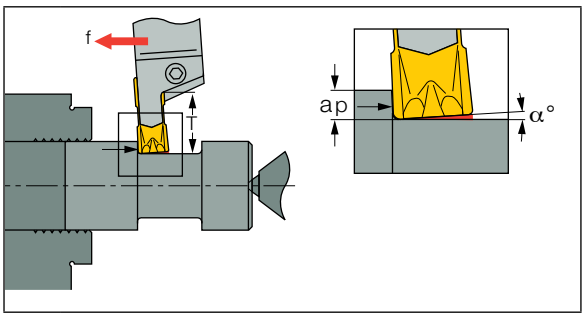
If the cutting edge is not parallel to the workpiece or is positioned as shown, the deflection during machining (in the indicated direction) will be too small and chatter may occur.

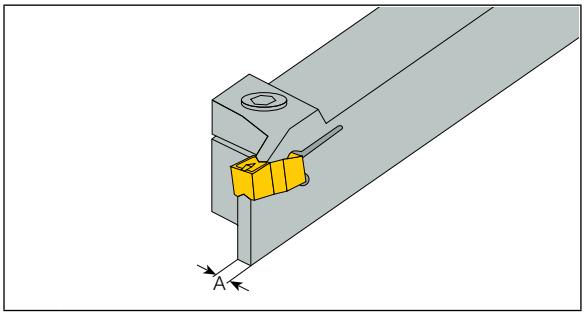
Principles of Turning with Groove-Turn Tools

The basic principle in turning with groove-turn tools is the deflection of the cutting tool, which results in a frontal clearance angle α° between the insert and the workpiece. The clearance angle α° is a function of the side cutting forces and is not constant, as is the case with ISO inserts. The deflection is influenced by the following factors:

Feed: **f**
Depth of Cut: $\mathbf{a_p}$
Overhang of Insert Support: **T**
Width of Insert Support: **A**
Cutting Speed: $\mathbf{V_c}$
Workpiece Material

When all of the above factors remain constant during turning, a high degree of accuracy with a tolerance up to ±0.01 mm can be achieved.



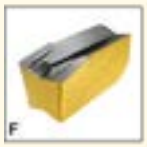


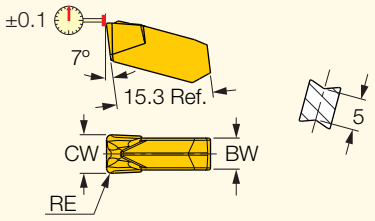
If the conditions are too light (such as in a super finish operation), there may not be enough deflection and the clearance angle will be very small. This may result in chatter and vibration.

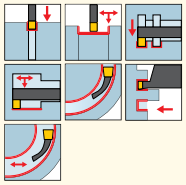
Cutting Conditions

Choosing the correct cutting conditions
Specific cutting conditions are listed in the catalog for every individual insert as shown below:

Example: GIMF 608 Utility Inserts for Grooving and Turning



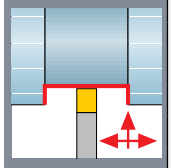




Designation	Dimensions W±0.05	R±0.05	M	Tough ↔ Hard IC830	IC8250	IC808	IC908	IC20	IC428	IC5010	IC907	IC806	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIMF 608	6.00	0.80	5.0	●	●	●		●		●		●	1.00-3.60	0.24-0.42	0.13-0.25
													Depth of cut	Turning feed	Grooving feed

Grades for Applications and Materials
Carbide grades and cutting speeds:

- Cutting speed recommendations are derived from the type of workpiece material and choice of carbide grade
- Choose the carbide grade according to the chart below.
- For specific workpiece material and cutting speed recommendations, refer to pages 488-489.

Material groups		ISO P 1-11 Steel	ISO P 12-13 Stainless Steel Ferritic & Martensitic	ISO M 14 Stainless Steel Austenitic & Duplex (Ferritic-Austenitic)	ISO K 15-20 Cast Iron	ISO N 21-28 Non-ferrous	ISO S 31-37 High Temperature Alloys	ISO H 38-41 Hard Steel & Cast Iron
 GROOVE-TURN	Harder	IC20N	IC807	IC807		ID5	IC804	**IB50**
		IC807			**IC5010**		**IC806**	
		IC808 (IC908) IC8250	**IC808 (IC908)**	**IC808 (IC908)**	IC428		IC907 IC807 IC07	IC807
					IC8250	**IC20**	IC20	IC808
	Tougher	IC830	IC830	IC830			IC908 IC08	

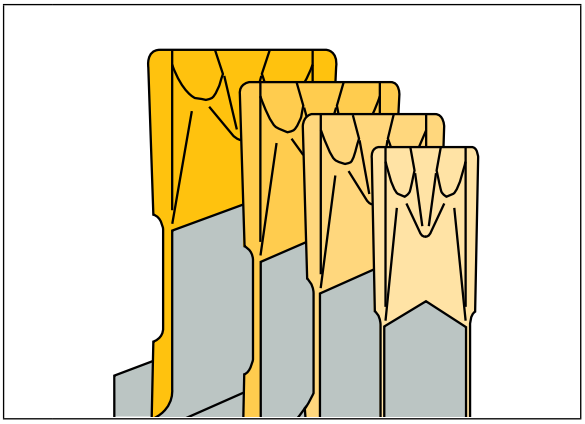
First choice

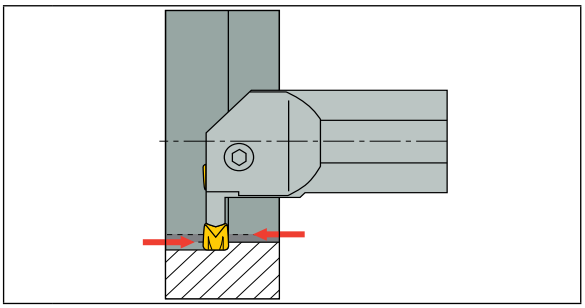
Machining Tips

Insert Width

Generally, the insert width should be as wide as possible as it contributes to its strength. However, there are additional considerations that should be taken into account in order to choose the correct width:

- Workpiece size and clamping stability: A larger width means higher cutting forces during grooving. A width that is too large can cause deformation of the workpiece and/or vibration.
- When using a larger width, make sure your machine has enough power. (see page 482)
- Machining strategy: Grooving in a correct sequence should also affect your choice. (see page 478)
- Required overhang: A larger tool overhang will require a wider insert to maintain stability.
- The larger the insert, the wider the upper and lower jaws can be, therefore, higher forces are required to effect the necessary side deflection.
- If the depth of cut is small, the width of the insert should be proportionately smaller to guarantee the required deflection.



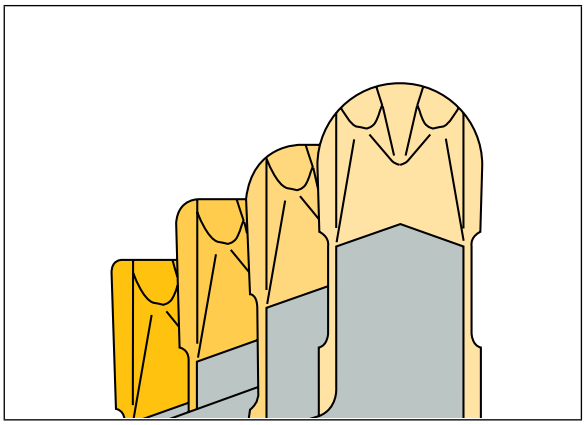


Efficient use of the insert's corners:
Always try to evenly split machining between the two corners. This optimization will increase the insert's life.

Insert Radius

Choosing the insert radius for a particular application is a combination of many factors.
The corner radius of the groove-turn insert influences the product shape and tool life.

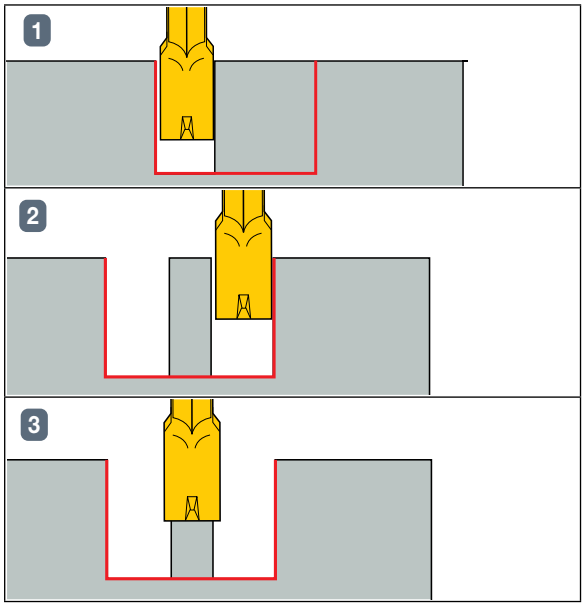
- A larger radius in turning operations normally improves surface quality.
- An insert with a larger radius has a better distribution of the cutting load and of the generated heat. It is stronger and ensures longer tool life.
- Small radii on grip inserts result in increased side forces and side deflection, preventing instability, especially with small depths of cut and feed.
- The best radius to use is basically determined by the geometry and dimensions of the workpiece. The more securely the workpiece is fastened in the machine tool, the larger the radius may be.
- When the ratio of a workpiece's length compared to its diameter is large, inserts with smaller radii will prevent chatter.
- A larger corner radius enables machining at a larger feed rate.
- In profiling operations, inserts with larger corner radii or full radii are required.



Machining Tips

Correct grooving sequence

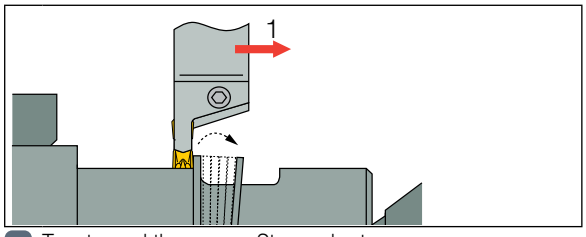
When making a groove where the insert's width is not identical to the groove, it is recommended to select an insert that will enable grooving symmetrically in such a way that the material is always in the center of the insert. This practice will ensure better chipbreaking and symmetrical cutting forces.



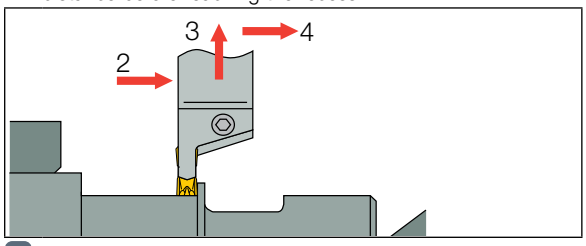
Eliminating a "Hanging Ring"

When turning at the end of a bar or towards a recess between two walls, a "hanging ring" may be formed.

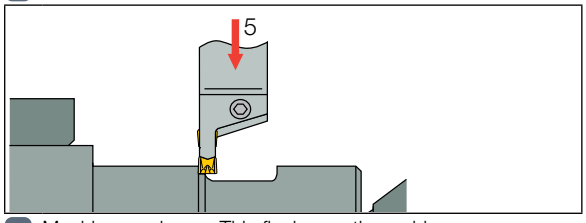
To eliminate the unwanted "hanging ring":



1 Turn toward the recess. Stop a short distance before reaching the recess.



2 Pull back the groove-turn tool and re-position it.



3 Machine as shown. This final operation achieves the size and flatness of the side wall.

Internal Machining

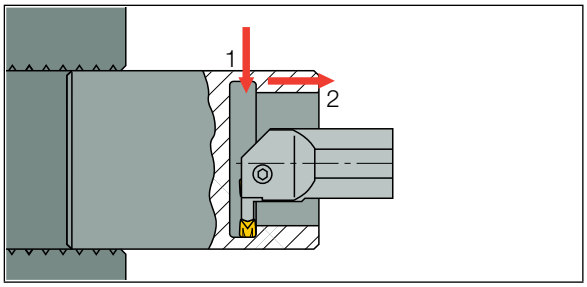
Improving Internal Turning in a Blind Hole

Internal turning in a blind hole brings about the problem of chip exit. When the tool reaches the rear side wall, chips may be caught between the wall and the insert, possibly causing insert breakage. Two solutions that can eliminate this problem:

First Solution

1 Start by grooving at the rear wall.

2 Continue by turning from the inside toward the outside.

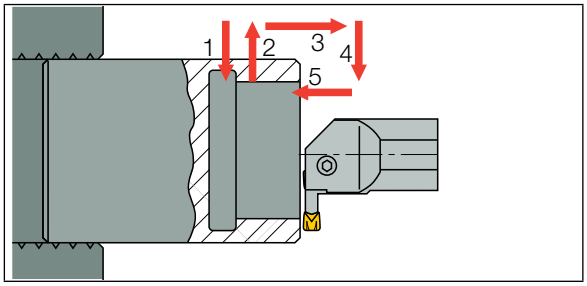


Second Solution

1 Start by grooving at the rear wall.

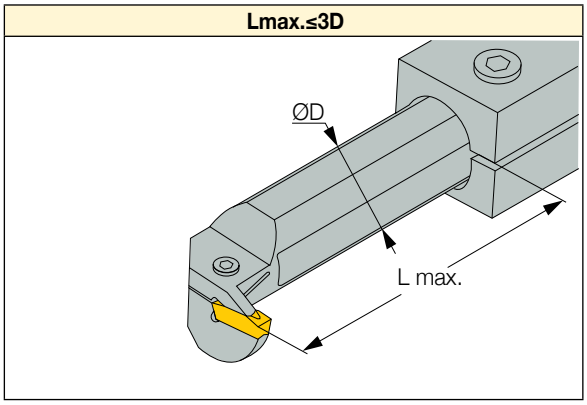
2 Pull the tool back toward the outside.

3 Turn the final diameter from outside, toward the groove.



Optimizing Internal Machining Toolholder Overhang

It is always recommended to use the minimum possible overhang in order to maintain maximum toolholder rigidity. As a general rule, maximum overhang should not exceed three times the holder-bar diameter.



Finishing Operation: Diameter Compensation

A compensation factor for the final diameter must be used in the final machining operation.

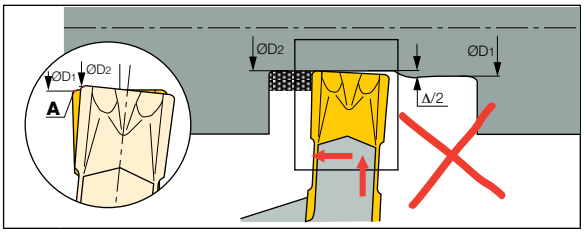
After the initial grooving to the required final diameter, the machining direction is normally changed for longitudinal turning. At this point the deflection occurs. If machining continues without correction, corner A will penetrate the material. This will result in two different diameters: øD1 from the grooving and øD2 from the turning. The difference between øD1 and øD2 is a value we define as Δ. The compensation factor is Δ/2, as shown below.

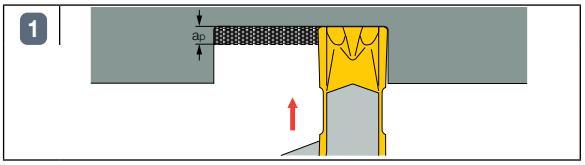
$$\frac{\Delta}{2} = \frac{\text{øD1-øD2}}{2}$$

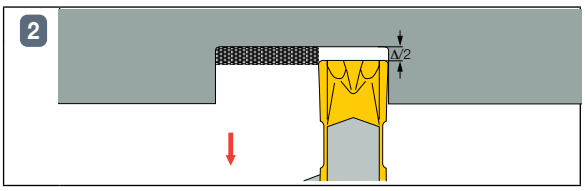
Using the compensation factor will eliminate the small surface step. Follow this simple procedure during machining:

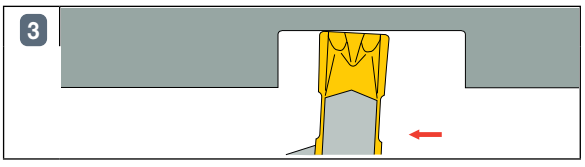
1. Groove to the final diameter
2. Pull the tool back, a distance equal to the value of Δ/2
3. Continue the finish turning operation

Characteristic values of Δ are shown in the diagrams.







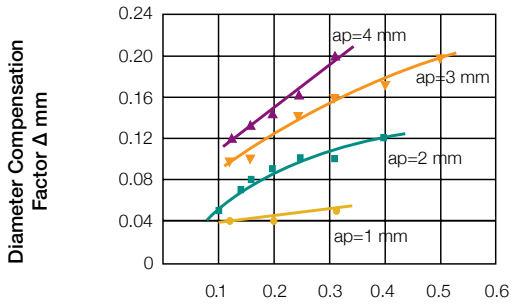


Characteristic Values of Δ

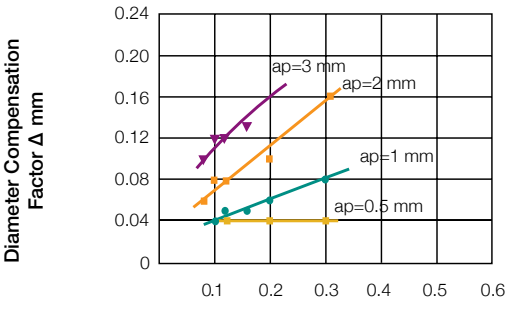
The diagrams show experimental results for specific machining conditions. These are sample values that will vary with different workpiece materials and different holder types.

Measure the Δ value for your finishing operation in a short test using your selected finishing conditions. Do not run your test using the final diameter.

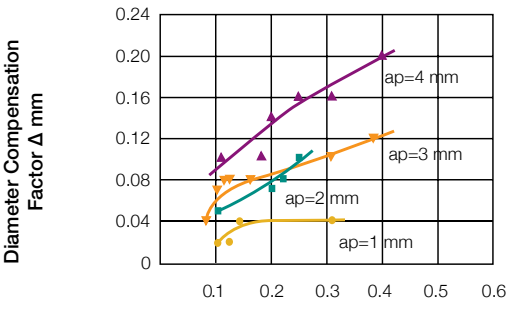
Insert: GIP 4.00E-0.4
Toolholder: GHDR 25-4



Insert: GIP 3.00E-0.4
Toolholder: GHDR 25-3



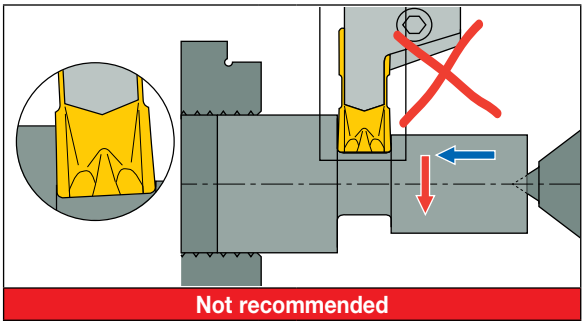
Insert: GIP 6.00E-0.8
Toolholder: GHDR 25-5

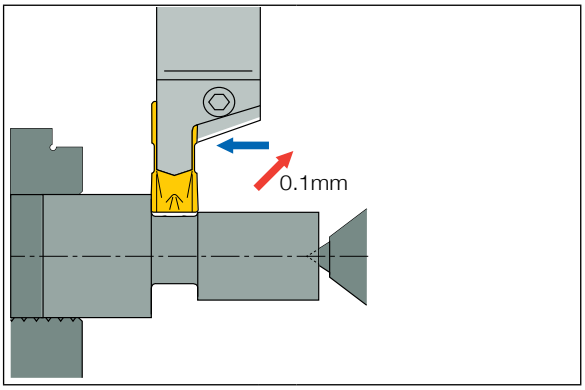


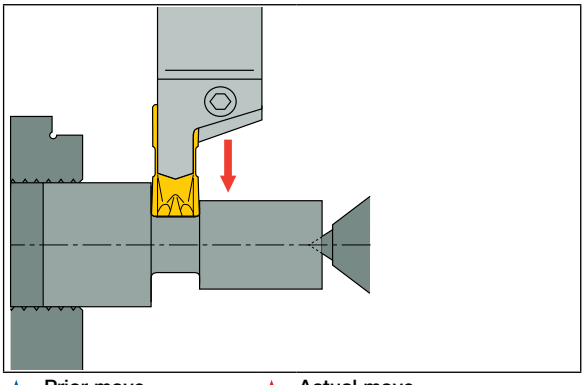
Multifunction Operations

The groove-turn tools are multifunction tools, able to operate in a sequence of grooving and turning modes. Moving from turning to grooving requires consideration of the basic Grip principle, thereby eliminating the possibility of insert breakage. In this situation one must release the side deflection which is necessary in turning, but not recommended in grooving.

The following machining sequence is suggested:
After completing the longitudinal turning, before starting the grooving, the side deflection must be released.
Move the tool in the direction opposite that of the feed, approximately 0.1 mm, and return to the original position without side load.
Then, after the deflection has been released and the holder is perpendicular to the workpiece, the grooving operation may start.







Machining Between Walls

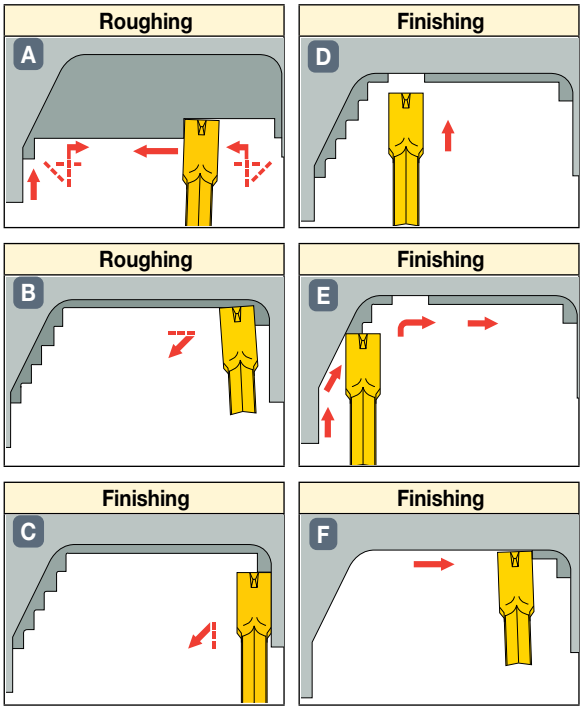
One of the most important advantages of the **GROOVE-TURN** systems is the ability to machine between walls. To achieve the best results, the following sequence is recommended:

Roughing

Plunge to depth of cut. Pull back 0.2 mm radially. Turn longitudinally, retract at the end of the cut by 0.2 mm, simultaneously in radial and axial directions. Plunge again and repeat same cycle leaving steps of 0.2 mm at the shoulders for the finishing cut. Minimum D.O.C. has to be $a_p \geq Rx1.2$ (corner radius).

Finishing

Plunge on the right side, reaching the tangent of the bottom radius. Retract and relieve the tangent point of the radius on the other side. Retract and machine all of the contour, pulling back by compensation value along the bottom (see page 479).

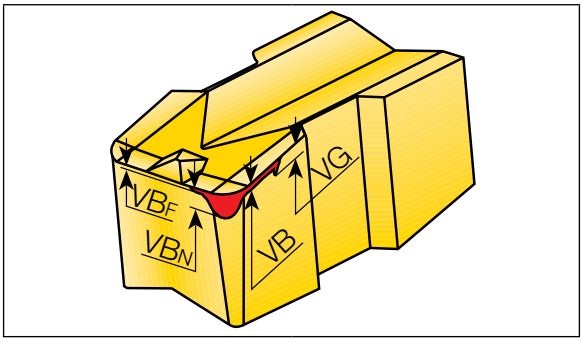


These instructions can be viewed at:
http://www.youtube.com/watch?v=HXhEtc1zl4w

Recommended Criteria for Replacement of the Cutting Edge

The cutting edge should be replaced in time to save costly downtime. The recommended value of wear at replacement is defined as the wear land size. The insert should be replaced when the wear land size is such that the increase in side forces is still small- not causing the insert to break and still maintaining the required workpiece tolerances. Wear is a function of machining time. The cutting edge should normally be replaced after 15 minutes of machining time.

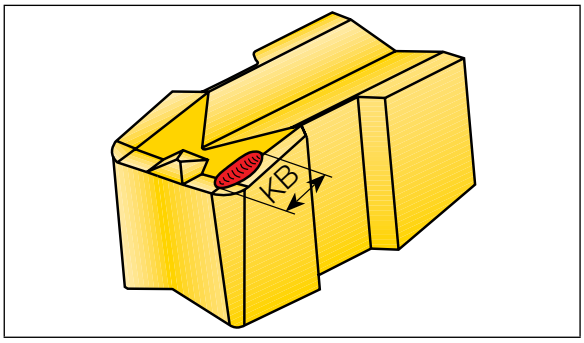
Insert Wear-Tool Life Wear on the Clearance Face
Wear land on groove turn inserts generally occurs at the corner of the clearance face **VBN**, on the side near the corner **VB**, on the frontal cutting edge **VBF** and at the end of the cutting side **VG**. The effective life of the cutting edge ends when any of the wear land values-**VB**, **VB**, **VBF** or **VG**-exceed the recommended maximum values shown. The largest wear land is normally measured at the corner of the clearance face **VBN**. It has the most influence on the dimensions and tolerances of the final workpiece. The wear land shape on GRIP inserts differs slightly from that of ISO inserts. Although the frontal cutting surface of GRIP inserts absorbs more heat land wear, the wear land **VBF** is generally negligible in turning operations when compared to **VB** and **VBN**. Wear may be found only occasionally at the end of the cutting side **VG**.



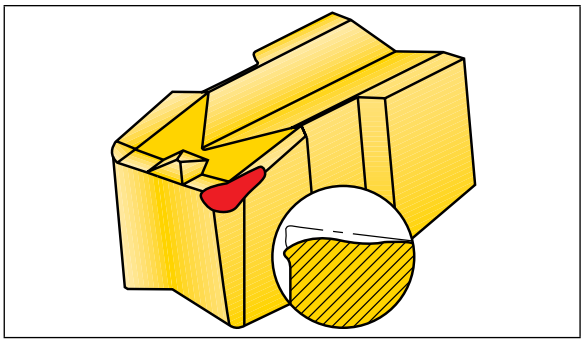
Maximum Recommended Wear Land Values Relative to Insert Widths

W Insert Width (mm)	Maximum Wear Land (mm)
≤3	0.20
4	0.22
5	0.25
6	0.27
8	0.27
≥10	0.30

Crater Wear and Tool Life
Crater wear **KB** occurs on the rake face and is mainly affected by feed and cutting speed. Crater wear develops over time toward the frontal cutting edge. If penetration of the frontal cutting edge occurs, it will immediately affect the quality of the machined surface.



Plastic Deformation
Plastic deformation occurs when the hardness of a cutting edge is decreased due to heat and pressure. The so-called "hot hardness" of the cutting tool material limits the feed and the cutting speed.
Plastic deformation will affect the dimensions and tolerances of the finished product. It generally occurs when a small corner radius is used with high cutting speeds and high feeds. Using the proper insert geometry and the correct speed and feed ranges should eliminate the problem.



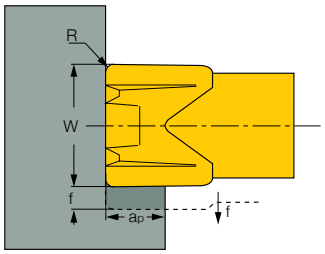
Machine Power Calculation

Calculation of Required Machine Power

Use the formulas below or use our internet web tool at:
http://mpwr.iscar.com/machinimgpwr

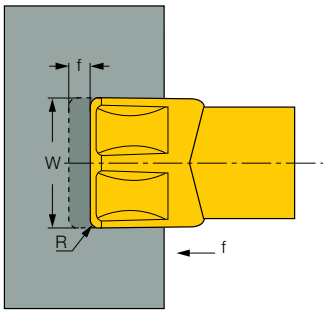
Turning

$$P = \frac{K_c \cdot a_p \cdot f \cdot v_c}{h \cdot 60{,}000} \text{ [kW]}$$



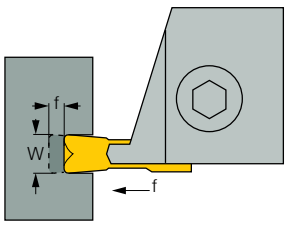
Grooving/Parting

$$P = \frac{K_c \cdot W \cdot f \cdot v_c}{h \cdot 60{,}000} \text{ [kW]}$$



Face Grooving

$$P = \frac{K_c \cdot W \cdot f \cdot v_c}{h \cdot 60{,}000} \text{ [kW]}$$



Where:

K_c - Specific cutting forces (N/mm²), turning values could be used

h - Efficiency (h≈0.8)



M-type Tools

- M-type tools have no support under the insert's cutting edge
- For an insert with a width smaller than 2.2 mm, there are no standard catalog tools available. There are 2 options as to how to use these narrow inserts:

1 Modify an existing tool and adjust the support under the insert to the required width

2 Use a standard M-type tool without support

- In wider widths, there are also cases where the support under the insert will disturb machining (threading inserts, pulley-V inserts and various specially tailored inserts) and therefore the above explanation should be considered
- These tools also provide the option for customers to use a very wide range of insert widths on the same tool (up to 6.4 mm)
- **Machining conditions need to be light due to little support**

K_c Values

Mtl. Gr. No.	K_c [N/mm²]
1	2000
2	2100
3	2150
4	2200
5	2100
6	2100
7	2100
8	2100
9	2100
10	2500
11	3250
12	2300
13	2800
14	2600
15	1100
16	1300
17	1100
18	1800
19	900
20	1000
21	500
22	800
23	800
26	700
27	700
28	1700
31	3000
32	3100
33	3300
34	3300
35	3200
36	1700
37	1700
38	4600
39	4700
40	4600
41	4500

For material groups, see page 488

Recommended Clamping Torques and Interchangeable Key Blades and Adjustable Torque Handles (optional) for GROOVE-TURN Tools



TOP-GRIP

Tool	Recommended Torque Range [Nm]	Adjustable Torque Handle	Key Blade
TGDR/L			
TGDR/L 1616-3M	6-7	TSA 6 5-14	BLD 6 HEX4
TGDR/L 1616-4M	7-8		BLD 6 HEX4
TGDR/L 2020-3M	7-8		BLD 6 HEX4
TGDR/L 2020-4M	7-8		BLD 6 HEX4
TGDR/L 2525-3M	7-8		BLD 6 HEX4
TGDR/L 2525-4M	6-7		BLD 6 HEX4
TGDR/L 2525-5M	6-7		BLD 6 HEX4
TGDR/L 2525-6M	8-9		BLD 6 HEX5
TGDR/L 3232-5M	7-8		BLD 6 HEX5
TGDR/L 3232-6M	12-13		BLD 6 HEX5

HELI-GRIP

Tool	Recommended Torque Range [Nm]	Adjustable Torque Handle	Key Blade
HELIR/L			
HELIR/L 1212-3T12	5-6	TSA 6 5-14	BLD 6 HEX4
HELIR/L 1616-3T12	7-8		BLD 6 HEX4
HELIR/L 1616-3T20	8-9		BLD 6 HEX5
HELIR/L 1616-4T12	5-6		BLD 6 HEX4
HELIR/L 1616-4T20	11-12		BLD 6 HEX5
HELIR/L 2020-3T12	6-7		BLD 6 HEX4
HELIR/L 2020-3T20	7-8		BLD 6 HEX5
HELIR/L 2020-4T12	6-7		BLD 6 HEX4
HELIR/L 2020-4T25	7-8		BLD 6 HEX5
HELIR/L 2020-5T12	7-8		BLD 6 HEX5
HELIR/L 2020-5T25	9-10		BLD 6 HEX5
HELIR/L 2525-3T12	6-7		BLD 6 HEX4
HELIR/L 2525-3T20	10-11		BLD 6 HEX5
HELIR/L 2525-4T12	6-7		BLD 6 HEX4
HELIR/L 2525-4T25	8-9		BLD 6 HEX5
HELIR/L 2525-5T12	8-9		BLD 6 HEX5
HELIR/L 2525-5T25	10-11		BLD 6 HEX5
HELIR/L 2525-6T12	11-12		BLD 6 HEX5
HELIR/L 2525-6T30	10-11		BLD 6 HEX5
HELIR/L 3232-3T20	9-10		BLD 6 HEX5
HELIR/L 3232-4T25	9-10		BLD 6 HEX5
HELIR/L 3232-5T25	10-11		BLD 6 HEX5
HELIR/L 3232-6T30	11-12		BLD 6 HEX5
HELIR/L 4032-4T25	9-10		BLD 6 HEX5
C#-HELIR/L			
C4 HELIR/L 3T20	9-10	TSA 6 5-14	BLD 6 HEX5
C4 HELIR/L 4T25	11-12		BLD 6 HEX5
C5 HELIR/L 3T20	10-11		BLD 6 HEX5
C5 HELIR/L 4T25	11-12		BLD 6 HEX5
C5 HELIR/L 5T25	11-12		BLD 6 HEX5
C6 HELIR/L 3T20	10-11		BLD 6 HEX5
C6 HELIR/L 4T25	12-13		BLD 6 HEX5
C6 HELIR/L 5T25	12-13		BLD 6 HEX5
C6 HELIR/L 6T30	13-14		BLD 6 HEX5

CUT-GRIP

Tool	Recommended Torque Range [Nm]	Adjustable Torque Handle	Key Blade
GHDR/L (short pocket)			
GHDR/L 12-3	4-5	TSA 6 5-14	BLD 6 T20
GHDR/L 16-3	5-6		BLD 6 HEX4
GHDR/L 16-3 ST	5-6		BLD 6 HEX4
GHDR/L 16-4	7-8		BLD 6 HEX5
GHDR/L 16-4 ST	7-8		BLD 6 HEX5
GHDR/L 20-3	5-6		BLD 6 HEX4
GHDR/L 20-4	7-8		BLD 6 HEX5
GHDR/L 20-5	8-9		BLD 6 HEX5
GHDR/L 25-3	5-6		BLD 6 HEX4
GHDR/L 25-4	7-8		BLD 6 HEX5
GHDR/L 25-5	8-9		BLD 6 HEX5
GHDR/L 25-6	9-10		BLD 6 HEX5
GHDR/L 32-3	6-7		BLD 6 HEX4
GHDR/L 32-4	8-10		BLD 6 HEX5
GHDR/L 32-5	9-11		BLD 6 HEX5
GHDR/L 25-P8	13-14		BLD 6 HEX6
GHDR/L 32-P8	10-12		BLD 6 HEX6
GHDR/L-JHP (short pocket)			
GHDR/L 20-3-JHP	5-6	TSA 6 5-14	BLD 6 HEX4
GHDR/L 20-4-JHP	7-8		BLD 6 HEX5
GHDR/L 25-3-JHP	7-8		BLD 6 HEX4
GHDR/L 25-4-JHP	10-11		BLD 6 HEX5
GHDR/L 25-5-JHP	10-12		BLD 6 HEX5
GHDR/L 25-P8-JHP	10-11		BLD 6 HEX5
GHDR/L-JHP (long pocket)			
GHDR/L 32-8-JHP	15-17	Not Available	Not Available
GHDR/L-8A			
GHDR/L 25-8A	10-12	TSA 6 5-14	BLD 6 HEX5
GHDR/L 32-8A	10-12		BLD 6 HEX5
GHDR/L (long pocket)			
GHDR/L 25-8	10-12	TSA 6 5-14	BLD 6 HEX5
GHDR/L 25-812	10-12		BLD 6 HEX5
GHDR/L 32-8	10-12		BLD 6 HEX5
GHDR/L 3225-8	10-12		BLD 6 HEX5
GHDR/L 32-812	11-12		BLD 6 HEX5
GHDR/L 25-10	15-17	Not Available	Not Available
GHDR/L 32-836	16-17		
GHDR/L 32-10	15-17		
GHDR/L 40-10	16-17		
C#-GHDR/L			
C4 GHDR/L-3	6-7	TSA 6 5-14	BLD 6 HEX4
C4 GHDR/L-4	7-8		BLD 6 HEX5
C5 GHDR/L-3	6-7		BLD 6 HEX4
C5 GHDR/L-4	7-8		BLD 6 HEX5
C5 GHDR/L-5	8-9		BLD 6 HEX5
C6 GHDR/L-3	6-7		BLD 6 HEX4
C6 GHDR/L-4	7-8		BLD 6 HEX5
C6 GHDR/L-5	8-9		BLD 6 HEX5
C6 GHDR/L-8	10-12		BLD 6 HEX5

CUT-GRIP

Tool	Recommended Torque Range [Nm]	Adjustable Torque Handle	Key Blade
GHDR/L/N 12/14			
GHDR/L 2525-14T12	16-17	Not Available	Not Available
GHDR/L 32-12	15-16		
GHDR/L 3232-14T12	16-17		
GHDR/L 3232-14T38	18-20		
GHDN 3232-14T38	18-20		
GHDR/L 4040-14T38	18-20		
GHDN 4040-14T38	18-20		
GHGR/L			
GHGR/L 16-3	7-8	TSA 6 5-14	BLD 6 HEX5
GHGR/L 16-3 ST	7-8		BLD 6 HEX5
GHGR 16-4	7-8		BLD 6 HEX5
GHGR/L 20-2	4-6	HSA 4 1-5	BLD 4 HEX4
GHGR/L 20-3	7-8	TSA 6 5-14	BLD 6 HEX5
GHGR/L 20-4	7-8		BLD 6 HEX5
GHGR/L 25-2	4-5	HSA 4 1-5	BLD 4 HEX4
GHGR/L 25-3	6-8	TSA 6 5-14	BLD 6 HEX5
GHGR/L 25-4	8-10		BLD 6 HEX5
GHGR/L 25-425	8-10		BLD 6 HEX5
GHGR/L 25-5	9-11		BLD 6 HEX5
GHGR/L 25-630	10-12		BLD 6 HEX5
GHGR/L 32-5	10-12		BLD 6 HEX5
GHGR/L 32-632	10-12		BLD 6 HEX5
GHMR/L			
GHMR/L 12	8-9	TSA 6 5-14	BLD 6 T20
GHMR/L 16	10-12		BLD 6 HEX5
GHMR/L 16-3 ST	10-12		BLD 6 HEX5
GHMR/L 20	10-12		BLD 6 HEX5
GHMR/L 25	10-12		BLD 6 HEX5
GHMR/L 32	10-12		BLD 6 HEX5
GHMPR/L			
GHMPR/L 16	4-5	TSA 6 5-14	BLD 6 HEX5
GHMPR/L 20	5-6		BLD 6 HEX5
GHMPR/L 25	8-9		BLD 6 HEX5
GHMUR/L			
GHMUR/L 16	6-7	TSA 6 5-14	BLD 6 HEX5
GHMUR/L 20	8-10		BLD 6 HEX5
GHMUR/L 25	10-11		BLD 6 HEX5
GHSR/L			
GHSR/L 10-2	2-3	HSA 4 1-5	BLD 4 T15
GHSR/L 12-2	2-3		BLD 4 T15
GHSR/L 14-2	2-3		BLD 4 T15
GHSR/L 16-2	4-5	TSA 6 5-14	BLD 6 T20
CGHN-P8			
CGHN 52-P8	6-7	TSA 6 5-14	BLD 6 HEX4
CGHN 53-P8	6-7		BLD 6 HEX4
CGHN-8-10D			
CGHN 52-8D	7-8	TSA 6 5-14	BLD 6 HEX4
CGHN 53-8D	7-8		BLD 6 HEX4
CGHN 52-10D	9-11		BLD 6 HEX5
CGHN 53-10D	9-11		BLD 6 HEX5
CGHR/L-12-14D			
CGHR/L 53-12D	10-12	TSA 6 5-14	BLD 6 HEX5
CGHR/L 53-14D	10-12		BLD 6 HEX5

All JETCUT tools also provide great advantages to standard low-pressure (7-10 bar) machine tools

The **JETCUT** tools provide a great advantage when standard machine pressure (10-20 bar) is applied and on a wide range of popular materials such as alloy & stainless steel, improving their tool life and in some cases chip control.

The main reasons for the improvement in both high and low pressure are:

- The **JETCUT** coolant is pinpointed exactly to the cutting edge where it is most effective.



- The **JETCUT** coolant is steady and not influenced by the operator's attention or interrupted by the chips.



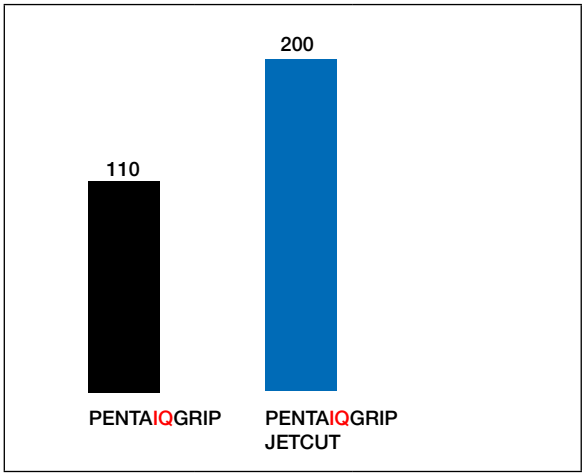
- In parting-off and deep grooving, external coolant loses its effectiveness as the groove becomes deeper.
- With **JETCUT** tools and blades, the coolant delivery is not influenced by the groove's depth.



These advantages were reported by many customers and are presented in various test reports.

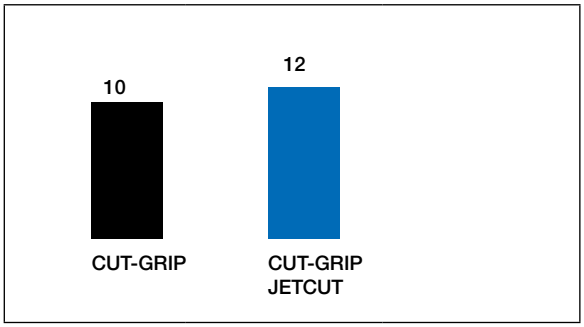
	PENTAIQGRIP	PENTAIQGRIP JETCUT
Material	Stainless Steel AISI 316	
Operation	Grooving	
Pressure (bar)	10 (external)	10 (Internal)
Tool	PCHR 25-D40-3	PCHR 25-D40-3-JHP
Insert	PENTA D40N300C020 IC808G	
V_c (mm/min)	180	
f (mm/rev)	0.2	
Tool life (number of grooves)	110	**200**

Tool life increase 82%



	CUT-GRIP	CUT-GRIP JETCUT
Material	Stainless Steel 1.4301 (AISI 304)	
Operation	External Grooving	
Pressure (bar)	20 (external)	20 (Internal)
Tool	GHDR 20-4	GHDR 20-4-JHP
Insert	GIP 4.00E-0.4 IC808	GIP 4.00E-0.4 IC808
V_c (m/min)	120	**140**
f (mm/rev)	0.12	**0.2**
Cycle time (min)	128.5	**67.4**
Parts/Edge	10	**12**

Tool life increase 20%
Cycle time improvement 52%



JETCUT Tools High-Pressure (up to 340 bar)

The high-pressure coolant feature has been in existence for a long time in the metal removal world, taking a bigger role in today's machining. **ISCAR** was one of the first cutting tools companies to respond to market needs by designing and producing tools for ultra-high and high-pressure coolant flow. High-pressure coolant was initially implemented mainly for difficult-to-machine materials such as Titanium, Inconel and other heat resistant alloys. Later it was found that tool life, productivity and chip control can be improved when machining stainless and alloyed steel. **JETCUT** tools are essential and important in the aviation, aerospace and medical industries.

How does it work?

The stream velocity of the coolant emitted from the pump increases as the coolant holes become smaller. When it emerges out of the tool through the nozzle, the velocity is very high, exerting considerable force on the chips, lowering their temperature and protecting the cutting edge from thermal shock. High temperature alloys produce a very high temperature as they are being cut. By effectively removing the heat, the chips become less ductile and thus easier to break. Shorter chips are easily managed, they do not tangle around the workpiece or machine parts, so there is no need to stop the process frequently. Usually in conventional cooling the chip prevents the coolant from reaching the insert rake face in the cutting zone. The coolant stream of the **JETCUT** tools is directed precisely between the insert rake face and the flowing chip. This results in longer tool life and a much more reliable process.

The coolant channels of the **JETCUT** tools feature outlets very close to the cutting edges, thus gaining the following advantages:

- Shorter machining time – the cutting speed may be increased by up to 200% when machining Titanium & heat resistant alloys
- Longer tool life – tool life increases by up to 100% not only on Titanium and heat resistant alloys, but also on stainless and alloy steels
- Improved chip control – even on the most ductile and problematic materials, small chips can be obtained
- Very effective cooling down of the cutting edge, which reduces sensitivity to heat fluctuations
- Safer and more stable process

JETCUT tools provide advantageous performance also when conventional pressure is applied.

General Information

Pressure Ranges

Up to 30 bar – Low pressure (LP) may provide some improvement in tool life. Usually will not have an effect on chip control. 30 – 120 bar – High-pressure (HP) the most commonly used pressure range used with **JETCUT** tools. Increase in tool life, increase in cutting speeds, improved chip control. 120 – 400 bar – Ultra high-pressure (UHP) requires special tool design in order to take advantage of the extra pressure. Minor increase in tool life compared to HP range. Ultra high-pressure coolant is usually implemented for machining Titanium and heat resistant alloys when there is a need for very small chips and higher machining rates.
Since 2000, **ISCAR** has provided hundreds of special tools featuring ultra high-pressure coolant capability for various customers and applications.

Pressure vs. Flow

Each **JETCUT** tool is designed to work at a certain flow rate, depending on the pressure. The flow rates are listed in the catalog pages for each tool. The user should verify that the pump can supply the required flow in order to achieve the optimal results. The pump data sheet will usually list the maximum flow rate for each pressure range.

Chips & Pressure

The coolant flow will start to break the chips at a certain pressure, depending on the specific tool and the workpiece material. If the chips are not breaking, the pressure should be increased until chip control is achieved. Above this pressure, as it is increased the chips become smaller and smaller. It is possible to control the size of the chips by modifying the pressure in order to achieve the desired chip size.

High-Pressure Coolant with GROOVE-TURN and Parting Tools

In grooving and parting operations, applying high-pressure coolant provides excellent chip breaking results on all materials. On exotic alloys such as Inconel and Titanium, it is usually impossible to break the chips with standard external coolant pressure.
Applying high coolant pressure provides excellent chip breaking results. On some alloyed and stainless steel, especially when low feeds are applied, high-pressure coolant may solve chip breaking problems.
High-pressure coolant reduces or even eliminates built-up edge phenomenon, especially when machining stainless steel and high temperature alloys.
In turning operations, applying high-pressure coolant is less effective because the jet is directed to the frontal edge.

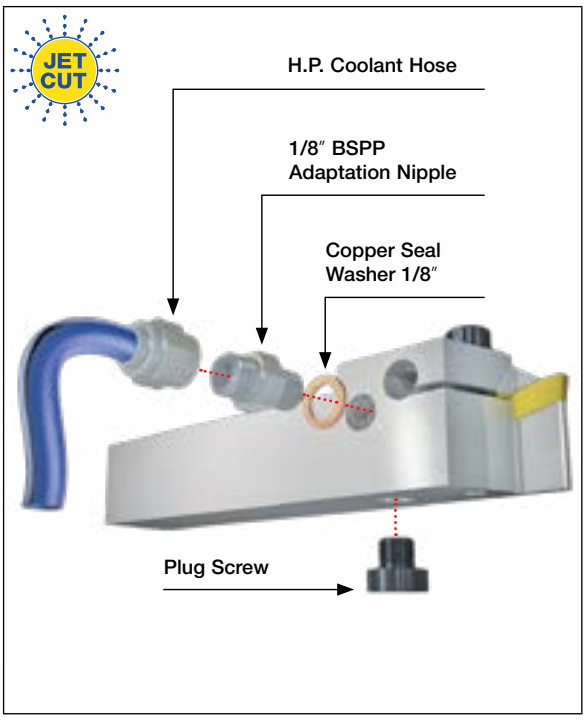
Assembly and Safety Guidelines when Using the JET HP Iso Turning and Grooving Tools

Before use, please ensure that:

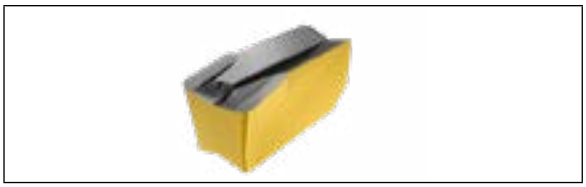
- The machine door is in a fully closed position
- The coolant hose is in the correct location and fully tightened with all seals in position
- A blank plug is inserted into the unused coolant hole
- All O-rings and washers are in place
- The coolant hose is tightened securely to the toolholder and tool block to prevent leakage of coolant

Important

Always pay attention not to exceed the maximum safe working pressure for **GROOVE-TURN tools 340 bar** and **PARTING OFF tools 300 bar.**



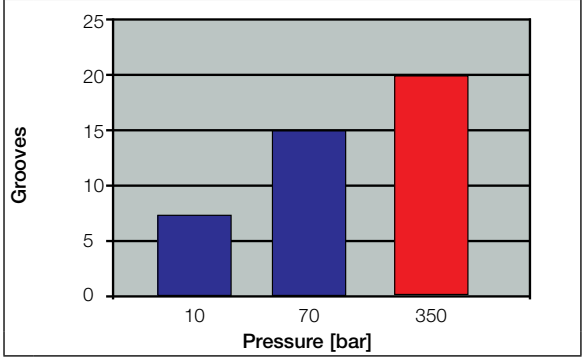
Grooving Test



Material: Titanium (Ti6Al4v)
Operation: Grooving
Tool: GHDL 25-6-JHP
Insert: GIMF 608 IC07
Vc: 50 mm/min
f: 0.15 mm/rev

Pressure [bar]		
10 (External)	70	350
		

Tool Life





Groove-Turn Cutting Speed Recommendations

ISO	Material		Condition	Tensile Strength [N/mm²]	Hardness HB	Material Group No.(1)
P	non-alloy steel and cast steel, free cutting steel	<0.25% C	annealed	420	125	1
		≥0.25% C	annealed	650	190	2
		<0.55% C	quenched and tempered	850	250	3
		≥0.55% C	annealed	750	220	4
			quenched and tempered	1000	300	5
	low alloy and cast steel (less than 5% of alloying elements)		annealed	600	200	6
			quenched and tempered	930	275	7
				1000	300	8
				1200	350	9
	high alloyed steel, cast steel and tool steel		annealed	680	200	10
			quenched and tempered	1100	325	11
P	stainless steel and cast steel		ferritic / martensitic	680	200	12
			martensitic	820	240	13
M	stainless steel and cast steel		austenitic, duplex	600	180	14
K	gray cast iron (GG)		ferritic / pearlitic		180	15
			pearlitic / martensitic		260	16
	nodular cast iron (GGG)		ferritic		160	17
			pearlitic		250	18
	malleable cast iron		ferritic		130	19
			pearlitic		230	20
N	aluminum-wrought alloys		not hardenable		60	21
			hardenable		100	22
	aluminum-cast alloys	≤12% Si	not hardenable		75	23
			hardenable		90	24
		>12% Si	high temperature		130	25
	copper alloys	>1% Pb	free cutting		110	26
			brass		90	27
			electrolytic copper		100	28
	non metallic		duroplastics, fiber plastics			29
			hard rubber			30
S	high temperature alloys	Fe based	annealed		200	31
			hardened		280	32
		Ni or Co based	annealed		250	33
			hardened		350	34
			cast		320	35
	titanium alloys		pure	400		36
			alpha+beta alloys, hardened	1050		37
H	hardened steel		hardened		55 HRC	38
			hardened		60 HRC	39
	chilled cast iron		cast		400	40
	cast iron		hardened		55 HRC	41

(1) For material groups, see pages 888-978

Material Group No.	IC20N	IC8250	IC807	IC808	IC908	IC354	IC830	IC228/328/528		
1	225 - 335	210 - 315	160 - 240	145 - 220	140-210	110 - 170	105 - 155	100 - 145		
2	210 - 290	195 - 270	150 - 205	135 - 190	130-180	105 - 145	95 - 135	90 - 125		
3	160 - 240	150 - 225	115 - 170	105 - 155	100-150	80 - 120	75 - 110	70 - 105		
4	175 - 270	165 - 255	125 - 195	115 - 180	110-170	90 - 135	80 - 125	75 - 120		
5	145 - 225	135 - 210	105 - 160	95 - 145	90-140	70 - 110	65 - 105	65 - 100		
6	175 - 270	165 - 255	125 - 195	115 - 180	110-170	90 - 135	80 - 125	75 - 120		
7	145 - 240	135 - 225	105 - 170	95 - 155	90-150	70 - 120	65 - 110	65 - 105		
8	145 - 225	135 - 210	105 - 160	95 - 145	90-140	70 - 110	65 - 105	65 - 100		
9	130 - 210	120 - 195	90 - 150	85 - 135	80-130	65 - 105	60 - 95	55 - 90		
10	210 - 290	195 - 270	150 - 205	135 - 190	130-180	105 - 145	95 - 135	90 - 125		
11	130 - 210	120 - 195	90 - 150	85 - 135	80-130	65 - 105	60 - 95	55 - 90		

	IC20N	IC806	IC907/807	IC8250	IC808	IC908	IC320	IC830	IC354	
12	180 - 320	130 - 240	125 - 230	120 - 220	115 - 210	110-200	100 - 180	80 - 150	90 - 160	
13	160 - 300	120 - 230	115 - 220	110 - 210	105 - 200	100-190	90 - 170	75 - 140	80 - 150	

	IC20N	IC806	IC907/807	IC8250	IC808	IC908	IC320	IC830	IC354	
14	140 - 270	110 - 205	105 - 195	100 - 185	95 - 180	90-170	80 - 155	65 - 125	70 - 135	

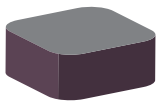
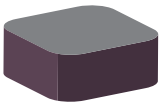
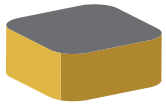
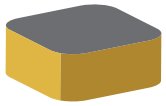
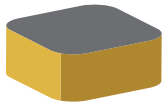
	IC5010	IC418	IC428	IC8250	IC907/807	IC908/808				
15	165 - 295	140 - 255	150-270	135 - 245	105 - 190	95 - 175				
16	145 - 210	125 - 180	130-190	115 - 170	90 - 135	85 - 125				
17	155 - 255	135 - 220	140-230	125 - 205	100 - 160	90 - 150				
18	120 - 200	105 - 170	110-180	100 - 160	75 - 125	70 - 115				
19	185 - 310	160 - 265	170-280	155 - 250	120 - 195	110 - 180				
20	155 - 255	135 - 220	140-230	125 - 205	100 - 160	90 - 150				

	ID5	IC04	IC807	IC20	IC04	IC07	IC08			
21	400-2500	460 - 1380	440 - 1320	400-1200	460 - 1380	440 - 1320	320 - 960			
22	400-2500	345 - 1150	330 - 1100	300-1000	345 - 1150	330 - 1100	240 - 800			
23	400-2500	345 - 1150	330 - 1100	300-1000	345 - 1150	330 - 1100	240 - 800			
24	400-2500	230 - 690	220 - 660	200-600	230 - 690	220 - 660	160 - 480			
25	300-1500	230 - 460	220 - 440	200-400	230 - 460	220 - 440	160 - 320			
26	300-1000	230 - 460	220 - 440	200-400	230 - 460	220 - 440	160 - 320			
27	300-800	170 - 345	165 - 330	150-300	170 - 345	165 - 330	120 - 240			
28	300-800	115 - 230	110 - 220	100-200	115 - 230	110 - 220	80 - 160			
29	150-600	55 - 230	55 - 220	50-200	55 - 230	55 - 220	40 - 160			
30										

No.	IC804	IC806	IC807	IC907	IC908	IC808	IC04	IC07	IC20	IC08
31	60 - 95	50 - 80	50 - 80	45 - 75	40-65	40 - 70	30 - 50	30 - 45	25 - 40	25 - 40
32	45 - 65	35 - 55	35 - 55	35 - 50	30-45	30 - 45	25 - 35	20 - 30	20 - 30	20 - 25
33	45 - 65	35 - 55	35 - 55	35 - 50	30-45	30 - 45	25 - 35	20 - 30	20 - 30	20 - 25
34	35 - 60	30 - 50	30 - 50	30 - 45	25-40	25 - 40	20 - 30	15 - 30	15 - 25	15 - 25
35	30 - 45	25 - 35	25 - 35	25 - 35	20-30	20 - 30	15 - 25	15 - 20	15 - 20	10 - 20
36	150 - 255	125 - 210	120 - 205	115 - 195	100-170	105 - 180	80 - 135	70 - 120	65 - 110	60 - 100
37	50 - 65	45 - 60	40 - 50	40 - 50	35-45	35 - 45	50 - 65	40 - 55	40 - 50	35 - 45

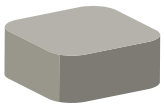
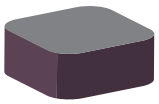
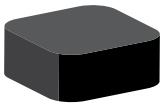
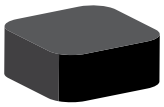
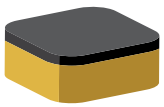
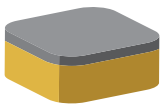
No.	IB10H	IB50	IB20H	IC807	IC907	IC808	IC908			
38	100-155	90-140	80-125	35-45	30-40	30-40	25-35			
39	90-135	80-120	75-110	30-40	25-35	25-35	20-30			
40	110-175	100-160	90-145	45-65	40-60	40-60	30-50			
41	100-135	90-120	80-110	40-50	35-45	35-45	30-40			

Groove-Turn Materials Grades Chart

	Grade	ISO	Grade Description	Coating Layers	Coating Color*
PVD COATED	IC228	P30-P45 M25-M40	A very substrate with PVD coating, suitable for machining steels and stainless steel at low to medium cutting speeds.	TiN TiCN Base	
	IC528	P30-P45 M25-M40	A tough substrate with PVD coating, suitable for machining steels and stainless steel at low to medium cutting speeds. Can be used under unstable conditions.	TiN TiCN Base	
	IC804	S05-S15	A very hard submicron grain size substrate with PVD coating and a special SUMOTEC surface treatment. Suitable for semi-finishing and finishing operations under stable conditions on high temperature alloys and Titanium alloys moderate to relatively high cutting speeds. Features high wear resistance and plastic deformation durability.	TiAlN AlTiN Base	
	IC806	M05-M15 S10-S20	A hard submicron grain size substrate with PVD coating and a special SUMOTEC surface treatment. Excellent for machining high temperature alloys and Titanium alloys, at moderate to relatively high cutting speeds. Features high wear resistance and plastic deformation durability.	TiAlN AlTiN Base	
	IC807	P10-P20 M05-M15 K15-K30 S10-S20 H05-H15	A hard submicron grain size substrate with PVD coating and a special SUMOTEC surface treatment. Suitable for machining steels, alloy steels, austenitic stainless steel, high temperature alloys and hard steels at moderate to relatively high cutting speeds under stable conditions. Features high wear resistance and plastic deformation durability.	TiN TiAlN Base	
	IC808	P15-P30 M20-M30 K20-K40 S15-S30 H20-H30	A tough submicron grain size substrate with PVD coating and a special SUMOTEC surface treatment. Recommended for general use for a large variety of applications and materials such as steels, alloy steels, austenitic stainless steel and high temperature alloys at moderate cutting speeds and feeds. Features high wear resistance and chipping durability.	TiN TiAlN Base	
	IC830	P30-P45 M25-M40 S20-S30	A tough substrate with PVD coating and a special SUMOTEC surface treatment. Suitable for machining steel and stainless steel at low to medium cutting speeds and moderate to high feeds. The grade features high toughness and recommended for interrupted cuts and machining under unstable conditions. May be used on high temperature alloys at low cutting speeds.	TiN TiAlN Base	
	IC907	P10-P20 M05-M15 K15-K30 S10-S20 H05-H15	A hard submicron grain size substrate with PVD coating suitable for a wide range of materials such as steels, alloy steels, hard steels, austenitic stainless steel and heat resistant alloys at moderate to relatively high cutting speeds under stable conditions. Features high wear resistance and plastic deformation durability.	TiAlN Base	

* For coated grades

Groove-Turn Materials Grades Chart

	Grade	ISO	Grade Description	Coating Layers	Coating Color*
PVD COATED	IC908	P15-P30 M20-M30 K20-K40 S15-S30 H20-H30	A tough submicron grain size substrate with PVD coating, recommended for general use in a large variety of operations and materials such as steels, alloy steels, austenitic stainless steel and high temperature alloys at moderate cutting speeds. Features high wear resistance and chipping durability.	TiAlN Base	
	IC1007	P10-P20 M05-M15 K15-K30 S10-S20 H05-H15	A hard submicron grain size substrate with PVD coating, suitable for a wide range of materials such as steels, alloy steels, hard steels, austenitic stainless steel and heat resistant alloys at moderate to high speeds under stable conditions. Features high wear resistance and plastic deformation durability. Good choice for non-ferrous materials and cast iron.	TiN TiAlN Base	
	IC1008	P15-P30 M20-M30 K20-K40 S15-S30 H20-H30	A tough submicron grain size substrate with PVD coating. Recommended for general use on a wide range of applications and materials as steels, alloy steels, austenitic stainless steel and high temperature alloys at moderate cutting speeds.	TiN TiAlN Base	
	IC1017	 S10-S25 	High-hardness submicron grain substrate with a TiAlN PVD coating for machining high-temperature alloys at relatively higher speeds. This complements and enhances the machining capabilities of IC806 and IC804 grades. Suitable for aerospace and petroleum industry applications.	TiAlN AlTiN Base	
CVD COATED	IC418	 K10-K25 	A tough substrate with multilayer CVD coating. Recommended for machining gray and nodular cast iron at medium to high cutting speeds. Can be used for interrupted cuts and under heavy machining conditions.	Al_2O_3 Tic Base	
	IC428	 K05-K20 H15-H25	A hard substrate with multilayer CVD coating. Recommended for machining gray and nodular cast iron at moderate to high cutting speeds.	Al_2O_3 Tic Base	
	IC5010	 K10-K20 	A hard substrate with MTCVD coating with a special SUMOTEC surface treatment. Recommended for machining gray and nodular cast iron at moderate to high cutting speeds, provides very good resistance to chipping.	TiN Al_2O_3 TiCN Base	
	IC8250	P15-P35 M15-M25 	A tough substrate with a cobalt enriched layer and MTCVD coating with a special SUMOTEC surface treatment. Recommended for general use machining of steels, alloy steels and martensitic stainless steel in a wide range of conditions. Features high toughness and good wear resistance.	TiN Al_2O_3 TiCN Base	

* For coated grades

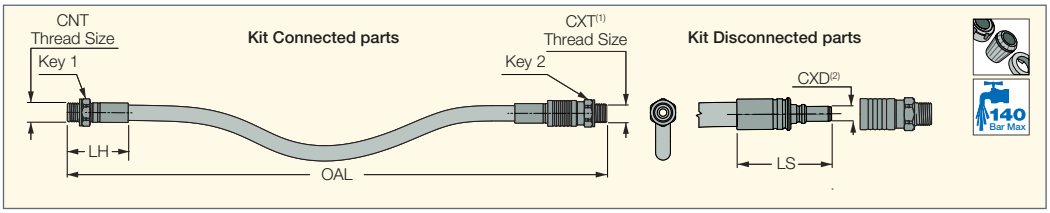
Groove-Turn Materials Grades Chart

	Grade	ISO	Grade Description	Coating Layers	Uncoated
CERMET	IC20N	P05-P25 M05-M15	A very hard cermet grade for turning and grooving, recommended for finishing operations on steels and alloy steels at high cutting speeds and low feeds. Features excellent surface finish, high wear resistance, plastic deformation durability and prevents built-up edge.	Base	
UNCOATED	IC4	N01-N15 S05-S15	A very hard-uncoated carbide grade, suitable for machining aluminum alloys, aluminum alloys with high silicon content and other non-ferrous materials at high cutting speeds.	Base	
	IC07	M10-M20 N05-N20 S10-S25	A hard-uncoated submicron carbide grade, suitable for machining aluminum alloys and other non-ferrous materials at high cutting speeds.	Base	
	IC08	M15-M30 N10-N25 S20-S30	A tough uncoated submicron carbide grade, suitable for steels, stainless steel and high temperature alloys at low cutting speeds. Good choice for non-ferrous materials.	Base	
	IC20	K10-K20 N05-N25 S10-S20 H10-H20	A hard-uncoated carbide grade for machining aluminum and other non-ferrous materials at medium to high cutting speeds. Can be used for cast iron at low cutting speeds. Suitable also for machining high temperature and Titanium alloys, at low cutting speeds.	Base	
CBN	IB10H	H10	Extra fine PCBN grain size. Suitable for high speed machining of hardened steels (45-65 HRC) under stable conditions.	Base	
	IB20H	H20	A combination of coarse and fine PCBN grain, suitable for general and interrupted cutting of hardened steels.	Base	
	IB50	K01-K10 H01-H10	A PCBN grade, suitable for finish turning and grooving operations on hardened steels 45-65 HRC and nodular cast iron in continuous cutting.	Base	
PCD	ID5	N01-N10	A PCD brazed tip, suitable for machining aluminum alloys (Si < 12%) and other non-ferrous materials. Features very high wear resistance with high toughness. Suitable for finishing operations and can be used for semi roughning operations and interrupted cut.	Base	

For complete information regarding ISCAR's ceramic, CBN, and PCD grades, please refer to ISCAR's catalog on the subject.

Accessories

JHP QC KIT
High-Pressure Quick Connection Kit



Designation	CNT	CXT(1)	CXD(2)	LH	LS	Key 1	Key 2	OAL
JHP QC KIT G1/8-CP5/16-2	G1/8"-28 BSPP	5/16"-24 UNF	4.00	25.0	36.0	13.00	10.00	263.00
JHP QC KIT G1/8-CP1/8-2	G1/8"-28 BSPP	G1/8"-28 BSPP	5.60	32.0	48.0	13.00	13.00	281.00

NEW

- JHP QC KIT G1/8-CP5/16-2 for 10, 12 & 16 mm shanks
- JHP QC KIT G1/8-CP1/8-2 for 20, 25 & 32 mm shanks

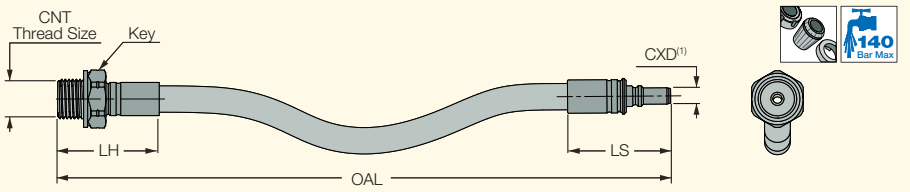
(1) Goes into the toolholder
(2) Coolant outlet diameter

Connected Quick Change Hose with Straight Connector	Disconnected Quick Change Hose with Straight Connector
	
Connected Quick Change Hose with 90° Elbow	**Disconnected Quick Change Hose with 90° Elbow**
	



Accessories

JHP QC HOSE
High-Pressure Quick Connection Coolant Hose



Designation	CNT	CXD(1)	LH	LS	Key	OAL
JHP QC HOS G1/8-CPM5/16-1	G1/8"-28 BSPP	4.00	25.0	25.0	13.00	150.00
JHP QC HOS G1/8-CPM5/16-2	G1/8"-28 BSPP	4.00	25.0	25.0	13.00	250.00
JHP QC HOSE G1/8-CPM1/8-2	G1/8"-28 BSPP	5.60	32.0	36.0	13.00	268.00

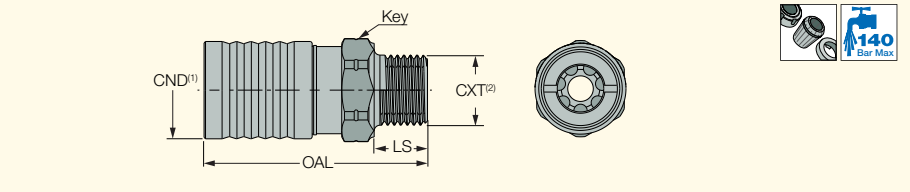
NEW

• JHP QC HOS G1/8-CPM5/16-1 and JHP QC HOS G1/8-CPM5/16-2 for 10, 12 & 16 mm shanks • JHP QC HOSE G1/8-CPM1/8-2 for 20, 25 & 32 mm shanks

(1) Coolant outlet diameter

Accessories

JHP QC CONNECTOR
High-Pressure Quick Connector



Designation	CND(1)	CXT(2)	LS	Key	OAL
JHP QC STR-M8x1	9.80	M8 x1	6.5	10.00	23.85
JHP QC STR-5/16UNF	9.80	5/16"-24 UNF	6.5	10.00	23.85
JHP QC STR-G1/8	13.50	G1/8"-28 BSPP	7.4	13.00	30.40

NEW

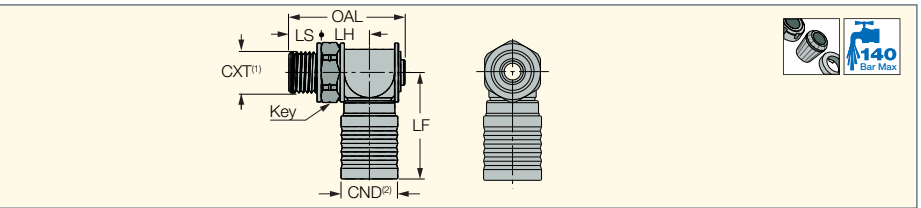
• JHP QC STR-M8x1 for the QUICKSWISS Modular Tooling System • JHP QC STR-5/16UNF for 10, 12 & 16 mm shanks • JHP QC STR-G1/8 for 20, 25 & 32 mm shanks

(1) Coolant inlet diameter

(2) Goes into the toolholder

Accessories

JHP QC ELBOW
High-Pressure Quick Connector Elbow



Designation	CXT(1)	CND(2)	LH	LS	LF	Key	OAL
JHP QC ELBOW 90-M8x1	M8x1	9.80	9.6	6.7	18.00	11.00	23.80
JHP QC ELBOW 90-5/16UNF	5/16"-24 UNF	9.80	9.6	6.7	18.00	11.00	23.80
JHP QC ELBOW 90-G1/8	G1/8"-28 BSPP	13.50	12.3	7.5	24.00	13.00	29.50

NEW

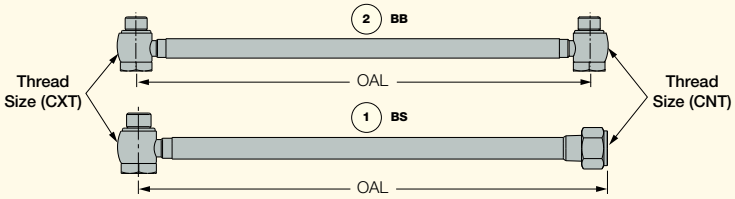
• JHP QC ELBOW 90-M8x1 for the QUICKSWISS Modular Tooling System • JHP QC ELBOW 90-5/16UNF for 10, 12 & 16 mm shanks • JHP QC ELBOW 90-G1/8 for 20, 25 & 32 mm shanks

(1) Goes into the toolholder

(2) Coolant inlet diameter

Accessories

JHP HOSE
High-Pressure Coolant Hose



Designation	OAL	Fig.	CXT	CNT
JHP HOSE G1/8-7/16-200BS	200.00	1	G1/8"-28 BSPP	UNF7/16"-20FLARE 37°
JHP HOSE 5/16-G1/8-200BS	200.00	1	5/16"-24 UNF	G1/8"-28 BSPP
JHP HOSE 5/16-7/16-200BS	200.00	1	5/16"-24 UNF	UNF7/16"-20FLARE 37°
JHP HOSE G1/8-G1/8-200BB	200.00	2	G1/8"-28 BSPP	G1/8"-28 BSPP
JHP HOSE G1/8-7/16-250BS	250.00	1	G1/8"-28 BSPP	UNF7/16"-20FLARE 37°
JHP HOSE G1/8-G1/8-250BB	250.00	2	G1/8"-28 BSPP	G1/8"-28 BSPP

Spare Parts

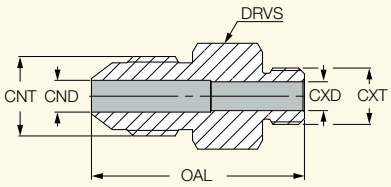
Designation		
JHP HOSE 5/16-7/16-200BS	JHP BANJO BOLT 5/16" UNF	JHP COPPER SEAL 5/16"
JHP HOSE G1/8-G1/8-200BB		JHP COPPER SEAL 1/8"*
JHP HOSE G1/8-G1/8-250BB	JHP BANJO BOLT G1/8"*	JHP COPPER SEAL 1/8"*

* Optional, to be ordered separately

Accessories

JHP NIPPLE
High-Pressure Adaptation Nipple





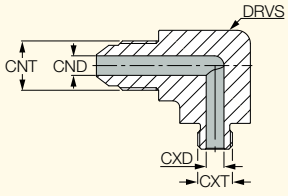


Designation	CXT	CNT	OAL	CND(1)	CXD	DRVS(2)
JHP NIPPLE G1/8"-7/16"UNF	1/8"-28 BSPP	7/16"-20 UNF	28.75	4.00	4.00	14.3
JHP NIPPLE 1/8NPT-7/16UNF	1/8"-27 NPT	7/16"-20 UNF	31.00	4.80	4.40	12.7
JHP NIPPLE 1/4NPT-7/16UNF	1/4"-18 NPT	7/16"-20 UNF	36.00	4.40	4.40	14.3
JHP NIPPLE5/16UNF-7/16UNF	5/16"-24 UNF	7/16"-20 UNF	29.50	4.40	4.00	12.7

(1) Coolant entry diameter
(2) Torque key size

Accessories

JHP ELBOW
High-Pressure Adaptation Elbow





Designation	CNT	CND(2)	CXT	CXD	DRVS(3)
JHP ELBOW TUB3/16-5/16UNF (1)	-	3.10	5/16"-24 UNF	4.00	12.7
JHP ELBOW 90-5/16-7/16UNF	7/16"-20 UNF	4.40	5/16"-24 UNF	4.00	12.7
JHP ELBOW 90-G1/8-7/16UNF	7/16"-20 UNF	4.40	1/8"-28 BSPP	4.00	15.9

(1) For connection to a simple 3/16" stainless or copper tube
(2) Coolant entry diameter
(3) Torque key size

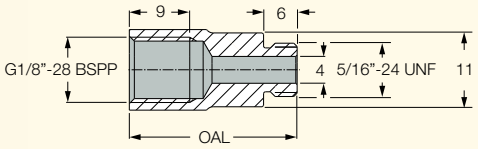
Spare Parts

Designation	
JHP ELBOW	JHP COPPER SEAL 1/8"

Accessories

JHP CONNECTOR
High-Pressure Connector







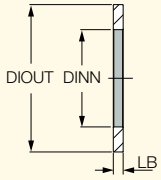
Designation	OAL	DRVS[1]
JHP CONECTOR 5/16"-G1/8"	25.00	12.0

(1) Torque key size

Accessories

JHP COPPER SEAL
High-Pressure Copper Seal





Designation	DIOUT	DINN	LB
JHP COPPER SEAL 5/16"-2.5	9.40	8.00	2.50
JHP COPPER SEAL 5/16"	11.90	8.15	1.35
JHP COPPER SEAL 1/8"	15.00	10.00	1.00

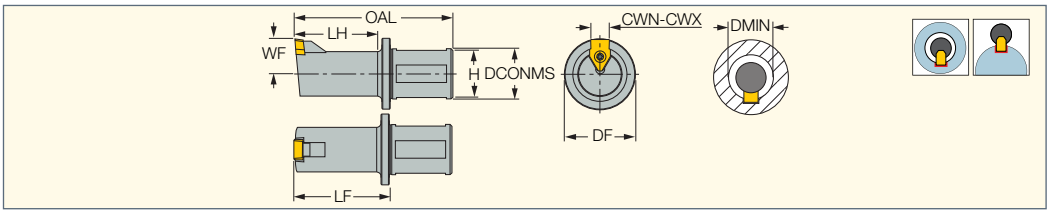
BROACHING TOOLS



ISCARBROACH

SXCIB

Broaching Holders for Lathe and Milling Machines



Designation	DCONMS	OAL	LH	LF	CWN[1]	CWX[2]	WF	DMIN	H	DF	Insert		
SXCIB 25-22-50	25.00	100.00	50.0	60.00	5.00	12.00	12.00	22.00	23.0	33.0	Group #1	SR M5X13 T20	T-20/5
SXCIB 32-30-50	32.00	100.00	50.0	60.00	5.00	12.00	16.50	30.00	30.0	45.0	Group #2	SR M5X13 T20	T-20/5
SXCIB 32-38-50	32.00	100.00	50.0	60.00	5.00	12.00	22.00	38.00	30.0	45.0	Group #3	SR M5X13 T20	T-20/5
SXCIB 32-30-75	32.00	125.00	75.0	85.00	7.00	12.00	16.50	30.00	30.0	45.0	Group #2	SR M5X13 T20	T-20/5
SXCIB 32-38-75	32.00	125.00	75.0	85.00	9.00	12.00	22.00	38.00	30.0	45.0	Group #3	SR M5X13 T20	T-20/5

[1] Minimum cutting width

[2] Maximum cutting width

For inserts, see pages: XNUWB (498) • XNUWB (light fit) (499) • XNUWB (tight fit) (499)

Insert Group #1	Insert Group #2	Insert Group #3
XNUWB 13-4.98-0.2	XNUWB 13-7.98-0.2	XNUWB 13-10.13-1.05
XNUWB 13-5.01-0.2	XNUWB 13-8.13-1.05	XNUWB 13-11.98-0.3
XNUWB 13-5.98-0.2	XNUWB 13-9.98-0.3	XNUWB 13-12.02-0.3
XNUWB 13-6.01-0.2	XNUWB 13-10.01-0.3	XNUWB 13-12.02-0.5
XNUWB 13-6.12-0.85		XNUWB 13-12.15-1.35
XNUWB 13-7.13-0.85		XNUWB 13-12.15-1.75
XNUWB 13-7.98-0.2		XNUWB 13-12.15-2.25
XNUWB 13-8.01-0.2		
XNUWB 13-8.13-1.05		

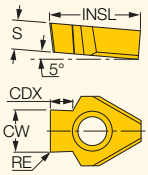
Spare Parts Clamping screw: SR M5X13 T20 Key: T-20/5

ISCARBROACH

XNUWB

DIN138 (Tolerance C11) Inserts for Keyway Broaching on Lathe and Milling Machines





Designation	Dimensions							IC908
	CW	RE	CWTOL[1]	RETOL[2]	INSL	CDX[3]	S	
XNUWB 13-6.12-0.85	6.12	0.85	0.020	0.050	17.30	2.60	5.30	●
XNUWB 13-7.13-0.85	7.13	0.85	0.020	0.050	17.30	3.30	5.30	●
XNUWB 13-8.13-1.05	8.13	1.05	0.020	0.050	17.30	3.40	5.30	●
XNUWB 13-10.13-1.05	10.13	1.05	0.020	0.050	20.20	4.20	5.30	●
XNUWB 13-12.15-1.35	12.15	1.35	0.020	0.050	20.20	5.10	5.30	●
XNUWB 13-12.15-1.75	12.15	1.75	0.020	0.050	20.20	6.60	5.30	●
XNUWB 13-12.15-2.25	12.15	2.25	0.020	0.050	20.20	8.50	5.30	●

• Typical conditions: V_c = 4000-8000 mm/min, a_p = 0.02-0.08 mm

[1] Cutting width tolerance (+/-)

[2] Corner radius tolerance (+/-)

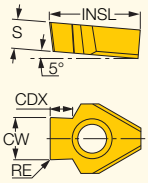
[3] Cutting depth maximum

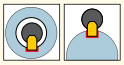
For tools, see pages: SXCIB (498)

ISCARBROACH

XNUWB (light fit)
DIN6885 Inserts for Light Fit (JS9) Keyway Broaching on Lathe and Milling Machines







Designation	Dimensions							IC908
	CW	CWTOL(1)	RE	RETOL(2)	INSL	CDX(3)	S	
XNUWB 13-5.01-0.2	5.01	-0.030	0.20	0.030	17.30	2.70	5.30	●
XNUWB 13-6.0-0.2	6.01	-0.030	0.20	0.030	17.30	3.40	5.30	●
XNUWB 13-8.01-0.2	8.01	-0.030	0.20	0.030	17.30	4.10	5.30	●
XNUWB 13-10.01-0.3	10.01	- (4)	0.30	0.030	17.30	4.20	5.30	●
XNUWB 13-12.02-0.3	12.02	-0.030	0.30	0.030	20.20	5.70	5.30	●
XNUWB 13-12.02-0.5	12.02	-0.030	0.50	0.050	20.20	8.50	5.30	●

- Typical conditions: V_c = 4000-8000 mm/min, a_p = 0.02-0.08 mm

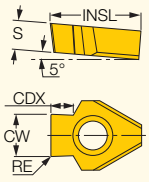
(1) Tolerance 0.0...-0.03
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum
(4) CW Tolerance: -0.028...+0.008

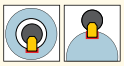
For tools, see pages: SXCIB (498)

ISCARBROACH

XNUWB (tight fit)
DIN6885 Inserts for Tight Fit (P9) Keyway Broaching on Lathe and Milling Machines







Designation	Dimensions					IC908
	CW(1)	RE	INSL	CDX(2)	S	
XNUWB 13-4.98-0.2	4.98	0.20	17.30	2.70	5.30	●
XNUWB 13-5.98-0.2	5.98	0.20	17.30	3.40	5.30	●
XNUWB 13-7.98-0.2	7.98	0.20	17.30	4.10	5.30	●
XNUWB 13-9.98-0.3	9.98	0.30	17.30	4.20	5.30	●
XNUWB 13-11.98-0.3	11.98	0.30	20.20	5.70	5.30	●

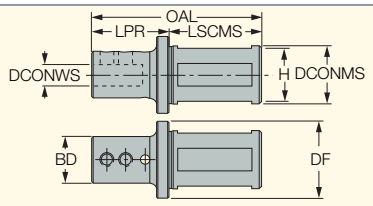
- Typical conditions: V_c = 4000-8000 mm/min, a_p = 0.02-0.08 mm

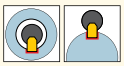
(1) Tolerance: +0 -0.03
(2) Cutting depth maximum

For tools, see pages: SXCIB (498)

ISCARBROACH

BHDN
Broaching Holders for Lathe and Milling Machines





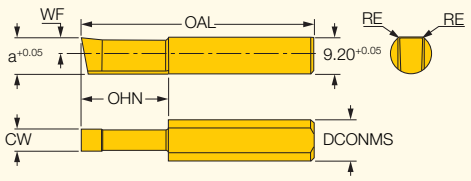
Designation	DCONWS	DCONMS	BD	DF	LPR	OAL	LSCMS	H	Insert			
BHDN 25-10-33	10.00	25.00	20.00	33.00	33.00	73.00	40.00	23.0	SCB 010	SR M6X0.5X6 PF	HW 3.0	ZAD 4X18 DIN 6325 m6
BHDN 32-10-33	10.00	32.00	20.00	40.00	33.00	73.00	40.00	30.0	SCB 010	SR M6X0.5X6 PF	HW 3.0	ZAD 4X18 DIN 6325 m6

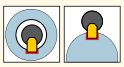
- Holders are suitable for left- and right-hand mini-bars and ISO bars

ISCARBROACH

SCB
DIN138 (Tolerance C11) Inserts for Keyway Broaching on Lathe and Milling Machines







Designation	Dimensions								IC908
	CW	RE	DCONMS	WF	a	OAL	OHN(1)	DMIN	
SCB 010.410.050-25	4.10	0.50	10.00	4.00	9.00	50.00	25.0	10.00	●
SCB 010.410.050-41	4.10	0.50	10.00	4.00	9.00	66.00	41.0	10.00	●
SCB 010.510.050-25	5.10	0.50	10.00	4.00	9.00	50.00	25.0	10.00	●
SCB 010.510.050-41	5.10	0.50	10.00	4.00	9.00	66.00	41.0	10.00	●

- Typical conditions: V_c = 4000-8000 mm/min, a_p = 0.02-0.08 mm

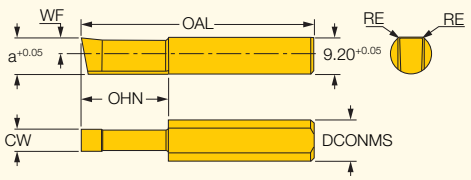
(1) Minimum overhang

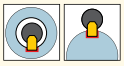
For holders, see pages: BHDN (441)

ISCARBROACH

SCB (light fit)
DIN6885 Inserts for Light Fit (JS9) Keyway Broaching on Lathe and Milling Machines







Designation	Dimensions								IC908
	CW	RE	DCONMS	WF	a	OAL	OHN(1)	DMIN	
SCB 010.400.020-25	4.00	0.20	10.00	4.00	9.00	50.00	25.0	10.00	●
SCB 010.400.020-41	4.00	0.20	10.00	4.00	9.00	66.00	41.0	10.00	●
SCB 010.500.020-25	5.00	0.20	10.00	4.00	9.00	50.00	25.0	10.00	●
SCB 010.500.020-41	5.00	0.20	10.00	4.00	9.00	66.00	41.0	10.00	●

- Typical conditions: V_c = 4000-8000 mm/min, a_p = 0.02-0.08 mm

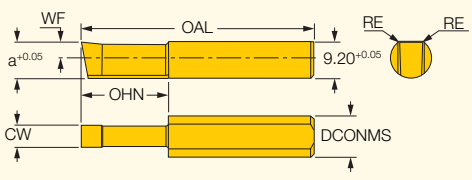
(1) Minimum overhang

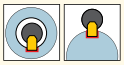
For holders, see pages: BHDN (441)

ISCARBROACH

SCB (tight fit)
DIN6885 Inserts for Tight Fit (P9) Keyway Broaching on Lathe and Milling Machines







Designation	Dimensions								IC908
	CW(1)	RE	DCONMS	WF	a	OAL	OHN(2)	DMIN	
SCB 010.398.020-25	3.98	0.20	10.00	4.00	9.00	50.00	25.0	10.00	●
SCB 010.398.020-41	3.98	0.20	10.00	4.00	9.00	66.00	41.0	10.00	●
SCB 010.498.020-25	4.98	0.20	10.00	4.00	9.00	50.00	25.0	10.00	●
SCB 010.498.020-41	4.98	0.20	10.00	4.00	9.00	66.00	41.0	10.00	●

- Typical conditions: V_c = 4000-8000 mm/min, a_p = 0.02-0.08 mm

(1) Tolerance: +0.01 -0.02

(2) Minimum overhang

For holders, see pages: BHDN (441)

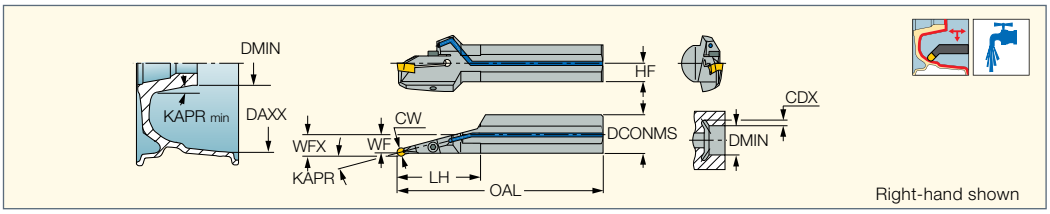
TOOLS FOR ALUMINUM WHEELS



CUTGRIP

GHIUR/L-C-A (15° & 27.5°) Bars

Internal Grooving and Turning Bars for Machining Aluminum Wheels



Designation	CW	DCONMS	DMIN	CDX(1)	OAL	LH	WFX	WF	HF	KAPR(2)
GHIUR/L 40C-15A-6	6.00	40.00	160.00	-	320.00	83.0	21.20	19.0	18.0	15.0
GHIUR/L 40C-15A-8	8.00	40.00	160.00	0.00 (3)	320.00	83.0	21.00	18.0	18.0	15.0
GHIUR 50C-15A-8	8.00	50.00	100.00	0.00 (4)	350.00	83.0	26.00	23.0	23.0	15.0
GHIUR/L 40C-27.5A-6	6.00	40.00	90.00	0.60 (5)	320.00	80.0	25.10	23.5	18.0	27.5
GHIUR/L 50C-27.5A-8	8.00	50.00	120.00	1.80 (5)	350.00	82.0	30.20	28.0	23.0	27.5

- Upper jaw with hard coating to sustain chip deflection

(1) Dimension for minimum bore diameter

(2) Tool cutting edge angle

(3) For bore diameter D>200, CDX is 0.5 mm

(4) For bore diameter D>200, CDX is 1.4 mm

(5) For bore diameter D>200, CDX is 4.0 mm

For inserts, see pages: GDMA (332) • GIPA (full radius W=3-6) (333) • GIPA 8-35V (V-shape) (505) • GIPA/GIDA 8 (full radius) (334)

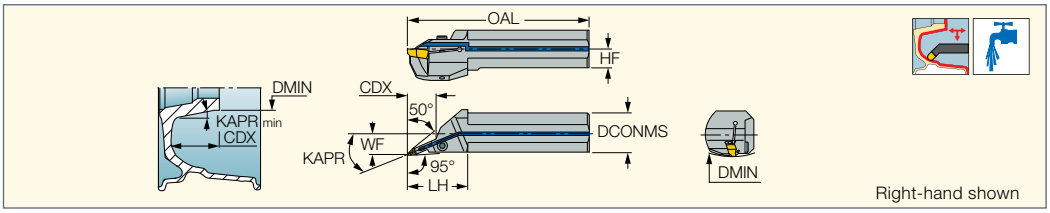
Spare Parts

Designation			
GHIUR/L 40C-15A-6	SR M5X20DIN912	HW 4.0	PL 40
GHIUR/L 40C-15A-8	SR M6X20 DIN912	HW 5.0	PL 40
GHIUR 50C-15A-8	SR M6X25DIN912	HW 5.0	PL 40
GHIUL 40C-27.5A-6	SR M6X25DIN912	HW 5.0	PL 40
GHIUR 40C-27.5A-6	SR M6X20 DIN912	HW 5.0	PL 40
GHIUR/L 50C-27.5A-8	SR M6X25DIN912	HW 5.0	PL 40

CUTGRIP

GHIUR/L-C-22.5A-8V

22.5° Approach Angle Bars for Facing and Internal Machining



Designation	CW	DCONMS	DMIN	CDX	OAL	LH	HF	WF	KAPR(1)
GHIUR/L 40C-22.5A-8V	8.00	40.00	300.00	28.50	250.00	60.0	18.0	21.00	22.5

- Upper jaw with hard coating to sustain chip deflection

(1) Tool cutting edge angle

For inserts, see pages: GIPA 8-35V (V-shape) (505)

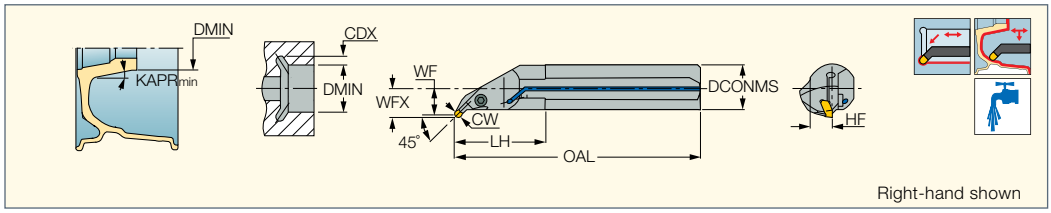
Spare Parts

Designation			
GHIUR/L-C-22.5A-8V	SR M6X20 DIN912	HW 5.0	PL 40

CUTGRIP

GHIUR/L-UC

45° Undercutting Bars for Internal Turning Aluminum Wheels



Designation	CW	DCONMS	DMIN	CDX(1)	OAL	LH	WFX	WF	HF			
GHIUR/L 40UC-6	6.00	40.00	70.00	0.00 (2)	350.00	75.0	23.80	24.7	18.0	SR M6X20 DIN912	HW 5.0	PL 40
GHIUR 50UC-6	6.00	50.00	78.00	0.00 (3)	350.00	75.0	28.80	29.7	23.0	SR M6X20 DIN912	HW 5.0	PL 40
GHIUR/L 40UC-8	8.00	40.00	68.00	0.00 (4)	350.00	79.0	28.80	26.0	18.0	SR M6X20 DIN912	HW 5.0	PL 40
GHIUR 50UC-8	8.00	50.00	58.00	0.00 (5)	350.00	80.0	30.20	31.4	23.0	SR M6X20 DIN912	HW 5.0	PL 40

(1) Cutting depth maximum

(2) For bore diameter more than 200, CDX is 1.3 mm

(3) For bore diameter more than 200, CDX is 2.0 mm

(4) For bore diameter more than 200, CDX is 2.8 mm

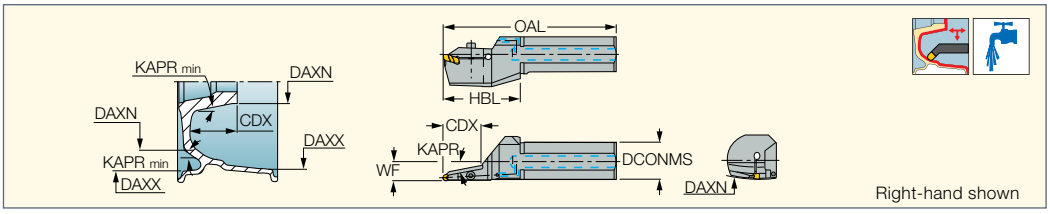
(5) For bore diameter more than 200, CDX is 6.0 mm

For inserts, see pages: GDMA (332) • GIPA (full radius W=3-6) (333) • GIPA 8-35V (V-shape) (505) • GIPA/GIDA 8 (full radius) (334)

CUTGRIP

GHIFR/L-A

8° / 10° Approach Angle Bars for Facing and Internal Machining



Designation	CW	DAXN(1)	DAXX(2)	OAL	HBL	CDX	WF	KAPR(3)	DCONMS			
GHIFR/L 40C-10A-6	6.00	300.00	360.0	300.00	80.0	40.00	19.30	10.0	40.00	SR M5X20DIN912	HW 4.0	PL 40
GHIFR/L 40C-8A-8	8.00	300.00	360.0	320.00	100.0	70.00	19.50	8.0	40.00	SR M6X25DIN912	HW 5.0	PL 40

- Upper jaw with hard coating to sustain chip deflection

(1) Minimum axial grooving diameter

(2) Maximum workpiece diameter for grooving operation

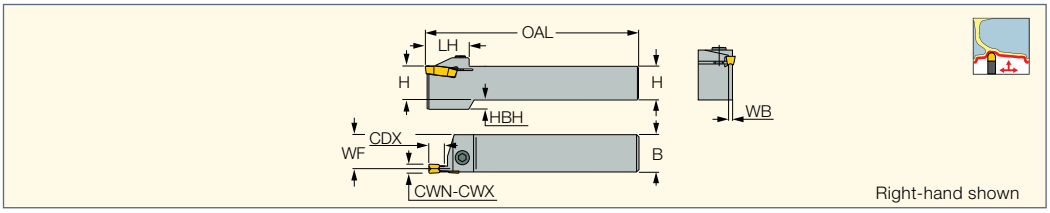
(3) Tool cutting edge angle

For inserts, see pages: GDMA (332) • GIPA (full radius W=3-6) (333) • GIPA/GIDA 8 (full radius) (334)

CUTGRIP

GHDR/L-8A

External Tools for Turning, Grooving and Parting; Upper Jaw with Hard Coating to Sustain Chip Deflection



Designation	H	CWN(1)	CWX(2)	CDX(3)	B	OAL	WF	WB	LH	HBH		
GHDR/L 25-8A	25.0	8.00	8.00	25.00	25.0	150.00	22.00	6.00	40.0	7.6	SR M6X16 DIN912	HW 5.0(a)
GHDR 32-8A	32.0	8.00	8.00	25.00	32.0	170.00	29.00	6.00	40.0	-	SR M6X16 DIN912	HW 5.0(a)

- Upper jaw with hard coating to sustain chip deflection • For user guide, see pages 606-615

(1) Minimum cutting width

(2) Maximum cutting width

(3) Cutting depth maximum

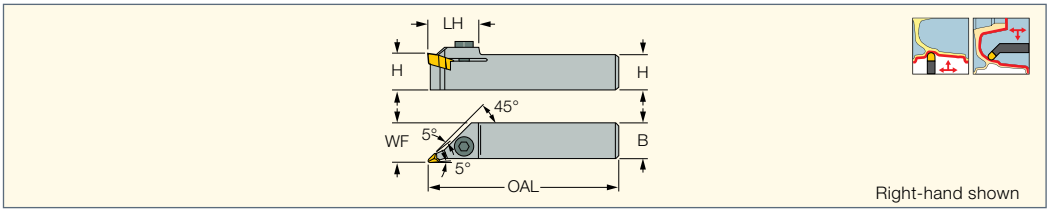
(a) For optional key with limited tightening torque click on “More Info”

For inserts, see pages: GIPA/GIDA 8 (full radius) (334)

CUTGRIP

GHVR/L

Internal and External Profiling Holders for Machining Aluminum Wheels



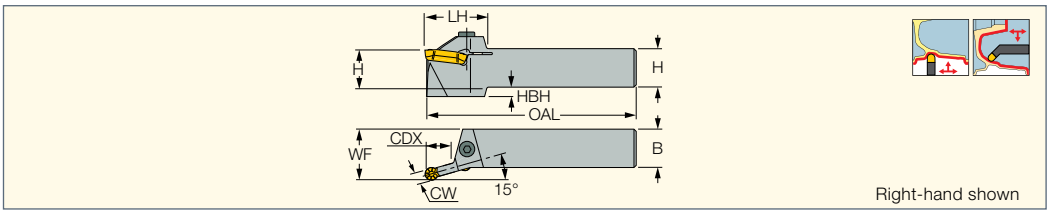
Designation	H	B	OAL	WF	LH		
GHVR/L 25-8	25.0	25.0	150.00	29.00	41.0	SR M6X16 DIN912	HW 5.0

For inserts, see pages: GIPA 8-35V (V-shape) (505)

CUTGRIP

GHDKR/L

External and Internal Profiling Holders for Machining Aluminum Wheels



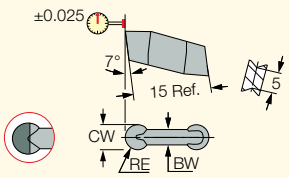
Designation	CW	H	B	OAL	LH	WF	HBH		
GHDKR/L 25-6	6.00	25.0	25.0	150.00	40.0	32.20	6.0	SR M6X20 DIN912	HW 5.0
GHDKR/L 25-8	8.00	25.0	25.0	150.00	44.0	33.00	6.0	SR M6X20 DIN912	HW 5.0
GHDKR/L 32-8	8.00	32.0	32.0	170.00	44.0	40.00	-	SR M6X20 DIN912	HW 5.0

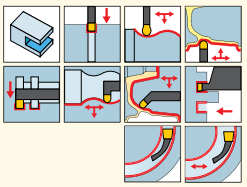
For inserts, see pages: GDMA (332) • GDMY (full radius) (320) • GIPA (full radius W=3-6) (333) • GIPA/GIDA 8 (full radius) (334)

CUTGRIP

GIPA (full radius W=3-6)
Precision Double-Ended Inserts with Polished Top Rake for Machining Aluminum







Designation	Dimensions CW	RE	CWTOL[4]	RETOL[5]	BW	Tough ↔ Hard IC1520	IC20	IC806	IC4	ID5	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIPA 3.00-1.50	3.00	1.50	0.020	0.050	2.40	●	●				0.00-1.50	0.15-0.30	0.08-0.16
GIPA 3.00-1.50-D [1]	3.00	1.50	0.020	0.050	2.40					●	0.00-1.50	0.19-0.36	0.09-0.19
GIPA 4.00-2.00	4.00	2.00	0.020	0.050	3.20	●	●	●			0.00-2.00	0.20-0.43	0.10-0.22
GIPA 4.00-2.00-D [1]	4.00	2.00	0.020	0.050	3.20					●	0.00-2.00	0.25-0.53	0.12-0.26
GIPA 4.00-2.00YZ-D [2]	4.00	2.00	0.020	0.050	3.20					●	0.00-2.00	0.25-0.53	0.12-0.26
GIPA 5.00-2.50	5.00	2.50	0.020	0.050	3.90	●	●	●			0.00-2.50	0.21-0.48	0.09-0.24
GIPA 5.00-2.50-D [1]	5.00	2.50	0.020	0.050	3.90					●	0.00-2.50	0.22-0.60	0.11-0.30
GIPA 5.00-2.50YZ-D [2]	5.00	2.50	0.020	0.050	3.90					●	0.00-2.50	0.22-0.60	0.11-0.30
GIPA 6.00-3.00	6.00	3.00	0.020	0.050	4.80	●	●		●		0.00-3.00	0.21-0.58	0.11-0.29
GIPA 6.00-3.00-D [1]	6.00	3.00	0.020	0.050	4.80					●	0.00-3.00	0.26-0.72	0.13-0.36
GIPA 6.00-3.00YZ	6.00	3.00	0.020	0.050	4.80	●	●				0.00-3.00	0.21-0.58	0.11-0.29
GIPA 6.00-3.00YZ-D [2]	6.00	3.00	0.020	0.050	4.80					●	0.00-3.00	0.26-0.72	0.13-0.36
GIPA 6.00-3.00CB [3]	6.00	3.00	0.020	0.050	4.80					●	0.00-3.00	0.21-0.58	0.11-0.29

- For cutting speed recommendations and user guide, see pages 612-613

[1] Single-ended PCD tipped insert
[2] Single-ended molded PCD chipformer tipped insert
[3] Single-ended flat PCD tipped insert with chip deflector
[4] Cutting width tolerance (+/-)
[5] Corner radius tolerance (+/-)

For tools, see pages: Anti-Vibration Blades (312) • C#-GHDR/L (301) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-S (309) • CGPAD (308) • CGPAD-JHP (309) • GHDKR/L (503) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHIFR/L-A (503) • GHIUR/L-C-A (15° & 27.5°) Bars (502) • GHIUR/L-UC (502) • GHMPR/L (300) • GHMR/L (300) • GHSR/L (428) • GHSR/L-JHP-SL (429) • NQCH-GHSR/L-JHP (428)





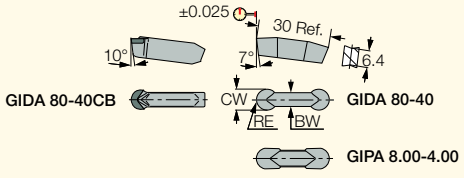


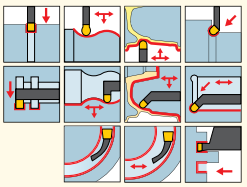


CUTGRIP

GIPA/GIDA 8 (full radius)
Precision Double-Ended Inserts with Polished Top Rake for Machining Aluminum







Designation	Dimensions CW	RE	CWTOL[2]	RETOL[3]	BW	Tough ↔ Hard IC1520	IC20	IC4	ID5	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIDA 80-40	8.00	4.00	0.020	0.050	5.60	•	•	•		0.00-4.00	0.24-0.67	0.14-0.38
GIDA 80-40-D	8.00	4.00	0.020	0.050	5.60				•	0.00-4.00	0.24-0.67	0.14-0.38
GIDA 80-40CB-D [1]	8.00	4.00	0.020	0.050	5.60				•	0.00-4.00	0.24-0.67	0.14-0.38
GIDA 80-40YZ	8.00	4.00	0.020	0.050	5.60	•	•	•		0.00-4.00	0.24-0.67	0.14-0.38
GIDA 80-40YZ-D	8.00	4.00	0.020	0.050	5.60				•	0.00-4.00	0.35-0.96	0.18-0.48
GIPA 8.00-4.00	8.00	4.00	0.020	0.050	6.00	•	•			0.00-4.00	0.24-0.67	0.14-0.38

• ID5 is a single-ended PCD tipped insert • For cutting speed recommendations and user guide, see pages 606-615
[1] Should not be clamped on tools with "A" suffix
[2] Cutting width tolerance (+/-)
[3] Corner radius tolerance (+/-)

For tools, see pages: C#-GHDR/L (301) • CGHN-8-10D (315) • GADR/L-8 (314) • GADR/L-JHP (315) • GAFG-R/L-8 (661) • GHDKR/L (503) • GHDR/L (long pocket) (313) • GHDR/L-8A (503) • GHDR/L-JHP (long pocket) (313) • GHFGR/L-8 (659) • GHIFR/L-A (503) • GHIR/L (W=7.0-8.3) (398) • GHIUR/L-C-A (15° & 27.5°) Bars (502) • GHIUR/L-UC (502)









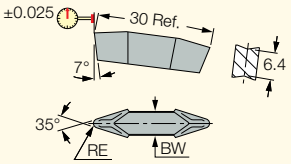




CUTGRIP

GIPA 8-35V (V-shape)
V-Shaped Inserts for Machining Aluminum Wheels







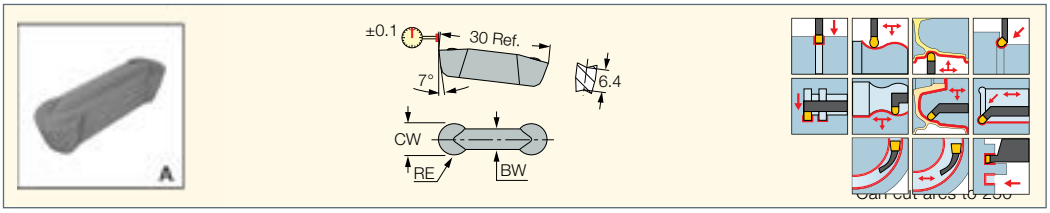
Designation	Dimensions RE	RETOL[2]	BW	Tough ↔ Hard IC1520	IC20	IC4	ID5	Recommended Machining Data a_p (mm)	f turn (mm/rev)
GIPA 6.0-35V-0.8	0.80	0.050	4.80		•			1.00-3.60	0.21-0.48
GIPA 8YZ-35V-0.80	0.80	0.050	6.00			•		1.00-4.80	0.24-0.56
GIPA 8YZ-35V-1.20-D [1]	1.20	0.050	6.00				•	1.45-4.80	0.35-0.88
GIPA 8-35V-1.20	1.20	0.050	6.00	•	•			1.45-4.80	0.24-0.62
GIPA 8-35V-1.20-D [1]	1.20	0.050	6.00				•	1.45-4.80	0.35-0.88
GIPA 8-35V-3.0	3.00	0.050	6.00		•			3.60-4.80	0.24-0.67

• Precision ground and polished rake to avoid built-up edge • Toolholder seat needs to be modified according to insert profile to ensure clearance
[1] Single-ended PCD tipped insert
[2] Corner radius tolerance (+/-)

For tools, see pages: GHIUR/L-C-22.5A-8V (502) • GHIUR/L-C-A (15° & 27.5°) Bars (502) • GHIUR/L-UC (502) • GHVR/L (503)

CUTGRIP

GDMA
Utility Double-Ended Insert
for Machining Aluminum



Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	Tough ↔ Hard IC07	IC507	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GDMA 840	8.00	4.00	0.050	0.050	5.60	●	●	0.00-4.00	0.24-0.67	0.14-0.38

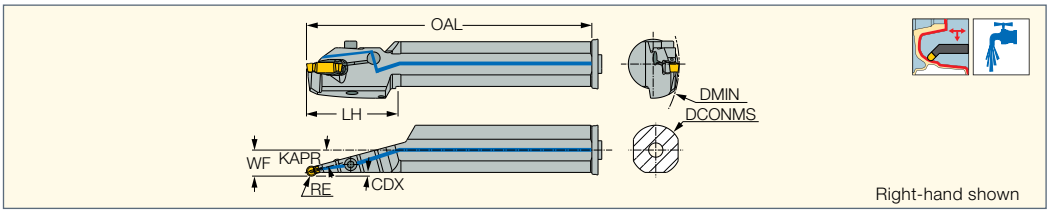
- For heavy-duty machining • DMIN for internal machining = 65 mm • For cutting speed recommendations and user guide, see pages 606-615

(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)

For tools, see pages: GADR/L-8 (314) • GADR/L-JHP (315) • GAFG-R/L-8 (661) • GHDKR/L (503) • GHIFR/L-A (503) • GHIR/L (W=7.0-8.3) (398) • GHIUR/L-C-A (15° & 27.5°) Bars (502) • GHIUR/L-UC (502)

FIXGRIP

FSHIUR
10° / 15° Approach Angle
Bars for Facing and Internal
Profiling of Aluminum



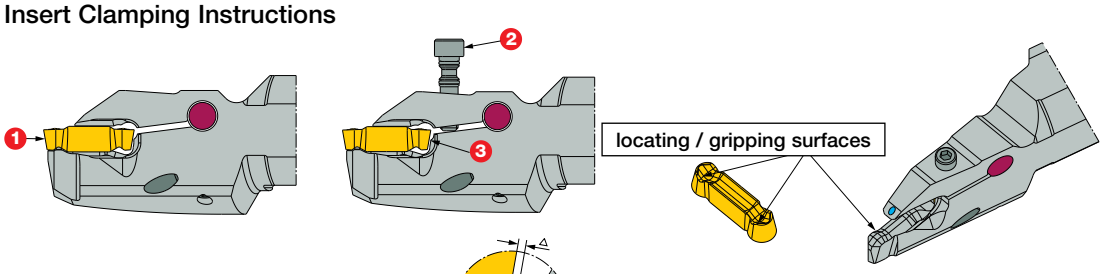
Designation	CW	DCONMS	DMIN	OAL	LH	CDX(1)	WF	KAPR(2)					
FSHIUR 40C-15A-6	6.00	40.00	160.00	320.00	68.0	2.20	21.00	15.0	SR M6X1-28509	HW 5.0	OR 5X1N	PU SEAL-28510	PL 40
FSHIUR 40C-10A-8	8.00	40.00	160.00	320.00	68.0	2.40	24.30	10.0	SR M6X1-28509	HW 5.0	OR 5X1N	PU SEAL-28510	PL 40
FSHIUR 40C-15A-8	8.00	40.00	160.00	320.00	68.0	3.00	21.00	15.0	SR M6X1-28509	HW 5.0	OR 5X1N	PU SEAL-28510	PL 40

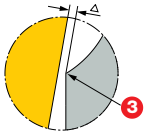
- Clamping torque for FSHIUR..-6: 9 Nxm, for FSHDR..-8: 10.5 Nxm

(1) Cutting depth maximum
(2) Tool cutting edge angle

For inserts, see pages: FSPA/FSMA (507)

Insert Clamping Instructions





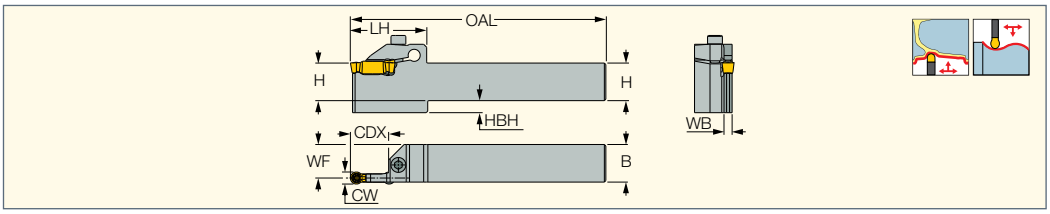
1 Position the insert in the pocket so the notch on the insert sits on top of the frontal bulge of the pocket.
2 Close the clamping screw Warning.

Warning

- Do not apply force and do not hold the insert in place while closing the screw
- There is no contact between the insert and pocket rear wall 3 .

FIXGRIP

FSHDR
Tools with a Strong Insert Grip for Interrupted Cuts and Back Turning Aluminum Wheels



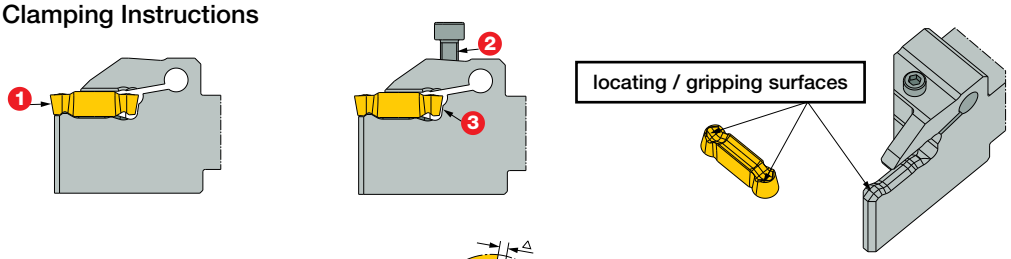
Designation	CW	CDX(1)	H	B	WF	WB	LH	HBH	OAL		
FSHDR 25-6	6.00	21.00	25.0	25.0	22.80	4.40	51.0	8.0	150.00	SR M5X20DIN912	HW 4.0
FSHDR 25-8	8.00	25.50	25.0	25.0	22.30	5.40	51.5	8.0	170.00	SR M6X25DIN912	HW 5.0

- Clamping torque for FSHDR..-6: 7.5 Nxm, for FSHDR..-8: 10 Nxm

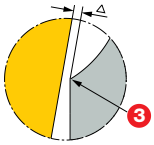
(1) Cutting depth maximum

For inserts, see pages: FSPA/FSMA (507)

Insert Clamping Instructions



1. Position the insert in the pocket so the notch on the insert sits on top of the front bulge of the pocket.
2. Close the clamping screw.

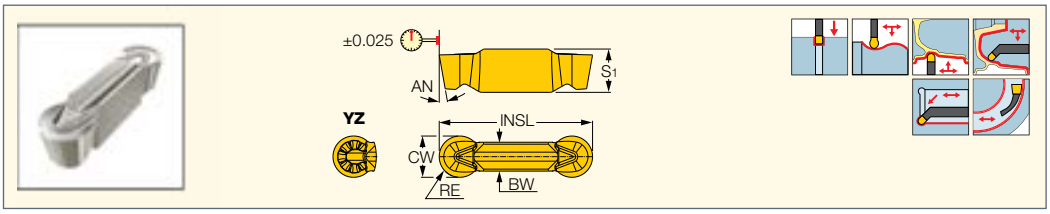


Warning

- Do not apply force and do not hold the insert in place while closing the screw.
- There is no contact between the insert and pocket rear wall 3.

FIXGRIP

FSPA/FSMA
Full Radius Precision Inserts for Machining Aluminum at Medium to High Feeds



Designation	Dimensions CW	CWTOL(2)	RE	S1	BW	INSL	AN	Tough ↔ Hard IC1520	IC20	IC07	ID5	Recommended Machining Data a_p (mm)	f turn (mm/rev)
FSPA 6.00-3.00	6.00	0.020	3.00	7.50	4.60	25.00	9.0		●			0.05-3.00	0.30-0.55
FSPA 6.00-3.00YZ	6.00	0.020	3.00	7.50	4.60	25.00	9.0		●			0.05-3.00	0.30-0.55
FSPA 6.00-3.00YZ-D	6.00	0.020	3.00	7.50	4.60	25.00	9.0				●	0.05-3.00	0.30-0.55
FSPA 80-40	8.00	0.020	4.00	8.40	5.60	29.70	10.0		●			0.05-4.00	0.40-0.72
FSPA 80-40-D	8.00	0.020	4.00	8.40	5.60	29.70	10.0				●	0.05-4.00	0.40-0.72
FSPA 80-40YZ	8.00	0.020	4.00	8.40	5.60	29.70	10.0	●	●			0.05-4.00	0.40-0.72
FSPA 80-40YZ-D	8.00	0.020	4.00	8.40	5.60	29.70	10.0				●	0.05-4.00	0.40-0.72
FSMA 80-40 (1)	8.00	0.040	4.00	8.40	5.60	29.70	10.0			●		0.05-4.00	0.40-0.72

(1) Utility insert

(2) Cutting width tolerance (+/-)

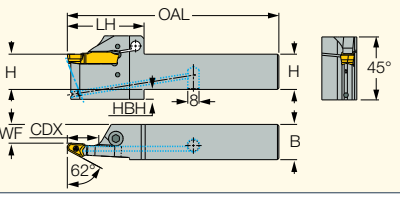
For tools, see pages: DTF50 FSHDR-8 (508) • DTF50 FSHIUR (509) • FSHDR (507) • FSHIUR (506)



FIXGRIP

FGHDUR

Tools for Interrupted Cuts and Back Turning Aluminum Wheels



Right-hand shown

Designation	CDX(1)	H	B	OAL	WF	LH	HBH		
FGHDUR 25C-3A-10S	22.30	25.0	25.0	150.00	13.30	54.4	7.0	SR M6X25DIN912	HW 5.0

- Upper jaw with hard coating to sustain chip deflection
- For mounting and removing the inserts, see page 475

(1) Cutting depth maximum

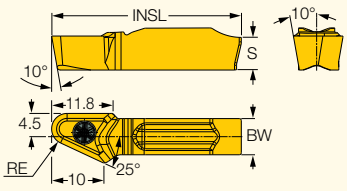
For inserts, see pages: FGPAM (508)

FIXGRIP

FGPAM

V-Shaped Inserts for Machining Aluminum Wheels





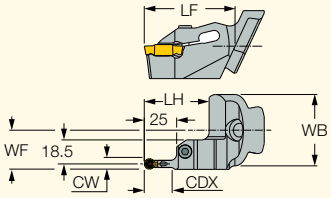
Designation	Dimensions				IC20	Recommended Machining Data	
	RE	BW	S	INSL		a_p (mm)	f turn (mm/rev)
FGPAM 10S-3R-25A	3.00	7.00	8.20	36.50	•	0.05-12.00	0.40-0.72

For tools, see pages: FGHDUR (508)

FIXGRIP

DTF50 FSHDR-8

CUT-GRIP Heads with Dovetail Connection for External Turning Aluminum Wheels



Right hand shown

Designation	CW	CDX	LH	WF	LF	WB	Insert
DTF50 FSHDR-8	8.00	21.50	50.0	30.00	70.00	55.00	FSPA 8...

For inserts, see pages: FSPA/FSMA (507)

For holders, see pages: VDI-DTF50E-L60R (510)

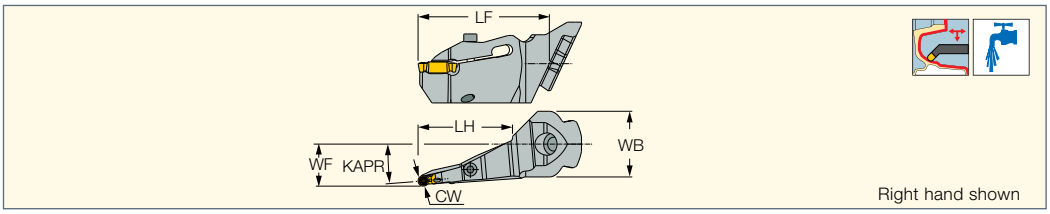
Spare Parts

Designation		
DTF50 FSHDR-8	SR M6X25DIN912	HW 5.0X120 MM

FIXGRIP

DTF50 FSHIUR

CUT-GRIP Heads for Internal Profiling, Undercutting and Facing of Aluminum Wheels



Designation	DMIN	CW	KAPR[1]	LH	WF	LF	WB	Insert
DTF50 FSHIUR-5A-8	250.00	8.00	5.0	72.0	32.00	100.00	50.00	FSPA 8...
DTF50 FSHIUR-8A-8	250.00	8.00	8.0	72.0	32.00	100.00	50.00	FSPA 8...
DTF50 FSHIUR-15A-8	250.00	8.00	15.0	80.0	36.00	100.00	50.00	FSPA 8...
DTF50 FSHIUR-22.5A-8	250.00	8.00	22.5	50.0	36.00	70.00	50.00	FSPA 8...
DTF50 FSHIUR-27.5A-8	250.00	8.00	27.5	60.0	40.00	80.00	50.00	FSPA 8...
DTF50 FSHIUR-45A-8	250.00	8.00	45.0	-	55.00	70.00	50.00	FSPA 8...
DTF50 FSHIUR-67.5A-8	250.00	8.00	67.5	-	60.00	70.00	50.00	FSPA 8...
DTF50 FSHIUR-80A-8	250.00	8.00	80.0	-	60.00	70.00	50.00	FSPA 8...

(1) Tool cutting edge angle

For inserts, see pages: FSPA/FSMA (507)
For holders, see pages: VDI-DTF50 (510)

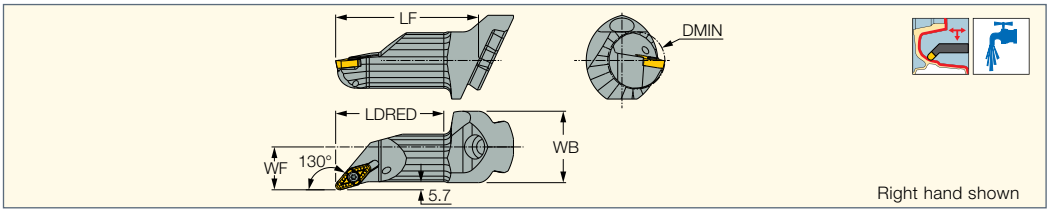
Spare Parts

Designation			
DTF50 FSHIUR-5A-8	SR M6X25DIN912	SR M5X6 DIN913	HW 5.0X120 MM
DTF50 FSHIUR-8A-8	SR M6X25DIN912	SR M6X6 DIN913	HW 5.0X120 MM
DTF50 FSHIUR-15A-8	SR M6X25DIN912	SR M6X6 DIN913	HW 5.0X120 MM
DTF50 FSHIUR-22.5A-8	SR M6X25DIN912		HW 5.0X120 MM
DTF50 FSHIUR-27.5A-8	SR M6X25DIN912		HW 5.0X120 MM
DTF50 FSHIUR-45A-8	SR M6X25DIN912		HW 5.0X120 MM
DTF50 FSHIUR-67.5A-8	SR M6X25DIN912	SR M5X6 DIN913	HW 5.0X120 MM
DTF50 FSHIUR-80A-8	SR M6X25DIN912		HW 5.0X120 MM

ISOTURN

DTF50 SVXCR-22

ISO Boring Heads with Dovetail Connection VCGT 22 Inserts for Machining Aluminum Wheels



Designation	DMIN	WF	LF	LDRED	WB	Insert
DTF50 SVXCR-22	40.00	30.00	100.00	76.0	50.00	VCGT 22...

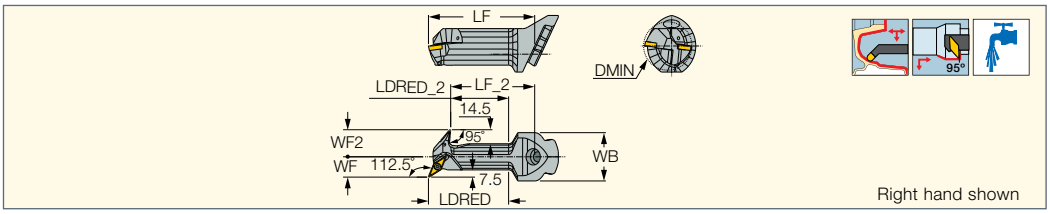
For inserts, see pages: VCGT-AF (269) • VCGT-AS (269) • VCGT-DW (PCD) (515)
For holders, see pages: VDI-DTF50 (510)

Spare Parts

Designation		
DTF50 SVXCR-22	SR 16-212	T-20/5

ISOTURN

DTF50 SVXCR-16X2
ISO Double Pocket Boring Heads with Dovetail Connection VCGT 16 Inserts for Machining Aluminum Wheels



Designation	DMIN	WF	WF2	LF	LF_2	LDRED	LDRED_2	WB	Insert
DTF50 SVXCR-16X2	50.00	21.00	28.0	110.00	87.00	83.0	60.0	50.00	VCGT 16...

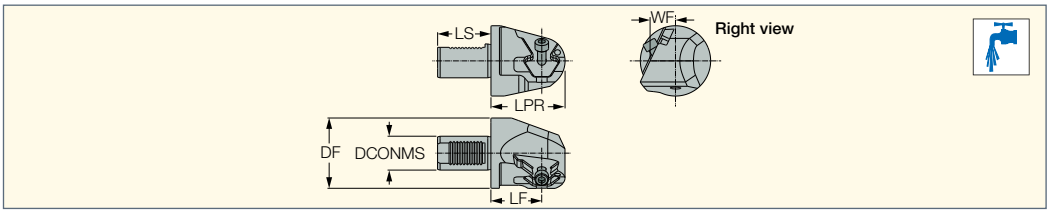
For inserts, see pages: VCGT-AS (269) • VCGT-DW (PCD) (515)
For holders, see pages: VDI-DTF50 (510)

Spare Parts

Designation		
DTF50 SVXCR-16X2	SR 16-236	T-15/5

VDI

VDI-DTF50E-L60R
QUICK-CHANGE Holder with a Dovetail Connection for External Turning Aluminum Wheels with CUT-GRIP Heads



Designation	WF	LF	LPR	LS	DF	DCONMS
VDI40-DTF50E-L60R	30.00	60.00	87.50	63.0	83.00	40.00
VDI50-DTF50E-L60R (1)	37.00	60.00	87.50	78.0	98.00	50.00

(1) on request

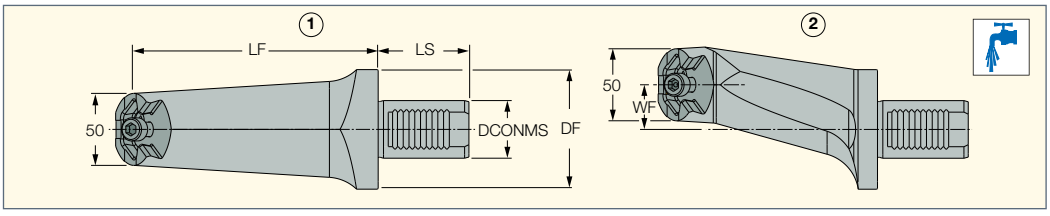
For tools, see pages: DTF50 FSHDR-8 (508)

Spare Parts

Designation			
VDI-DTF50E-L60R	SR M10X45 DIN912	HW8 L208	OR 5X1N

VDI

VDI-DTF50
QUICK-CHANGE Holder with Dovetail Connection Internal Turning Aluminum Wheels with CUT-GRIP and ISOTURN Heads



Designation	WF	LF	LS	DF	DCONMS	Fig.
VDI40-DTF50F31L140R	31.00	140.00	63.0	83.00	40.00	2
VDI40-DTF50L110	0.00	110.00	63.0	83.00	40.00	1
VDI40-DTF50L140	0.00	140.00	63.0	83.00	40.00	1
VDI40-DTF50L170	0.00	170.00	63.0	83.00	40.00	1
VDI50-DTF50F31L140R (1)	31.00	140.00	78.0	98.00	50.00	2
VDI50-DTF50L110 (1)	0.00	110.00	78.0	98.00	50.00	1
VDI50-DTF50L140 (1)	0.00	140.00	78.0	98.00	50.00	1
VDI50-DTF50L170 (1)	0.00	170.00	78.0	98.00	50.00	1

(1) on request

For tools, see pages: DTF50 FSHIUR (509) • DTF50 SVXCR-16X2 (510) • DTF50 SVXCR-22 (509)

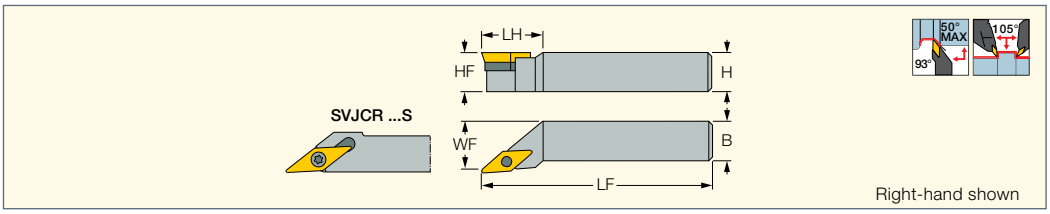
Spare Parts

Designation		
VDI-DTF50	SR M10X45 DIN912	HW8 L208

ISOTURN

SVJCR/L

93° Lead Angle Screw Lock Tools Carrying 35° Diamond Inserts with 7° Clearance Angle



Designation	H	HF	B	LF	LH	WF	Insert				
SVJCR/L 0808K-11S (1)	8.0	8.0	8.0	125.00	11.5	8.20	VC..1103	SR 14-560	T-8/5		
SVJCR/L 1010K-11S (1)	10.0	10.0	10.0	125.00	22.0	10.20	VC..1103	SR 14-560	T-8/5		
SVJCR/L 1212K-11S (1)	12.0	12.0	12.0	125.00	-	12.20	VC..1103	SR 14-560	T-8/5		
SVJCR/L 1616K-11	16.0	16.0	16.0	125.00	25.0	20.00	VC..1103	SR 14-560	T-8/5		
SVJCR/L 2020K-11	20.0	20.0	20.0	125.00	30.0	25.00	VC..1103	SR 14-560	T-8/5		
SVJCR/L 2525M-11	25.0	25.0	25.0	150.00	30.0	32.00	VC..1103	SR 14-560	T-8/5		
SVJCR/L 2020K-16	20.0	20.0	20.0	125.00	30.0	25.00	VC..1604	SR 16-236 P	T-15/5	TVC 3-1	SR TC-3
SVJCR/L 2525M-16	25.0	25.0	25.0	150.00	30.0	32.00	VC..1604	SR 16-236 P	T-15/5	TVC 3-1	SR TC-3

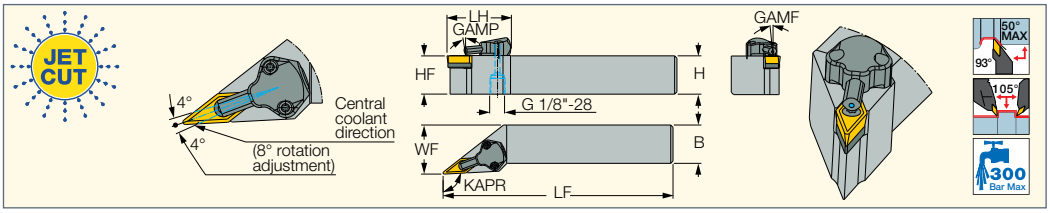
(1) For Swiss-type machines

For inserts, see pages: VCGT-AS (269) • VCGT-DW (PCD) (515) • VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCMT-14 (252) • VCMT-F3M (249) • VCMT-F3P (248) • VCMT-FPC-CERMET (250) • VCMT-M3M (249) • VCMT-M3P (248) • VCMT-SM (251) • VCMW (252) • VCET-WF (251)

ISOTURN

SVJCR/L-16-JHP

Screw Lock Tools with Channels for High-Pressure Coolant Carrying 35° Rhombic Inserts with 7° Clearance Angle



Designation	H	B	HF	LF	LH	WF	KAPR(1)	GAMP	GAMF	Insert
SVJCR/L 2525M-16-JHP	25.0	25.0	25.0	150.00	42.0	32.00	93.0	0.0	0.0	VCMT 1604

- For user guide, see pages 606-615

(1) Tool cutting edge angle

For inserts, see pages: VCMT-FPC-CERMET (250) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-F3M (249) • VCMT-M3M (249) • VCMT-SM (251) • VCGT-AS (269) • VCMT-14 (252) • VCMW (252) • VCGT-DW (PCD) (515)

Spare Parts

Designation								
SVJCR/L 2525M-16-JHP	TVC 3-1	SR TC-3	SR 16-236 P	CU-V-JHP	T-15/5	HW 2.5	T-8/5	TVC 3-04675(a)*

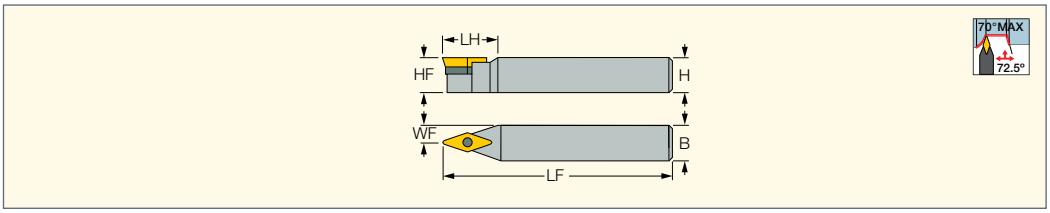
* Optional, to be ordered separately

(a) Rhombic seat for inserts with radius 1.2, should be ordered separately

ISOTURN

SVVCN

72.5° Lead Angle Screw Lock Tools Carrying 35° Diamond Inserts with 7° Clearance Angle



Designation	H	HF	B	LF	LH	WF	Insert				
SVVCN 0808K-11S (1)	8.0	8.0	8.0	125.00	-	4.30	VC..1103	SR 14-560	T-8/5		
SVVCN 1010K-11S (1)	10.0	10.0	10.0	125.00	-	5.30	VC..1103	SR 14-560	T-8/5		
SVVCN 1212K-11S (1)	12.0	12.0	12.0	125.00	-	6.30	VC..1103	SR 14-560	T-8/5		
SVVCN 1616K-11S (1)	16.0	16.0	16.0	125.00	-	8.30	VC..1103	SR 14-560	T-8/5		
SVVCN 2020K-16	20.0	20.0	20.0	125.00	34.0	10.00	VC..1604	SR 16-236 P	T-15/5	TVC 3-1	SR TC-3
SVVCN 2525M-16	25.0	25.0	25.0	150.00	38.1	12.50	VC..1604	SR 16-236 P	T-15/5	TVC 3-1	SR TC-3

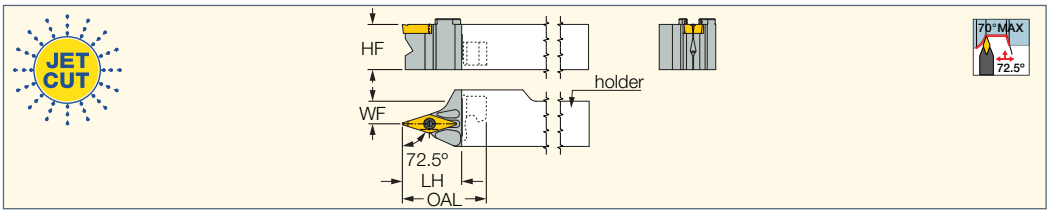
(1) For Swiss-type machines

For inserts, see pages: VCGT-AS (269) • VCGT-DW (PCD) (515) • VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCMT-14 (252) • VCMT-F3M (249) • VCMT-F3P (248) • VCMT-FPC-CERMET (250) • VCMT-M3M (249) • VCMT-M3P (248) • VCMT-SM (251) • VCMW (252)

NEOSWISS

NQCH-SVVCN-S-JHP

Screw Lock JETCUT Modular Heads Carrying 35° Rhombic Inserts with 7° Clearance Angle for Swiss-Type Machines



Designation	WF	HF	LH	OAL	MIID[1]
NQCH12R/L-SVVCN-11S-JHP	6.00	12.0	21.0	28.80	VC..1103..
NQCH16L-SVVCN-11S-JHP	8.00	16.0	21.0	28.80	VC..1103..

NEW

- Use only RH Shank with RH Head and LH Shank with LH Head

[1] Master insert identification

For inserts, see pages: VCGT-AS (269) • VCGT-F1M-12P (250) • VCGT-F1M-20P (250) • VCMT-F3M (249) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-SM (251)
For holders, see pages: NQCH-JHP (424)

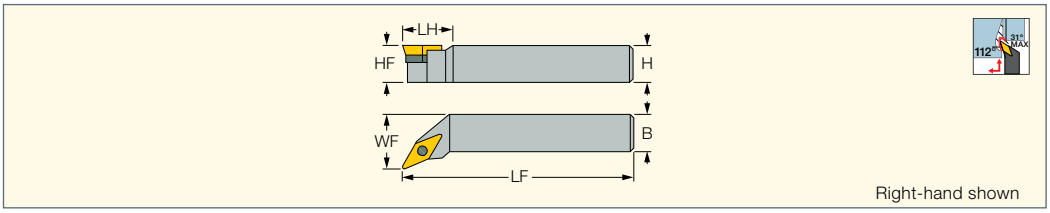
Spare Parts

Designation		
NQCH-SVVCN-S-JHP	SR 14-560	T-8/5

ISOTURN

SVXCR/L

112° Lead Angle Screw Lock Tools Carrying 35° Diamond Inserts with 7° Clearance Angle



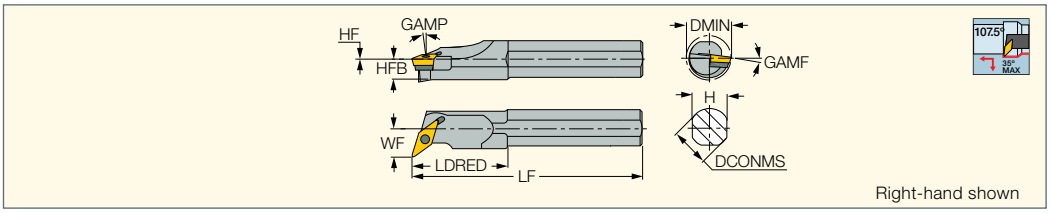
Designation	H	HF	B	LF	LH	WF	Insert				
SVXCR/L 2020K-16	20.0	20.0	20.0	125.00	25.0	25.00	VC..1604	TVC 3-1	SR TC-3	HW 2.5	SR 16-236 P
SVXCR/L 2525M-16	25.0	25.0	25.0	150.00	30.0	32.00	VC..1604	TVC 3-1	SR TC-3	HW 2.5	SR 16-236 P

For inserts, see pages: VCMT-FPC-CERMET (250) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-F3M (249) • VCMT-M3M (249) • VCMT-SM (251) • VCGT-AS (269) • VCMT-14 (252) • VCMW (252) • VCGT-DW (PCD) (515)

ISOTURN

A/S-SVQCR/L

Screw Lock Boring Bars Carrying 35° Rhombic Inserts with 7° Clearance



Designation	DCONMS	LF	LDRED	H	HFB	WF	HF	DMIN	GAMP	GAMF	CSP[1]	Insert
S25S SVQCR/L-16	25.00	250.00	61.0	23.0	12.0	17.00	0.5	32.00	0.0	-5.0	0	VC.. 1604
S32T SVQCR/L-16	32.00	300.00	70.0	30.0	15.0	22.00	0.0	40.00	0.0	-5.0	0	VC.. 1604
A40U SVQCR/L-22	40.00	350.00	64.0	36.0	18.0	27.00	0.0	47.50	0.0	-8.0	1	VCGT 2205

[1] 0 - Without coolant supply, 1 - With coolant supply

For inserts, see pages: VCMT-FPC-CERMET (250) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-F3M (249) • VCMT-M3M (249) • VCMT-SM (251) • VCGT-AS (269) • VCGT-AF (269) • VCMT-14 (252) • VCMW (252) • VCGT-DW (PCD) (515)

Spare Parts

Designation							
S25S SVQCR/L-16	SR 16-236 P	T-15/5					
S32T SVQCR/L-16	SR 16-236 P	T-15/5	TVC 3-1P	SR TC-3P	HW 4.0		TVC 3-04675[a]*
A40U SVQCR/L-22	SR 14-536	T-20/5	TVC 22T330	SR TC-3	HW 2.5	PL 40	

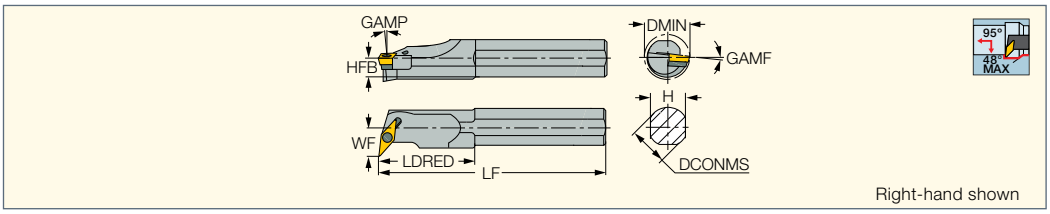
* Optional, to be ordered separately

[a] Rhombic seat for inserts with radius 1.2, should be ordered separately

ISOTURN

A/S-SVLFCR/L; A-SVUCR/L

Screw Lock Boring Bars Carrying 35° Rhombic Inserts with 7° Clearance



Designation	DCONMS	LF	LDRED	H	HFB	WF	DMIN	GAMP	GAMF	CSP[2]	Insert
A32T SVUCR/L-16 [1]	32.00	300.00	50.0	29.0	14.5	22.00	40.00	0.0	-8.0	1	VC.. 1604
S32T SVLFCR/L-16	32.00	300.00	56.0	29.0	14.5	22.00	39.50	0.0	-8.0	0	VC.. 1604
S40U SVLFCR/L-16	40.00	350.00	-	36.0	18.0	27.00	49.00	0.0	-5.0	0	VC.. 1604
A40U SVLFCR/L-22	40.00	350.00	70.0	36.0	18.0	27.00	48.00	0.0	-8.0	1	VC.. 2205

[1] 93° approach angle

[2] 0 - Without coolant supply, 1 - With coolant supply

For inserts, see pages: VCMT-F3P (248) • VCMT-M3P (248) • VCMT-F3M (249) • VCMT-M3M (249) • VCMT-SM (251) • VCGT-AS (269) • VCGT-AF (269) • VCMT-14 (252) • VCMW (252) • VCGT-DW (PCD) (515) • VCMT-FPC-CERMET (250)

For holders, see pages: HSK A63TM ABB (839)

Spare Parts

Designation									
A32T SVUCR/L-16	TVC 3-1P	SR TC-3P	HW 4.0	SR 16-236 P	T-15/5	PL 32	TVC 3-04675[a]*	SR M3X3DIN913	HW 1.5
S32T SVLFCR/L-16	TVC 3-1P	SR TC-3P	HW 4.0	SR 16-236 P	T-15/5		TVC 3-04675[a]*		
S40U SVLFCR/L-16	TVC 3-1P	SR TC-3P	HW 4.0	SR 16-236 P	T-15/5		TVC 3-04675[a]*		
A40U SVLFCR/L-22	TVC 22T330	SR TC-3	HW 2.5	SR 14-536	T-20/5	PL 40			

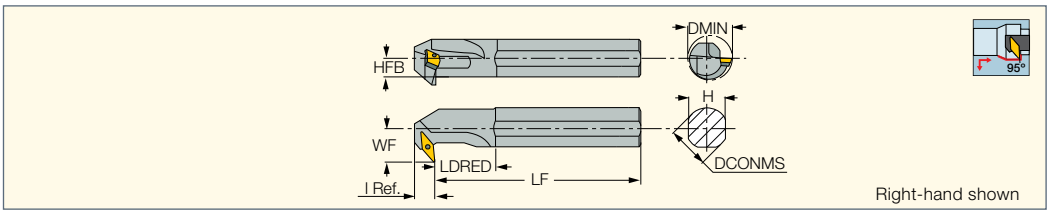
* Optional, to be ordered separately

[a] Rhombic seat for inserts with radius 1.2, should be ordered separately

ISOTURN

A/S-SVLBCR/L

Screw Lock Back Boring Bars Carrying 35° Rhombic Inserts with 7° Clearance



Designation	DCONMS	LF	LDRED	l Ref.	H	HFB	WF	DMIN	CSP[1]	Insert
A32T SVLBCR/L-16	32.00	300.00	76.5	18.50	29.0	14.5	27.50	40.00	1	VC.. 1604
S32T SVLBCR/L-16	32.00	300.00	63.2	18.50	29.0	14.5	22.00	40.00	0	VC.. 1604
S40U SVLBCR/L-16	40.00	350.00	60.0	20.00	36.0	18.0	27.00	49.50	0	VC.. 1604

[1] 0 - Without coolant supply, 1 - With coolant supply

For inserts, see pages: VCMT-FPC-CERMET (250) • VCMT-F3P (248) • VCMT-M3P (248) • VCMT-F3M (249) • VCMT-M3M (249) • VCMT-SM (251) • VCGT-AS (269) • VCMT-14 (252) • VCMW (252) • VCGT-DW (PCD) (515)

For holders, see pages: HSK A63TM ABB (839)

Spare Parts

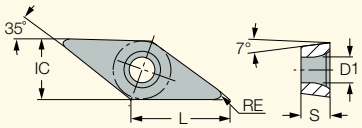
Designation					
A/S-SVLBCR/L	TVC 3-1P	SR TC-3P	HW 4.0	SR 16-236 P	T-15/5

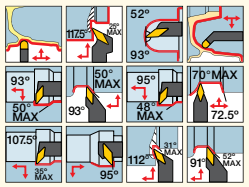
ISOTURN

VCGT-AS

35° Rhombic Inserts with a 7° Positive Flank, Very Positive Rake Angle and Sharp Cutting Edge for Machining Aluminum







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC1520	IC20	IC920	Recommended Machining Data a_p (mm)	f (mm/rev)
VCGT 110302-AS	11.10	6.35	3.18	0.20	2.90	●	●	●	0.20-2.50	0.05-0.20
VCGT 110304-AS	11.10	6.35	3.18	0.40	2.90	●	●		0.50-3.00	0.05-0.25
VCGT 160401-AS	16.60	9.52	4.76	0.10	4.40		●		0.20-2.50	0.05-0.20
VCGT 160402-AS	16.60	9.52	4.76	0.20	4.40	●	●		0.50-2.50	0.05-0.25
VCGT 160404-AS	16.60	9.52	4.76	0.40	4.40	●	●		0.50-3.00	0.05-0.25
VCGT 160408-AS	16.60	9.52	4.76	0.80	4.40	●	●		0.50-3.00	0.10-0.25
VCGT 160412-AS	16.60	9.52	4.76	1.20	4.40	●	●		0.50-3.00	0.10-0.25
VCGT 220520-AS	22.10	12.70	5.56	2.00	5.50	●			1.50-4.50	0.15-0.30
VCGT 220530-AS	22.10	12.70	5.56	3.00	5.50	●	●		1.50-4.50	0.15-0.30

- For user guide and cutting speed recommendations, see pages 160-170, 274-278

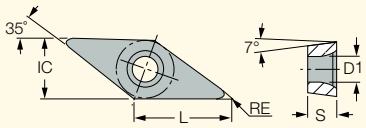
For tools, see pages: A/S-SVLBCR/L (150) • A/S-SVLFCR/L; A-SVUCR/L (149) • A/S-SVQCR/L (149) • AVC-SVLCR/L-VH (128) • AVC-SVMCR/L (124) • AVC-SVPCR/L (123) • AVC-SVQCR/L (123) • AVC-SVUCR/L (122) • C#-SVJCR/L (87) • C#-SVJCR/L-JHP (87) • C#-SVVCN (91) • DTF50 SVXCR-16X2 (510) • DTF50 SVXCR-22 (509) • HSK A63WH-SVJCR/L (87) • NQCH-SVACR/L-S-JHP (89) • NQCH-SVJCR/L-S-JHP (85) • NQCH-SVVCN-S-JHP (512) • NQCH-Y-SVJCR-S-JHP (86) • PVACR/L-S (84) • PVACR/L-S-JHP (89) • S/A-SVJCR/L (150) • SBTT#-SVJCR/L-JHP (416) • SBTT#-SVQCR/L-JHP (417) • SBTT#-SVUCR/L-JHP (416) • SBTT-SVVCN-JHP (416) • SVACR/L-S (88) • SVJCR-PAD (88) • SVJCR/L (511) • SVJCR/L-16-JHP (511) • SVJCR/L-PAD-JHP (88) • SVPCR/L-S (92) • SVVCN (511) • SVXCR/L (512) • Y-SVJCR-S (85) • Y-SVJCR-S-JHP (86) • AVC-SVLCR/L (123) • PVACR/L-S-JHP-MC (90)

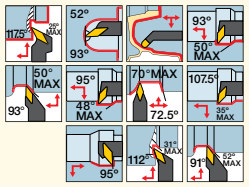
ISOTURN

VCGT-AF

Inserts with a Very Positive Rake Angle and Sharp Cutting Edge for Semi-Finishing and Finishing Aluminum







Designation	Dimensions L	IC	S	RE	D1	Tough ↔ Hard IC1520	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
VCGT 220508-AF	22.10	12.70	5.56	0.80	5.50		●	1.00-4.50	0.10-0.25
VCGT 220512-AF	22.10	12.70	5.56	1.20	5.50		●	1.00-4.50	0.10-0.30
VCGT 220516-AF	22.10	12.70	5.56	1.60	5.50	●	●	1.50-4.50	0.10-0.35

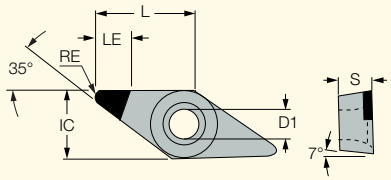
- For user guide and cutting speed recommendations, see pages 160-170, 274-278

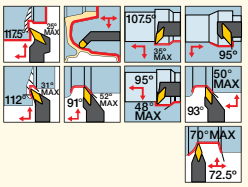
For tools, see pages: A/S-SVLFCR/L; A-SVUCR/L (149) • A/S-SVQCR/L (149) • DTF50 SVXCR-22 (509)

ISOTURN

VCGT-DW (PCD)
Inserts with 7° Clearance and a Single PCD Top Corner Tip Chipformer for Machining Aluminum







Designation	Dimensions L	IC	S	RE	LE	D1	ID5	Recommended Machining Data a_p (mm)	f (mm/rev)
VCGT 160404-DW	16.60	9.52	4.76	0.40	6.60	4.40	●	0.10-3.00	0.05-0.30
VCGT 160408-DW	16.60	9.52	4.76	0.80	6.40	4.40	●	0.10-3.00	0.05-0.30
VCGT 160412-DW	16.60	9.52	4.76	1.20	6.30	4.40	●	0.10-3.00	0.05-0.30
VCGT 220516-DW	22.10	12.70	5.56	1.60	6.30	5.50	●	0.10-3.00	0.05-0.30
VCGT 220520-DW	22.10	12.70	5.56	2.00	6.20	5.50	●	0.10-3.00	0.05-0.30
VCGT 220530-DW	22.10	12.70	5.56	3.00	6.00	5.50	●	0.10-3.00	0.05-0.30

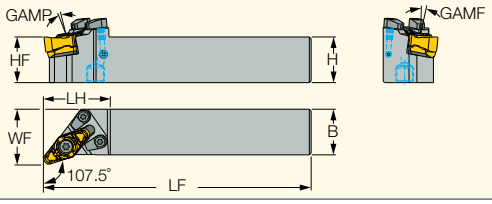
* For complete information regarding ISCAR's ceramic and CBN grades, please refer to ISCAR's catalog on the subject.

For tools, see pages: A/S-SVLBCR/L (150) • A/S-SVLFCR/L; A-SVUCR/L (149) • A/S-SVQCR/L (149) • AVC-SVLCR/L-VH (128) • AVC-SVPCR/L (123) • AVC-SVQCR/L (123) • C#-SVJCR/L (87) • C#-SVJCR/L-JHP (87) • C#-SVVCN (91) • DTF50 SVXCR-16X2 (510) • DTF50 SVXCR-22 (509) • HSK A63WH-SVJCR/L (87) • NQCH-SVJCR/L-S-JHP (85) • SVJCR/L (511) • SVJCR/L-16-JHP (511) • SVVCN (511) • SVXCR/L (512) • AVC-SVLCR/L (123)

ISOTURN

SVHNR/L-AL-JHP
Screw Lock Tools with Channels for High-Pressure Coolant Carrying 35° Rhombic Inserts







Designation	H	B	HF	LF	LH	WF	GAMP	GAMF	MIID(1)
SVHNR/L 2525M-22-AL-JHP	25.0	25.0	25.0	146.34	36.3	30.03	7.0	6.0	VNGU 220630-R3N

• For user guide, see pages 104-110
(1) Master insert identification

For inserts, see pages: VNGU-R3N (268)

Spare Parts

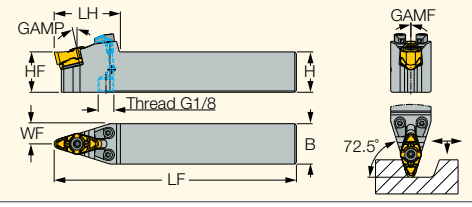
Designation									
SVHNR/L 2525M-22-AL-JHP	TVX 2230(a)	SR 14-591/L-SN	SW6-T-SH	BLD T20/S7	HW 3.0	SR TC-4	CH-1.9D-JHP-A SET	TVX 2212(b)*	TVX 2216(c)*

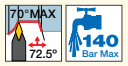
* Optional, to be ordered separately
(a) For VNGU 220630-R3N insert
(b) For VNGU 220612-R3N insert
(c) For VNGU 220616-R3N insert

ISOTURN

SVVNN-AL-JHP
Screw Lock Tools with Channels for High-Pressure Coolant Carrying 35° Rhombic Inserts







Designation	H	HF	B	LF	LH	WF	GAMP	GAMF	MIID(1)
SVVNN 2525M-22-AL-JHP	25.0	25.0	25.0	150.00	41.0	12.50	0.0	-13.5	VNGU 220630-R3N

(1) Master insert identification

For inserts, see pages: VNGU-R3N (268)

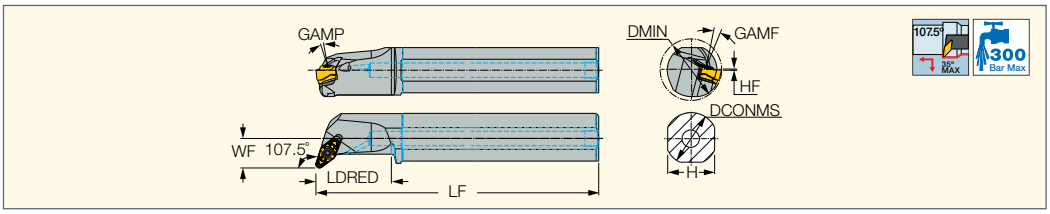
Spare Parts

Designation									
SVVNN 2525M-22-AL-JHP	TVX 2230(a)	HW 3.0	BLD T20/S7	SW6-T-SH	SR TC-4	SR 14-591/L-SN	CH-1.9D-JHP-A SET	TVX 2212(b)*	TVX 2216(c)*

* Optional, to be ordered separately
(a) For VNGU 220630-R3N insert
(b) For VNGU 220612-R3N insert
(c) For VNGU 220616-R3N insert

ISOTURN

A-SVQNR/L-AL-JHP
Screw Lock Boring Bars
Carrying 35° Rhombic Inserts



Designation	DCONMS	LF	LDRED	H	HF	WF	DMIN	GAMP	GAMF	MIID[1]
A40U SVQNR/L-22-AL-JHP	40.00	348.10	60.0	36.0	0.1	23.40	49.00	14.5	6.5	VNGU 220630-R3N

(1) Master insert identification

For inserts, see pages: VNGU-R3N (268)
For holders, see pages: HSK A63TM ABB (839)

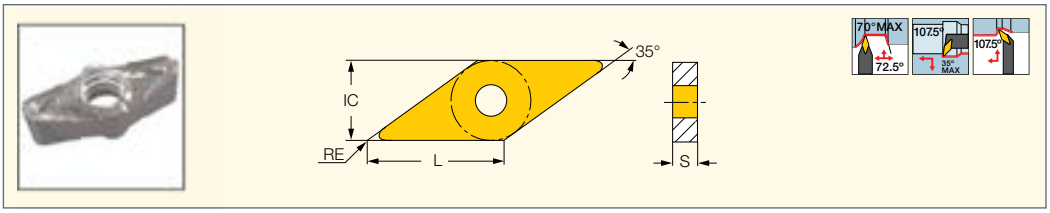
Spare Parts

Designation									
A40U SVQNR/L-22-AL-JHP	TVX 2230[a]	SR 14-591/L-SN	HW 3.0	SW6-T-SH	BLD T20/S7	PL 40	SR TC-4	TVX 2212[b]*	TVX 2216[c]*

* Optional, to be ordered separately
(a) For VNGU 220630-R3N insert
(b) For VNGU 220612-R3N insert
(c) For VNGU 220616-R3N insert

ALUPTURN POSITIVE DOUBLE SIDED

VNGU-R3N
Double-Sided Sharp Edged
Positive Rake Inserts for Rough
Machining Aluminum and
Other Non-Ferrous Materials



Designation	Dimensions L	IC	S	RE	Tough ↔ Hard IC1520	IC20	Recommended Machining Data a_p (mm)	f (mm/rev)
VNGU 220612-R3N	22.00	12.70	6.77	1.20		●	1.00-4.50	0.10-0.30
VNGU 220616-R3N	22.00	12.70	6.51	1.60		●	1.50-4.50	0.10-0.35
VNGU 220630-R3N	22.00	12.70	6.35	3.00	●	●	1.50-4.50	0.15-0.40

• For user guide and cutting speed recommendations, see pages 160-170, 274-278

For tools, see pages: A-SVLFNR-AL-JHP (141) • A-SVQNR/L-AL-JHP (142) • SVHNR/L-AL-JHP (44) • SVVNN-AL-JHP (44)



PARTING



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TANG-GRIP 554
LOGIQ-F-GRIP 574
DO-F-GRIP 580
JET-CROWN 581
SELF-5-GRIP 585
TANG-5-GRIP 586
CUT-GRIP 587
PENTA-IQ-GRIP 591
PENTA-CUT R/L Parting Inserts 596

USER GUIDE **606**

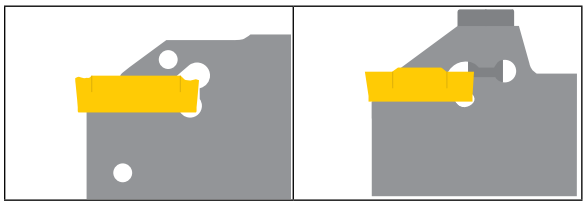
MODULAR-GRIP ADAPTATIONS **849**

Clamping Systems

DO-GRIP

- First choice for parting
- Double-ended insert
- Self-clamped for deeper grooving and parting medium to large diameters
- Screw-clamped for small diameters
- See also **HELI-GRIP**, page 259

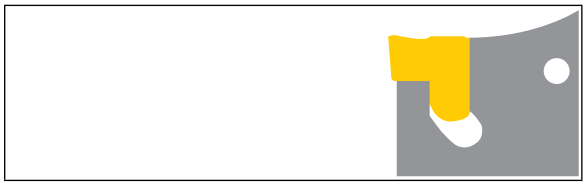
FIRST CHOICE!



Self-clamped | Screw-clamped

TANG-GRIP

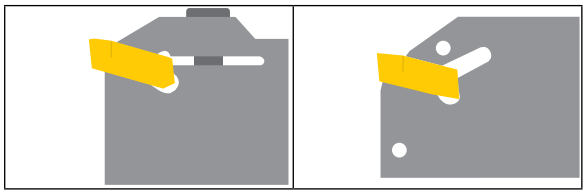
- Very rigid clamping in a tangentially oriented pocket
- Enables machining at very high feed rates and provides excellent straightness and surface finish
- Recommended for parting large diameter parts and for interrupted cuts
- Offers a free, unobstructed chip flow



TANG-GRIP

CUT-GRIP

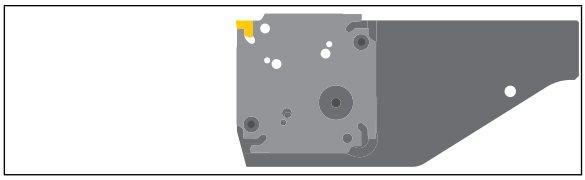
- Single-ended insert
- Self- and screw-clamped options



Screw-clamped | Self-clamped

LOGIQ F GRIP (HIGH FEED GRIP HOLDER)

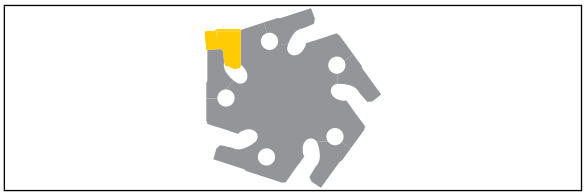
- Unique adaptation for Quad /Square type adapters with 4 pockets
- Outstanding stability, vibration free parting system also on big diameters
- Improves insert life, surface finish and workpiece straightness due to robust design
- Enables reduction of cutting width due to excellent stability, leading to material savings
- **Ø120mm** bar can be cut with only 3 mm insert width
- Guarantees high productivity, especially when using **TAG N...HF** inserts with feed of up to 0.4 mm\rev.
- Economical adapters with 4 pockets
- User friendly, easy to operate
- Saves set up time after pocket replacement; adapter can be positioned with new pocket without set up
- Several adapters can be clamped on one tool block
- The tools and adapters are designed for **JET-CUT** cooling up to 140 Bar



LOGIQ-F-GRIP

TANG 5 GRIP (PARTING AND GROOVING)

- Economical pentagonal adapters with 5 pockets
- No setup time after pocket replacement
- Several adapters can be clamped on one holder
- The tools and adapters are designed for **JET-CUT** cooling up to 340 Bar



TANG-5-GRIP

PENTACUT

- 5 cutting edges
- Fast edge indexing
- For shallow grooving and up to 20 mm parting diameter
- **PENTA-IQ** for parting up to 40mm bar diameter



PENTACUT | PENTA-IQ

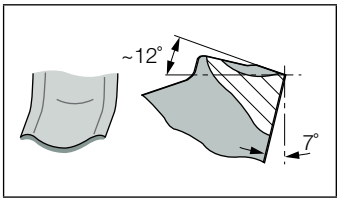
Main Chipformers

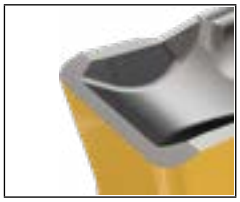
HF-Type

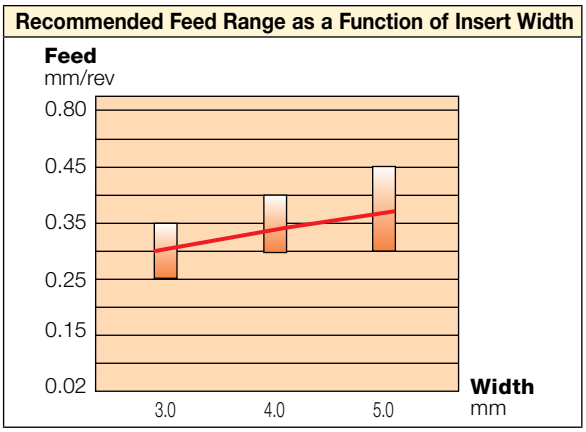
- For high feed machining only!
- Reinforced cutting edge (negative rake)
- Should be used with short extension tools

$$f \approx \frac{W\ insert}{12}\ [mm/rev]$$

Alloy Steel	Austenitic Stainless	High Temp. Alloys	Nonferrous Materials	Cast Iron
✓	✗	✗	✗	✓







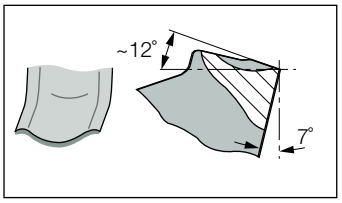
C-Type

- First choice for parting of bars, hard materials and tough applications
- A positive rake, single cavity with negative land and shoulders provides extra cutting-edge strength
- Medium-to-high feed

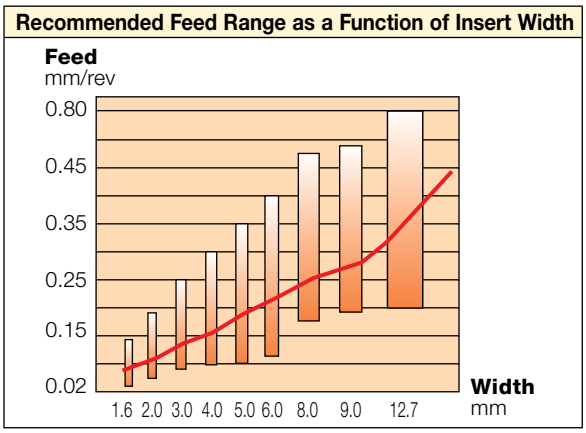
$$f \approx \frac{W\ insert}{18}\ [mm/rev]$$

Alloy Steel	Austenitic Stainless	High Temp. Alloys	Nonferrous Materials	Cast Iron
✓	✗	✓ (IC20 only)	✓ (IC20 only)	✓

Recommendations are for neutral inserts.
For R/L inserts, reduce feed by 20-40%.





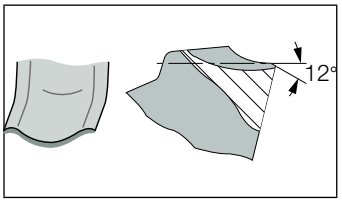


MF Type

- Parting and Grooving Insert for Soft and Hard Materials, Medium Feed

$$f \approx \frac{W\ insert}{21}\ [mm/rev]$$

Alloy Steel	Austenitic Stainless	High Temp. Alloys	Nonferrous Materials	Cast Iron
✓	✓	✓	✗	✓





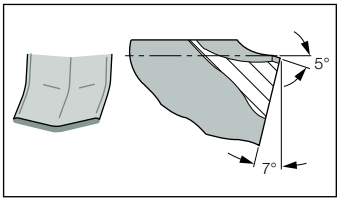
JT-Type

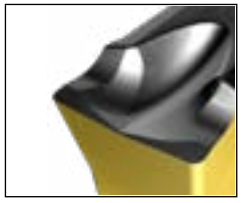
Based on the J-type chipformer with a T-land reinforced frontal cutting edge.

- Provides a solution for the intermediate range between the strong and negative C-type configuration and the positive edged J-type chipformer.
- Can be used on a wide range of materials.
- Same manner as the J-type, but it can be used at higher feeds due to its reinforced edge.

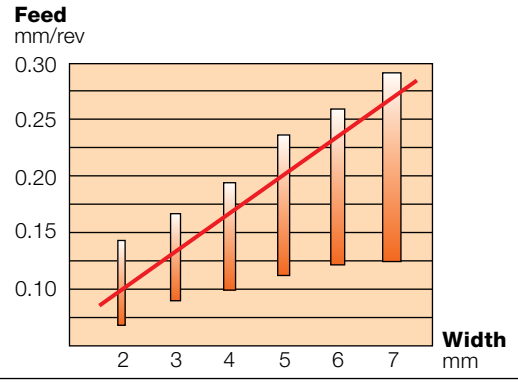
$$f \approx \frac{\text{W insert}}{24} \text{ [mm/rev]}$$

Alloy Steel	Austenitic Stainless	High Temp. Alloys	Nonferrous Materials	Cast Iron
✓	✓	✓	✗	✓





Recommended Feed Range as a Function of Insert Width



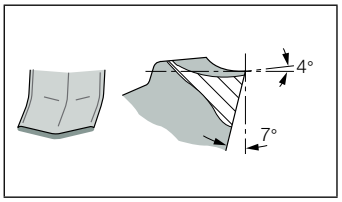
J-Type

- First choice for soft materials, parting tubes, small diameters and thin-walled parts
- Cutting edge with positive rake
- Low-to-medium feed

$$f \approx \frac{\text{W insert}}{26} \text{ [mm/rev]}$$

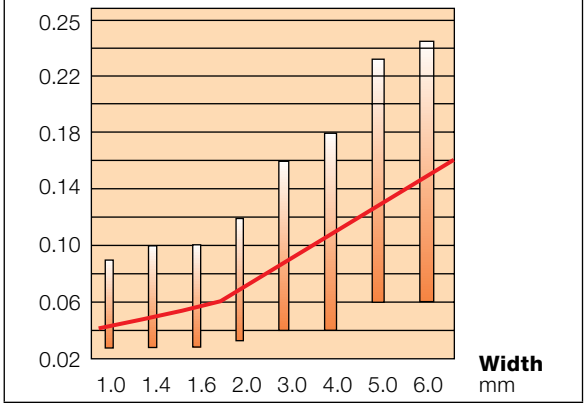
Alloy Steel	Austenitic Stainless	High Temp. Alloys	Nonferrous Materials	Cast Iron
✓	✓	✓	✓	✗

Recommendations are for neutral inserts.
For R/L inserts, reduce feed by 20-40%.





Recommended Feed Range as a Function of Insert Width

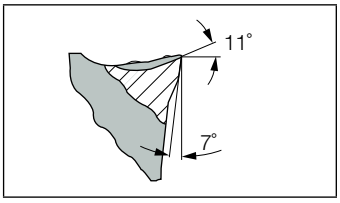


Z-Type

- Cutting edge with high positive rake, suitable for parting tubes, thin walled arts and for small diameters
- Suitable for soft materials
- Excellent for cutting bearing steel and stainless steel
- Low-to-medium feeds

$$f \approx \frac{W\ insert}{28}\ [mm/rev]$$

Alloy Steel	Austenitic Stainless	High Temp. Alloys	Nonferrous Materials	Cast Iron
✓	✓	✓	✓	✗



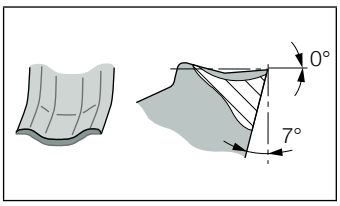


LF

- Parting and Grooving Insert for Stainless Steel & soft materials
- Miniature Parts
- Low Feeds

$$f \approx \frac{W\ insert}{31}\ [mm/rev]$$

Alloy Steel	Austenitic Stainless	High Temp. Alloys	Nonferrous Materials	Cast Iron
✓	✓	✓	✗	✗

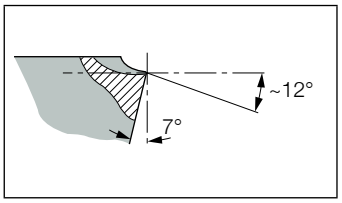




UA/UT-Type

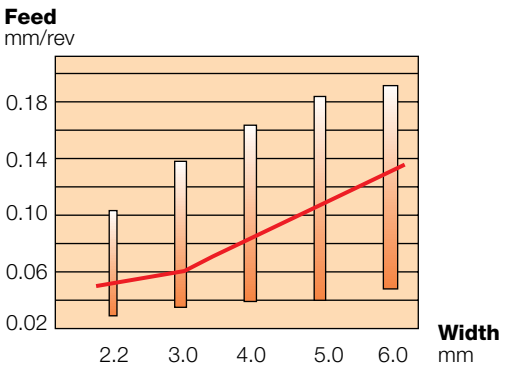
- A chipformer for use at low feeds
- Recommended for CrNi alloys and low carbon steel, especially in the bearing industry and on similar, ductile materials
- The narrow chipformer design ensures short deformed chips and provides improved performance
- **UA** and **UT** are similar chipformers. **UT** is slightly tighter than the **UA** chipformer

$$f \approx \frac{W\ insert}{40}\ [mm/rev]$$





Recommended feed range as a function of insert width

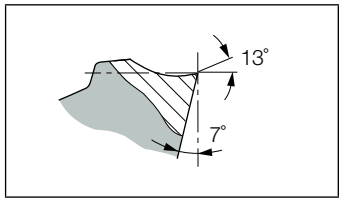


P-Type

- Very positive rake inclination and sharp cutting edge
- For soft materials, slim parts and general parting
- Low feeds

$$f \approx \frac{\text{W insert}}{55} \text{ [mm/rev]}$$

Alloy Steel	Austenitic Stainless	High Temp. Alloys	Nonferrous Materials	Cast Iron
✓	✓	✗	✓	✗



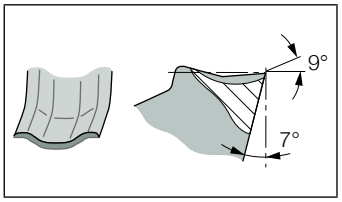


A-Type

- Positive rake, sharp edge
- For parting aluminum
- In grade **IC20**

$$f \approx \frac{\text{W insert}}{43} \text{ [mm/rev]}$$

Alloy Steel	Austenitic Stainless	High Temp. Alloys	Nonferrous Materials	Cast Iron
✗	✗	✗	✓	✗



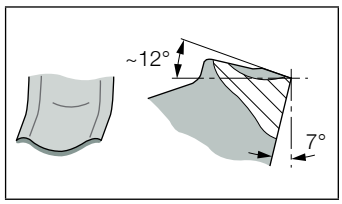


M-Type

- Similar to C-type, but with modified edge (smaller K-land)
- Improved chip control at medium feed

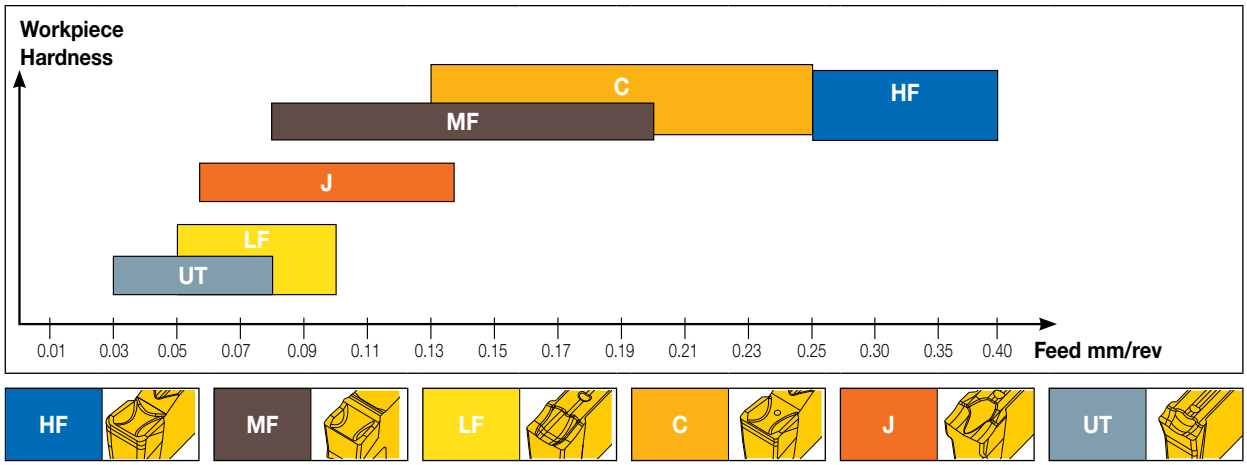
$$f \approx \frac{\text{W insert}}{22} \text{ [mm/rev]}$$

Alloy Steel	Austenitic Stainless	High Temp. Alloys	Nonferrous Materials	Cast Iron
✓	✗	✓	✗	✗

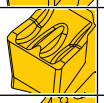
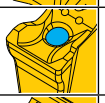
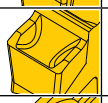
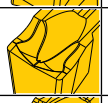
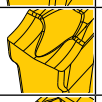
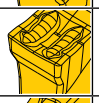
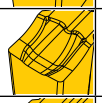
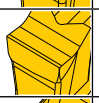
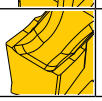




Main Chipformers Recommended Feed



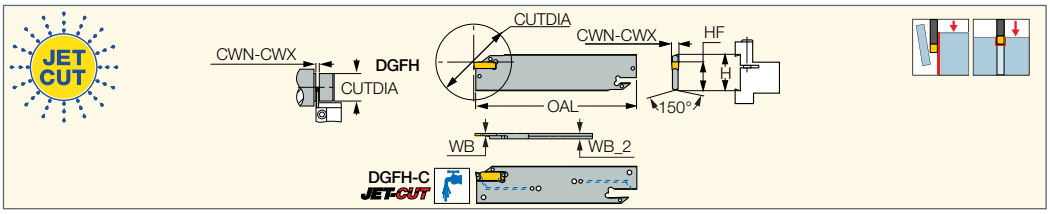
Selection of Chipformers for Various Workpiece Materials

	Inserts		Alloy Steel	Austenitic Stainless	High Temp. Alloys	Nonferrous Materials	Cast Iron
		HF	✔	✘	✘	✘	✔
		C	✔	✘	✔ (IC20 only)	✔ (IC20 only)	✔
High		W	✔	✘	✘	✘	✔
		C-jet (Coolant)	✔	✔	✔	✘	✘
		MF	✔	Medium to high feed	✔	✘	✔
		JT	✔	✔	✔	✘	✔
Feed		J	✔	✔	✔	✔	✘
		Z	✔	✔	✔	✔	✘
		LFT	✔	✔	✔	✘	✘
		LF	✔	✔	✔	✘	✘
Low		UT	✔	✘	✘	✘	✘
		P	✔	✔	✘	✔	✘
		A	✘	✘	✘	✔	✘

✔ First choice

DO-GRIP

DGFH
Parting and Grooving Blades with and without Coolant Channels Carrying DO-GRIP and HELI-GRIP Inserts



Designation	H	CWN[4]	CWX[5]	WB	WB_2	OAL	HF	CUTDIA[6]
DGFH 26-1.4	26.0	1.40	1.40	1.00	2.4 [8]	110.00	21.4	26.0
DGFH 26-2 [1]	26.0	1.90 [7]	2.50	-	1.6	110.00	21.4	39.0 [9]
DGFH 26-3 [1]	26.0	3.00 [7]	3.18	-	2.4	110.00	21.4	39.0 [9]
DGFH 26C-3 [2]	26.0	3.00	3.18	-	2.4	110.00	21.4	39.0 [9]
DGFH 26-4	26.0	4.00	4.00	-	3.2	110.00	21.4	80.0
DGFH 32-1.4	32.0	1.40	1.40	1.00	2.4 [8]	150.00	24.8	26.0
DGFH 32-2 [1]	32.0	1.90 [7]	2.50	-	1.8	150.00	24.8	39.0 [9]
DGFH 32-3 [1]	32.0	3.00 [7]	3.18	-	2.4	150.00	24.8	39.0 [9]
DGFH 32C-3 [2]	32.0	3.00	3.18	-	2.4	150.00	24.8	39.0 [9]
DGFH 32-4	32.0	4.00	4.00	-	3.2	150.00	24.8	100.0
DGFH 32C-4 [3]	32.0	4.00	4.00	-	3.2	150.00	24.8	69.0
DGFH 32-5	32.0	5.00	5.00	-	4.0	150.00	24.8	120.0
DGFH 32-6	32.0	6.00	6.35	-	5.2	150.00	24.8	120.0
DGFH 45-3	45.0	3.00 [7]	3.18	-	2.4	225.00	38.0	160.0
DGFH 45-4	45.0	4.00	4.10	-	3.2	225.00	38.0	160.0
DGFH 45-5	45.0	4.80	5.00	-	4.0	225.00	38.0	160.0
DGFH 45-6	45.0	6.00	6.40	-	5.2	225.00	38.0	160.0

• DG..1.0 insert can be mounted into pocket sizes 2 and 3, in which case the pocket width has to be modified • For user guide, see pages 606-615

[1] For CUTDIA 50 mm, use single-ended insert (should be modified by the user)

[2] Blades with frontal coolant holes (JET-CUT) • For CUTDIA 50 mm, use single-ended insert (should be modified by the user)

[3] These blades are suitable for turning, using GRIP 4 inserts • Blades with frontal coolant holes (JET-CUT)

[4] Minimum cutting width

[5] Maximum cutting width

[6] Maximum workpiece diameter for grooving operation

[7] For DG. 1... insert, modify holder

[8] Thickness at the D.O.C. area is 1.0 mm

[9] Maximum diameter with double-sided inserts.

For inserts, see pages: DGN-LF/LFT (546) • DGN-MF (541) • DGN-T (541) • DGR/L-B (542) • GRIP-T (295) • GRIPA (296) • GRIPA (full radius) (296) • DGN/DGNC/DGNM-C (539) • DGR/L-C DGRC/LC-C (540) • DGN/DGNM-J/JS/JT (544) • DGR/L-J/JS (545) • DGN-P (548) • DGN-UT/UA (547) • DGN-W (540) • DGN-WP (549) • DGN-Z (546) • DGR-P (548) • DGR-WP (549) • DGR-Z/ZS (547) • GRIP (294) • GRIP (full radius) (295)

For holders, see pages: C#-TBK-R/L (695) • HSK A-WH-TBK-R/L (706) • SGTBF (691) • SGTBK (691) • SGTBR/L (691) • SGTBU/SGTBN (690) • UBHCR/L (691)

Spare Parts

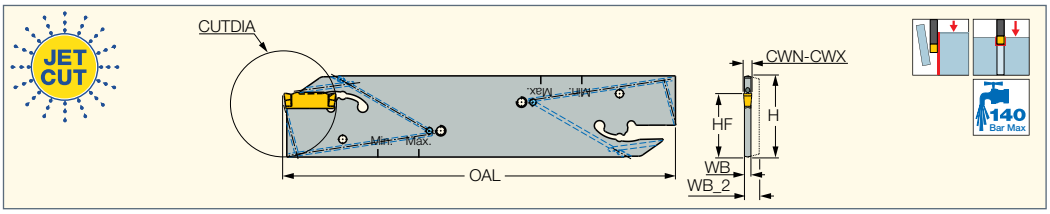
Designation						
DGFH 26-1.4	EDG 23B*					
DGFH 26-2	EDG 23A*					
DGFH 26-3	EDG 23A*					
DGFH 26C-3	EDG 23A*	SGC 340	SGCU 341*	CGF 343*	CF 343*	CGM 343*
DGFH 26-4	EDG 23A*					
DGFH 32-1.4	EDG 23B*					
DGFH 32-2	EDG 33A*					
DGFH 32-3	EDG 33A*					
DGFH 32C-3	EDG 33A*	SGC 340	SGCU 341*	CGF 343*	CF 343*	CGM 343*
DGFH 32-4	EDG 33A*					
DGFH 32C-4	EDG 33A*	SGC 340	SGCU 341*	CGF 343*	CF 343*	CGM 343*
DGFH 32-5	EDG 33A*					
DGFH 32-6	EDG 33A*					
DGFH 45-3	EDG 33A*					
DGFH 45-4	EDG 33A*					
DGFH 45-5	EDG 33A*					
DGFH 45-6	EDG 33A*					

* Optional, to be ordered separately

DO-GRIP

DGFH-JHP

Parting and Grooving Blades with Channels for Low and High-Pressure Coolant Carrying DO-GRIP Inserts



Designation	CWN[2]	CWX[3]	WB	WB_2	OAL	H	HF	CUTDIA[4]	Insert		
DGFH 32-2-JHP [1]	1.90 [5]	2.50	1.80	2.5	150.00	32.0	24.8	39.0	DG. 1.../DG. 2...	SGC 340	EDG 33A-JHP*
DGFH 32-3-JHP	3.00 [5]	3.18	2.50	-	152.00	32.0	24.8	90.0	DG. 1.../DG. 3...	SGC 340	EDG 33A-JHP*
DGFH 32-4-JHP	4.00	4.00	3.20	-	152.00	32.0	24.9	90.0	DG. 4.../GRIP 4...	SGC 340	EDG 33A-JHP*
DGFH 32-5-JHP	5.00	5.00	4.00	-	152.00	32.0	24.9	90.0	DG. 5.../GRIP 5...	SGC 340	EDG 33A-JHP*
DGFH 32-6-JHP [1]	6.00	6.35	5.20	-	160.00	32.0	24.9	90.0	DG. 6.../GRIP 6...	SGC 340	EDG 33A-JHP*

- For user guide, see pages 606-615

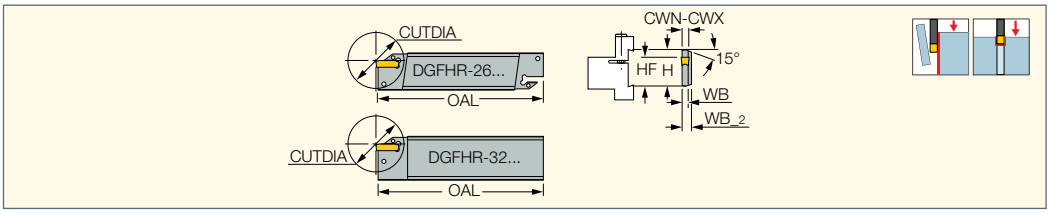
[1] Only an upper channel
[2] Minimum cutting width
[3] Maximum cutting width
[4] Maximum workpiece diameter for grooving operation
[5] For DG. 1... insert, modify holder
* Optional, to be ordered separately

For inserts, see pages: DGN-LF/LFT (546) • DGN-MF (541) • DGN-P (548) • DGN-T (541) • DGN-UT/UA (547) • DGN-W (540) • DGN-WP (549) • DGN-Z (546) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGR-P (548) • DGR-WP (549) • DGR-Z/ZS (547) • DGR/L-C DGRC/LC-C (540) • DGR/L-J/JS (545) • GRIP (294) • GRIP (full radius) (295) • GRIP-T (295) • GRIPA (296) • GRIPA (full radius) (296)
For holders, see pages: TGTBU-JHP (559)

DO-GRIP

DGFHR/L

Parting and Grooving Reinforced Blades Carrying DO-GRIP Inserts



Designation	H	CWN[1]	CWX[2]	WB_2	WB	OAL	HF	CUTDIA[3]	Machines	Insert	
DGFHR 26T16-2	26.0	1.90	2.50	8.0	1.70	110.00	21.4	42.0	TNS-30	DG. 1.../DG. 2..	EDG 23A*
DGFHR/L 26T23-2	26.0	1.90	2.50	8.0	1.60	110.00	21.4	42.0	TNS-30/112	DG. 1.../DG. 2..	EDG 23A*
DGFHR/L 26T16-3	26.0	3.00	3.18	8.0	2.40	110.00	21.4	30.0	TNS-30	DG. 1.../DG. 3..	EDG 23A*
DGFHR/L 26T23-3	26.0	3.00	3.18	8.0	2.40	110.00	21.4	42.0	TNS-30/42	DG. 1.../DG. 3..	EDG 23A*
DGFHR/L 32T22-2	32.0	1.90	2.50	8.0	1.60	110.00	24.8	42.0	TNS-42	DG. 1.../DG. 2..	EDG 33A*
DGFHR/L 32T33-3	32.0	3.00	3.18	8.0	2.40	110.00	24.8	60.0	TNS-42/60/65	DG. 1.../DG. 3..	EDG 33A*
DGFHR/L 32T33-4	32.0	4.00	4.00	8.0	3.40	110.00	24.8	60.0	TNS-42/60/65	DG. 4.../GRIP 4..	EDG 33A*
DGFHL 32T41-4	32.0	4.00	4.00	10.0	3.40	110.00	24.8	80.0	TNS-65/80/480	DG. 4.../GRIP 4..	EDG 33A*
DGFHR 32T41-4	32.0	4.00	4.00	8.0	3.40	110.00	24.8	80.0	TNS-65/80/480	DG. 4.../GRIP 4..	EDG 33A*

- Insert limit is Tmax=18 mm. If deeper penetration is required, the insert should be modified into single-ended by the user.
- DG..1.0 insert can be mounted into pocket sizes 2 and 3. in which case the pocket width has to be modified - see page 537
- For user guide, see pages 606-615

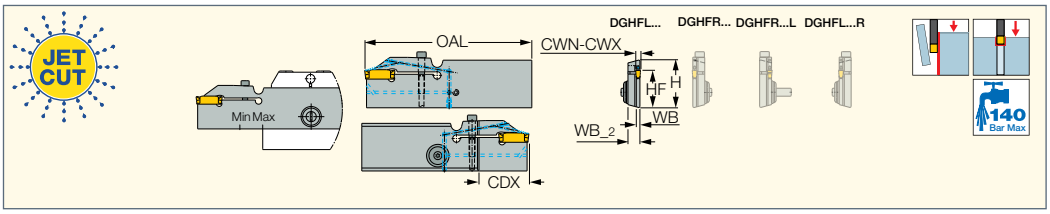
[1] Minimum cutting width • For DG: 1.0 insert - modify holder
[2] Maximum cutting width
[3] The specified limit refers to the tool
* Optional, to be ordered separately

For inserts, see pages: DGN-B (542) • DGN-LF/LFT (546) • DGN-P (548) • DGN-T (541) • DGN-UT/UA (547) • DGN-WP (549) • DGN-Z (546) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGR-P (548) • DGR-WP (549) • DGR-Z/ZS (547) • DGR/L-B (542) • DGR/L-C DGRC/LC-C (540) • DGR/L-J/JS (545)
For holders, see pages: C#-TBK-R/L (695) • HSK A-WH-TBK-R/L (706) • SGTBF (691) • SGTBR/L (691) • SGTBU/SGTBN (690) • UBHCR/L (691)

DO-GRIP

DGFHR/L-BC-JHP

Parting and Grooving Reinforced Blades with Channels for High-Pressure Coolant Carrying DO-GRIP Inserts



Designation	CWN(1)	CWX(2)	WB_2	WB	OAL	H	HF	CDX(3)	Insert
DGFHR/L 32BC-3T33-JHP	3.00	3.18	7.9	2.40	111.00	32.0	24.8	33.00	DG. 3..
DGFHL 32BC-3T33R-JHP	3.00	3.18	7.9	2.40	111.00	32.0	24.8	33.00	DG. 3..
DGFHR 32BC-3T33L-JHP	3.00	3.18	7.9	2.40	111.00	32.0	24.8	33.00	DG. 3..

- For user guide, see pages 606-615

(1) Minimum cutting width • For DG: 1.0 insert - modify holder
(2) Maximum cutting width
(3) The specified limit refers to the tool

For inserts, see pages: DGN-LF/LFT (546) • DGN-MF (541) • DGN-P (548) • DGN-T (541) • DGN-UT/UA (547) • DGN-Z (546) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGR-Z/ZS (547) • DGR/L-C DGRC/LC-C (540) • DGR/L-J/JS (545)
For holders, see pages: TGTBU-JHP (559)



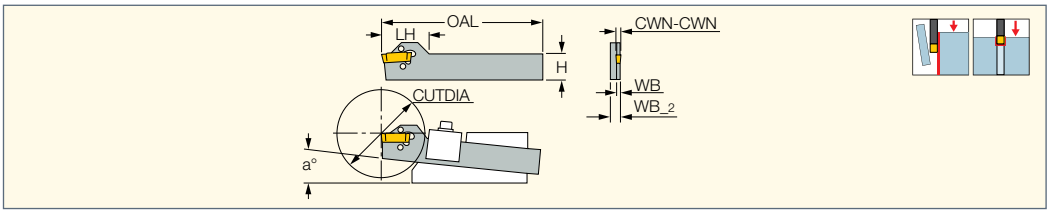
Spare Parts

Designation				
DGFHL 32BC-3T33-JHP	SR M4-21532	HW 3.0	SGC 340	SR M3X3DIN913
DGFHR 32BC-3T33-JHP	SR M4-21532	HW 3.0	SGC 340	SR M3X3DIN913
DGFHL 32BC-3T33R-JHP	SR M4-21532	HW 3.0	SGC 340	SR M3X3DIN913
DGFHR 32BC-3T33L-JHP	SR M4-21532	HW 3.0	SGC 340	SR M3X3DIN913

DO-GRIP

DGFS

Blades for Multi-Spindle Machines, Replacement for HSS and Brazed Tools



Designation	H	CWN(7)	CWX(8)	CUTDIA(9)	WB	WB_2	OAL	LH	a°	
DGFS 0-12-2 (1)	12.7	1.90	2.50	32.0	1.60	3.2	110.00	32.0	0	EDG 33B*
DGFS 0-17-2 (2)	17.4	1.90	2.50	35.0	1.60	3.2	110.00	32.0	0	EDG 33B*
DGFS 0-17-3 (2)	17.4	3.00	3.18	60.0	2.40	3.2	110.00	32.0	0	EDG 33B*
DGFS 5-17-2 (3)	17.4	1.90	2.50	35.0	1.60	3.2	110.00	32.0	5	EDG 33B*
DGFS 5-17-3 (3)	17.4	3.00	3.18	60.0	2.40	3.2	110.00	32.0	5	EDG 33B*
DGFS 5-17-4 (3)	17.4	4.00	4.00	60.0	3.20	3.2	110.00	32.0	5	EDG 33B*
DGFS 5-22-2 (4)	22.2	1.90	2.50	50.0	1.60	3.2	150.00	32.0	5	EDG 33B*
DGFS 5-22-3 (5)	22.2	3.00	3.18	75.0	2.40	3.2	150.00	32.0	5	EDG 33B*
DGFS 5-22-4 (5)	22.2	4.00	4.00	80.0	3.20	3.2	150.00	32.0	5	EDG 33B*
DGFS 5-24-3	23.8	3.00	3.18	80.0	2.40	3.2	150.00	32.0	5	EDG 33B*
DGFS 5-28-2 (6)	28.5	1.90	2.50	65.0	1.60	3.2	150.00	32.0	5	EDG 33B*
DGFS 5-28-4 (6)	28.5	4.00	4.00	100.0	3.20	3.2	150.00	32.0	5	EDG 33B*

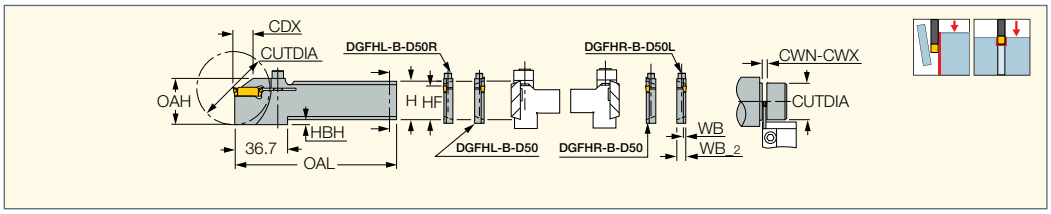
- DG..1.0 insert can be mounted into pocket sizes 2 and 3. in which case the pocket width has to be modified -see page 537
- For user guide, see pages 606-615

(1) Toolholder assembly X18-1,46,47-WT,160-CL,354-CL,701-ACL,702,702-CL,703,703-CL,704,704-CL,6921,6925
(2) Toolholder assembly E-7,47,102-CL,103-CL,161-A-CL,162-A-CL
(3) Toolholder assembly 226,226-CL,275,275-CL,276-CL,361-CL,431,630,707-A,707-A-CL
(4) Toolholder assembly 100-CL,274,277,277-CL,274-CL,370,383-CL, 6722,6754,6755,6854,6855,6922,51,51-CL,353-CL,167,370-CL
(5) Toolholder assembly 100-CL,274,277,277-CL,274-CL,370,383-CL, 6722,6754,6755,6854,6855,51,51-CL,353-CL,167,370-CL
(6) Toolholder assembly 278,278-CL,279,279-CL,280,280-CL,281,281-CL,375-CL,359-CL,372-CL,A6120,52,52-CL
(7) Minimum cutting width • For DG: 1.0 insert - modify holder
(8) Maximum cutting width
(9) Maximum workpiece diameter for grooving operation
* Optional, to be ordered separately

For inserts, see pages: DGN-B (542) • DGN-LF/LFT (546) • DGN-T (541) • DGR/L-B (542) • GRIP-T (295) • GRIPA (296) • GRIPA (full radius) (296) • DGN/DGNC/DGNM-C (539) • DGR/L-C DGRC/LC-C (540) • DGN/DGNM-J/JS/JT (544) • DGR/L-J/JS (545) • DGN-P (548) • DGN-UT/UA (547) • DGN-WP (549) • DGN-Z (546) • DGR-P (548) • DGR-WP (549) • DGR-Z/ZS (547) • GRIP (294) • GRIP (full radius) (295)

DO-GRIP

DGFHR/L-B-D..(R/L)
Reinforced Type Blades with Screw Clamping



Designation	H[4]	CWN[5]	CWX[6]	WB	WB_2	OAL	OAH	HF	HBH	CDX[7]	CUTDIA[8]	Insert		
DGFHR/L 26B-2D50 [1]	26.0	1.90	2.50	1.60	8.0	110.00	33.7	21.4	3.6	18.00	50.0	DG. 1.../DG. 2..	SR M4X20 DIN912	HW 3.0
DGFHL 26B-2D50R [2]	26.0	1.90	2.50	1.60	8.0	110.00	31.5	21.4	3.7	18.00	50.0	DG. 1.../DG. 2..	SR M4X20 DIN912	HW 3.0
DGFHR 26B-2D50L [2]	26.0	1.90	2.50	1.60	8.0	110.00	31.5	21.4	3.7	18.00	50.0	DG. 1.../DG. 2..	SR M4X20 DIN912	HW 3.0
DGFHR/L 26B-3D50 [1]	26.0	3.00	3.18	2.40	8.0	110.00	31.5	21.4	3.7	18.00	50.0	DG. 1.../DG. 3..	SR M4X20 DIN912	HW 3.0
DGFHL 26B-3D50R [2]	26.0	3.00	3.18	2.40	8.0	110.00	31.5	21.4	3.7	18.00	50.0	DG. 1.../DG. 3..	SR M4X20 DIN912	HW 3.0
DGFHR 26B-3D50L [2]	26.0	3.00	3.18	2.40	8.0	110.00	31.5	21.4	3.7	18.00	50.0	DG. 1.../DG. 3..	SR M4X20 DIN912	HW 3.0
DGFHR/L 32B-2D50 [3]	32.0	1.90	2.50	1.60	8.0	120.00	31.5	24.8	-	18.00	50.0	DG. 1.../DG. 2..	SR M4X20 DIN912	HW 3.0
DGFHL 32B-2D50R [2]	32.0	1.90	2.50	1.60	8.0	120.00	31.5	24.8	-	18.00	50.0	DG. 1.../DG. 2..	SR M4X20 DIN912	HW 3.0
DGFHR 32B-2D50L [2]	32.0	1.90	2.50	1.60	8.0	120.00	31.5	24.8	-	18.00	50.0	DG. 1.../DG. 2..	SR M4X20 DIN912	HW 3.0
DGFHR/L 32B-3D50 [3]	32.0	3.00	3.18	2.40	8.0	120.00	31.5	24.8	-	18.00	50.0	DG. 1.../DG. 3..	SR M4X20 DIN912	HW 3.0
DGFHL 32B-3D50R [2]	32.0	3.00	3.18	2.40	8.0	120.00	31.5	24.8	-	18.00	50.0	DG. 1.../DG. 3..	SR M4X20 DIN912	HW 3.0
DGFHR 32B-3D50L [2]	32.0	3.00	3.18	2.40	8.0	120.00	31.5	24.8	-	18.00	50.0	DG. 1.../DG. 3..	SR M4X20 DIN912	HW 3.0

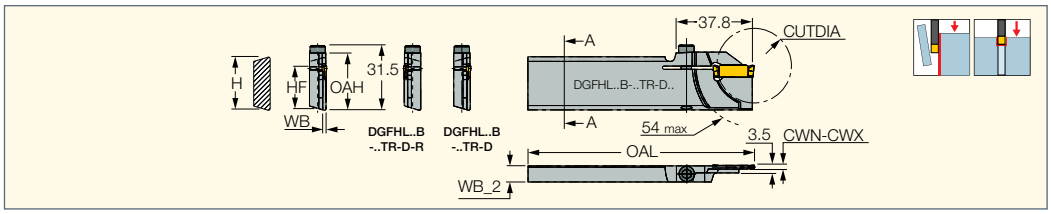
- Insert (double sided) limit is CDX=18 mm, If deeper penetration is required the insert should be changed to a single-ended insert DGNM type.
- DG..1.0 insert can be mounted into pocket sizes 2 and 3, in which case the pocket width has to be modified-see page 537
- For user guide, see pages 606-615

[1] For TRAUB machines, model TNC 30, TNM 28, TNS 26/30/42/112, TNA 300, TNK 260
[2] For Tornos Bechler, Emco 2000/20, 2000/26 machines
[3] For TRAUB machines, model TNC 42/65, TNM 42/65, TNS 42/60/65, TNA 300/400
[4] Mounted on all ISCAR standard blocks
[5] Minimum cutting width • For DG: 1.0 insert - modify holder
[6] Maximum cutting width
[7] Cutting depth maximum
[8] The specified limit refers to the tool

For inserts, see pages: DGN-B (542) • DGN-LF/LFT (546) • DGN-MF (541) • DGN-P (548) • DGN-T (541) • DGN-UT/UA (547) • DGN-WP (549) • DGN-Z (546) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGR-P (548) • DGR-WP (549) • DGR-Z/ZS (547) • DGR/L-B (542) • DGR/L-C DGRC/LC-C (540) • DGR/L-J/JS (545)
For holders, see pages: C#-TBK-R/L (695) • HSK A-WH-TBK-R/L (706) • SGTBF (691) • SGTBR/L (691) • SGTBU/SGTBN (690) • UBHCR/L (691)

DO-GRIP

DGFHL-26B-TR-D
Reinforced Type Blades with Screw Clamping for TRAUB and Index Machines



Designation	H[2]	CWN[3]	CWX[4]	WB	WB_2	OAL	OAH	HF	CUTDIA[5]	Insert		
DGFHL 26B-1.5TR-D20 [1]	26.0	1.00	1.50	1.20	7.9	110.00	27.9	21.4	20.0	DG. 1.../DG. 15..	SR M4X20 DIN912	HW 3.0
DGFHL 26B-2TR-D36	26.0	1.90 [6]	2.50	1.60	7.9	110.00	27.9	21.4	36.0	DG. 1.../DG. 2..	SR M4X20 DIN912	HW 3.0
DGFHL 26B-2TR-D36R	26.0	1.90 [6]	2.50	1.60	7.9	110.00	27.9	21.4	36.0	DG. 1.../DG. 2..	SR M4X20 DIN912	HW 3.0
DGFHL 26B-3TR-D36	26.0	3.00 [6]	3.18	2.40	7.9	110.00	27.9	21.4	36.0	DG. 1.../DG. 3..	SR M4X20 DIN912	HW 3.0
DGFHL 26B-3TR-D36R	26.0	3.00 [6]	3.18	2.40	7.9	110.00	27.9	21.4	36.0	DG. 1.../DG. 3..	SR M4X20 DIN912	HW 3.0

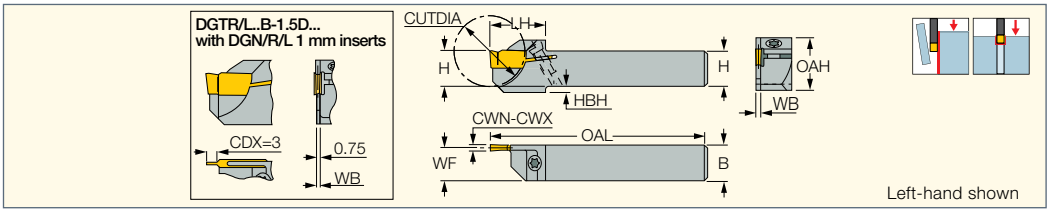
- Insert limit is Tmax=18 mm. If deeper penetration is required, the insert should be modified into single-ended by the user
- DG..1.0 insert can be mounted into pocket sizes 2 and 3, in which case the pocket width has to be modified - see page 537
- For user guide, see pages 606-615

[1] Do not use DG.. 1.4 on this tool!
[2] Mounted on all ISCAR standard blocks
[3] Minimum cutting width
[4] Maximum cutting width
[5] The specified limit refers to the tool
[6] For DG: 1.0 insert - modify holder

For inserts, see pages: DGN-B (542) • DGN-LF/LFT (546) • DGN-P (548) • DGN-UT/UA (547) • DGN-WP (549) • DGN-Z (546) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGR-Z/ZS (547) • DGR/L-B (542) • DGR/L-C DGRC/LC-C (540) • DGR/L-J/JS (545)

DO-GRIP

DGTR/L-B-D-SH
Parting and Grooving
Short Head Tools for CNC
and Swiss Automatics



Designation	CWN[2]	CWX[3]	H	B	WB	WF	LH	CUTDIA	OAH	HBH	OAL	Insert		
DGTR/L 8B-1.4SH	1.40	1.40	8.0	8.0	1.00	7.50	18.0	10.0	15.4	2.0	125.00	DG. 14..	SR 16-236 P[a]	T-15/5
DGTR/L 10B-1.4D20SH	1.40	1.40	10.0	10.0	1.00	9.50	18.0	20.0	13.7	2.0	120.00	DG. 14..	SR 16-236 P[a]	T-15/5
DGTR/L 10B-1.5D20SH [1]	1.00	1.50	10.0	10.0	1.00	9.50	19.0	20.0	15.7	2.0	120.00	DG. 1.../DG. 15..	SR 16-236 P[a]	T-15/5
DGTR/L 10B-2D20SH	1.90	2.50	10.0	10.0	1.60	9.20	19.0	20.0	15.7	2.0	120.00	DG. 1.../DG. 2..	SR 16-236 P[a]	T-15/5
DGTR/L 12B-1.4D24SH	1.40	1.40	12.0	12.0	1.00	11.50	19.0	24.0	15.7	-	120.00	DG. 14..	SR 16-236 P[a]	T-15/5
DGTR/L 12B-1.5D24SH [1]	1.00	1.50	12.0	12.0	1.00	11.40	19.0	24.0	15.7	-	120.00	DG. 1.../DG. 15..	SR 16-236 P[a]	T-15/5
DGTR/L 12B-2D24SH	1.90	2.50	12.0	12.0	1.60	11.20	19.0	24.0	15.7	-	120.00	DG. 1.../DG. 2..	SR 16-236 P[a]	T-15/5
DGTR 12B-2D24SH-L85	1.90	2.50	12.0	12.0	1.60	11.20	19.0	24.0	15.7	-	85.00	DG. 1.../DG. 2..	SR 16-236 P[a]	T-15/5
DGTR/L 12B-3D24SH	3.00	3.18	12.0	12.0	2.40	10.80	19.0	24.0	15.7	-	120.00	DG. 3.../DG. 10..	SR 16-236 P[a]	T-15/5
DGTR/L 16B-1.5D25SH [1]	1.00	1.50	16.0	16.0	1.20	15.40	19.5	25.4	19.7	-	120.00	DG. 1.../DG. 15..	SR 16-236 P[a]	T-15/5
DGTR/L 16B-2D25SH	1.90	2.50	16.0	16.0	1.60	15.20	19.5	25.4	19.7	-	120.00	DG. 1.../DG. 2..	SR 16-236 P[a]	T-15/5
DGTR/L 16B-3D25SH	3.00	3.18	16.0	16.0	2.40	14.80	19.5	25.4	19.7	-	120.00	DG. 1.../DG. 3..	SR 16-236 P[a]	T-15/5
DGTR/L 20B-1.5D25SH [1]	1.00	1.50	20.0	20.0	1.20	19.40	19.5	25.4	23.7	-	120.00	DG. 1.../DG. 15..	SR 16-236 P[a]	T-15/5
DGTR/L 20B-3D25SH	3.00	3.18	20.0	20.0	2.40	18.80	19.5	25.4	23.7	-	120.00	DG. 1.../DG. 3..	SR 16-236 P[a]	T-15/5

- DGN/R/L 1 mm inserts can also be mounted into pocket sizes 2 and 3.

For insert depth capacity table and modification instructions for the 2 and 3 holder pockets, see page 537

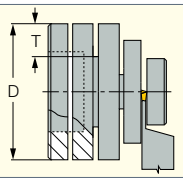
- For user guide, see pages 606-615

[1] Do not use DG.. 1.4 on this tool!
[2] Minimum cutting width
[3] Maximum cutting width
[a] Recommended tightening torque for this item: 3 N*m (26.5 lbf*in)

For inserts, see pages: DGN-B (542) • DGN-LF/LFT (546) • DGN-P (548) • DGN-UT/UA (547) • DGN-WP (549) • DGN-Z (546) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGR-P (548) • DGR-WP (549) • DGR-Z/ZS (547) • DGR/L-B (542) • DGR/L-C DGRC/LC-C (540) • DGR/L-J/JS (545)

Depth Capacity DGTR/L-B-D

Depth of Cut as Function
of Workpiece Diameter
(DGN/R/L-100... excluded)



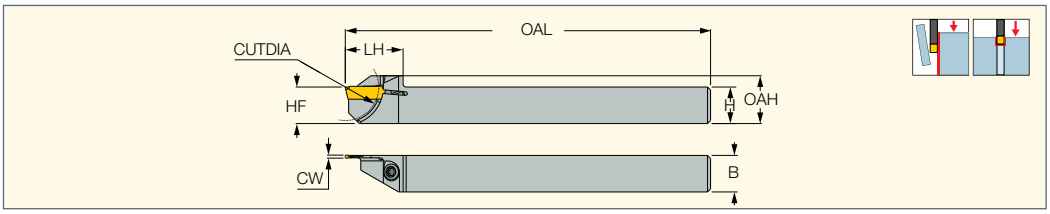
Designation	øDmax																
DGTR/L 10B-1.4D20	—	—	—	—	—	—	—	—	—	20	23	26	32	45	76	NL	
DGTR/L 12B-1.4D30	—	—	—	—	—	30	32	35	38	43	50	62	83	125	300	NL	NL
DGTR/L 16B-1.4D30	—	—	—	—	—	30	32	35	38	43	50	62	83	125	300	NL	NL
DGTR/L 20B-1.4D30	—	—	—	—	—	30	32	35	38	43	50	62	83	125	300	NL	NL
DGTR/L 10B-2D30	—	—	—	—	—	30	32	35	38	43	50	62	83	125	300	NL	NL
DGTR/L 12B-2D30	—	—	—	—	—	30	32	35	38	43	50	62	83	125	300	NL	NL
DGTR/L 16B-2D32	—	—	—	—	32	35	37	41	47	55	69	93	150	400	NL	NL	NL
DGTR/L 20B-2D35	—	—	—	75	90	113	155	250	650	NL	NL	NL	NL	NL	NL	NL	NL
DGTR/L 25B-2D35	—	—	—	75	90	113	155	250	650	NL	NL	NL	NL	NL	NL	NL	NL
DGTR/L 12B-3D30	—	—	—	—	—	30	32	35	38	43	50	62	83	125	300	NL	NL
DGTR/L 16B-3D35	—	—	—	35	39	42	46	51	59	71	91	130	230	1200	NL	NL	NL
DGTR/L 20B-3D40	56	62	71	83	102	134	200	400	NL	NL	NL	NL	NL	NL	NL	NL	NL
DGTR/L 25B-3D40	56	62	71	83	102	134	200	400	NL	NL	NL	NL	NL	NL	NL	NL	NL
Depth T →	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4

NL- No Limit

Example:
For 9 mm depth of groove on a 75 mm workpiece diameter, six tools may be used.

DO-GRIP

DGTR/L-B-D-SH (NARROW CUT)
Parting and Grooving Short Head Tools for CNC and Swiss Automatics



Designation	CW	H	B	HF	HBL	LH	CUTDIA	OAH	OAL
DGTR/L 0810B-0.8-D12SH	0.80	8.0	10.0	8.0	16.1	15.6	12.0	13.70	120.00
DGTR/L 10B-0.8-D12SH	0.80	10.0	10.0	10.0	-	15.6	12.0	15.70	120.00
DGTR/L 12B-0.8-D12SH	0.80	12.0	12.0	12.0	-	15.6	12.0	15.70	120.00
DGTR/L 16B-0.8-D12SH	0.80	16.0	16.0	16.0	-	15.6	12.0	15.70	120.00
DGTR/L 0810B-1.0-D22SH	1.00	8.0	10.0	8.0	20.5	20.0	22.0	15.00	120.00
DGTR/L 10B-1.0-D22SH	1.00	10.0	10.0	10.0	-	20.0	22.0	15.70	120.00
DGTR/L 12B-1.0-D22SH	1.00	12.0	12.0	12.0	-	20.0	22.0	15.70	120.00
DGTR/L 16B-1.0-D22SH	1.00	16.0	16.0	16.0	-	20.0	22.0	15.70	120.00
DGTR/L 0810B-1.2-D22SH	1.20	8.0	10.0	8.0	20.5	20.0	22.0	15.00	120.00
DGTR/L 10B-1.2-D22SH	1.20	10.0	10.0	10.0	-	20.0	22.0	15.70	120.00
DGTR/L 12B-1.2-D22SH	1.20	12.0	12.0	12.0	-	20.0	22.0	15.70	120.00
DGTR/L 16B-1.2-D22SH	1.20	16.0	16.0	16.0	-	20.0	22.0	15.70	120.00

NEW

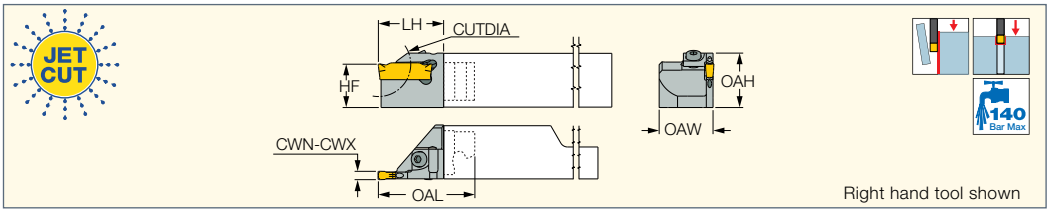
For inserts, see pages: DGN-J/JS-D (543) • DGR/L-J/JS-D (543)

Spare Parts

Designation		
DGTR/L-B-D-SH (NARROW CUT)	SR 16-236 P	T-15/5

NEOSWISS

NQCH-DGTR/L-D22-SH-JHP
Screw Lock JETCUT Modular Heads Carrying DO-GRIP Double-Edged Parting Inserts for Swiss-Type Machines



Designation	CWN(2)	CWX(3)	HF	OAW	OAH	LH	OAL	CUTDIA	Insert
NQCH12-DGTR/L-1D22SH-JHP	1.00	1.00	12.1	20.00	16.20	20.0	28.80	22.0	DGN 1
NQCH12R-DGTL-1D22SH-JHP (1)	1.00	1.00	12.1	20.00	16.20	20.0	28.80	22.0	DGN 1
NQCH16-DGTR/L-1D22SH-JHP	1.00	1.00	16.1	20.00	20.20	20.0	28.80	22.0	DGN 1
NQCH16R-DGTL-1D22SH-JHP (1)	1.00	1.00	16.1	20.00	20.20	20.0	28.80	22.0	DGN 1
NQCH16-DGTL-1.2D22SH-JHP	1.20	1.20	16.1	20.00	20.20	20.0	28.80	22.0	DGN 1
NQCH16-DGTR-1.2D22SH-JHP	1.20	1.20	16.1	20.00	20.20	20.0	28.80	22.0	DGN 1
NQCH16R-DGTL-1.2D22SH-JHP	1.20	1.20	16.1	20.00	20.20	20.0	28.80	22.0	DGN 1

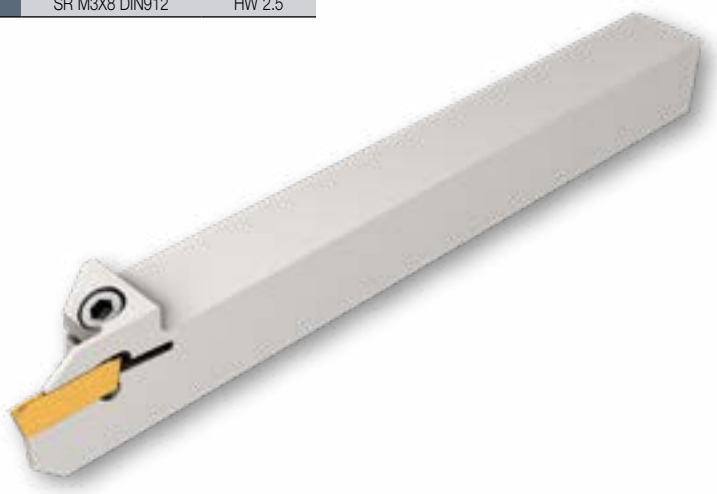
- Use only RH Shank with RH Head and LH Shank with LH Head exept NQCH12R/16R... heads.

(1) The head is dedicated for the right hand machines and to be mounted on the right hand holder only.
(2) Minimum cutting width
(3) Maximum cutting width

For inserts, see pages: DGN-J/JS-D (543) • DGR/L-J/JS-D (543)
For holders, see pages: NQCH-JHP (424)

Spare Parts

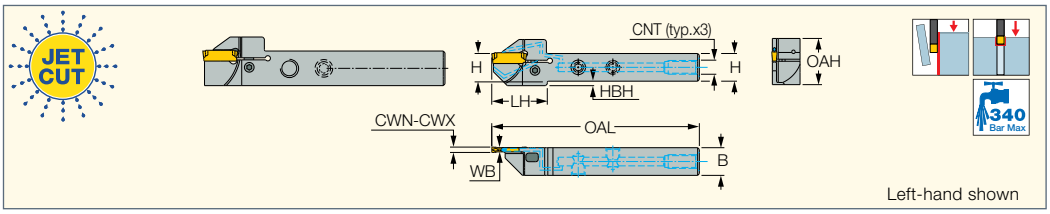
Designation		
NQCH-DGTR/L-D22-SH-JHP	SR M3X8 DIN912	HW 2.5



DO-GRIP

DGTR/L-B-D-JHP-SL

Parting and Grooving
Side Lock Type Tools with
High-Pressure Coolant for
CNC and Swiss Automatics



Designation	CWN(1)	CWX(2)	H	B	WB	LH	CUTDIA(3)	OAH	HBH	OAL	Insert	CNT
DGTR/L 12B-2D24-JHP-SL	1.90	2.50	12.0	12.0	1.70	29.4	24.0	25.7	6.5	100.00	DG. 2...	5/16"-24 UNF
DGTR/L 16B-2D35-JHP-SL	1.90	2.50	16.0	16.0	1.70	32.0	35.0	26.7	2.6	120.00	DG. 2...	5/16"-24 UNF
DGTL 20B-2D35-JHP-SL	1.90	2.50	20.0	20.0	1.70	32.0	35.0	28.1	-	140.00	DG. 2...	1/8"-28 BSPP
DGTR 20B-2D35-JHP-SL	1.90	2.50	20.0	20.0	1.70	32.0	35.0	28.1	-	140.00	DG. 2..	1/8"-28 BSPP
DGTR/L 12B-3D24-JHP-SL	3.00	3.18	12.0	12.0	2.40	29.4	24.0	25.7	6.5	100.00	DG. 3..	5/16"-24 UNF
DGTR/L 16B-3D35-JHP-SL	3.00	3.18	16.0	16.0	2.40	32.0	35.0	26.7	2.6	120.00	DG. 3..	5/16"-24 UNF
DGTR/L 20B-3D40-JHP-SL	3.00	3.18	20.0	20.0	2.40	35.6	40.0	28.1	-	140.00	DG. 3..	1/8"-28 BSPP
DGTR/L 25B-2D35-JHP-SL	1.90	2.50	25.0	25.0	1.70	32.1	35.0	33.1	-	140.00	DG. 2..	1/8"-28 BSPP
DGTR/L 25B-3D40-JHP-SL	3.00	3.18	25.0	25.0	2.40	35.6	40.0	33.1	-	140.00	DG. 3..	1/8"-28 BSPP
DGTR 25B-4D40-JHP-SL	4.00	4.76	25.0	25.0	3.40	34.6	40.0	33.0	-	140.00	DG..4..	1/8"-28 BSPP

• For insert depth capacity table and modification instructions for the holder pockets, see page 537 • For user guide, see pages 606-615

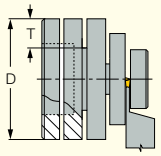
(1) Minimum cutting width
(2) Maximum cutting width
(3) Maximum cutting diameter

For inserts, see pages: DGN-B (542) • DGN-LF/LFT (546) • DGN-MF (541) • DGN-P (548) • DGN-T (541) • DGN-UT/UA (547) • DGN-WP (549) • DGN-Z (546) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGR-P (548) • DGR-WP (549) • DGR-Z/ZS (547) • DGR/L-B (542) • DGR/L-C DGRC/LC-C (540) • DGR/L-J/JS (545)

For holders, see pages: SBTH-JHP (421)

Depth Capacity
DGTR/L-B-D-JHP-SL

Depth of Cut as Function
of Workpiece Diameter
(DGN/R/L-100... excluded)



Designation	øDmax																
DGTR/L 12B-2D24-JHP-SL	—	—	—	—	—	—	—	—	24	26	27	28	30	32	36	42	52
DGTR/L 16B-2D35-JHP-SL	—	—	—	—	—	—	—	—	24	26	27	28	30	32	36	42	52
DGTR/L 20B-2D35-JHP-SL	—	—	—	35	39	42	46	51	59	71	91	130	230	1200	NL	NL	NL
DGTR/L 25B-2D35-JHP-SL	—	—	—	65	70	75	80	90	100	120	140	180	250	410	1200	NL	NL
DGTR/L 12B-3D24-JHP-SL	—	—	—	35	39	42	46	51	59	71	91	130	230	1200	NL	NL	NL
DGTR/L 16B-3D35-JHP-SL	—	—	—	75	90	113	155	250	650	NL	NL	NL	NL	NL	NL	NL	NL
DGTR/L 20B-3D40-JHP-SL	56	62	71	83	102	134	200	400	NL	NL	NL	NL	NL	NL	NL	NL	NL
DGTR/L 25B-3D40-JHP-SL	50	55	60	67	75	85	100	115	140	200	350	NL	NL	NL	NL	NL	NL
Depth T →	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4

NL - No Limit

Example:
For a 9 mm depth of groove on a 75 mm workpiece diameter, six tools may be used.

Flow Rate vs. Pressure

Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
DGTR/L ...2-JHP-SL	3-4	4-5	5-6
DGTR/L ...3-JHP-SL	5-6	6-7	7-8

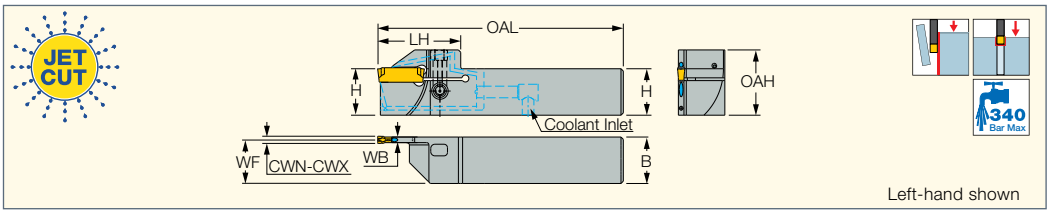
Spare Parts

Designation						
DGTR/L 12B-2D24-JHP-SL	PIN-32121	SR M5-24145-RL	SR 5/16UNF TL360	BLD HW2.5	HW 5/32"	
DGTR/L 16B-2D35-JHP-SL	PIN-32121	SR M5-24145-RL	SR 5/16UNF TL360	BLD HW2.5	HW 5/32"	SW6-SD
DGTR/L 20B-2D35-JHP-SL	PIN-32121	SR M5-24145-RL	PLG G1/8 TL360	BLD HW2.5	HW 5.0	SW6-SD
DGTR/L 12B-3D24-JHP-SL	PIN-32121	SR M5-24145-RL	SR 5/16UNF TL360	BLD HW2.5	HW 5/32"	SW6-SD
DGTR/L 16B-3D35-JHP-SL	PIN-32121	SR M5-24145-RL	SR 5/16UNF TL360	BLD HW2.5	HW 5/32"	SW6-SD
DGTR/L 20B-3D40-JHP-SL	PIN-32121	SR M5-24145-RL	PLG G1/8 TL360	BLD HW2.5	HW 5.0	SW6-SD
DGTL 25B-2D35-JHP-SL	PIN-32121	SR M5-24145-RL	PLG G1/8 TL360		HW 5.0	
DGTR 25B-2D35-JHP-SL	PIN-32121	SR M5-24145-RL	PLG G1/8 TL360	BLD HW2.5	HW 5.0	SW6-SD
DGTL 25B-3D40-JHP-SL				BLD HW2.5		SW6-SD
DGTR/L 25B-3D40-JHP-SL	PIN-32121	SR M5-24145-RL	PLG G1/8 TL360		HW 5.0	
DGTR 25B-3D40-JHP-SL				BLD HW2.5*		SW6-SD*

* Optional, to be ordered separately

DO-GRIP

DGTR/L-B-D-JHP-SL-MC
Parting and Grooving Side Lock Type Tools with Bottom Inlets for High-Pressure Coolant



Designation	CWN(1)	CWX(2)	H	B	WB	WF	LH	CUTDIA(3)	OAH	OAL	Insert
DGTR/L 20B-2D35-JHP-SL-MC	1.90	2.50	20.0	20.0	1.70	19.15	32.1	35.0	28.10	102.10	DG. 2...
DGTR/L 20B-3D40-JHP-SL-MC	3.00	3.18	20.0	20.0	2.40	18.80	35.6	40.0	28.10	105.60	DG. 3...
DGTR/L 25B-2D35-JHP-SL-MC	1.90	2.50	25.0	25.0	1.70	24.15	32.1	35.0	33.10	117.10	DG. 2...
DGTR/L 25B-3D40-JHP-SL-MC	3.00	3.18	25.0	25.0	2.40	23.80	35.6	40.0	33.10	120.60	DG. 3...

- For insert depth capacity table and modification instructions for the holder pockets, see page 537 • For user guide, see pages 606-615

(1) Minimum cutting width
(2) Maximum cutting width
(3) Maximum cutting diameter

For inserts, see pages: DGN-B (542) • DGN-LF/LFT (546) • DGN-MF (541) • DGN-P (548) • DGN-T (541) • DGN-UT/UA (547) • DGN-WP (549) • DGN-Z (546) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGR-P (548) • DGR-WP (549) • DGR-Z/ZS (547) • DGR/L-B (542) • DGR/L-C DGRC/LC-C (540) • DGR/L-J/JS (545)

For holders, see pages: VDI-B1/B4AK-JHPMC (841) • VDI-B2/B3A-JHPMC (841) • VDI-B2/B3AK-JHPMC (841) • VDI-C1/C4A-JHPMC (841) • VDI-C1/C4AK-JHPMC (842) • VDI-C2/C3A-JHPMC (842) • VDI-C2/C3AK-JHPMC (842)

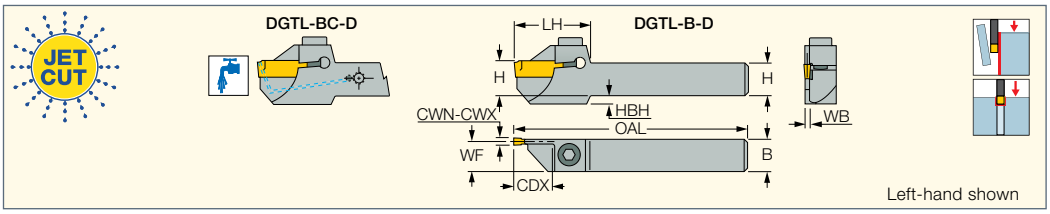
Spare Parts

Designation							
DGTR/L 20B-2D35-JHP-SL-MC	SR M5-24145-RL	SR M8X10 DIN913	PIN-32121	SW6-SD	BLD HW2.5	SR M3X3DIN913	SR M2.5X2.5 DIN913
DGTR/L 20B-3D40-JHP-SL-MC	SR M5-24145-RL	SR M8X10 DIN913	PIN-32121	SW6-SD	BLD HW2.5	SR M3X3DIN913	SR M2.5X2.5 DIN913
DGTR/L 25B-2D35-JHP-SL-MC	SR M5-24145-RL	SR M8X10 DIN913	PIN-32121	SW6-SD	BLD HW2.5	SR M3X3DIN913	SR M2.5X2.5 DIN913
DGTR/L 25B-3D40-JHP-SL-MC	SR M5-24145-RL	SR M8X10 DIN913	PIN-32121	SW6-SD	BLD HW2.5	SR M3X3DIN913	SR M2.5X2.5 DIN913



DO-GRIP

DGTR/L-B/BC-D
Integral Shank Reinforced Parting and Grooving Tools Especially for DGNC Type of Inserts



Designation	CWN[3]	CWX[4]	H	B	WB	OAL	LH	CDX[5]	WF	HBH	CSP[6]	Insert
DGTR/L 10B-1.4D20	1.40	1.40	10.0	10.0	1.00	140.00	23.6	10.00	9.50	2.0	0	DG. 14..
DGTR/L 12B-1.4D30	1.40	1.40	12.0	12.0	1.00	140.00	29.6	15.00	11.50	3.5	0	DG. 14..
DGTR/L 16B-1.4D30	1.40	1.40	16.0	16.0	1.00	140.00	29.6	15.00	15.50	-	0	DG. 14..
DGTR/L 20B-1.4D30	1.40	1.40	20.0	20.0	1.00	140.00	29.6	15.00	19.50	-	0	DG. 14..
DGTR/L 10B-2D30	1.90	2.50	10.0	10.0	1.60	140.00	29.6	15.00	9.20	6.6	0	DG. 1.../DG. 2..
DGTR/L 12B-2D30	1.90	2.50	12.0	12.0	1.60	140.00	29.6	15.00	11.20	3.5	0	DG. 1.../DG. 2..
DGTR/L 16B-2D32	1.90	2.50	16.0	16.0	1.60	140.00	30.6	16.00	15.20	-	0	DG. 1.../DG. 2..
DGTR/L 20B-2D35	1.90	2.50	20.0	20.0	1.60	140.00	32.1	17.50	19.20	-	0	DG. 1.../DG. 2..
DGTR/L 25B-2D35	1.90	2.50	25.0	25.0	1.60	140.00	32.1	17.50	24.20	-	0	DG. 1.../DG. 2..
DGTR/L 12B-3D30	3.00	3.18	12.0	12.0	2.40	140.00	29.6	15.00	10.80	3.5	0	DG. 1.../DG. 3..
DGTR/L 16B-3D35	3.00	3.18	16.0	16.0	2.40	140.00	32.1	16.00	14.80	2.6	0	DG. 1.../DG. 3..
DGTR/L 16BC-3D35 [1]	3.00	3.18	16.0	16.0	2.40	140.00	31.1	16.00	14.80	2.6	1	DGNC/DGRC/DGLC 3...
DGTR/L 20B-3D40 [2]	3.00	3.18	20.0	20.0	2.40	140.00	35.6	20.00	18.80	-	0	DG. 1.../DG. 3..
DGTR/L 20BC-3D40 [1]	3.00	3.18	20.0	20.0	2.40	140.00	34.6	20.00	18.80	-	1	DGNC/DGRC/DGLC 3...
DGTR/L 25B-3D40 [2]	3.00	3.18	25.0	25.0	2.40	140.00	35.6	20.00	23.80	-	0	DG. 1.../DG. 3..

- Important: 1.4 mm width inserts should be used only on tools for 1.4 mm specific width tools
- DGN/R/L 1 mm inserts can also be mounted into pocket sizes 2 and 3.
- For insert depth capacity table and modification instructions for the 2 and 3 holder pockets, see page 537
- For user guide, see pages 606-615

[1] Tools for inserts with coolant holes for high temperature alloys and stainless steel
[2] Insert's Tmax=18 mm, for deeper penetration modify insert into single-ended
[3] Minimum cutting width
[4] Maximum cutting width
[5] The specified limit refers to the tool
[6] 0 - Without coolant supply, 1 - With coolant supply

For inserts, see pages: DGN-B (542) • DGN-LF/LFT (546) • DGN-P (548) • DGN-T (541) • DGN-UT/UA (547) • DGN-WP (549) • DGN-Z (546) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGR-P (548) • DGR-WP (549) • DGR-Z/ZS (547) • DGR/L-B (542) • DGR/L-C DGRC/LC-C (540) • DGR/L-J/JS (545)

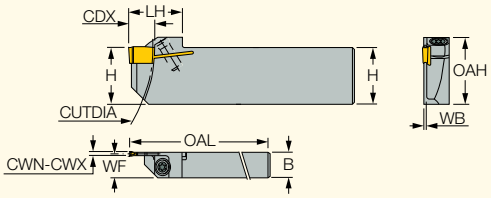
Spare Parts

Designation						
DGTR/L 10B-1.4D20	SR M5X12 DIN912	HW 4.0				
DGTR/L 12B-1.4D30	SR M5X12 DIN912	HW 4.0				
DGTR/L 16B-1.4D30	SR M5X12 DIN912	HW 4.0				
DGTR/L 20B-1.4D30	SR M5X12 DIN912	HW 4.0				
DGTR/L 10B-2D30	SR M5X12 DIN912	HW 4.0				
DGTR/L 12B-2D30	SR M5X12 DIN912	HW 4.0				
DGTR/L 16B-2D32	SR M4X14 DIN912	HW 3.0				
DGTR/L 20B-2D35	SR M4X14 DIN912	HW 3.0				
DGTL 25B-2D35	SR M5X12 DIN912	HW 4.0				
DGTR 25B-2D35	SR M4X14 DIN912	HW 3.0				
DGTR/L 12B-3D30	SR M5X12 DIN912	HW 4.0				
DGTR/L 16B-3D35	SR M5X12 DIN912	HW 4.0				
DGTR/L 16BC-3D35	SR M5X12 DIN912	HW 4.0	CGM 343*	CF 343*	SGCU 341*	CGF 343*
DGTR/L 20B-3D40	SR M5X12 DIN912	HW 4.0				
DGTR/L 20BC-3D40	SR M5X12 DIN912	HW 4.0	CGM 343*	CF 343*	SGCU 341*	CGF 343*
DGTR/L 25B-3D40	SR M5X12 DIN912	HW 4.0				

* Optional, to be ordered separately

DO-GRIP

DGTR/L-B-T-SH
Reinforced Parting and Grooving Short Head Tools Carrying DGN Double-Ended Inserts



Designation	CWN(1)	CWX(2)	H	B	WB	WF	OAL	LH	CUTDIA(3)	CDX(4)	OAH		
DGTR/L 2009B-1.5T9SH	1.00	1.50	20.0	9.0	1.20	8.40	100.00	19.0	95.0	9.00	23.7	SR 16-236 P	T-15/5

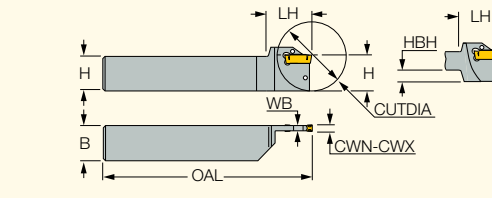
- Important: 1.4 mm width inserts should be used only on tools for 1.4 mm specific width
- For user guide, see pages 606-615

(1) Minimum cutting width
(2) Maximum cutting width
(3) Maximum workpiece diameter for grooving operation
(4) Cutting depth maximum

For inserts, see pages: DGN-P (548) • DGN/DGNM-J/JS/JT (544) • DGR-P (548) • DGR/L-J/JS (545)

DO-GRIP

DGTR/L
Integral Shank Parting and Grooving Tools



Designation	CWN(1)	CWX(2)	H	B	WB	OAL	LH	HBH	CUTDIA(3)	
DGTR/L 1010-2	1.90	2.50	10.0	10.0	1.80	150.00	29.0	6.6	35.0	EDG 33B*
DGTR/L 1212-2	1.90	2.50	12.0	12.0	1.80	150.00	29.0	6.6	35.0	EDG 33B*
DGTR/L 1616-2	1.90	2.50	16.0	16.0	1.80	150.00	29.0	2.6	35.0	EDG 33B*
DGTR/L 2012-2	1.90	2.50	20.0	12.0	1.80	125.00	29.0	-	35.0	EDG 33A*
DGTR/L 1212-3	3.00	3.18	12.0	12.0	2.50	150.00	29.0	6.6	35.0 (4)	EDG 33B*
DGTR/L 1616-3	3.00	3.18	16.0	16.0	2.50	150.00	29.0	6.6	35.0 (5)	EDG 33B*
DGTR/L 2012-3	3.00	3.18	20.0	12.0	2.50	125.00	29.0	-	35.0 (4)	EDG 33A*
DGTR/L 2020-3	3.00	3.18	20.0	20.0	2.50	125.00	29.0	-	35.0 (4)	EDG 33A*
DGTR/L 2525-3	3.00	3.18	25.0	25.0	2.50	150.00	29.0	-	35.0 (4)	EDG 33A*
DGTR/L 2020-4	4.00	4.76	20.0	20.0	3.40	125.00	31.0	-	51.0	EDG 33A*
DGTR/L 2525-4	4.00	4.76	25.0	25.0	3.40	150.00	31.0	-	51.0	EDG 33A*
DGTR/L 2020-5	4.80	5.00	20.0	20.0	4.00	125.00	33.0	-	59.0	EDG 33A*
DGTR/L 2525-5	4.80	5.00	25.0	25.0	4.00	150.00	33.0	-	76.0	EDG 33A*
DGTR/L 2525-6	6.00	6.35	25.0	25.0	5.30	150.00	33.0	-	76.0	EDG 33A*

- Insert limit is Tmax=18 mm. If deeper penetration is required, the insert should be modified into single-ended by the user
- DG..1.0 insert can be mounted into pocket sizes 2 and 3, in which case the pocket width has to be modified - see page 537
- For user guide, see pages 606-615

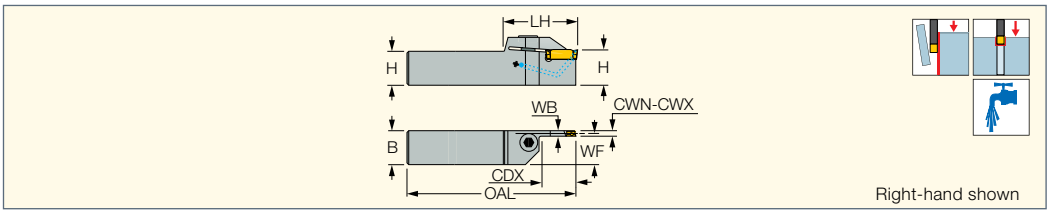
(1) Minimum cutting width
(2) Maximum cutting width
(3) Maximum workpiece diameter for grooving operation
(4) Dmax=43 mm when single-ended insert is used
(5) Dmax=43(1.69") when single-ended insert is used
* Optional, to be ordered separately

For inserts, see pages: DGN-B (542) • DGN-T (541) • DGR/L-B (542) • GRIP-T (295) • GRIPA (296) • GRIPA (full radius) (296)
• DGN-LF/LFT (546) • DGN-MF (541) • DGN/DGNC/DGNM-C (539) • DGR/L-C DGRC/LC-C (540) • DGN/DGNM-J/JS/JT (544) • DGR/L-J/JS (545)
• DGN-P (548) • DGN-UT/UA (547) • DGN-W (540) • DGN-WP (549) • DGN-Z (546) • DGR-P (548) • DGR-WP (549) • DGR-Z/ZS (547)
• GRIP (294) • GRIP (full radius) (295)
For holders, see pages: SBTH-JHP (421)

DO-GRIP

DGTR/L-BC-T

Parting and Grooving Tools with Coolant Holes Carrying JET-CUT Inserts



Designation	H	B	CWN(1)	CWX(2)	OAL	WB	WF	LH	CDX(3)	Insert
DGTR/L 20BC-4T25	20.0	20.0	4.00	4.00	140.00	3.40	18.30	42.0	25.00	DGNC/DGRC/DGLC 4...
DGTR/L 25BC-4T25	25.0	25.0	4.00	4.00	140.00	3.40	23.30	42.0	25.00	DGNC/DGRC/DGLC 4...

- For user guide, see pages 606-615

(1) Minimum cutting width
(2) Maximum cutting width
(3) Cutting depth maximum

For inserts, see pages: DGN-UT/UA (547) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGR/L-C DGRC/LC-C (540) • DGR/L-J/JS (545)

Spare Parts

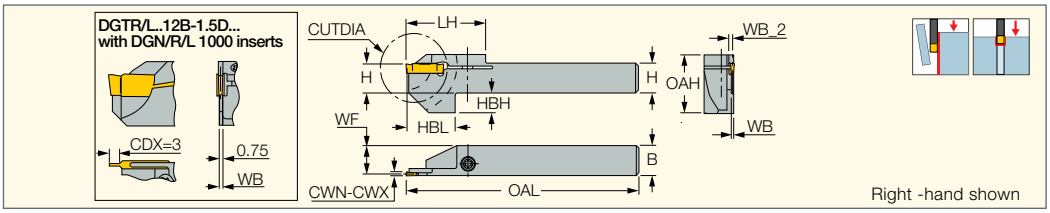
Designation						
DGTR/L-BC-T	SR M6X16 DIN912	SGCU 341*	CGF 343*	CF 343*	CGM 343*	HW 5.0

* Optional, to be ordered separately

DO-GRIP

DGTR/L-B-D-TR

Reinforced Parting and Grooving Tools Carrying Double-Ended DO-GRIP Inserts



Designation	CWN(1)	CWX(2)	H	B	WB	WB_2	WF	OAL	LH	HBL	CUTDIA(3)	OAH	HBH	Insert
DGTR 12B-1.4D20-TR12	1.40	1.40	12.0	12.0	1.00	2.3	11.50	95.00	32.5	20.00	20.0	23.7	8.0	DG. 14..
DGTL 12B-1.5D20-TR12	1.00	1.50	12.0	12.0	1.20	2.3	11.30	95.00	32.5	20.00	20.0	23.7	8.0	DG. 1.../DG. 15..
DGTR 12B-1.5-D20-TR12	1.00	1.50	12.0	12.0	1.20	2.3	11.30	95.00	32.5	20.00	20.0	23.7	8.0	DG. 1.../DG. 15..

- Important: 1.4 mm width inserts should be used only on tools for 1.4 mm specific width! • For TRAUB machines, model TNL 12/7
- For user guide, see pages 606-615

(1) Minimum cutting width
(2) Maximum cutting width
(3) Maximum workpiece diameter for grooving operation

For inserts, see pages: DGN-P (548) • DGN/DGNM-J/JS/JT (544) • DGR-P (548) • DGR/L-J/JS (545)
For holders, see pages: SBTH-JHP (421)

Spare Parts

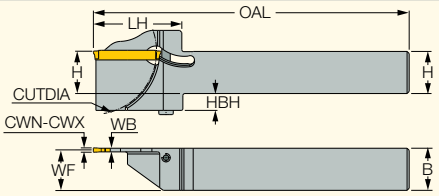
Designation		
DGTR/L-B-D-TR	SR 16-236 P(a)	T-15/5

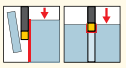
(a) 3 N*m(26.5 lbf*in)

DO-GRIPXL

DGTR/L-XL

Integral Shank Reinforced Parting and Grooving Tools for Parting Up to 65 mm Diameters





Left-hand shown

Designation	CW	CUTDIA[1]	H	B	WB	OAL	LH	WF	HBH
DGTR/L 20B-2XL-D60	2.00	60.0	20.0	20.0	1.74	150.00	43.2	19.10	8.0
DGTR/L 25B-2XL-D60	2.00	60.0	25.0	25.0	1.74	150.00	43.2	24.10	3.0
DGTR/L 20B-3XL-D65	3.00	65.0	20.0	20.0	2.40	150.00	43.2	18.80	12.0
DGTR/L 25B-3XL-D65	3.00	65.0	25.0	25.0	2.40	150.00	43.2	23.80	7.0

- For user guide, see pages 606-615

(1) Maximum workpiece diameter for grooving operation

For inserts, see pages: DGN-C-XL (551) • DGN-J-XL (552) • DGR/L-C-XL (551) • DGR/L-J-XL (552)

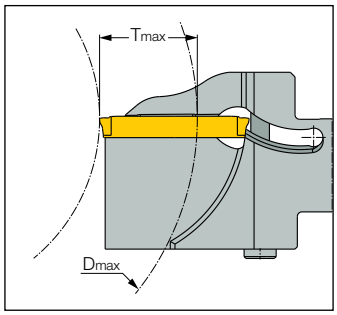
Depth of Cut as Function of Workpiece Diameter

Tmax/Dmax for DGTR/L...-2XL

T max	D max
15	No limit
16	600
17	300
18	200
19	150
20	130
21	120
22	100
23	90
24	85
25	80
26	75
27	70
28	65
29	63
30	60

Tmax/Dmax for DGTR/L...-3XL

T max	D max
15	No limit
16	1000
17	400
18	300
19	230
20	180
21	150
22	130
23	115
24	105
25	95
26	90
27	85
28	80
29	75
30	72
31	70
32.5	65



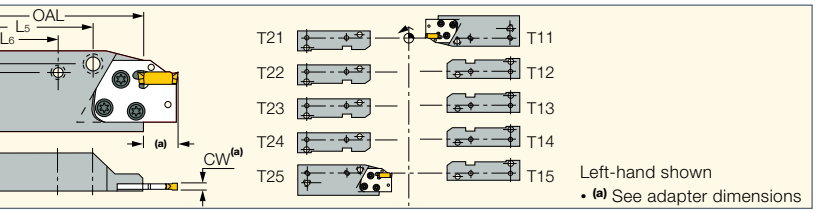
Spare Parts

Designation		
DGTR/L 20B-2XL-D60	HW 3.0	SR M4X35DIN912
DGTR/L 25B-2XL-D60	HW 3.0	SR M4X35DIN912
DGTR/L 20B-3XL-D65	HW 4.0	SR M5X40DIN912
DGTR/L 25B-3XL-D65	HW 4.0	SR M5X40DIN912

DO-GRIP

DGHAL-DECO

Holders for DGAD Adapters for Tornos Bechler Deco Machines



Left-hand shown

• (a) See adapter dimensions

Designation	H	B	OAL	WF	HF	H2	H5	L6	L5
DGHAL DECO 7-10 (1)	40.3	18.2	106.00	15.0	-	12.8	4.8	52.00	69.00
DGHAL DECO 13 (2)	42.0	35.2	115.00	28.7	2.0	16.0	16.0	60.00	60.00
DGHAL DECO 20-26 (2)	44.8	23.2	120.00	20.0	4.0	17.0	17.0	65.00	65.00

- DGAD-... HGAD-... adapters should be ordered separately

(1) Positioning combinations: T11; T25

(2) Positioning combinations: All

For tools, see pages: DGAD-B-D (538) • DGAD/HGAD (537) • TGAD (560)

Spare Parts

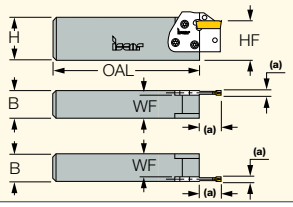
Designation							
DGHAL DECO 7-10	SR 14-519-L9.7[a]	HW 4.0	SR 16-212-L9.5	T-20/5	SR 16-212	SR M5X25DIN912	
DGHAL DECO 13	SR 14-519-L9.7[a]	HW 5.0	SR 16-212-L7.5	T-20/5	SR 16-212	SR M6X25DIN912	
DGHAL DECO 20-26	SR 14-519-L12.8[a]	HW 5.0	SR 16-212-L7.5	T-20/5	SR 16-212	SR M6X25DIN912	EZ 104

(a) Recommended tightening torque: 9 N*m (80lbf*in)

DO-GRIP

HMSN-New Britain

Holders for Grooving and Turning Adapters for New Britain Multi-Spindle Bar Machines



(a) See adapter dimensions

Designation	H	B	HF	OAL	WF	S1[2]			
HMSN 35/3722 [1]	36.5	22.4	34.5	181.70	18.4	226	SR 16-212	SR 14-519	T-20/5

- DGAD-... HGAD-..., adapters should be ordered separately

[1] For models #42; #52; #60; #61; #62; #602

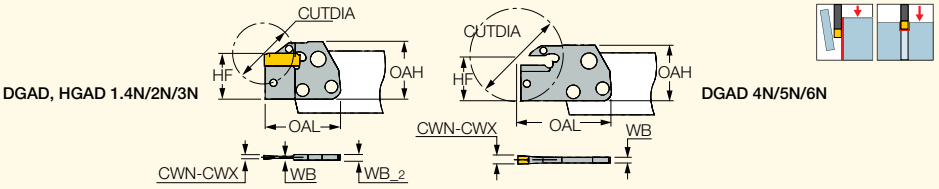
[2] Comparable Empire block

For tools, see pages: DGAD-B-D (538) • DGAD/HGAD (537) • SCLCR-PAD (71) • SDJCR-PAD (78) • SVJCR-PAD (88) • SWAPR-PAD (96)

DO-GRIP

DGAD/HGAD

Parting and Grooving Adapters for DO-GRIP Double-Ended Inserts



Designation	CWN[2]	CWX[3]	WB	WB_2	OAH	HF	OAL	CUTDIA[4]	
DGAD 1.4N	1.40	1.40	1.00	3.2	30.00	24.0	41.50	28.0	EDG 23B*
DGAD 2N	1.90 [5]	2.50	1.60	3.2	30.00	24.0	41.50	32.0	EDG 33A*
DGAD 3N [1]	3.00 [5]	3.18	2.40	4.0	30.00	24.0	41.50	32.0	EDG 33A*
HGAD 3N	3.00	3.00	2.40	4.0	30.00	24.0	50.50	50.0	EDG 23B*
DGAD 4N	4.00	4.00	3.20	-	30.00	24.0	50.50	50.0	EDG 33A*
DGAD 5N	4.80	5.00	4.00	-	30.00	24.0	50.50	50.0	EDG 33A*
DGAD 6N	6.00	6.35	5.20	-	30.00	24.0	50.50	50.0	EDG 33A*

- DG..1.0 insert can be mounted into pocket sizes 2 and 3 in which case the pocket width has to be modified - see page 537
- For user guide, see pages 606-615

[1] Only the DGN/R/L inserts are suitable for this adapter

[2] Minimum cutting width

[3] Maximum cutting width

[4] Maximum workpiece diameter for grooving operation

[5] For 1 mm inserts, modify adapter

* Optional, to be ordered separately

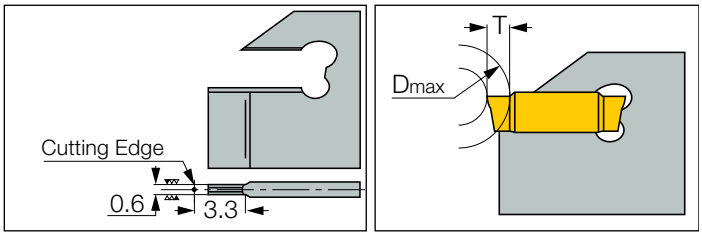
For inserts, see pages: DGN-LF/LFT (556) • DGN-P (558) • DGN-UT/UA (557) • DGN-W (550) • DGN-WP (559) • DGN-Z (556) • DGN/DGNC/DGNM-C (549) • DGN/DGNM-J/JS/JT (554) • DGR-P (558) • DGR-WP (559) • DGR-Z/ZS (557) • DGR/L-C DGRC/LC-C (550) • DGR/L-J/JS (555) • GRIP (299) • GRIP (full radius) (300) • GRIP-T (300) • GRIPA (301) • GRIPA (full radius) (301) • HGN-C (559) • HGN-J (560) • HGN-UT (561) • HGR/L-C (560) • HGR/L-J/JS (560)

For holders, see pages: MAHPR/L-JHP (313) • MAHR/L-JHP (311) • MAHR/L (311) • MAHPR/L (312) • C#-MAHD (707) • C#-MAHPD (708) • C#-MAHDR-45 (706) • HSK A63WH-MAHUR/L (716) • HSK A63WH-MAHDR-45 (715) • HSK A63WH-MAHDOR (715) • IM-MAHD (717) • IM-MAHPD (717) • C#-MAHD-JHP (707) • C#-MAHPD-JHP (708) • MAHR/L-JHP-MC (312) • HMSN-New Britain (547) • DGHAL-DECO (546)

Depth Capacity for DGN/R-1002J Insert on Standard Holders

Depth: T		D max
Up to	1.2	No limit
	1.3	830
	1.4	218
	1.5	126
	1.6	88.4
	1.7	68.2
	1.8	55.6
	1.9	46.9
	2.0	40.7
	2.1	36.0

Depth: T		D max
Up to	2.2	32.3
	2.3	29.3
	2.4	26.7
	2.5	24.8
	2.6	23.2
	2.7	21.7
	2.8	20.5
	2.9	19.4
	3.0	18.4



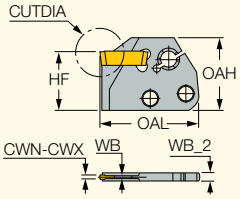
Standard Holders Modification

To achieve no limitation on the workpiece diameter up to 3 mm depth, the steel support under the insert should be ground, as per the shown sketch.

DO-GRIP

DGAD-B-D

Parting and Grooving Screw-Clamped Adapters for DO-GRIP Double-Ended Inserts



Designation	CWN[2]	CWX[3]	WB	WB_2	OAL	CUTDIA[4]	HF	OAH
DGAD 1.4B-D16	1.40	1.40	1.00	3.2	36.80	16.0	24.0	30.30
DGAD 1.5B-D20 [1]	1.00	1.50	1.00	3.2	41.00	20.0	24.0	30.30
DGAD 2B-D20	1.90	2.50	1.60	3.2	41.00	20.0	24.0	30.30

- Up to 3 mm depth, without any limitation on the diameter
- DG..1.0 insert can also be mounted into pocket sizes 2 and 3, in which case the pocket width has to be modified-see page 537
- For user guide, see pages 606-615

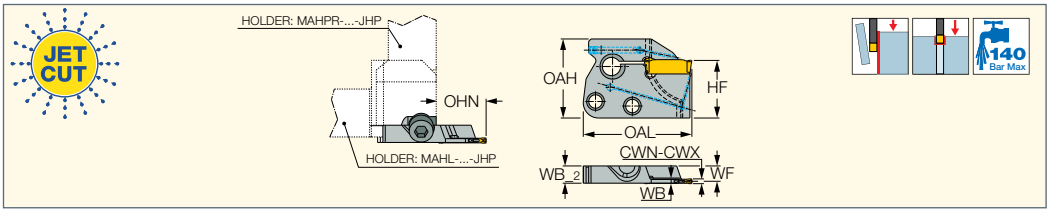
[1] Do not use DG.. 1.4 on this tool!
[2] Minimum cutting width
[3] Maximum cutting width
[4] Maximum workpiece diameter for grooving operation

For inserts, see pages: DGN-B (542) • DGN-LF/LFT (546) • DGN-P (548) • DGN-UT/UA (547) • DGN-WP (549) • DGN-Z (546) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGR-P (548) • DGR-WP (549) • DGR-Z/ZS (547) • DGR/L-B (542) • DGR/L-C DGRC/LC-C (540) • DGR/L-J/JS (545)
For holders, see pages: C#-MAHD-JHP (697) • C#-MAHPD-JHP (698) • MAHR/L-JHP-MC (307) • MAHPR/L-JHP (308) • MAHR/L-JHP (306) • MAHR/L (306) • MAHPR/L (307) • C#-MAHD (697) • C#-MAHPD (698) • C#-MAHDR-45 (696) • HSK A63WH-MAHUR/L (706) • HSK A63WH-MAHDR-45 (705) • HSK A63WH-MAHDOR (705) • IM-MAHD (707) • IM-MAHPD (707) • HMSN-New Britain (537) • DGHAL-DECO (536)

MODULAR-GRIP

DGPAD-JHP

Adapters with High-Pressure Coolant Channels for DO-GRIP Parting and Grooving Inserts



Designation	CWN[1]	CWX[2]	CUTDIA[3]	OHN[4]	WF	WB	WB_2	OAL	OAH	HF	Insert
DGPAD 2R/L-D22-JHP	1.90	2.50	22.0	21.0	6.40	1.60	7.2	45.50	33.00	24.0	DG. 2...
DGPAD 2R/L-D32-JHP	1.90	2.50	32.0	21.0	6.40	1.60	7.2	45.50	33.00	24.0	DG. 2...
DGPAD 3R/L-D32-JHP	3.00	3.18	32.0	21.0	6.00	2.40	7.2	45.50	33.00	24.0	DG. 3...
DGPAD 2R/L-D42-JHP	1.90	2.50	42.0	21.0	6.30	1.70	7.2	49.00	33.00	24.0	DG. 2...

- For user guide, see pages 606-615

[1] Minimum cutting width
[2] Maximum cutting width
[3] Maximum workpiece diameter for grooving operation
[4] Minimum overhang

For inserts, see pages: DGN-B (542) • DGN-LF/LFT (546) • DGN-MF (541) • DGN-P (548) • DGN-T (541) • DGN-UT/UA (547) • DGN-WP (549) • DGN-Z (546) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGR-P (548) • DGR-WP (549) • DGR-Z/ZS (547) • DGR/L-B (542) • DGR/L-C DGRC/LC-C (540) • DGR/L-J/JS (545)
For holders, see pages: DT##/2 MAHD#-#-XL-JHP (860) • MS-ES#####-GWS-MG-JHP (861)

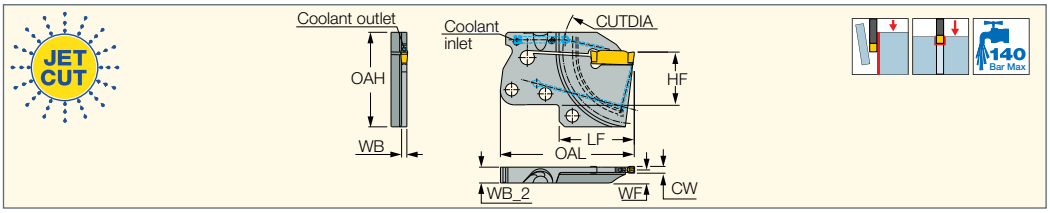
Flow Rate vs. Pressure

Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
DGPAD 2R/L-D22-JHP	5	6	7
DGPAD 2R/L-D32-JHP	5	6	7
DGPAD 3R/L-D32-JHP	8.5	10	12

DO-GRIP

DGPAD-XL-JHP

Parting and Grooving Extra Long Adapters with Coolant Channels Carrying DO-GRIP Inserts



Designation	CW	CUTDIA	WF	WB	WB_2	LF	OAL	OAH	HF	Insert
DGPAD-XL 3R/L-D52-JHP	3.00	52.0	6.00	2.40	7.2	27.70	54.40	43.00	34.0	DG. 3...
DGPAD-XL 3L-D65-JHP	3.00	65.0	6.00	2.40	7.2	34.20	60.40	43.00	34.0	DG. 3...
DGPAD-XL 3R-D65-JHP	3.00	65.0	6.00	2.40	7.2	34.20	60.00	43.00	34.0	DG. 3...

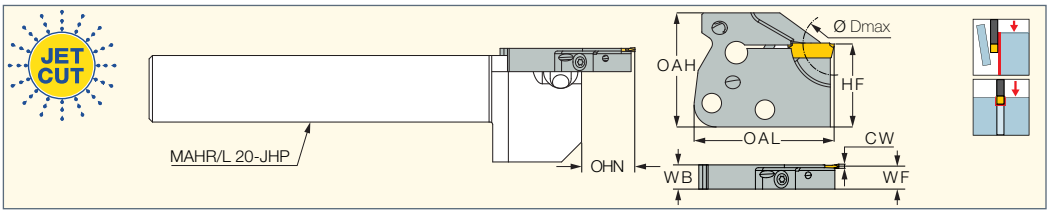
- For user guide and accessories, see pages 606-615

For inserts, see pages: DGN-LF/LFT (546) • DGN-MF (541) • DGN-P (548) • DGN-T (541) • DGN-UT/UA (547) • DGN-Z (546) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGR-Z/ZS (547) • DGR/L-C DGRC/LC-C (540) • DGR/L-J/JS (545)
For holders, see pages: ABC MAHDR-#-XL-JHP (884) • MAHPR/L-XL-JHP (642) • MAHR/L-MG-XL-JHP (563) • MAHR/L-MG-XL-JHP-MC (563) • TR TNK36 MAHDL-R-XL-JHP (884) • TR45TNL MAHDN-R-XL-JHP (883) • V## MAHD#-#-XL-##-JHP (880)

MODULAR GRIP

DGPAD-D12/22-JHP

Adapters with High-Pressure Coolant Channels for DO-GRIP Parting and Grooving Inserts



Designation	CW	CUTDIA[1]	OHN[2]	WF	WB	OAL	OAH	HF	MIID[3]		
DGPAD 0.8R/L-D12-JHP	0.80	12.0	16.0	6.65	7.00	40.50	31.00	24.0	DGN 08	T-7/5	SR 10500401
DGPAD 1.0R/L-D22-JHP	1.00	22.0	16.0	6.60	7.00	40.50	33.00	24.0	DGN 1	T-7/5	SR 10500401
DGPAD 1.2R/L-D22-JHP	1.20	22.0	16.0	6.50	7.00	40.50	33.00	24.0	DGN 12	T-7/5	SR 10500401

NEW

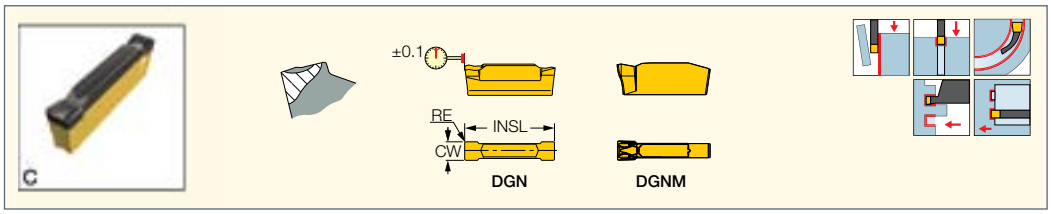
- For user guide, see pages 606-615

(1) Maximum workpiece diameter for grooving operation
(2) Minimum overhang
(3) Master insert identification

DO-GRIP

DGN/DGNC/DGNM-C

Double-Sided Parting Inserts for Parting and Grooving Bars, Hard Materials and Tough Applications



Designation	Dimensions						Tough ↔ Hard														Recommended Machining Data
	CW	CWTOL[3]	RE	RETOL[4]	CDX[5]	INSL	IC328	IC830	IC928	IC1030	IC1028	IC354	IC1010	IC308	IC808	IC908	IC30N	IC5400	IC20	IC807	IC907	f groove (mm/rev)
DGN 2002C	2.00	0.030	0.20	0.020	18.00	19.90	●	●		●	●	●	●		●	●		●	●			0.05-0.16
DGN 2202C	2.20	0.030	0.20	0.020	18.00	19.80	●	●		●	●	●	●	●	●	●	●	●	●		●	0.05-0.16
DGN 2502C	2.50	0.030	0.20	0.020	18.00	20.70			●	●			●			●						0.08-0.20
DGN 3102C	3.10	0.040	0.20	0.020	18.00	20.10	●	●		●	●	●	●	●	●	●	●	●	●	●	●	0.10-0.25
DGNC 3102C (1)	3.10	0.040	0.20	0.020	18.00	21.00									●	●						0.10-0.25
DGNM 3202C (2)	3.18	0.040	0.20	0.020	- (6)	20.40	●					●				●						0.10-0.25
DGN 4003C	4.00	0.040	0.30	0.030	- (6)	18.80	●	●		●	●	●	●	●	●	●	●		●	●		0.10-0.30
DGNC 4003C (1)	4.00	0.040	0.30	0.030	- (6)	19.00									●	●						0.10-0.30
DGN 4803C	4.80	0.040	0.30	0.030	- (6)	19.90	●															0.12-0.35
DGN 5003C	5.00	0.040	0.30	0.030	- (6)	19.10	●	●		●	●	●	●		●	●	●		●			0.12-0.35
DGN 6303C	6.35	0.040	0.35	0.030	- (6)	19.10	●	●			●	●	●		●	●			●			0.15-0.40

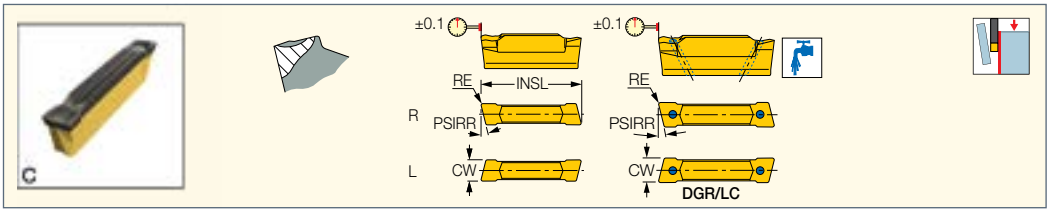
- Feed values for grade IC20 should be decreased by 50%
- For cutting speed recommendations and user guide, see pages 606-615

(1) Inserts with coolant holes, recommended coolant pressure 10 bar minimum
(2) Single-ended insert
(3) Cutting width tolerance (+/-)
(4) Corner radius tolerance (+/-)
(5) Cutting depth maximum
(6) No depth limit

For tools, see pages: C#-HELIR/L (289) • C#-HFIR/L-MC (653) • CR HFIR-M (655) • D/HGAD RE/LE-JHP (561) • DGAD-B-D (538) • DGAD/HGAD (537) • DGAQ (580) • DGAQ-JHP (580) • DGFH (293) • DGFH-JHP (294) • DGFHL-26B-TR-D (528) • DGFHR/L (526) • DGFHR/L-B-D..(R/L) (528) • DGFHR/L-BC-JHP (527) • DGFS (527) • DGPAD-JHP (538) • DGPAD-XL-JHP (538) • DGTR/L (534) • DGTR/L-B-D-JHP-SL (531) • DGTR/L-B-D-JHP-SL-MC (532) • DGTR/L-B-D-SH (529) • DGTR/L-B/BC-D (533) • DGTR/L-BC-T (535) • HELIR/L (290) • HFAER/L-4 (646) • HFAER/L-5T, 6T (647) • HFAIR/L-4 (651) • HFAIR/L-DG (652) • HFFR/L-T (645) • HFHR/L-4T (639) • HFHR/L-5T (640) • HFHR/L-6T (641) • HFIR/L-MC (654) • HFPAD-4 (643) • HFPAD-5 (644) • HFPAD-6 (644) • HFPAD-JHP (642) • HGPAD (291) • HGPAD-JHP (291) • IM-HFIR-MC (653)

DO-GRIP

DGR/L-C DGRC/LC-C
Double-Sided Inserts for Parting Bars, Hard Materials and Tough Applications



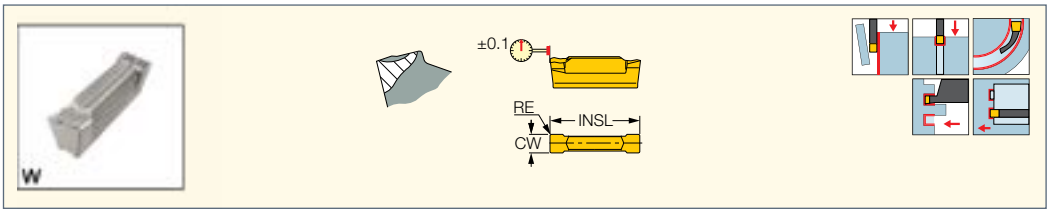
Designation	Dimensions CW	RE	CDX(2)	PSIRL	PSIRR	INSL	Tough ↔ Hard IC328	IC830	IC1030	IC1028	IC354	IC1010	IC808	IC908	IC20	Recommended Machining Data f groove (mm/rev)
DGL 2202C-6D	2.20	0.20	18.00	6.0	-	20.80	●		●	●	●	●		●	●	0.04-0.12
DGR 2202C-6D	2.20	0.20	18.00	-	6.0	20.80	●	●	●	●	●	●	●	●	●	0.04-0.12
DGL 3102C-15D	3.10	0.20	18.00	15.0	-	21.00	●	●	●	●						0.08-0.14
DGL 3102C-6D	3.10	0.20	18.00	6.0	-	21.00	●	●	●	●	●	●	●	●	●	0.08-0.18
DGLC 3102C-6D (1)	3.10	0.20	18.00	6.0	-	21.00							●	●		0.08-0.18
DGR 3102C-15D	3.10	0.20	18.00	-	15.0	20.90	●	●	●	●		●		●		0.08-0.14
DGR 3102C-6D	3.10	0.20	18.00	-	6.0	21.00	●	●	●	●	●	●	●	●	●	0.08-0.18
DGR 3102C-8D	3.10	0.20	18.00	-	8.0	21.10	●	●	●	●						0.05-0.15
DGRC 3102C-6D (1)	3.10	0.20	18.00	-	6.0	20.90							●	●		0.08-0.18
DGL 4003C-4D	4.00	0.30	- (3)	4.0	-	18.90	●		●	●	●	●		●	●	0.08-0.20
DGLC 4003C-4D (1)	4.00	0.30	- (3)	4.0	-	19.00							●			0.08-0.20
DGR 4003C-4D	4.00	0.30	- (3)	-	4.0	18.80	●	●		●	●	●		●	●	0.08-0.20
DGRC 4003C-4D (1)	4.00	0.30	- (3)	-	4.0	19.00							●	●		0.08-0.20
DGR 4800CS-4D	4.80	0.02	- (3)	-	4.0	19.70	●									0.05-0.15
DGR 4800CS-8D	4.80	0.02	- (3)	-	8.0	19.70	●									0.05-0.15
DGR 4803C-4D	4.80	0.30	- (3)	-	4.0	20.30	●									0.10-0.25
DGR 4803C-8D	4.80	0.30	- (3)	-	8.0	20.30	●									0.10-0.20
DGL 5003C-4D	5.00	0.30	- (3)	4.0	-	19.10	●				●				●	0.10-0.25
DGR 5003C-4D	5.00	0.30	- (3)	-	4.0	19.20	●				●				●	0.10-0.25
DGL 6303C-4D	6.35	0.35	- (3)	4.0	-	19.10	●				●				●	0.12-0.30
DGR 6303C-4D	6.35	0.35	- (3)	-	4.0	19.10	●				●				●	0.12-0.30

• Feed values for grade IC20 should be decreased by 50% • For cutting speed recommendations and user guide, see pages 606-615
(1) Inserts with coolant holes, recommended coolant pressure 10 bar minimum
(2) Cutting depth maximum
(3) No depth limit

For tools, see pages: C#-HELIR/L (289) • D/HGAD RE/LE-JHP (561) • DGAD-B-D (538) • DGAD/HGAD (537) • DGAQ (580) • DGAQ-JHP (580) • DGFH (293) • DGFH-JHP (294) • DGFHL-26B-TR-D (528) • DGFHR/L (526) • DGFHR/L-B-D..(R/L) (528) • DGFHR/L-BC-JHP (527) • DGFS (527) • DGPAD-JHP (538) • DGPAD-XL-JHP (538) • DGTR/L (534) • DGTR/L-B-D-JHP-SL (531) • DGTR/L-B-D-JHP-SL-MC (532) • DGTR/L-B-D-SH (529) • DGTR/L-B/BC-D (533) • DGTR/L-BC-T (535) • HELIR/L (290)

DO-GRIP

DGN-W
Double-Sided Inserts with Central Ridged Chipformer for Parting and Grooving Hard Materials and Interrupted Cuts



Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	INSL	Tough ↔ Hard IC328	IC1030	IC354	Recommended Machining Data f groove (mm/rev)
DGN 5003W	5.00	0.30	0.040	0.030	19.00	●	●	●	0.12-0.33

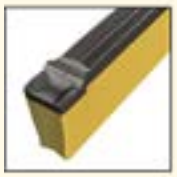
• No depth limit • For cutting speed recommendations and user guide, see pages 606-615
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)

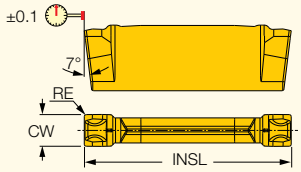
For tools, see pages: C#-HELIR/L (289) • C#-HFIR/L-MC (653) • CR HFIR-M (655) • DGAD/HGAD (537) • DGAQ (580) • DGAQ-JHP (580) • DGFH (293) • DGFH-JHP (294) • DGTR/L (534) • HELIR/L (290) • HFAER/L-5T, 6T (647) • HFAIR/L-DG (652) • HFFR/L-T (645) • HFHR/L-5T (640) • HFIR/L-MC (654) • HFPAD-5 (644) • HFPAD-JHP (642) • HGPAD (291) • HGPAD-JHP (291) • IM-HFIR-MC (653)

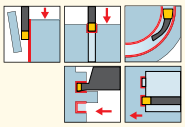
DO-GRIP

DGN-MF

Double-Sided Inserts for Parting and Grooving Soft and Hard Materials at Medium Feeds







Designation	Dimensions CW	RE	CWTOL(1)	CDX(2)	INSL	Tough ↔ Hard IC830	IC1030	IC1010	IC808	IC5400	Recommended Machining Data f groove (mm/rev)
DGN 2002MF	2.00	0.20	0.040	18.00	19.90	●	●	●	●	●	0.04-0.12
DGN 2202MF	2.20	0.20	0.040	18.00	19.90		●	●			0.04-0.12
DGN 3002MF	3.00	0.20	0.040	18.00	20.10					●	0.06-0.18
DGN 3102MF	3.10	0.20	0.040	18.00	20.10	●	●	●	●	●	0.06-0.18
DGN 4003MF	4.00	0.30	0.040	- (3)	18.80	●			●		0.08-0.20

- For cutting speed recommendations and user guide, see pages 606-615

(1) Cutting width tolerance (+/-)

(2) Cutting depth maximum

(3) No depth limit

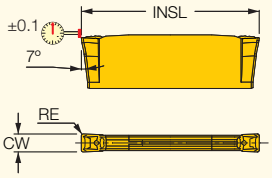
For tools, see pages: C#-HELIR/L (289) • C#-HFIR/L-MC (653) • CR HFIR-M (655) • D/HGAD RE/LE-JHP (561) • DGAQ (580) • DGAQ-JHP (580) • DGFH (293) • DGFH-JHP (294) • DGFHR/L-B-D..(R/L) (528) • DGFHR/L-BC-JHP (527) • DGPAD-JHP (538) • DGPAD-XL-JHP (538) • DGTR/L (534) • DGTR/L-B-D-JHP-SL (531) • DGTR/L-B-D-JHP-SL-MC (532) • HELIR/L (290) • HFAER/L-4 (646) • HFAIR/L-4 (651) • HFAIR/L-DG (652) • HFFR/L-T (645) • HFHR/L-4T (639) • HFIR/L-MC (654) • HFPAD-4 (643) • HFPAD-JHP (642) • HGPAD (291) • IM-HFIR-MC (653)

DO-GRIP

DGN-T

Double-Sided Inserts for Parting and Grooving Soft Materials, Parting Tubes, Small Diameters and Thin-Walled Parts







Designation	Dimensions CW	CWTOL(1)	RE	RETOL(2)	CDX(3)	INSL	Tough ↔ Hard IC1030	IC1010	Recommended Machining Data f groove (mm/rev)
DGN 2002T	2.00	0.030	0.20	0.020	18.00	19.86	●	●	0.03-0.10
DGN 3002T	3.00	0.040	0.20	0.030	18.00	19.95	●	●	0.03-0.14

NEW

- For cutting speed recommendations and user guide, see pages 606-615

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

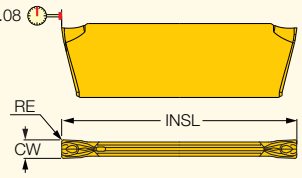
(3) Cutting depth maximum

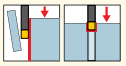
For tools, see pages: DGAQ (580) • DGAQ-JHP (580) • DGFH (293) • DGFH-JHP (294) • DGFHR/L (526) • DGFHR/L-B-D..(R/L) (528) • DGFHR/L-BC-JHP (527) • DGFS (527) • DGPAD-JHP (538) • DGPAD-XL-JHP (538) • DGTR/L (534) • DGTR/L-B-D-JHP-SL (531) • DGTR/L-B-D-JHP-SL-MC (532) • DGTR/L-B/BC-D (533)

DO-GRIP

DGN-B
For Soft & Ductile Materials Such as 100cr6 (Specifically for the Bearing Industry), Intended for Low to Medium Feeds







Designation	Dimensions CW	CWTOL[1]	RE	RETOL[2]	CDX	INSL	Tough ↔ Hard IC1030	IC1010	Recommended Machining Data f groove (mm/rev)
DGN 1602B	1.60	0.040	0.16	0.020	18.00	20.60	●	●	0.03-0.10
DGN 2002B	2.00	0.040	0.20	0.020	18.00	20.40	●	●	0.04-0.11

NEW

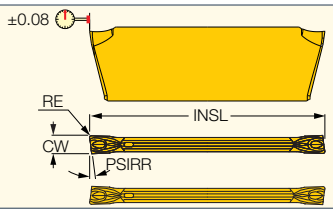
- For cutting speed recommendations and user guide, see pages 606-615

(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)

For tools, see pages: DGAD-B-D (538) • DGAQ (580) • DGAQ-JHP (580) • DGFHL-26B-TR-D (528) • DGFHR/L (526) • DGFHR/L-B-D..(R/L) (528) • DGFS (527) • DGPAD-JHP (538) • DGTR/L (534) • DGTR/L-B-D-JHP-SL (531) • DGTR/L-B-D-JHP-SL-MC (532) • DGTR/L-B-D-SH (529) • DGTR/L-B/BC-D (533)

DO-GRIP

DGR/L-B
Lead Angled Type, for Soft & Ductile Materials Such as 100cr6 (Bearing Industry), Intended for Low to Medium Feeds





Designation	Dimensions CW	RE	INSL	CDX	PSIRL[1]	PSIRR[2]	Tough ↔ Hard IC1030	IC1010	Recommended Machining Data f groove (mm/rev)
DGL 1602B-8D	1.56	0.16	20.40	18.00	8.0	-	●	●	0.08-0.03
DGR 1602B-8D	1.56	0.16	20.40	18.00	-	8.0	●	●	0.08-0.03
DGL 2002B-6D	1.96	0.20	20.10	18.00	6.0	-	●	●	0.10-0.04
DGR 2002B-6D	1.96	0.20	20.10	18.00	-	6.0	●	●	0.10-0.04

NEW

- For cutting speed recommendations and user guide, see pages 606-615

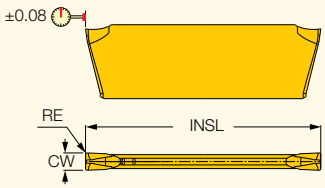
(1) Cutting edge angle major left hand
(2) Cutting edge angle major right hand

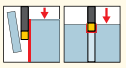
For tools, see pages: DGAD-B-D (538) • DGAQ (580) • DGAQ-JHP (580) • DGFH (293) • DGFHL-26B-TR-D (528) • DGFHR/L (526) • DGFHR/L-B-D..(R/L) (528) • DGFS (527) • DGPAD-JHP (538) • DGTR/L (534) • DGTR/L-B-D-JHP-SL (531) • DGTR/L-B-D-JHP-SL-MC (532) • DGTR/L-B-D-SH (529) • DGTR/L-B/BC-D (533) • HFFR/L-T (645) • HFHR/L-4T (639) • HFHR/L-5T (640) • HFHR/L-6T (641) • HFPAD-4 (643) • HFPAD-5 (644) • HFPAD-6 (644) • HFPAD-JHP (642)

DO-GRIP

DGN-J/JS-D
Double-Sided Inserts for Parting and Grooving Soft Materials, Parting Tubes, Small Diameters and Thin-Walled Parts







Designation	Dimensions						Tough ↔ Hard			Recommended Machining Data
	CW	RE	CWTOL[1]	RETOL[2]	CUTDIA	INSL	IC1030	IC1010	IC1508	f groove (mm/rev)
DGN 0801J-D12	0.80	0.10	0.030	0.020	12.0	11.10	●	●		0.02-0.06
DGN 1001J-D22	1.00	0.10	0.030	0.020	22.0	13.50	●	●		0.03-0.08
DGN 1000JS-D22	1.00	0.00	0.030	0.020	22.0	13.50		●	●	0.03-0.08
DGN 1201J-D22	1.20	0.10	0.030	0.020	22.0	13.50	●	●		0.03-0.10

NEW

- For cutting speed recommendations and user guide, see pages 606-615

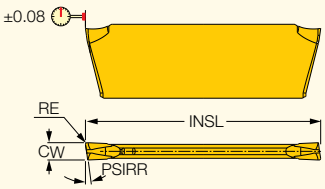
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)

For tools, see pages: DGPAD-D12/22-JHP (539) • DGTR/L-B-D-SH (NARROW CUT) (530) • NQCH-DGTR/L-D22-SH-JHP (530)

DO-GRIP

DGR/L-J/JS-D
Double-Sided Inserts for Parting Soft Materials, Parting Tubes, Small Diameters and Thin-Walled Parts







Designation	Dimensions						Tough ↔ Hard			Recommended Machining Data
	CW	RE	CUTDIA	INSL	PSIRL[1]	PSIRR[2]	IC1030	IC1010	IC1508	f groove (mm/rev)
DGL 0801J-6D-D12	0.80	0.10	12.0	11.10	6.0	-	●	●		0.02-0.05
DGR 0801J-6D-D12	0.80	0.10	12.0	11.10	-	6.0	●	●		0.02-0.05
DGL 1001J-8D-D22	1.00	0.10	22.0	13.50	8.0	-	●	●		0.02-0.06
DGR 1001J-8D-D22	1.00	0.10	22.0	13.50	-	8.0	●	●		0.02-0.06
DGL 1000JS-15D-D22	1.00	0.00	22.0	13.50	15.0	-		●	●	0.02-0.06
DGR 1000JS-15D-D22	1.00	0.00	22.0	13.50	-	15.0		●	●	0.02-0.06
DGL 1201J-8D-D22	1.20	0.10	22.0	13.50	8.0	-	●	●		0.03-0.08
DGR 1201J-8D-D22	1.20	0.10	22.0	13.50	-	8.0	●	●		0.03-0.08

NEW

- For cutting speed recommendations and user guide, see pages 606-615

(1) Lead angle type for minimal burr size (left)
(2) Lead angle type for minimal burr size (right)

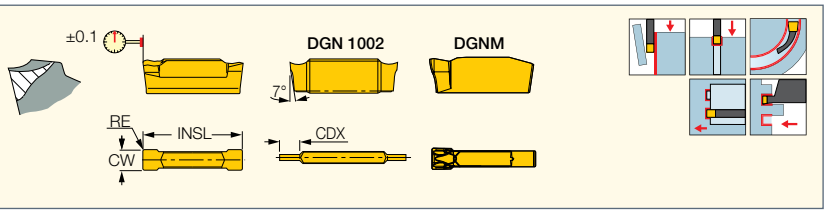
For tools, see pages: DGTR/L-B-D-SH (NARROW CUT) (530) • NQCH-DGTR/L-D22-SH-JHP (530)

DO-GRIP

DGN/DGNM-J/JS/JT

Double-Sided Inserts for Parting and Grooving Soft Materials, Parting Tubes, Small Diameters and Thin-Walled Parts





Designation	Dimensions						Tough ↔ Hard													Recommended Machining Data
	CW	CWTOL[3]	RE	RETOL[4]	CDX[5]	INSL	IC328	IC830	IC928	IC1030	IC1028	IC354	IC1010	IC308	IC808	IC908	IC5400	IC20	IC807	IC907	f groove (mm/rev)
DGN 1002J	1.00	0.020	0.16	0.020	3.00	21.00	●			●	●		●			●					0.02-0.07
DGN 1402J	1.40	0.030	0.16	0.020	15.00	15.80	●	●		●	●	●	●	●	●	●					0.03-0.12
DGN 1502J	1.50	0.030	0.16	0.020	18.00	20.90	●			●	●		●			●					0.03-0.12
DGN 2002J	2.00	0.020	0.20	0.020	18.00	19.88								●							0.04-0.12
DGN 2002JT	2.00	0.030	0.20	0.020	18.00	19.80									●						0.04-0.14
DGN 2200JS [1]	2.20	0.030	0.02	0.020	18.00	19.00	●	●		●			●								0.03-0.08
DGN 2202J	2.20	0.030	0.20	0.020	18.00	19.80	●	●		●	●	●	●	●	●	●	●	●	●		0.04-0.12
DGN 2202JT	2.20	0.030	0.20	0.020	18.00	19.80		●							●		●				0.04-0.14
DGN 3100JS [1]	3.10	0.040	0.02	0.020	18.00	19.70	●			●			●	●							0.03-0.10
DGN 3102J	3.10	0.040	0.20	0.020	18.00	20.10	●	●		●	●	●	●	●	●	●	●	●		●	0.04-0.16
DGN 3102JT	3.10	0.040	0.20	0.020	18.00	20.10		●							●		●			●	0.05-0.18
DGN 3202J	3.18	0.040	0.20	0.020	18.00	20.10										●					0.04-0.16
DGNM 3202J [2]	3.18	0.040	0.20	0.020	- [6]	20.30	●			●		●	●			●					0.04-0.16
DGN 4003J	4.00	0.040	0.30	0.030	- [6]	18.90	●	●		●	●	●	●	●	●	●		●	●		0.05-0.18
DGN 4003JT	4.00	0.040	0.30	0.030	- [6]	18.90		●													0.05-0.18
DGN 4803J	4.80	0.040	0.30	0.030	- [6]	20.40	●														0.05-0.20
DGN 5003J	5.00	0.040	0.30	0.030	- [6]	19.00	●	●		●	●	●	●		●	●		●			0.05-0.20
DGN 5003JT	5.00	0.040	0.30	0.030	- [6]	19.00			●							●					0.05-0.20
DGN 6303J	6.35	0.040	0.35	0.030	- [6]	19.10	●	●		●	●	●	●		●	●		●			0.05-0.25
DGN 6303JT	6.35	0.040	0.35	0.030	- [6]	19.10			●							●					0.05-0.25

- JT chipformer has the basic positive configuration of the J-type and a reinforced negative frontal edge; most suitable for soft materials at low to medium feeds
- For cutting speed recommendations and user guide, see pages 606-615

[1] Sharp corners
[2] Single-ended insert
[3] Cutting width tolerance (+/-)
[4] Corner radius tolerance (+/-)
[5] Cutting depth maximum
[6] No depth limit

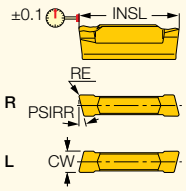
For tools, see pages: C#-HELIR/L (289) • C#-HFIR/L-MC (653) • CR HFIR-M (655) • D/HGAD RE/LE-JHP (561) • DGAD-B-D (538) • DGAD/HGAD (537) • DGAQ (580) • DGAQ-JHP (580) • DGFH (293) • DGFH-JHP (294) • DGFHL-26B-TR-D (528) • DGFHR/L (526) • DGFHR/L-B-D..(R/L) (528) • DGFHR/L-BC-JHP (527) • DGFS (527) • DGPAD-JHP (538) • DGPAD-XL-JHP (538) • DGTR/L (534) • DGTR/L-B-D-JHP-SL (531) • DGTR/L-B-D-JHP-SL-MC (532) • DGTR/L-B-D-SH (529) • DGTR/L-B-D-TR (535) • DGTR/L-B-T-SH (534) • DGTR/L-B/BC-D (533) • DGTR/L-BC-T (535) • HELIR/L (290) • HFAER/L-4 (646) • HFAER/L-5T, 6T (647) • HFAIR/L-4 (651) • HFAIR/L-DG (652) • HFFR/L-T (645) • HFHR/L-4T (639) • HFHR/L-5T (640) • HFHR/L-6T (641) • HFIR/L-MC (654) • HFPAD-4 (643) • HFPAD-5 (644) • HFPAD-6 (644) • HFPAD-JHP (642) • HGPAD (291) • HGPAD-JHP (291) • IM-HFIR-MC (653)

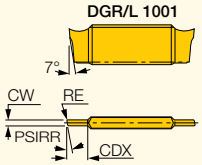
DO-GRIP

DGR/L-J/JS
Double-Sided Inserts for Parting Soft Materials, Parting Tubes, Small Diameters and Thin-Walled Parts











Designation	Dimensions CW	RE	CDX(2)	INSL	PSIRL	PSIRR	Tough ↔ Hard IC328	IC830	IC1030	IC1028	IC354	IC1010	IC308	IC808	IC908	IC20	Recommended Machining Data f groove (mm/rev)
DGL 1001J-8D	1.00	0.07	3.00	21.00	-	8.0							●		●		0.02-0.06
DGR 1001J-8D	1.00	0.07	3.00	21.00	-	8.0	●			●		●	●		●		0.02-0.06
DGL 1400JS-15D (1)	1.40	0.02	14.00	15.40	15.0	-	●		●								0.03-0.07
DGR 1400JS-15D (1)	1.40	0.02	14.00	15.40	-	15.0	●	●	●	●		●	●		●		0.03-0.07
DGL 1402J-8D	1.40	0.16	14.00	15.80	8.0	-	●			●							0.03-0.08
DGR 1402J-8D	1.40	0.16	14.00	15.80	-	8.0	●	●	●	●			●		●		0.03-0.08
DGR 1500J-8D	1.50	0.05	18.00	20.90	-	8.0	●	●	●	●		●	●				0.03-0.08
DGL 2200JS-15D (1)	2.20	0.02	18.00	20.60	15.0	-	●		●	●	●		●		●		0.03-0.07
DGL 2200JS-6D (1)	2.20	0.02	18.00	20.60	6.0	-	●			●			●		●		0.03-0.08
DGR 2200JS-15D (1)	2.20	0.02	18.00	20.60	15.0	-	●		●	●	●	●	●		●	●	0.03-0.07
DGR 2200JS-6D (1)	2.20	0.02	18.00	20.60	-	6.0	●	●	●	●	●	●	●		●		0.03-0.08
DGL 2202J-6D	2.20	0.20	18.00	21.00	6.0	-	●		●	●	●	●			●	●	0.03-0.10
DGR 2202J-15D	2.20	0.20	18.00	21.00	-	15.0	●	●	●	●							0.03-0.08
DGR 2202J-6D	2.20	0.20	18.00	21.00	-	6.0	●	●	●	●	●	●			●	●	0.03-0.10
DGL 3100JS-15D (1)	3.10	0.02	18.00	20.60	-	15.0	●			●	●		●		●		0.03-0.07
DGL 3100JS-6D (1)	3.10	0.02	18.00	20.60	6.0	-	●			●			●		●		0.03-0.08
DGR 3100JS-15D (1)	3.10	0.02	18.00	20.60	15.0	-	●	●	●	●	●	●	●		●		0.03-0.07
DGR 3100JS-6D (1)	3.10	0.02	18.00	20.60	-	6.0	●	●	●	●	●	●	●		●		0.03-0.08
DGL 3102J-15D	3.10	0.20	18.00	21.00	15.0	-	●		●	●							0.04-0.10
DGL 3102J-6D	3.10	0.20	18.00	21.00	6.0	-	●	●	●	●	●	●			●	●	0.04-0.14
DGR 3102J-15D	3.10	0.20	18.00	21.00	-	15.0	●		●	●	●	●			●		0.04-0.10
DGR 3102J-6D	3.10	0.20	18.00	21.00	6.0	-	●	●	●	●	●	●		●	●	●	0.04-0.14
DGR 4000JS-15D (1)	4.00	0.00	- (3)	19.30	-	15.0	●		●								0.04-0.10
DGL 4003J-4D	4.00	0.30	- (3)	18.90	-	4.0	●		●	●	●	●			●	●	0.04-0.15
DGR 4003J-4D	4.00	0.30	- (3)	18.90	4.0	-	●	●		●	●	●		●	●	●	0.04-0.15
DGR 4800JS-4D (1)	4.80	0.03	- (3)	19.80	4.0	-	●										0.04-0.12
DGR 4800JS-8D (1)	4.80	0.03	- (3)	19.80	-	8.0	●										0.04-0.14
DGR 4803J-4D	4.80	0.30	- (3)	19.80	4.0	-	●										0.04-0.18
DGR 4803J-8D	4.80	0.30	- (3)	19.80	-	8.0	●										0.04-0.15
DGL 5003J-4D	5.00	0.30	- (3)	19.80	4.0	-	●				●						0.05-0.20
DGR 5003J-4D	5.00	0.30	- (3)	19.80	4.0	-	●			●	●					●	0.05-0.20
DGL 6303J-4D	6.35	0.35	- (3)	19.10	4.0	-	●				●						0.05-0.25
DGR 6303J-4D	6.35	0.35	- (3)	19.10	-	4.0	●										0.05-0.25

• For cutting speed recommendations and user guide, see pages 606-615

(1) Sharp corners

(2) Cutting depth maximum

(3) No depth limit.

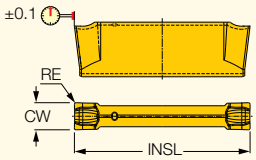
For tools, see pages: C#-HELIR/L (289) • D/HGAD RE/LE-JHP (561) • DGAD-B-D (538) • DGAD/HGAD (537) • DGAQ (580) • DGAQ-JHP (580) • DGFH (293) • DGFH-JHP (294) • DGFHL-26B-TR-D (528) • DGFHR/L (526) • DGFHR/L-B-D..(R/L) (528) • DGFHR/L-BC-JHP (527) • DGFS (527) • DGPAD-JHP (538) • DGPAD-XL-JHP (538) • DGTR/L (534) • DGTR/L-B-D-JHP-SL (531) • DGTR/L-B-D-JHP-SL-MC (532) • DGTR/L-B-D-SH (529) • DGTR/L-B-D-TR (535) • DGTR/L-B-T-SH (534) • DGTR/L-B/BC-D (533) • DGTR/L-BC-T (535) • HELIR/L (290)

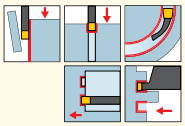
DO-GRIP

DGN-LF/LFT

Double-Sided Inserts for Parting and Grooving Stainless Steel







Designation	Dimensions						Tough ↔ Hard							Recommended Machining Data
	CW	CWTOL(1)	RE	RETOL(2)	CDX(3)	INSL	IC830	IC928	IC1030	IC1010	IC808	IC908	IC5400	f groove (mm/rev)
DGN 2002LF	2.00	0.030	0.20	0.020	18.00	19.80	●		●	●	●		●	0.03-0.08
DGN 2202LF	2.20	0.030	0.20	0.020	18.00	19.80		●	●	●		●	●	0.03-0.08
DGN 2502LF	2.50	0.030	0.20	0.020	18.00	19.80			●	●				0.03-0.08
DGN 3102LF	3.10	0.040	0.20	0.020	18.00	20.10	●	●	●	●	●	●	●	0.04-0.10
DGN 3102LFT	3.10	0.040	0.20	0.020	18.00	21.10		●				●		0.04-0.12

- The LFT chipformer features basically the same design as the LF chipformer, except that it is reinforced by a T-land to improve its durability in interrupted-cut or on hard materials applications. It can be applied at higher feeds than the LF chipformer
- For cutting speed recommendations and user guide, see pages 606-615

(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

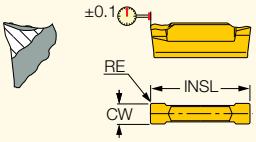
For tools, see pages: D/HGAD RE/LE-JHP (561) • DGAD-B-D (538) • DGAD/HGAD (537) • DGAQ (580) • DGAQ-JHP (580) • DGFH (293) • DGFH-JHP (294) • DGFHL-26B-TR-D (528) • DGFHR/L (526) • DGFHR/L-B-D..(R/L) (528) • DGFHR/L-BC-JHP (527) • DGFS (527) • DGPAD-JHP (538) • DGPAD-XL-JHP (538) • DGTR/L (534) • DGTR/L-B-D-JHP-SL (531) • DGTR/L-B-D-JHP-SL-MC (532) • DGTR/L-B-D-SH (529) • DGTR/L-B/BC-D (533)

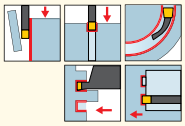
DO-GRIP

DGN-Z

Double-Sided Inserts for Parting Tubes, Thin-Walled and Small Parts







Designation	Dimensions						Tough ↔ Hard				Recommended Machining Data
	CW	CDX(1)	CWTOL(2)	RE	RETOL(3)	INSL	IC1030	IC1010	IC808	IC908	f groove (mm/rev)
DGN 2002Z	2.00	18.00	0.030	0.20	0.020	20.90	●	●	●	●	0.03-0.12
DGN 3002Z	3.00	18.00	0.030	0.20	0.020	20.90			●	●	0.03-0.16

- For cutting speed recommendations and user guide, see pages 606-615

(1) Cutting depth maximum
(2) Cutting width tolerance (+/-)
(3) Corner radius tolerance (+/-)

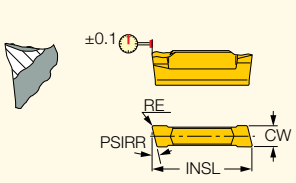
For tools, see pages: D/HGAD RE/LE-JHP (561) • DGAD-B-D (538) • DGAD/HGAD (537) • DGAQ (580) • DGAQ-JHP (580) • DGFH (293) • DGFH-JHP (294) • DGFHL-26B-TR-D (528) • DGFHR/L (526) • DGFHR/L-B-D..(R/L) (528) • DGFHR/L-BC-JHP (527) • DGFS (527) • DGPAD-JHP (538) • DGPAD-XL-JHP (538) • DGTR/L (534) • DGTR/L-B-D-JHP-SL (531) • DGTR/L-B-D-JHP-SL-MC (532) • DGTR/L-B-D-SH (529) • DGTR/L-B/BC-D (533)

DO-GRIP

DGR-Z/ZS

Double-Sided Inserts with Very Positive Rake for Parting Tubes, Thin-Walled and Small Parts





Designation	Dimensions CW	RE	INSL	CDX(2)	PSIRR	IC908	Recommended Machining Data f groove (mm/rev)
DGR 2000ZS-15D (1)	2.00	0.02	20.40	18.00	15.0	●	0.03-0.07
DGR 2000ZS-6D (1)	2.00	0.02	20.40	18.00	6.0	●	0.03-0.08
DGR 2002Z-15D	2.00	0.20	20.90	18.00	15.0	●	0.03-0.10
DGR 2002Z-6D	2.00	0.20	20.90	18.00	6.0	●	0.03-0.10
DGR 3000ZS-15D (1)	3.00	0.02	20.40	18.00	15.0	●	0.03-0.10
DGR 3000ZS-6D (1)	3.00	0.02	20.40	18.00	6.0	●	0.03-0.12
DGR 3002Z-6D	3.00	0.20	20.90	18.00	6.0	●	0.03-0.14

• For cutting speed recommendations and user guide, see pages 606-615

(1) Sharp corners

(2) Cutting depth maximum

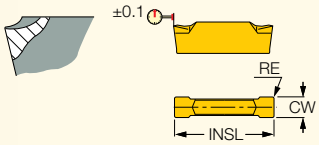
For tools, see pages: D/HGAD RE/LE-JHP (561) • DGAD-B-D (538) • DGAD/HGAD (537) • DGAQ (580) • DGAQ-JHP (580) • DGFH (293) • DGFH-JHP (294) • DGFHL-26B-TR-D (528) • DGFHR/L (526) • DGFHR/L-B-D..(R/L) (528) • DGFHR/L-BC-JHP (527) • DGFS (527) • DGPAD-JHP (538) • DGPAD-XL-JHP (538) • DGTR/L (534) • DGTR/L-B-D-JHP-SL (531) • DGTR/L-B-D-JHP-SL-MC (532) • DGTR/L-B-D-SH (529) • DGTR/L-B/BC-D (533)

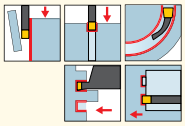
DO-GRIP

DGN-UT/UA

Double-Sided Inserts for Parting and Grooving Cr-Ni Alloys, Low Carbon Steel and Ductile Materials at Low Feeds







Designation	Dimensions CW	CWTOL(1)	RE	RETOL(2)	CDX(3)	INSL	Tough ↔ Hard IC328	IC1030	IC1028	IC354	IC350	IC1010	IC308	IC908	IC20	Recommended Machining Data f groove (mm/rev)
DGN 2202UA	2.20	0.030	0.20	0.020	18.00	19.90	●		●	●						0.04-0.13
DGN 2202UT	2.20	0.030	0.20	0.020	18.00	19.60					●			●		0.03-0.11
DGN 3003UA	3.00	0.030	0.25	0.020	18.00	20.50	●	●	●	●		●	●		●	0.04-0.15
DGN 3003UT	3.00	0.030	0.25	0.020	18.00	20.50						●	●	●		0.04-0.13
DGN 4003UA	4.00	0.040	0.30	0.020	- (4)	19.40	●			●						0.05-0.16
DGN 4003UT	4.00	0.040	0.30	0.020	- (4)	19.30	●			●				●		0.04-0.15
DGN 5003UT	5.00	0.040	0.30	0.020	- (4)	19.00	●		●				●	●		0.05-0.18
DGN 6008UT	6.00	0.040	0.80	0.050	- (4)	19.10	●			●			●	●		0.06-0.20

• For cutting speed recommendations and user guide, see pages 606-615

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

(3) Cutting depth maximum

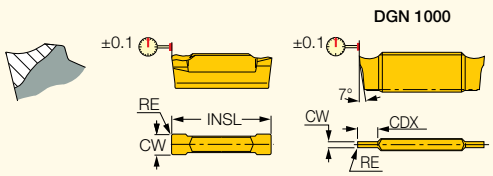
(4) No depth limit

For tools, see pages: C#-HELIR/L (289) • D/HGAD RE/LE-JHP (561) • DGAD-B-D (538) • DGAD/HGAD (537) • DGAQ (580) • DGAQ-JHP (580) • DGFH (293) • DGFH-JHP (294) • DGFHL-26B-TR-D (528) • DGFHR/L (526) • DGFHR/L-B-D..(R/L) (528) • DGFHR/L-BC-JHP (527) • DGFS (527) • DGPAD-JHP (538) • DGPAD-XL-JHP (538) • DGTR/L (534) • DGTR/L-B-D-JHP-SL (531) • DGTR/L-B-D-JHP-SL-MC (532) • DGTR/L-B-D-SH (529) • DGTR/L-B/BC-D (533) • DGTR/L-BC-T (535) • HELIR/L (290) • HGPAD (291) • HGPAD-JHP (291)

DO-GRIP

DGN-P
Double-Sided Inserts for Parting and Grooving Soft Materials, Thin and Miniature Parts





Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	INSL	CDX	IC508	Recommended Machining Data f groove (mm/rev)
DGN 1000P	1.00	0.05	0.020	0.020	20.00	3.00	●	0.02-0.05
DGN 1500P	1.50	0.05	0.020	0.020	20.00	18.00	●	0.02-0.07
DGN 2000P	2.00	0.05	0.020	0.020	20.00	18.00	●	0.02-0.08
DGN 3000P	3.00	0.05	0.020	0.020	20.00	18.00	●	0.02-0.10

- For cutting speed recommendations and user guide, see pages 606-615

(1) Cutting width tolerance (+/-)

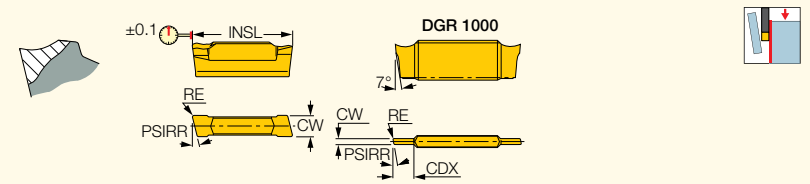
(2) Corner radius tolerance (+/-)

For tools, see pages: D/HGAD RE/LE-JHP (561) • DGAD-B-D (538) • DGAD/HGAD (537) • DGAQ (580) • DGAQ-JHP (580) • DGFH (293) • DGFH-JHP (294) • DGFHL-26B-TR-D (528) • DGFHR/L (526) • DGFHR/L-B-D..(R/L) (528) • DGFHR/L-BC-JHP (527) • DGFS (527) • DGPAD-JHP (538) • DGPAD-XL-JHP (538) • DGTR/L (534) • DGTR/L-B-D-JHP-SL (531) • DGTR/L-B-D-JHP-SL-MC (532) • DGTR/L-B-D-SH (529) • DGTR/L-B-D-TR (535) • DGTR/L-B-T-SH (534) • DGTR/L-B/BC-D (533)

DO-GRIP

DGR-P
Double-Sided Inserts for Parting Soft Materials, Thin Walled and Miniature Parts





Designation	Dimensions CW	RE	INSL	CDX(1)	PSIRR	IC508	Recommended Machining Data f groove (mm/rev)
DGR 1000P-15D	1.00	0.05	20.60	2.90	15.0	●	0.02-0.03
DGR 1000P-6D	1.00	0.05	20.60	2.90	6.0	●	0.02-0.04
DGR 1500P-15D	1.50	0.05	20.60	18.00	15.0	●	0.02-0.04
DGR 1500P-6D	1.50	0.05	20.60	18.00	6.0	●	0.02-0.05
DGR 2000P-15D	2.00	0.05	20.60	18.00	15.0	●	0.02-0.05
DGR 2000P-6D	2.00	0.05	20.60	18.00	6.0	●	0.02-0.07

- For cutting speed recommendations and user guide, see pages 606-615

(1) Cutting depth maximum

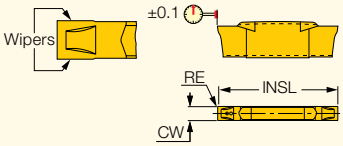
For tools, see pages: D/HGAD RE/LE-JHP (561) • DGAD-B-D (538) • DGAD/HGAD (537) • DGAQ (580) • DGAQ-JHP (580) • DGFH (293) • DGFH-JHP (294) • DGFHR/L (526) • DGFHR/L-B-D..(R/L) (528) • DGFS (527) • DGPAD-JHP (538) • DGTR/L (534) • DGTR/L-B-D-JHP-SL (531) • DGTR/L-B-D-JHP-SL-MC (532) • DGTR/L-B-D-SH (529) • DGTR/L-B-D-TR (535) • DGTR/L-B-T-SH (534) • DGTR/L-B/BC-D (533)

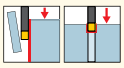
DO-GRIP

DGN-WP

Double-Sided Parting and Grooving Inserts with a Wiper Design for High Flatness and Surface Finish







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	INSL	Tough ↔ Hard IC328	IC1030	Recommended Machining Data f groove (mm/rev)
DGN 1900WP	1.90	0.05	0.020	0.020	6.00	19.70	●	●	0.04-0.12
DGN 2400WP	2.39	0.05	0.020	0.020	6.00	20.40	●	●	0.05-0.14

• For cutting speed recommendations and user guide, see pages 606-615
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

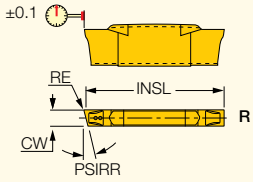
For tools, see pages: D/HGAD RE/LE-JHP (561) • DGAD-B-D (538) • DGAD/HGAD (537) • DGAQ (580) • DGAQ-JHP (580) • DGFH (293) • DGFH-JHP (294) • DGFHL-26B-TR-D (528) • DGFHR/L (526) • DGFHR/L-B-D..(R/L) (528) • DGFS (527) • DGPAD-JHP (538) • DGTR/L (534) • DGTR/L-B-D-JHP-SL (531) • DGTR/L-B-D-JHP-SL-MC (532) • DGTR/L-B-D-SH (529) • DGTR/L-B/BC-D (533)

DO-GRIP

DGR-WP

Double-Sided Parting Inserts with a Wiper Design for High Flatness and Surface Finish







Designation	Dimensions CW	RE	CDX(1)	INSL	PSIRR	Tough ↔ Hard IC328	IC1030	Recommended Machining Data f groove (mm/rev)
DGR 1900WP-12D	1.90	0.05	6.00	19.70	12.0	●	●	0.04-0.10
DGR 1900WP-5D	1.90	0.05	6.00	19.70	5.0	●		0.04-0.10
DGR 2400WP-12D	2.39	0.05	6.00	20.40	12.0	●	●	0.04-0.10
DGR 2400WP-5D	2.39	0.05	6.00	20.40	5.0	●		0.04-0.12

• For cutting speed recommendations and user guide, see pages 606-615
(1) Cutting depth maximum

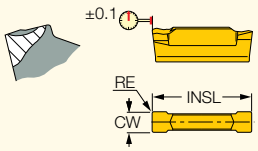
For tools, see pages: D/HGAD RE/LE-JHP (561) • DGAD-B-D (538) • DGAD/HGAD (537) • DGAQ (580) • DGAQ-JHP (580) • DGFH (293) • DGFH-JHP (294) • DGFHR/L (526) • DGFHR/L-B-D..(R/L) (528) • DGFS (527) • DGPAD-JHP (538) • DGTR/L (534) • DGTR/L-B-D-JHP-SL (531) • DGTR/L-B-D-JHP-SL-MC (532) • DGTR/L-B-D-SH (529) • DGTR/L-B/BC-D (533)

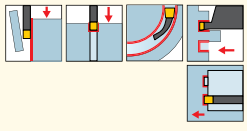
DO-GRIP

HGN-C

Parting and Grooving Inserts for Parting Bars, Hard Materials and Tough Applications







Designation	Dimensions CW	RE	CWTOL(1)	INSL	Tough ↔ Hard IC328	IC830	IC354	IC308	IC908	Recommended Machining Data f groove (mm/rev)
HGN 3003C	3.00	0.30	0.050	15.80	●	●	●	●	●	0.08-0.20

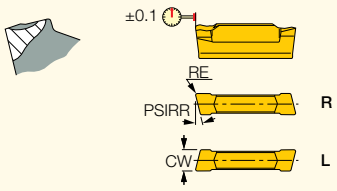
• No depth limit • For cutting speed recommendations and user guide, see pages 606-615
(1) Cutting width tolerance (+/-)

For tools, see pages: C#-HELIR/L (289) • D/HGAD RE/LE-JHP (561) • DGAD/HGAD (537) • HELIR/L (290) • HFPAD-3 (643) • HFPAD-JHP (642) • HGAIR/L-3 (648) • HGFH (292) • HGHR/L-3 (638) • HGPAD (291) • HGPAD-JHP (291)

DO-GRIP

HGR/L-C
Inserts for Parting Bars, Hard Materials and Tough Applications







Designation	Dimensions CW	RE	INSL	PSIRL	PSIRR	Tough ↔ Hard IC328	IC830	Recommended Machining Data f groove (mm/rev)
HGL 3003C-6D	3.00	0.30	15.60	6.0	-	●		0.06-0.16
HGR 3003C-6D	3.00	0.30	15.60	-	6.0	●	●	0.06-0.16

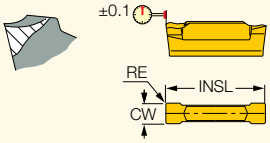
• No depth limit • For cutting speed recommendations and user guide, see pages 606-615

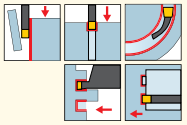
For tools, see pages: C#-HELIR/L (289) • D/HGAD RE/LE-JHP (561) • DGAD/HGAD (537) • HELIR/L (290) • HGFH (292) • HGPAD (291) • HGPAD-JHP (291)

DO-GRIP

HGN-J
Inserts for Parting and Grooving Soft Materials, Parting Tubes, Small Diameters and Thin-Walled Parts







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	INSL	Tough ↔ Hard IC328	IC830	IC354	IC308	Recommended Machining Data f groove (mm/rev)
HGN 3002J	3.00	0.20	0.050	0.030	16.10	●	●	●	●	0.04-0.15

• No depth limit • For cutting speed recommendations and user guide, see pages 606-615

(1) Cutting width tolerance (+/-)

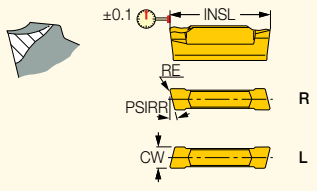
(2) Corner radius tolerance (+/-)

For tools, see pages: C#-HELIR/L (289) • D/HGAD RE/LE-JHP (561) • DGAD/HGAD (537) • HELIR/L (290) • HFPAD-3 (643) • HFPAD-JHP (642) • HGAIR/L-3 (648) • HGFH (292) • HGHR/L-3 (638) • HGPAD (291) • HGPAD-JHP (291)

DO-GRIP

HGR/L-J/JS
Double-Sided Inserts for Parting Soft Materials, Tubes, Small Diameters and Thin-Walled Parts







Designation	Dimensions CW	RE	PSIRL	PSIRR	INSL	Tough ↔ Hard IC328	IC830	IC354	Recommended Machining Data f groove (mm/rev)
HGL 3000JS-15D (1)	3.00	0.02	15.0	-	15.20	●			0.03-0.07
HGR 3000JS-15D (1)	3.00	0.02	-	15.0	15.20	●			0.03-0.07
HGL 3002J-6D	3.00	0.20	6.0	-	15.70	●			0.04-0.12
HGR 3002J-6D	3.00	0.20	-	6.0	15.70	●	●	●	0.04-0.12

• No depth limit • For cutting speed recommendations and user guide, see pages 606-615

(1) Sharp corners

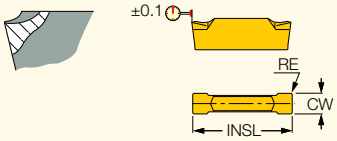
For tools, see pages: C#-HELIR/L (289) • D/HGAD RE/LE-JHP (561) • DGAD/HGAD (537) • HELIR/L (290) • HGFH (292) • HGPAD (291) • HGPAD-JHP (291)

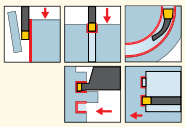
DO-GRIP

HGN-UT

Double-Sided Inserts for Parting and Grooving Low Feeds on Cr-Ni Alloys and Low Carbon Steel







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	INSL	Tough ↔ Hard IC328	IC354	Recommended Machining Data f groove (mm/rev)
HGN 3003UT	3.00	0.30	0.050	0.030	15.80	•	•	0.04-0.13

• No depth limit • For cutting speed recommendations and user guide, see pages 606-615

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

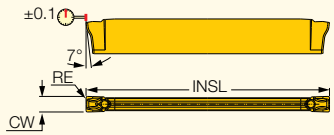
For tools, see pages: C#-HELIR/L (289) • D/HGAD RE/LE-JHP (561) • DGAD/HGAD (537) • HELIR/L (290) • HFPAD-3 (643) • HFPAD-JHP (642) • HGAIR/L-3 (648) • HGFH (292) • HGHR/L-3 (638) • HGPAD (291) • HGPAD-JHP (291)

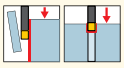
DO-GRIPXL

DGN-C-XL

Extra Long Parting and Grooving Inserts for Parting Bars Up to 65 mm Diameters, Hard Materials and Tough Applications







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	INSL	Tough ↔ Hard IC830	IC808	IC5400	Recommended Machining Data f groove (mm/rev)
DGN 2002C-XL	2.05	0.20	0.040	0.030	30.00	32.00	•	•	•	0.05-0.16
DGN 3002C-XL	3.00	0.20	0.040	0.030	32.50	35.00	•	•		0.07-0.20

• For cutting speed recommendations and user guide, see pages 606-615

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

(3) Cutting depth maximum

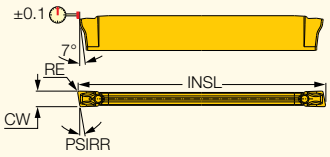
For tools, see pages: DGTR/L-XL (536)

DO-GRIPXL

DGR/L-C-XL

Extra Long Double-Sided Inserts for Parting Bars, Hard Materials and Tough Applications







Right-hand shown

Designation	Dimensions CW	RE	CDX(1)	PSIRL	PSIRR	INSL	Tough ↔ Hard IC830	IC808	Recommended Machining Data f groove (mm/rev)
DGL 2002C-6D-XL	2.00	0.20	30.00	6.0	-	32.00	•	•	0.05-0.12
DGR 2002C-6D-XL	2.00	0.20	30.00	-	6.0	32.00	•	•	0.05-0.12
DGL 3002C-6D-XL	3.00	0.20	32.50	6.0	-	35.00	•	•	0.08-0.18
DGR 3002C-6D-XL	3.00	0.20	32.50	-	6.0	35.00	•	•	0.08-0.18

• For cutting speed recommendations and user guide, see pages 606-615

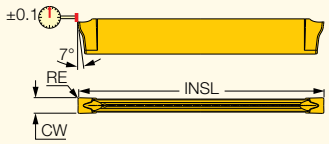
(1) Cutting depth maximum

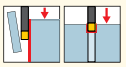
For tools, see pages: DGTR/L-XL (536)

DO-GRIP XL

DGN-J-XL
Extra Long Inserts for Parting and Grooving Soft Materials, Parting Tubes, Small Diameters and Thin-Walled Parts







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	INSL	Tough ↔ Hard IC830	IC808	IC5400	Recommended Machining Data f groove (mm/rev)
DGN 2002J-XL	2.05	0.20	0.040	0.030	30.00	32.00	●	●	●	0.04-0.14
DGN 3002J-XL	3.00	0.20	0.040	0.030	32.50	35.00	●	●		0.04-0.16

- For cutting speed recommendations and user guide, see pages 606-615

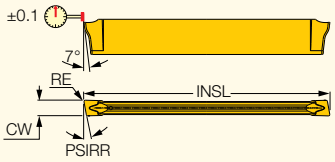
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

For tools, see pages: DGTR/L-XL (536)

DO-GRIP XL

DGR/L-J-XL
Extra Long Double-Sided Inserts for Parting Soft Materials, Tubes, Small Diameters and Thin-Walled Parts







Right-hand shown

Designation	Dimensions CW	RE	CDX(1)	PSIRL	PSIRR	INSL	Tough ↔ Hard IC830	IC808	Recommended Machining Data f groove (mm/rev)
DGL 2002J-6D-XL	2.00	0.20	30.00	6.0	-	32.00	●	●	0.04-0.10
DGR 2002J-6D-XL	2.00	0.20	30.00	-	6.0	32.00	●	●	0.04-0.10
DGL 3002J-6D-XL	3.00	0.20	32.50	6.0	-	35.00	●	●	0.04-0.14
DGR 3002J-6D-XL	3.00	0.20	32.50	-	6.0	35.00	●	●	0.04-0.14

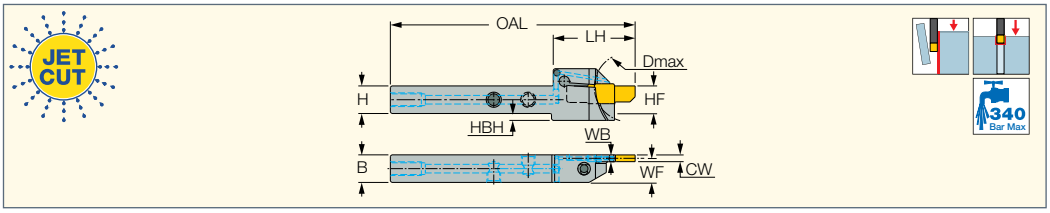
- For cutting speed recommendations and user guide, see pages 606-615

(1) Cutting depth maximum

For tools, see pages: DGTR/L-XL (536)

ISCARPARTING

BGTR/L-B-JHP
Integral Shank Parting and Grooving Tools with Coolant Channels Carrying Narrow Inserts for Parting up to 20 mm Bars



Designation	CWN[1]	CWX[2]	H	HF	B	WB	OAL	LH	D max[3]	WF	HBH
BGTR/L 16B-D20-JHP	0.80	1.50	16.0	16.0	16.0	4.00	142.00	47.5	40.0 [4]	14.00	4.0
BGTR/L 20B-D20-JHP	0.80	1.50	20.0	20.0	20.0	4.00	142.00	47.5	40.0 [4]	18.00	-
BGTR/L 25B-D20-JHP	0.80	1.50	25.0	25.0	25.0	4.00	142.00	47.5	40.0 [4]	23.00	-

- For user guide, see pages 606-615

[1] Minimum cutting width
[2] Maximum cutting width
[3] The specified limit refers to the tool
[4] for grooving

For inserts, see pages: BGM N-J (553) • BGM R/L-J (553)
For holders, see pages: C#-ADE (831) • C#-ADES (832) • C#-ASHA (830) • C#-ASHR/L (830) • C#-ASHR/L-45 (831) • DT30/2 ASH# 16/20-1-35080 (861) • HSK A-WH-ASHN-45 (836) • HSK A-WH-ASHR/L-1 (836) • HSK A63WH-ASHR/L-2 (837) • HSK A63WH-ASHR/L-3 (837) • HSK A63WH-ASHR/L-45 (836)

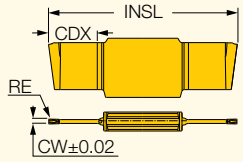
Spare Parts

Designation				
BGTR/L 16B-D20-JHP	SR M5X16 DIN912	SR 5/16UNF TL360	HW 4.0	
BGTL 20B-D20-JHP	SR M5X16 DIN912	PLG G1/8 TL360	HW 4.0	HW 5.0
BGTR 20B-D20-JHP	SR M5X16 DIN912	PLG G1/8 TL360	HW 5.0	
BGTR/L 25B-D20-JHP	SR M5X16 DIN912	PLG G1/8 TL360	HW 4.0	HW 5.0

ISCARPARTING

BGM N-J
Narrow Material Cost Saving Inserts for Grooving and Parting up to 20 mm Bar Diameters





Designation	Dimensions CW	CWTOL[1]	RE	RETOL[2]	CDX	INSL	IC1008	Recommended Machining Data f groove (mm/rev)
BGM N0801J	0.80	0.020	0.10	0.020	10.00	38.70	●	0.02-0.05
BGM N1001J	1.00	0.020	0.10	0.020	10.00	38.70	●	0.02-0.08
BGM N1201J	1.20	0.020	0.10	0.020	10.00	38.70	●	0.03-0.10
BGM N1501J	1.50	0.020	0.10	0.020	10.00	38.70	●	0.05-0.12

- For cutting speed recommendations and user guide, see pages 606-615

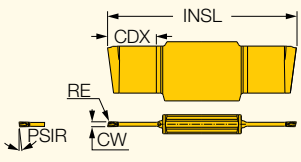
[1] Cutting width tolerance (+/-)
[2] Corner radius tolerance (+/-)

For tools, see pages: BGTR/L-B-JHP (553)

ISCARPARTING

BGM R/L-J
Narrow Material Cost Saving Inserts for Parting up to 20 mm Bar Diameters





Designation	Dimensions CW	RE	INSL	CDX	PSIR	IC1008	Recommended Machining Data f groove (mm/rev)
BGM R/L1001J-15D	1.00	0.10	38.70	10.00	15.0	●	0.02-0.06
BGM R/L1001J-6D	1.00	0.10	38.70	10.00	6.0	●	0.02-0.08

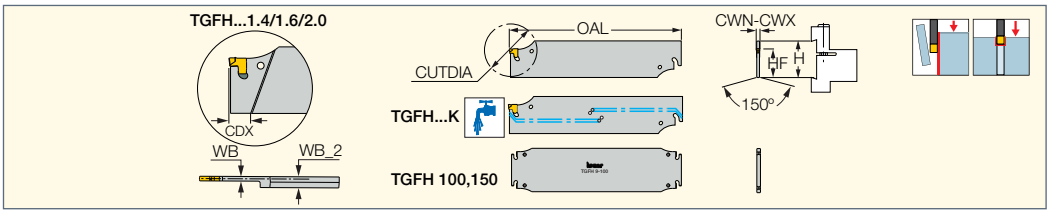
- For cutting speed recommendations and user guide, see pages 606-615

For tools, see pages: BGTR/L-B-JHP (553)

TANG-GRIP PARTING LINE

TGFH/R/L

Blades with a Tangentially Oriented Pocket Carrying TANG-GRIP Single-Ended Inserts for Parting and Grooving



Designation	H	CWN[2]	CWX[3]	WB	WB_2	OAL	CDX	HF	CUTDIA[4]	CSP[5]	Insert		
TGFH 19-1.4	19.0	1.40	1.40	1.10	2.5	86.00	9.60	15.7	30.0	0	TAG 1.4	ETG 1.4/1.6*	
TGFH 19-1.6	19.0	1.60	1.60	1.30	1.6	86.00	11.00	15.7	32.0	0	TAG 1.6	ETG 1.4/1.6*	
TGFH 19-2	19.0	1.80	2.40	-	1.7	86.00	-	15.7	38.0	0	TAG 2	ETG 2*	
TGFH 26-1.4	26.0	1.40	1.40	1.10	2.5	110.00	8.30	21.4	29.0	0	TAG 1.4	ETG 1.4/1.6*	
TGFH 26-1.6	26.0	1.60	1.60	1.30	1.6	110.00	10.00	21.4	35.0	0	TAG 1.6	ETG 1.4/1.6*	
TGFH 26-2	26.0	1.80	2.40	-	1.7	110.00	-	21.4	50.0	0	TAG 2	ETG 2*	
TGFH 26-3	26.0	2.80	3.50	-	2.5	110.00	-	21.4	75.0	0	TAG 3	ETG 3-4*	
TGFH 26K-3 [1]	26.0	2.80	3.50	-	2.5	110.00	-	21.4	75.0	1	TAG 3	ETG 3-4-SH*	SGC 340
TGFH 26-4	26.0	3.70	4.50	-	3.4	110.00	-	21.4	80.0	0	TAG 4	ETG 3-4*	
TGFH 26-5	26.0	4.70	5.50	-	4.0	150.00	-	21.4	80.0	0	TAG 5	ETG 5-7*	
TGFH 32-1.4	32.0	1.40	1.40	1.10	2.5	150.00	7.10	24.8	29.0	0	TAG 1.4	ETG 1.4/1.6*	
TGFH 32-1.6	32.0	1.60	1.60	1.30	1.6	150.00	10.00	24.8	38.0	0	TAG 1.6	ETG 1.4/1.6*	
TGFH 32-2	32.0	1.80	2.40	1.70	2.5	150.00	-	24.8	50.0	0	TAG 2	ETG 2*	
TGFH 32-3	32.0	2.80	3.50	-	2.5	150.00	-	24.8	100.0	0	TAG 3	ETG 3-4*	
TGFH 32K-3 [1]	32.0	2.80	3.50	-	2.5	150.00	-	24.8	100.0	1	TAG 3	ETG 3-4-SH*	SGC 340
TGFH 32-4	32.0	3.70	4.50	-	3.4	150.00	-	24.8	100.0	0	TAG 4	ETG 3-4*	
TGFH 32K-4 [1]	32.0	3.70	4.50	-	3.4	150.00	-	24.8	100.0	1	TAG 4	ETG 3-4-SH*	SGC 340
TGFH 32-5	32.0	4.70	5.50	-	4.0	150.00	-	24.8	120.0	0	TAG 5	ETG 5-7*	
TGFH 32-6	32.0	5.70	6.50	-	5.2	150.00	-	24.8	120.0	0	TAG 6	ETG 5-7*	
TGFH 32-7	32.0	6.80	7.50	-	6.0	148.00	-	24.8	120.0	0	TAG 7	ETG 5-7*	
TGFH 45-3	45.0	2.80	3.50	-	2.5	225.00	-	38.1	160.0	0	TAG 3	ETG 3-4*	
TGFH 45-4	45.0	3.70	4.50	-	3.4	225.00	-	38.1	160.0	0	TAG 4	ETG 3-4*	
TGFH 45-5	45.0	4.70	5.50	-	4.0	225.00	-	38.1	160.0	0	TAG 5	ETG 5-7*	
TGFH 45-6	45.0	5.70	6.50	-	5.2	225.00	-	38.1	160.0	0	TAG 6	ETG 5-7*	
TGFH 45-7	45.0	6.80	7.50	-	6.0	225.00	-	38.1	160.0	0	TAG 7	ETG 5-7*	
TGFH 52-7	52.6	6.80	7.50	-	6.0	190.00	-	45.2	190.0	0	TAG 7	ETG 5-7*	
TGFH 53-7	52.6	6.80	7.50	-	6.0	260.00	-	45.2	220.0	0	TAG 7	ETG 5-7*	
TGFH 52K-8 [1]	52.6	7.70	8.50	-	7.2	190.00	-	45.2	190.0	1	TAG 8	ETG 8-12*	
TGFH 53K-8 [1]	52.6	7.70	8.50	-	7.2	260.00	-	45.2	215.0	1	TAG 8	ETG 8-12*	
TGFH 52K-9 [1]	52.6	8.70	10.00	-	8.2	190.00	-	45.2	190.0	1	TAG 9	ETG 8-12*	
TGFH 53K-9 [1]	52.6	8.70	10.00	-	8.2	260.00	-	45.2	215.0	1	TAG 9	ETG 8-12*	
TGFHR/L 53K-12 [1]	52.6	11.70	12.70	-	10.0	260.00	-	45.2	215.0	1	TAG 12	ETG 8-12*	
TGFH 100-9	100.0	8.70	10.00	-	8.2	460.00	-	92.5	450.0	0	TAG 9	ETG 8-12*	
TGFH 100-12	100.0	11.70	12.70	-	10.0	460.00	-	92.5	450.0	0	TAG 12	ETG 8-12*	
TGFH 150-12	150.0	11.70	12.70	-	10.0	610.00	-	142.5	600.0	0	TAG 12	ETG 8-12*	

• For user guide, see pages 606-615

[1] With coolant holes, the recommended coolant pressure is 10 bar min.; cooling tube SGCU 341 should be ordered separately

[2] Minimum cutting width

[3] Maximum cutting width

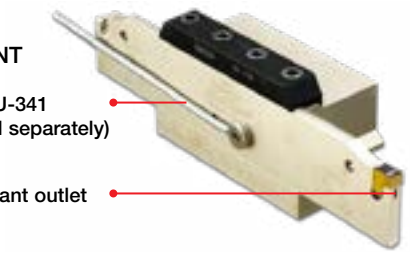
[4] Maximum workpiece diameter for grooving operation

[5] 0 - Without coolant supply, 1 - With coolant supply

* Optional, to be ordered separately

For inserts, see pages: TAG N-A (573) • TAG N-C (full radius) (569) • TAG N-C/W/M (568) • TAG N-HF (568) • TAG N-J/JS/JT (570) • TAG N-LF (572) • TAG N-MF (570) • TAG N-T (573) • TAG N-UT (572) • TAG R/L-C (569) • TAG R/L-J/JS (571) • TAGB/TAGBA (375)
For holders, see pages: C#-TBK-R/L (695) • SGTBF (691) • SGTBK (691) • SGTBR/L (691) • SGTBU/SGTBN (690) • UBHCR/L (691)

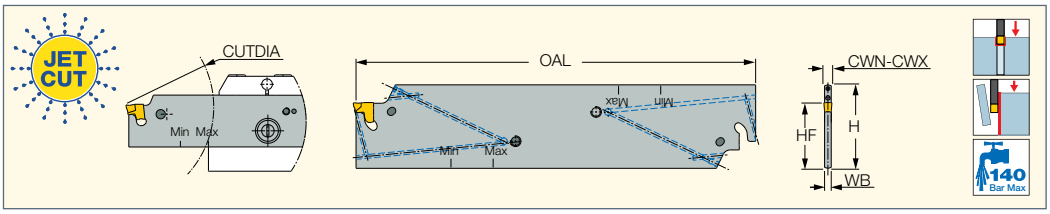
K TYPE COOLANT



TANG-GRIP PARTING LINE

TGFH-JHP

Parting and Grooving Blades with Channels for Low and High-Pressure Coolant Carrying TANG-GRIP Inserts



Designation	H	CWN(2)	CWX(3)	WB	OAL	HF	CUTDIA(4)	Insert		
TGFH 26C-3-JHP	26.0	2.80	3.50	2.50	140.00	21.4	75.0	TAG 3	SGC 340	ETG 3-4-SH*
TGFH 32C-3-JHP	32.0	2.80	3.50	2.50	150.00	24.8	90.0	TAG 3	SGC 340	ETG 3-4-SH*
TGFH 26C-4-JHP	26.0	3.70	4.50	3.40	140.00	21.4	75.0	TAG 4	SGC 340	ETG 3-4-SH*
TGFH 32C-4-JHP	32.0	3.70	4.50	3.40	150.00	24.8	90.0	TAG 4	SGC 340	ETG 3-4-SH*
TGFH 32C-5-JHP	32.0	4.70	5.50	4.00	160.00	24.8	120.0	TAG 5	SGC 340	ETG 5-7*
TGFH 32C-6-JHP (1)	32.0	5.70	6.50	5.20	160.00	24.8	120.0	TAG 6	SGC 340	ETG 5-7*

- For user guide, see pages 606-615

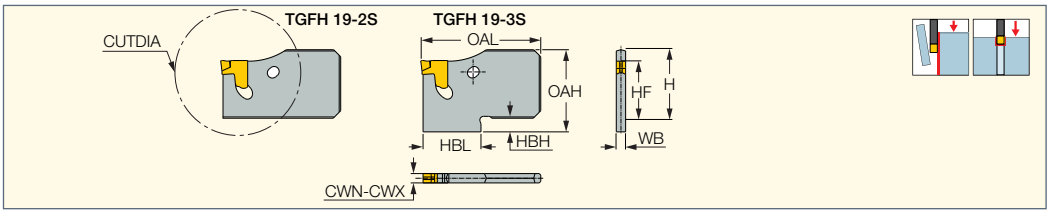
(1) Only an upper channel
(2) Minimum cutting width
(3) Maximum cutting width
(4) Maximum workpiece diameter for grooving operation
* Optional, to be ordered separately

For inserts, see pages: TAG N-A (573) • TAG N-C (full radius) (569) • TAG N-C/W/M (568) • TAG N-HF (568) • TAG N-J/JS/JT (570) • TAG N-LF (572) • TAG N-MF (570) • TAG N-T (573) • TAG N-UT (572) • TAG R/L-C (569) • TAG R/L-J/JS (571) • TAGB/TAGBA (375)
For holders, see pages: TGTBU-JHP (559)

TANG-GRIP PARTING LINE

TGFH-S

Parting and Grooving Single-Sided Blades Carrying TANG-GRIP Inserts



Designation	H	CWN(1)	CWX(2)	WB	OAL	HF	OAH	HBH	HBL	CDX(3)	CUTDIA(4)	
TGFH 19-2S	19.0	1.80	2.40	1.65	32.00	15.7	19.0	-	-	12.00	36.0	ETG 2*
TGFH 19-3S	19.0	2.80	3.50	2.50	34.60	15.7	22.0	3.0	15.5	16.00	40.0	ETG 3-4-SH*

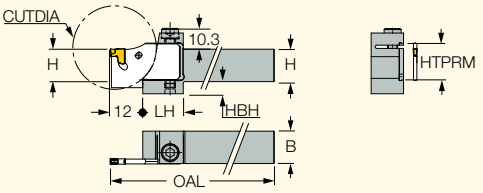
- For Dmax and Tmax drawing, see SGBHR/L holder

(1) Minimum cutting width
(2) Maximum cutting width
(3) Cutting depth maximum
(4) Maximum workpiece diameter for grooving operation
* Optional, to be ordered separately

For inserts, see pages: TAG N-A (573) • TAG N-C (full radius) (569) • TAG N-C/W/M (568) • TAG N-HF (568) • TAG N-J/JS/JT (570) • TAG N-LF (572) • TAG N-MF (570) • TAG N-T (573) • TAG N-UT (572) • TAG R/L-C (569) • TAG R/L-J/JS (571)

SELF-GRIP

SGBHR/L
Tool Blocks for SELF-GRIP
Single-Sided Blades



Designation	H	B	HBH	OAL	HTPRM	LH	CDX(1)	CUTDIA(2)
SGBHR/L 1010	10.0	10.0	10.0	154.00	19.00	20.0	16.00	40.0
SGBHR 1212	12.0	12.0	8.0	154.00	19.00	20.0	16.00	40.0
SGBHR 1414	14.0	14.0	6.0	154.00	19.00	20.0	16.00	40.0
SGBHR/L 1616	16.0	16.0	6.0	154.00	19.00	20.0	16.00	40.0
SGBHR/L 2020	20.0	20.0	2.0	154.00	19.00	20.0	16.00	40.0
SGBHR/L 2525	25.0	25.0	-	154.00	19.00	20.0	16.00	40.0

- For Dmax and Tmax dimensions, see TGFH-S adapters

(1) Cutting depth maximum

(2) Maximum workpiece diameter for grooving operation

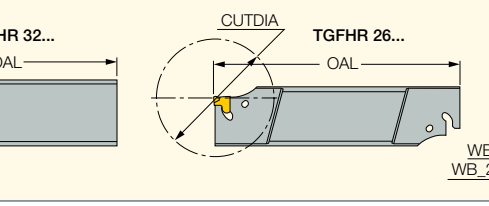
For tools, see pages: TGFH-S (555)

Spare Parts

Designation			
SGBHL 1010	SET ESG 1	SR M5X25DIN912	HW 4.0
SGBHR 1010		SR M5X25DIN912	HW 4.0
SGBHR 1212		SR M5X25DIN912	HW 4.0
SGBHR 1414	SET ESG 1	SR M5X25DIN912	HW 4.0
SGBHR/L 1616		SR M5X25DIN912	HW 4.0
SGBHL 2020		SR M5X25DIN912	HW 4.0
SGBHR 2020	SET ESG 1	SR M5X25DIN912	HW 4.0
SGBHR/L 2525		SR M5X25DIN912	HW 4.0

TANG-GRIP PARTING LINE

TGFHR/L
Single- and Double-Ended
Parting and Grooving Reinforced
Blades Carrying TANG-GRIP
Tangentially Clamped Inserts



Designation	H	CWN(1)	CWX(2)	WB	WB_2	OAL	HF	CUTDIA(3)	
TGFHL 26T16-2	26.0	1.80	2.40	1.65	7.9	110.50	21.4	43.0	ETG 2*
TGFHR 26T16-3	26.0	2.80	3.50	2.50	7.9	110.50	21.4	43.0	ETG 3-4-SH*
TGFHR/L 26T23-2	26.0	1.80	2.40	1.65	7.9	110.50	21.4	46.0	ETG 2*
TGFHR/L 26T23-3	26.0	2.80	3.50	2.50	7.9	110.50	21.4	46.0	ETG 3-4-SH*
TGFHR/L 32T22-2	32.0	1.80	2.40	1.65	7.9	110.50	24.8	42.0	ETG 2*
TGFHR/L 32T22-3	32.0	2.80	3.50	2.50	7.9	110.50	24.8	42.0	ETG 3-4-SH*
TGFHR/L 32T33-3	32.0	2.80	3.50	2.50	7.9	110.50	24.8	66.0	ETG 3-4-SH*
TGFHR/L 32T33-4	32.0	3.70	4.50	3.40	7.9	110.50	24.8	66.0	ETG 3-4-SH*

- For user guide, see pages 606-615

(1) Minimum cutting width

(2) Maximum cutting width

(3) Maximum workpiece diameter for grooving operation

* Optional, to be ordered separately

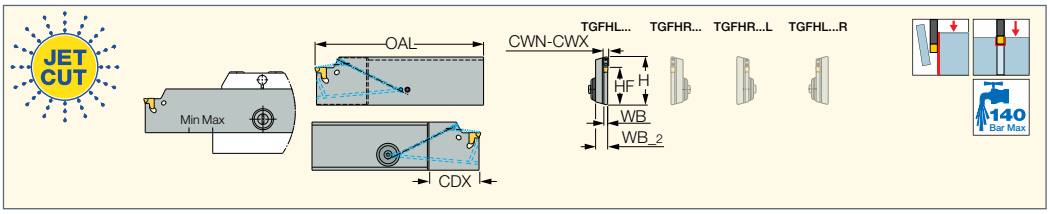
For inserts, see pages: TAG N-A (573) • TAG N-C (full radius) (569) • TAG N-C/W/M (568) • TAG N-HF (568) • TAG N-J/JS/JT (570) • TAG N-LF (572) • TAG N-MF (570) • TAG N-T (573) • TAG N-UT (572) • TAG R/L-C (569) • TAG R/L-J/JS (571)

For holders, see pages: C#-TBK-R/L (695) • HSK A-WH-TBK-R/L (706) • SGTBF (691) • SGTBK (691) • SGTBR/L (691) • SGTBU/SGTBN (690) • UBHCR/L (691)

TANG-GRIP PARTING LINE

TGFHR/L-JHP

Parting and Grooving Reinforced Blades with Channels for High-Pressure Coolant Carrying TANG-GRIP Inserts



Designation	CWN(1)	CWX(2)	WB_2	WB	OAL	H	HF	CDX(3)	Insert		
TGFHR/L 32C-3T33-JHP	2.80	3.50	7.9	2.50	110.50	32.0	24.8	33.00	TAG 3	ETG 3-4-SH*	SGC 340
TGFHL 32C-3T33R-JHP	2.80	3.50	7.9	2.50	110.50	32.0	24.8	33.00	TAG 3	ETG 3-4-SH*	SGC 340
TGFHR 32C-3T33L-JHP	2.80	3.50	7.9	2.50	110.50	32.0	24.8	33.00	TAG 3	ETG 3-4-SH*	SGC 340

- For user guide, see pages 606-615

(1) Minimum cutting width

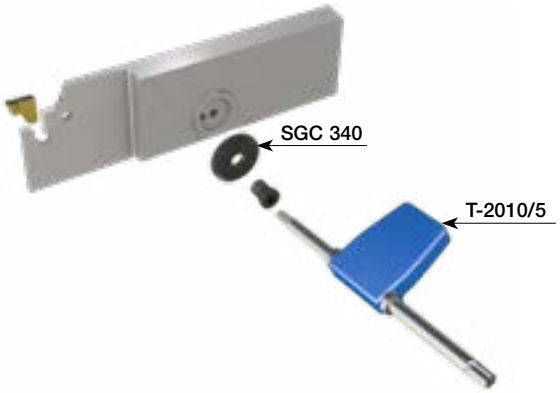
(2) Maximum cutting width

(3) Cutting depth maximum

* Optional, to be ordered separately

For inserts, see pages: TAG N-A (573) • TAG N-C (full radius) (569) • TAG N-C/W/M (568) • TAG N-HF (568) • TAG N-J/JS/JT (570) • TAG N-LF (572) • TAG N-MF (570) • TAG N-T (573) • TAG N-UT (572) • TAG R/L-C (569) • TAG R/L-J/JS (571)

For holders, see pages: TGTBU-JHP (559)

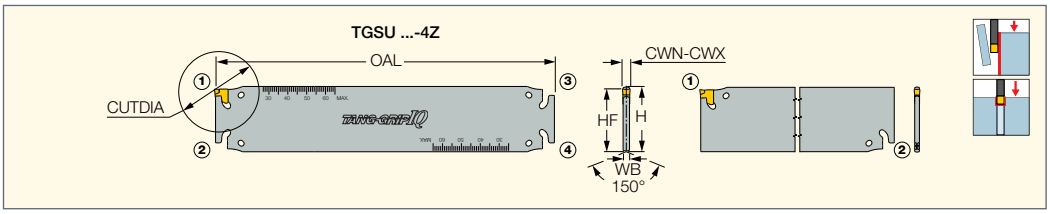




TANG-GRIP IQ 350 LINE

TGSU

Parting and Grooving Flat Top Blades with Tangential Pockets Carrying TANG-GRIP Single-Ended Inserts



Designation	H	CWN[2]	CWX[3]	CUTDIA[4]	NOP[5]	WB	OAL	HF	CSP[6]	Insert	
TGSU 35-1.4-IQ	35.0	1.40	1.40	35.0	2	2.50 [7]	180.00	33.2	0	TAG 1.4	ETG 1.4/1.6*
TGSU 35-2-IQ	35.0	1.80	2.40	59.5	2	2.50 [8]	160.00	33.2	0	TAG 2	ETG 2*
TGSU 35-3-IQ-4Z	35.0	2.80	3.50	120.0	4	2.50	180.00	33.2	0	TAG 3	ETG 3-4-SH*
TGSU 35-4-IQ-4Z	35.0	3.70	4.50	120.0	4	3.40	180.00	33.2	0	TAG 4	ETG 3-4-SH*
TGSU 35-5-IQ	35.0	4.70	5.50	144.0	2	4.00	180.00	33.2	0	TAG 5	ETG 5-7*
TGSU 35-6-IQ	35.0	5.70	6.50	144.0	2	5.20	180.00	33.2	0	TAG 6	ETG 5-7*
TGSU 35-7-IQ	35.0	6.80	7.50	144.0	2	6.00	180.00	33.2	0	TAG 7	ETG 5-7*
TGSU 35C-8-IQ [1]	35.0	7.70	8.50	144.0	2	7.20	180.00	33.2	1	TAG 8	ETG 8-12*
TGSU 35C-9-IQ [1]	35.0	8.70	10.00	144.0	2	8.20	180.00	33.2	1	TAG 9	ETG 8-12*
TGSU 56C-7-IQ [1]	56.0	6.80	7.50	220.0	2	6.00	260.00	53.6	1	TAG 7	ETG 5-7*
TGSU 56C-8-IQ [1]	56.0	7.70	8.50	220.0	2	7.20	260.00	53.6	1	TAG 8	ETG 8-12*
TGSU 56C-9-IQ [1]	56.0	8.70	10.00	220.0	2	8.20	260.00	53.6	1	TAG 9	ETG 8-12*

- For user guide, see pages 606-615

[1] C- Internal coolant, use with TGTBU HD blocks only; cooling tube SGCU 341 should be ordered separately
[2] Minimum cutting width
[3] Maximum cutting width
[4] Maximum workpiece diameter for grooving operation
[5] Number of pockets
[6] 0 - Without coolant supply, 1 - With coolant supply
[7] Thickness at the D.O.C. area is 1.05 mm
[8] Thickness at the D.O.C. area is 1.65 mm
* Optional, to be ordered separately

For inserts, see pages: TAG N-A (573) • TAG N-C (full radius) (569) • TAG N-C/W/M (568) • TAG N-HF (568) • TAG N-J/JS/JT (570) • TAG N-LF (572) • TAG N-MF (570) • TAG N-T (573) • TAG N-UT (572) • TAG R/L-C (569) • TAG R/L-J/JS (571) • TAGB/TAGBA (375)
For holders, see pages: TGTBU (558)

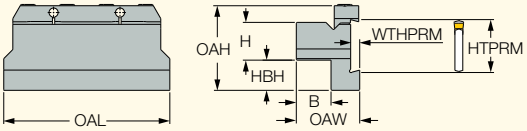
TGSU 35-3-IQ-4Z
TGSU 35-4-IQ-4Z



TANG-GRIP IQ 350 LINE

TGTBU

Tool Blocks for TGSU Parting and Grooving Blades



Choose blade by HTPRM dimension

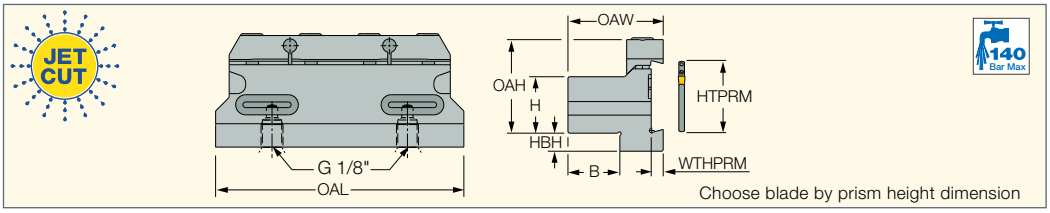
Designation	H	B	HTPRM	WTHPRM	OAW	OAH	HBH	OAL			
TGTBU 20-35	20.0	19.0	35.00	6.00	38.00	56.0	23.7	110.00	BKU 110	SR M6X16 DIN912	HW 5.0
TGTBU 25-35	25.0	23.0	35.00	6.00	42.00	56.0	18.7	110.00	BKU 110	SR M6X16 DIN912	HW 5.0
TGTBU 32-35	32.0	29.0	35.00	6.00	48.00	56.0	11.7	110.00	BKU 110	SR M6X16 DIN912	HW 5.0
TGTBU 32-35 HD [1]	32.0	30.0	35.00	8.00	55.00	64.0	18.0	130.00	BK 509	SR M8X20DIN912	HW 6.0
TGTBU 40-35	40.0	41.0	35.00	6.00	60.00	56.0	3.7	110.00	BKU 110	SR M6X16 DIN912	HW 5.0
TGTBU 40-35 HD [1]	40.0	41.0	35.00	8.00	66.00	64.0	10.0	130.00	BK 509	SR M8X20DIN912	HW 6.0
TGTBU 40-56 HD [1]	40.0	41.0	56.00	8.00	66.00	72.0	28.0	130.00	BK 509	SR M8X20DIN912	HW 6.0

[1] HD - recommended blocks for TGSU...-8, TGSU...-9 blades

For tools, see pages: TGSU (558)

JETCUT

TGTBU-JHP
Tool Blocks for Parting and Grooving Blades for High-Pressure Coolant

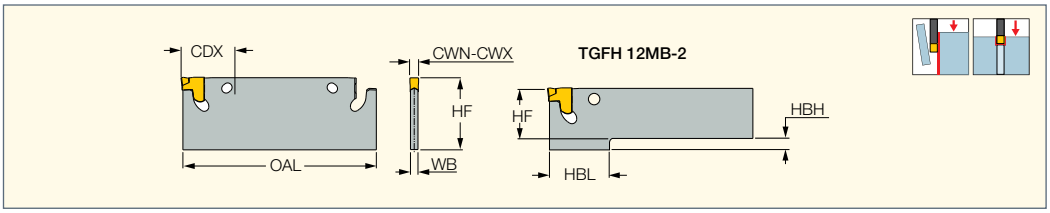


Designation	H	B	HTPRM	OAW	OAH	HBH	WTHPRM	OAL				
TGTBU 16-5G-JHP	16.0	16.9	26.00	35.60	29.9	13.1	4.10	86.00	BKU 86	SR M6X16 DIN912	HW 5.0	OR 14X2.5N N
TGTBU 20-5G-JHP	20.0	20.9	26.00	39.60	33.9	9.1	4.10	86.00	BKU 86	SR M6X16 DIN912	HW 5.0	OR 14X2.5N N
TGTBU 20-6G-JHP	20.0	19.0	32.00	39.20	36.4	15.0	5.30	100.00	BKU 100	SR M6X16 DIN912	HW 5.0	OR 14X2.5N N
TGTBU 25-5G-JHP	25.0	26.1	26.00	44.10	39.0	5.5	4.10	110.00	BKU 105	SR M6X16 DIN912	HW 5.0	OR 14X2.5N N
TGTBU 25-6G-JHP	25.0	23.0	32.00	43.20	41.4	8.0	5.30	110.00	BKU 110	SR M6X16 DIN912	HW 5.0	OR 14X2.5N N
TGTBU 32-6G-JHP	32.0	29.0	32.00	49.20	48.4	5.0	5.30	110.00	BKU 110	SR M6X16 DIN912	HW 5.0	OR 14X2.5N N

For tools, see pages: DGFH-JHP (294) • DGFHR/L-BC-JHP (527) • TGFH-JHP (555) • TGFHR/L-JHP (557)

TANG-GRIP PARTING LINE

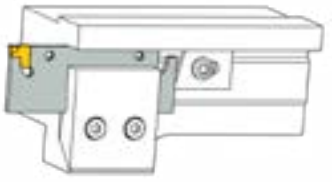
TGFH-MB
Parting and Grooving Blades for Other Manufacturers Blocks



Designation	CWN(1)	CWX(2)	WB	OAL	HF	HBH	HBL	CDX(3)	Insert	
TGFH 12MB-2 L58	1.80	2.40	1.65	58.00	12.2	2.8	15.5	11.50	TAG 2	ETG 2*
TGFH 17MB-2 L58	1.80	2.40	1.65	58.00	17.2	-	-	11.50	TAG 2	ETG 2*
TGFH 22MB-2 L58	1.80	2.40	1.65	58.00	22.2	-	-	11.50	TAG 2	ETG 2*
TGFH 17MB-3	2.80	3.50	2.50	64.00	17.2	-	-	12.00	TAG 3	ETG 3-4-SH*
TGFH 22MB-3	2.80	3.50	2.50	64.00	22.2	-	-	12.00	TAG 3	ETG 3-4-SH*
TGFH 22MB-3-L84	2.80	3.50	2.50	84.00	22.2	-	-	16.00	TAG 3	ETG 3-4-SH*
TGFH 28MB-3	2.80	3.50	2.50	100.00	28.0	-	-	19.00	TAG 3	ETG 3-4-SH*
TGFH 17MB-4	3.70	4.50	3.40	70.00	17.2	-	-	14.00	TAG 4	ETG 3-4-SH*
TGFH 22MB-4	3.70	4.50	3.40	70.00	22.2	-	-	14.00	TAG 4	ETG 3-4-SH*
TGFH 22MB-4-L90	3.70	4.50	3.40	90.00	22.2	-	-	17.00	TAG 4	ETG 3-4-SH*
TGFH 28MB-4	3.70	4.50	3.40	100.00	28.0	-	-	19.00	TAG 4	ETG 3-4-SH*

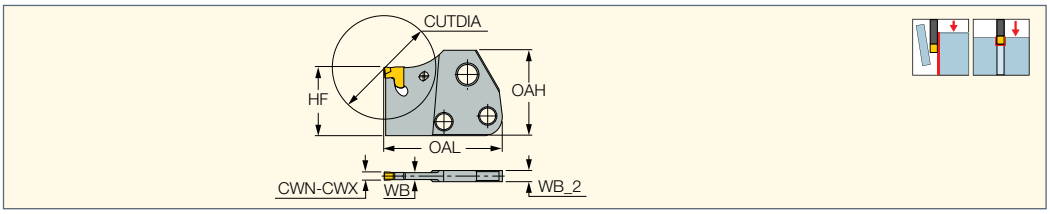
• For user guide, see pages 606-615
(1) Minimum cutting width
(2) Maximum cutting width
(3) Cutting depth maximum
* Optional, to be ordered separately

For inserts, see pages: TAG N-A (573) • TAG N-C (full radius) (569) • TAG N-C/W/M (568) • TAG N-HF (568) • TAG N-J/JS/JT (570) • TAG N-LF (572) • TAG N-MF (570) • TAG N-T (573) • TAG N-UT (572) • TAG R/L-C (569) • TAG R/L-J/JS (571)



TANG-GRIP PARTING LINE

TGAD
Parting and Grooving Adapters Carrying TANG-GRIP Tangentially Clamped Inserts



Designation	CWN(1)	CWX(2)	WB_2	WB	OAL	CUTDIA(3)	HF	OAH	Insert	
TGAD 1.4N	1.40	1.40	3.20	1.1	41.50	32.0	24.0	29.00	TAG 1.4	ETG 1.4/1.6*
TGAD 2N	1.80	2.40	3.20	1.7	41.50	32.0	24.0	30.00	TAG 2	ETG 2*
TGAD 3N	2.80	3.50	4.00	2.4	41.50	35.0	24.0	30.00	TAG 3	ETG 3-4-SH*
TGAD 4N	3.70	4.50	3.20	3.2	50.50	50.0	24.0	30.00	TAG 4	ETG 3-4-SH*
TGAD 5N	4.70	5.50	4.00	4.0	50.50	50.0	24.0	30.00	TAG 5	ETG 5-7*

- For user guide, see pages 606-615

(1) Minimum cutting width

(2) Maximum cutting width

(3) Maximum workpiece diameter for grooving operation

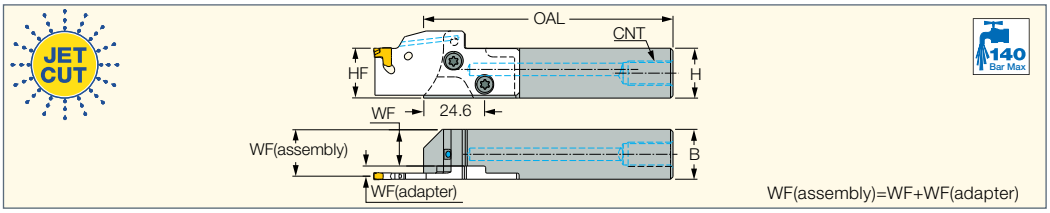
* Optional, to be ordered separately

For inserts, see pages: TAG N-A (573) • TAG N-C (full radius) (569) • TAG N-C/W/M (568) • TAG N-HF (568) • TAG N-J/JS/JT (570) • TAG N-LF (572) • TAG N-MF (570) • TAG N-T (573) • TAG N-UT (572) • TAG R/L-C (569) • TAG R/L-J/JS (571)

For holders, see pages: DGHAL-DECO (536) • MAHPR/L-JHP (308) • MAHR/L-JHP (306) • MAHR/L (306) • MAHPR/L (307) • C#-MAHD (697) • C#-MAHPD (698) • C#-MAHDR-45 (696) • HSK A63WH-MAHUR/L (706) • HSK A63WH-MAHDR-45 (705) • HSK A63WH-MAHDOR (705) • IM-MAHD (707) • C#-MAHD-JHP (697) • C#-MAHPD-JHP (698) • IM-MAHPD (707) • MAHR/L-JHP-MC (307)

MODUGRIP MODULAR GRIP CARTRIDGES

NMAHR/L-JHP
Holders with High-Pressure Coolant Channels Carrying MODU-GRIP Adapters



Designation	H	B	OAL	WF	CNT	HF
NMAHR/L 20-MG-JHP	20.0	20.0	100.00	14.70	G1/8	20.0
NMAHR/L 25-MG-JHP	25.0	25.0	100.00	19.70	G1/8	25.0

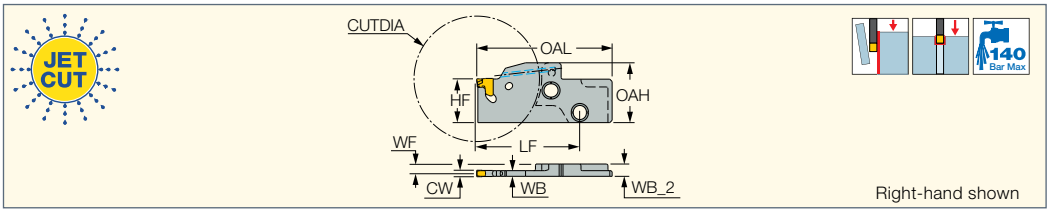
For tools, see pages: D/HGAD RE/LE-JHP (571) • PCAD RE/LE-JHP (571) • TGAD RE/LE-JHP (570)

Spare Parts

Designation				
NMAHR/L-JHP	SR M5-04451	SW6-T-SH	BLD T20/S7	OR 5X1N

MODUGRIP MODULAR GRIP CARTRIDGES

TGAD RE/LE-JHP
Parting and Grooving Adapters with Channels for High-Pressure Coolant Carrying TANG-GRIP Inserts



Designation	CWN(1)	CWX(2)	WF	WB	WB_2	LF	OAL	OAH	HF	CUTDIA	Insert
TGAD 2R/LE-D54-JHP	1.80	2.40	4.48	1.65	5.3	44.40	58.30	25.80	18.9	54.0	TAG 2
TGAD 3R/LE-D54-JHP	3.00	3.50	4.08	2.45	5.3	44.40	58.30	25.80	18.9	54.0	TAG 3

- For user guide, see pages 606-615

(1) Minimum cutting width

(2) Maximum cutting width

For inserts, see pages: TAG N-A (573) • TAG N-C (full radius) (569) • TAG N-C/W/M (568) • TAG N-HF (568) • TAG N-J/JS/JT (570) • TAG N-LF (572) • TAG N-MF (570) • TAG N-UT (572) • TAG R/L-C (569) • TAG R/L-J/JS (571)

For holders, see pages: NMAHR/L-JHP (560)

Spare Parts

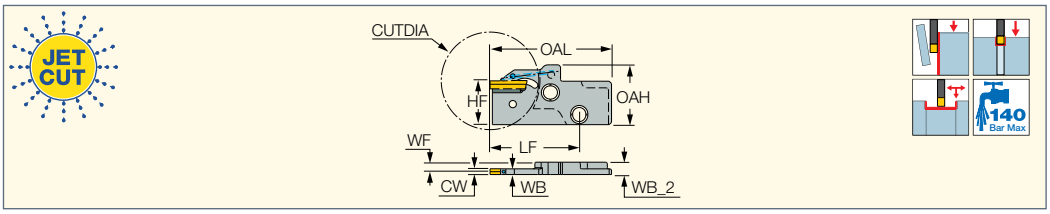
Designation	
TGAD 2R/LE-D54-JHP	ETG 2*
TGAD 3R/LE-D54-JHP	ETG 3-4-SH*

* Optional, to be ordered separately

MODUGRIP
MODULAR GRIP CARTRIDGES

D/HGAD RE/LE-JHP

Parting and Grooving Adapters with Channels for High-Pressure Coolant Carrying DO-GRIP Inserts



Designation	CWN[2]	CWX[3]	WF	WB	WB_2	LF	OAL	OAH	HF	CUTDIA	Insert	
DGAD 2R/LE-D38-JHP [1]	1.90	2.50	4.50	1.60	5.3	40.40	54.35	25.80	18.9	38.0	DGN 2	EDG 33A*
DGAD 3R/LE-D38-JHP [1]	3.00	3.18	4.08	2.45	5.3	40.40	54.35	25.80	18.9	38.0	DGN 3	EDG 33A*
HGAD 3R/LE-D42-JHP	3.00	3.00	4.08	2.45	5.3	38.40	52.35	25.80	18.9	42.0	HGN 3/GRIP 3	EDG 23B*

- For user guide, see pages 606-615

[1] For parting and external grooving only
[2] Minimum cutting width
[3] Maximum cutting width
* Optional, to be ordered separately

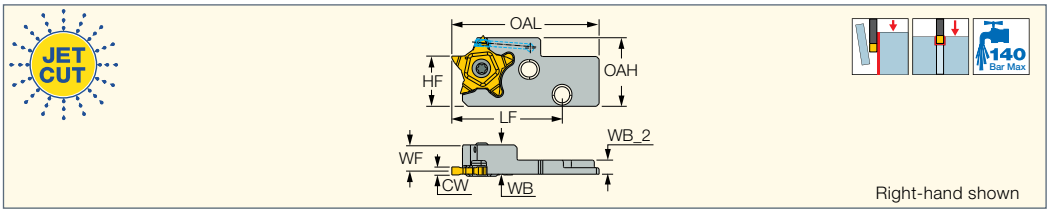
For inserts, see pages: DGN-LF/LFT (546) • DGN-MF (541) • DGN-P (548) • DGN-UT/UA (547) • DGN-WP (549) • DGN-Z (546) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGR-P (548) • DGR-WP (549) • DGR-Z/ZS (547) • DGR/L-C DGRC/LC-C (540) • DGR/L-J/JS (545) • GRIP (294) • GRIP (full radius) (295) • GRIP-T (295) • GRIPA (296) • GRIPA (full radius) (296) • HGN-C (549) • HGN-J (550) • HGN-UT (551) • HGR/L-C (550) • HGR/L-J/JS (550)

For holders, see pages: NMAHR/L-JHP (560)

MODUGRIP
MODULAR GRIP CARTRIDGES

PCAD RE/LE-JHP

Parting and Grooving Adapters with Channels for High-Pressure Coolant Carrying PENTA 24 Inserts



Designation	CWN[1]	CWX[2]	WF	WB	WB_2	LF	OAL	OAH	HF	Insert
PCAD 24R/LE-JHP	0.50	3.18	5.20	11.00	5.3	41.40	55.30	25.80	18.9	PENTA 24

- For user guide, see pages 606-615

[1] Minimum cutting width
[2] Maximum cutting width

For inserts, see pages: PENTA 24-BSPT (767) • PENTA 24-ISO (742) • PENTA 24-MT (725) • PENTA 24-NPT (763) • PENTA 24-UN (753) • PENTA 24-W (759) • PENTA 24-WT (717) • PENTA 24N-C (359) • PENTA 24N-C (full radius) (360) • PENTA 24N-C-SL (356) • PENTA 24N-J (358) • PENTA 24N-J (full radius) (359) • PENTA 24N-J-SL (356) • PENTA 24N-PF (full radius) (361) • PENTA 24N-PF/P (360) • PENTA 24N-Z (361) • PENTA 24R-C (601) • PENTA 24R-P (602) • PENTA 24R/L-DSL (357) • PENTA 24R/L-J (598) • PENTA 24R/L-Z (600)

For holders, see pages: NMAHR/L-JHP (560)

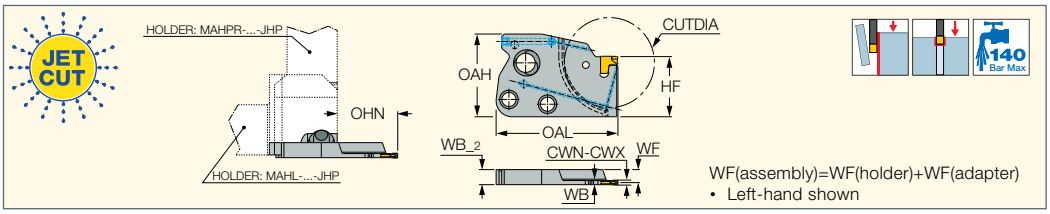
Spare Parts

Designation	
PCAD 24LE-JHP	SR 16-212-01397L
PCAD 24RE-JHP	SR 16-212-01397

MODULAR-GRIP

TAGPAD-JHP

Parting and Grooving Adapters with Coolant Channels for High-Pressure Carrying TANG-GRIP Inserts



Designation	CWN[1]	CWX[2]	CUTDIA[3]	OHN[4]	WF	WB	WB_2	OAL	OAH	HF	Insert	
TAGPAD 2R/L-D42-JHP	1.80	2.40	42.0	24.0	5.18	1.65	6.0	48.40	33.00	24.0	TAG 2	ETG 2*
TAGPAD 2R/L-D52-JHP	1.80	2.40	52.0	29.0	5.18	1.65	6.0	53.40	33.00	24.0	TAG 2	ETG 2*
TAGPAD 3R/L-D42-JHP	2.80	3.50	42.0	24.0	4.80	2.40	6.0	48.40	33.00	24.0	TAG 3	ETG 3-4-SH*
TAGPAD 3R/L-D52-JHP	2.80	3.50	52.0	29.0	4.80	2.40	6.0	53.40	33.00	24.0	TAG 3	ETG 3-4-SH*

- For user guide and accessories see pages 606-615

[1] Minimum cutting width
[2] Maximum cutting width
[3] Maximum workpiece diameter for grooving operation
[4] Minimum overhang
* Optional, to be ordered separately

For inserts, see pages: TAG N-A (573) • TAG N-C (full radius) (569) • TAG N-C/W/M (568) • TAG N-HF (568) • TAG N-J/JS/JT (570) • TAG N-LF (572) • TAG N-MF (570) • TAG N-T (573) • TAG N-UT (572) • TAG R/L-C (569) • TAG R/L-J/JS (571)
For holders, see pages: ABC MAHDR-#-XL-JHP (884) • DT##/2 MAHD#-#-XL-JHP (860) • MAHR/L-JHP-MC (307) • MS##-##-MG-JHP (859) • MS-ES#####-GWS-MG-JHP (861) • TR45 MAHDR-#-XL-JHP (883) • V## MAHD#-#-XL-##-JHP (880) • V## MAHD-XL-JHP (881)

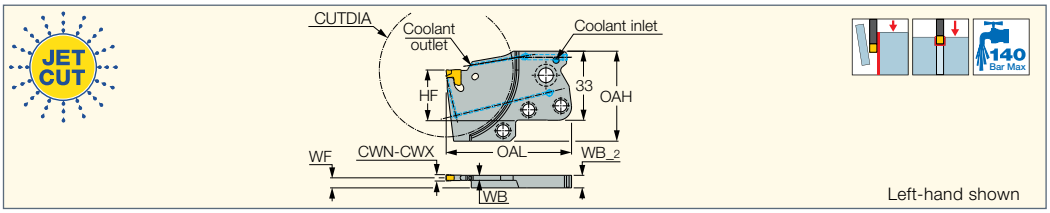
Flow Rate vs. Pressure

Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
TAGPAD 2R/L-D42-JHP	5	6	7
TAGPAD 2R/L-D52-JHP	5	6	7
TAGPAD 3R/L-D42-JHP	8.5	10	12
TAGPAD 3R/L-D52-JHP	8.5	10	12

MODULAR-GRIP

TAGPAD-XL-JHP

Extra Long Parting and Grooving Adapters with Channels for High-Pressure Coolant Carrying TANG-GRIP Inserts



Designation	CWN[1]	CWX[2]	WF	WB	WB_2	OAL	OAH	HF	CUTDIA[3]	Insert
TAGPAD-XL 2R/L-D65-JHP	1.80	2.40	5.20	1.60	6.0	60.00	43.00	24.0	65.0	TAG 2
TAGPAD-XL 3R/L-D52-JHP	2.80	3.50	4.80	2.40	6.0	53.40	43.00	24.0	52.0	TAG 3
TAGPAD-XL 3R/L-D65-JHP	2.80	3.50	4.80	2.40	6.0	59.90	43.00	24.0	65.0	TAG 3
TAGPAD-XL 3R/L-D82-JHP	2.80	3.50	4.80	2.40	6.0	70.40	43.00	24.0	82.0	TAG 3
TAGPAD-XL 3R/L-D102-JHP	2.80	3.50	4.80	2.40	6.0	82.50	43.00	24.0	102.0	TAG 3
TAGPAD-XL 4R/L-D52-JHP	3.70	4.50	4.30	3.40	6.0	53.40	43.00	24.0	52.0	TAG 4
TAGPAD-XL 4R/L-D65-JHP	3.70	4.50	4.30	3.40	6.0	60.00	43.00	24.0	65.0	TAG 4
TAGPAD-XL 4R/L-D82-JHP	3.70	4.50	4.30	3.40	6.0	70.00	43.00	24.0	82.0	TAG 4
TAGPAD-XL 4R/L-D102-JHP	3.70	4.50	4.30	3.40	6.0	83.00	43.00	24.0	102.0	TAG 4

- For user guide, see pages 606-615

[1] Minimum cutting width
[2] Maximum cutting width
[3] Maximum workpiece diameter for grooving operation

For inserts, see pages: TAG N-A (573) • TAG N-C (full radius) (569) • TAG N-C/W/M (568) • TAG N-HF (568) • TAG N-J/JS/JT (570) • TAG N-LF (572) • TAG N-MF (570) • TAG N-T (573) • TAG N-UT (572) • TAG R/L-C (569) • TAG R/L-J/JS (571)
For holders, see pages: ABC MAHDR-#-XL-JHP (884) • MAHPR/L-XL-JHP (642) • MAHR/L-MG-XL-JHP (563) • MAHR/L-MG-XL-JHP-MC (563) • TR TNK36 MAHDL-R-XL-JHP (884) • TR45 MAHDR-#-XL-JHP (883) • TR45TNL MAHDN-R-XL-JHP (883) • V## MAHD#-#-XL-##-JHP (880) • V## MAHD-XL-JHP (881)

Spare Parts

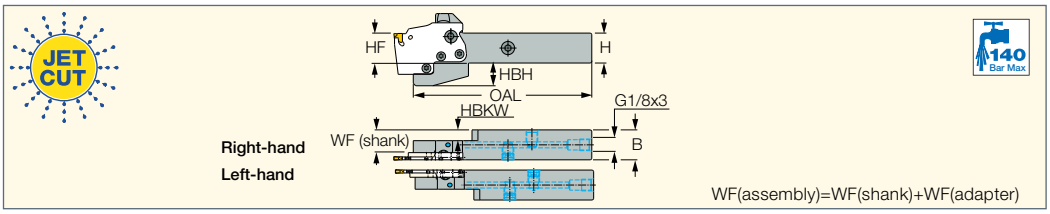
Designation	
TAGPAD-XL 2R/L-D65-JHP	ETG 2*
TAGPAD-XL 3R/L-D52-JHP	ETG 3-4-SH*
TAGPAD-XL 3R/L-D65-JHP	ETG 3-4-SH*
TAGPAD-XL 3R/L-D82-JHP	ETG 3-4-SH*
TAGPAD-XL 3R/L-D102-JHP	ETG 3-4-SH*
TAGPAD-XL 4R/L-D52-JHP	ETG 3-4-SH*
TAGPAD-XL 4R/L-D65-JHP	ETG 3-4-SH*
TAGPAD-XL 4R/L-D82-JHP	ETG 3-4-SH*
TAGPAD-XL 4R/L-D102-JHP	ETG 3-4-SH*

* Optional, to be ordered separately

MODULAR GRIP

MAHR/L-MG-XL-JHP

Holders with High-Pressure Coolant Channels for Interchangeable Adapters



Designation	H	B	OAL	HBH	WF	HBKW
MAHR/L 20-MG-XL-JHP	20.0	20.0	149.10	24.0	14.0	4.00
MAHR/L 25-MG-XL-JHP	25.0	25.0	149.10	19.0	19.0	9.00

- For user guide, see pages 606-615

For tools, see pages: DGPAD-XL-JHP (538) • TAGPAD-XL-JHP (562) • TAGPAD-Y-JHP (584) • TNFPAD-XL-JHP (668)

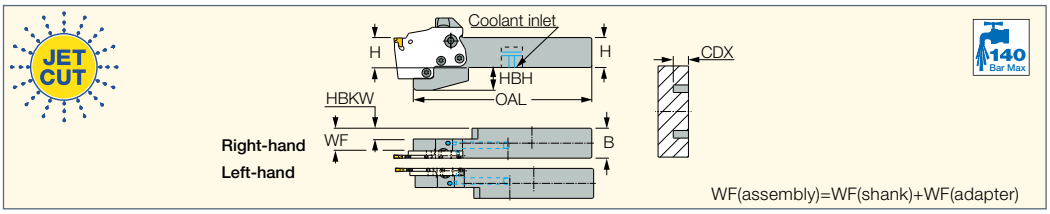
Spare Parts

Designation							
MAHR/L 20-MG-XL-JHP	SR M6X12DIN6912-P	HW 5.0	SR M5-04451	T-20/5	SR M6X14-XT DIN 912	OR 5X1N	PLG G1/8 TL360
MAHR/L 25-MG-XL-JHP	SR M6X12DIN6912-P	HW 5.0	SR M5-04451	T-20/5	SR M6X14-XT DIN 912	OR 5X1N	PLG G1/8 TL360

MODULAR GRIP

MAHR/L-MG-XL-JHP-MC

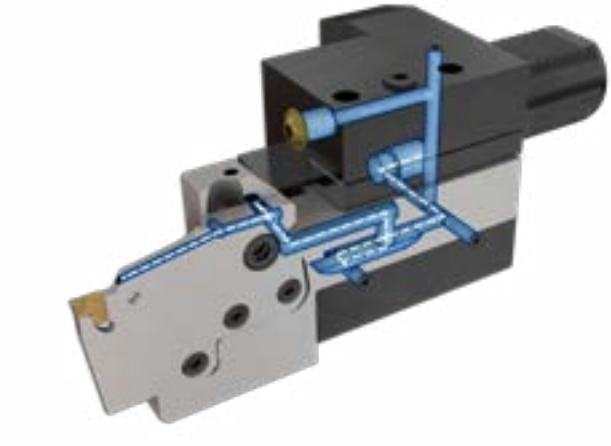
Holders with Bottom Inlets for High-Pressure Coolant Channels Carrying Parting and Grooving Adapters



Designation	H	B	OAL	HBH	WF	HBKW
MAHR/L 20-MG-XL-JHP-MC	20.0	20.0	116.10	10.0	14.0	4.00
MAHR/L 25-MG-XL-JHP-MC	25.0	25.0	114.00	10.0	19.0	9.00

- For CDX, refer to the adapters data

For tools, see pages: DGPAD-XL-JHP (538) • TAGPAD-XL-JHP (562) • TAGPAD-Y-JHP (584) • TNFPAD-XL-JHP (668)



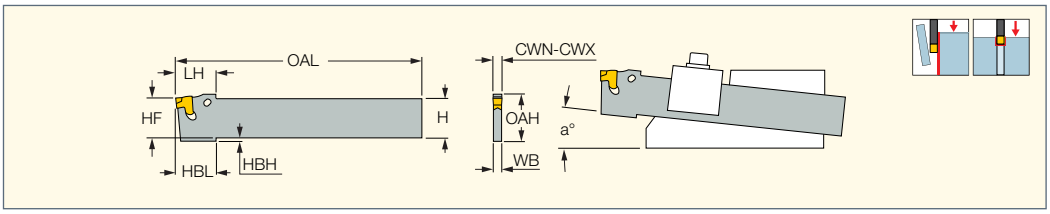
Spare Parts

Designation						
MAHR/L 20-MG-XL-JHP-MC	SR M6X14-XT DIN 912	HW 5.0	SR M5-04451	T-20/5	SR M6X12DIN6912-P	OR 5X1N
MAHR/L 25-MG-XL-JHP-MC	SR M6X14-XT DIN 912	HW 5.0	SR M5-04451	T-20/5	SR M6X12DIN6912-P	OR 5X1N

TANG-GRIP PARTING LINE

TGFS

Blades for Multi-Spindle Machines - Replacement for HSS and Brazed Tools



Designation	CWN(1)	CWX(2)	H	WB	OAL	OAH	HF	LH	HBL	HBH	CUTDIA(3)	a°	Insert	
TGFS 0-17-2	1.80	2.40	17.2	1.65	110.00	17.2	17.2	-	18.00	1.8	35.0	0	TAG 2	ETG 2*
TGFS 0-17-3	2.80	3.50	17.2	2.50	110.00	19.0	17.2	-	18.00	1.8	60.0	0	TAG 3	ETG 3-4-SH*
TGFS 5-17-2	1.80	2.40	17.4	1.65	110.00	18.9	17.5	18.0	18.00	1.5	35.0	5	TAG 2	ETG 2*
TGFS 5-17-3	2.80	3.50	17.4	2.50	110.00	20.7	17.5	18.0	18.00	1.5	60.0	5	TAG 3	ETG 3-4-SH*
TGFS 5-17-4	3.70	4.50	17.4	3.40	110.00	20.7	17.5	18.0	18.00	1.5	60.0	5	TAG 4	ETG 3-4-SH*
TGFS 5-22-2	1.80	2.40	22.2	1.65	150.00	23.8	22.4	18.0	-	-	50.0	5	TAG 2	ETG 2*
TGFS 5-22-3	2.80	3.50	22.2	2.50	150.00	24.1	22.4	18.0	-	-	75.0	5	TAG 3	ETG 3-4-SH*
TGFS 5-22-4	3.70	4.50	22.2	3.40	150.00	24.1	22.4	18.0	-	-	80.0	5	TAG 4	ETG 3-4-SH*
TGFS 5-28-4	3.70	4.50	28.6	3.40	150.00	30.4	28.7	18.0	-	-	100.0	5	TAG 4	ETG 3-4-SH*

- For user guide, see pages 606-615

(1) Minimum cutting width

(2) Maximum cutting width

(3) Maximum workpiece diameter for grooving operation

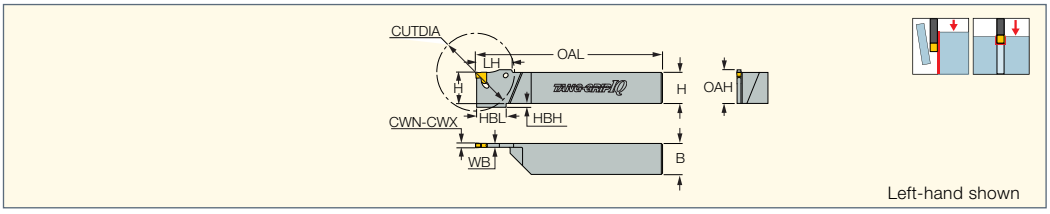
* Optional, to be ordered separately

For inserts, see pages: TAG N-A (573) • TAG N-C (full radius) (569) • TAG N-C/W/M (568) • TAG N-HF (568) • TAG N-J/JS/JT (570) • TAG N-LF (572) • TAG N-MF (570) • TAG N-T (573) • TAG N-UT (572) • TAG R/L-C (569) • TAG R/L-J/JS (571)

TANG-GRIP IQ 350 LINE

TGTR/L-IQ

Integral Shank TANG-GRIP Toolholders for Parting and Grooving



Designation	CWN(2)	CWX(3)	H	B	WB	OAL	OAH	LH	HBL	HBH	CUTDIA(4)	Insert	
TGTR/L 1010-1.4-IQ	1.40	1.45	10.0	10.0	1.05	140.00	15.0	-	15.50	5.0	20.0	TAG 1.4	ETG 1.4/1.6*
TGTR/L 1212-1.4-IQ	1.40	1.45	12.0	12.0	1.05	140.00	12.0	-	16.00	3.0	30.0	TAG 1.4	ETG 1.4/1.6*
TGTR/L 1616-1.4-IQ	1.40	1.45	16.0	16.0	1.05	140.00	16.0	-	16.00	-	30.0	TAG 1.4	ETG 1.4/1.6*
TGTR/L 2020-1.4-IQ	1.40	1.45	20.0	20.0	1.05	140.00	20.0	-	16.00	-	30.0	TAG 1.4	ETG 1.4/1.6*
TGTR/L 1010-1.6-IQ	1.60	1.64	10.0	10.0	1.30	120.00	-	-	16.00	5.0	28.0	TAG 1.6	ETG 1.4/1.6*
TGTR/L 1212-1.6-IQ	1.60	1.64	12.0	12.0	1.30	120.00	-	-	16.00	3.0	32.0	TAG 1.6	ETG 1.4/1.6*
TGTR/L 1616-1.6-IQ	1.60	1.64	16.0	16.0	1.30	120.00	-	-	16.00	-	35.0	TAG 1.6	ETG 1.4/1.6*
TGTR/L 1010-2-IQ	1.80	2.40	10.0	10.0	1.65	150.00	15.0	-	15.50	5.0	28.0	TAG 2	ETG 2*
TGTR/L 1212-2-IQ	1.80	2.40	12.0	12.0	1.65	150.00	15.0	-	17.00	3.0	32.0	TAG 2	ETG 2*
TGTR/L 1612-2-L120-IQ	1.80	2.50	16.0	12.0	1.65	120.00	16.0	-	16.00	-	35.0	TAG 2	ETG 2*
TGTR/L 1616-2-IQ	1.80	2.40	16.0	16.0	1.65	150.00	16.0	-	16.00	-	35.0	TAG 2	ETG 2*
TGTR/L 2012-2-IQ	1.80	2.40	20.0	12.0	1.65	125.00	20.0	-	16.00	-	35.0	TAG 2	ETG 2*
TGTR/L 1212-3-IQ	2.80	3.50	12.0	12.0	2.50	150.00	19.0	-	19.00	7.0	32.0	TAG 3	ETG 3-4-SH*
TGTR/L 1612-3-L120-IQ	2.80	3.50	16.0	12.0	2.50	120.00	19.0	-	19.00	3.0	35.0	TAG 3	ETG 3-4-SH*
TGTR/L 1616-3-IQ	2.80	3.50	16.0	16.0	2.50	150.00	19.0	-	19.00	3.0	35.0	TAG 3	ETG 3-4-SH*
TGTR/L 2012-3-IQ	2.80	3.50	20.0	12.0	2.50	125.00	20.0	-	19.00	-	43.0	TAG 3	ETG 3-4-SH*
TGTR/L 2020-3-IQ	2.80	3.50	20.0	20.0	2.50	120.50	21.7	23.4	19.00	-	54.0	TAG 3	ETG 3-4*
TGTR/L 2525-3-IQ	2.80	3.50	25.0	25.0	2.50	150.50	26.7	23.4	19.00	-	56.0	TAG 3	ETG 3-4*
TGTR 2525K-3 (1)	2.80	3.50	25.0	25.0	2.50	150.00	26.7	23.4	19.00	-	56.0	TAG 3	ETG 3-4*
TGTR/L 2020-4-IQ	3.70	4.50	20.0	20.0	3.40	120.50	21.7	23.4	19.00	-	57.0	TAG 4	ETG 3-4*
TGTR/L 2525-4-IQ	3.70	4.50	25.0	25.0	3.40	150.50	26.7	23.4	19.00	-	65.0	TAG 4	ETG 3-4*
TGTR/L 2020-5-IQ	4.70	5.50	20.0	20.0	4.00	120.00	21.7	-	19.00	-	57.0	TAG 5	ETG 5-7*
TGTR/L 2525-5-IQ	4.70	5.50	25.0	25.0	4.00	150.00	25.0	-	19.00	-	76.0	TAG 5	ETG 5-7*
TGTR/L 2525-6-IQ	5.70	6.50	25.0	25.0	5.20	150.00	25.0	-	19.00	-	76.0	TAG 6	ETG 5-7*

- For user guide, see pages 606-615

(1) With coolant

(2) Minimum cutting width

(3) Maximum cutting width

(4) Maximum workpiece diameter for grooving operation

* Optional, to be ordered separately

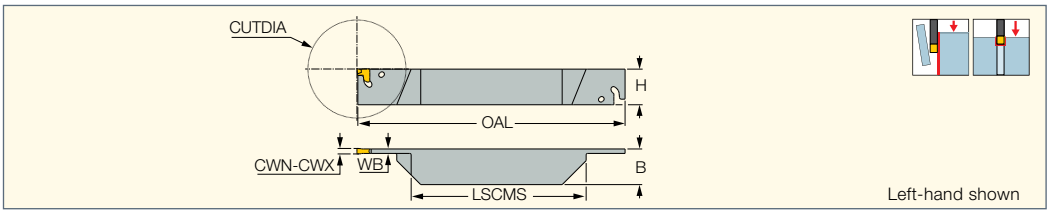
For inserts, see pages: TAG N-A (573) • TAG N-C (full radius) (569) • TAG N-C/W/M (568) • TAG N-HF (568) • TAG N-J/JS/JT (570) • TAG N-LF (572) • TAG N-MF (570) • TAG N-T (573) • TAG N-UT (572) • TAG R/L-C (569) • TAG R/L-J/JS (571) • TAGB/TAGBA (375)

For holders, see pages: SBTH-JHP (421)

TANG-GRIP IQ 350 LINE

TGTR/L-IQ-2Z

Integral Shank TANG-GRIP Toolholders with 2 Pockets for Parting and Grooving



Designation	CWN(1)	CWX(2)	CUTDIA(3)	H	B	WB	OAL	LSCMS	Insert	
TGTR/L 2020-3-IQ-2Z	2.80	3.50	54.0	20.0	20.0	2.50	150.00	98.90	TAG 3	ETG 3-4-SH*
TGTR/L 2525-3-IQ-2Z	2.80	3.50	56.0	25.0	25.0	2.50	150.00	98.00	TAG 3	ETG 3-4-SH*
TGTR/L 2020-4-IQ-2Z	3.70	4.50	57.0	20.0	20.0	3.40	150.00	95.00	TAG 4	ETG 3-4-SH*
TGTR/L 2525-4-IQ-2Z	3.70	4.50	65.0	25.0	25.0	3.40	150.00	88.00	TAG 4	ETG 3-4-SH*

- For user guide, see pages 606-615

(1) Minimum cutting width

(2) Maximum cutting width

(3) Maximum workpiece diameter for grooving operation

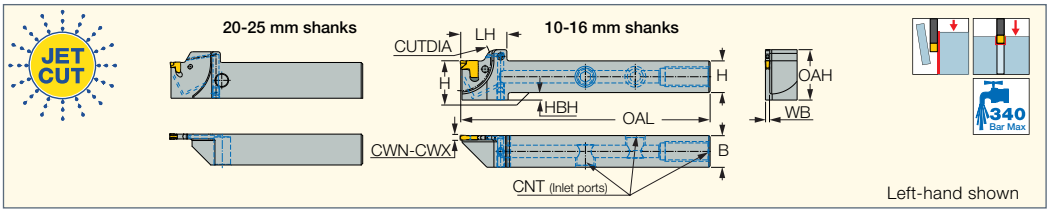
* Optional, to be ordered separately

For inserts, see pages: TAG N-A (573) • TAG N-C (full radius) (569) • TAG N-C/W/M (568) • TAG N-HF (568) • TAG N-J/JS/JT (570) • TAG N-LF (572) • TAG N-MF (570) • TAG N-T (573) • TAG N-UT (572) • TAG R/L-C (569) • TAG R/L-J/JS (571)

TANG-GRIP PARTING LINE

TGTR/L-JHP

Parting and Grooving Tools with Channels for High-Pressure Coolant Carrying TANG-GRIP Inserts



Designation	CWN(1)	CWX(2)	H	B	WB	OAL	OAH	LH	HBH	CNT	CUTDIA(3)	Insert
TGTR/L 1010-2JHP	1.80	2.50	10.0	10.0	1.72	100.00	19.5	18.5	5.0	UNF 5/16-24	24.0	TAG 2
TGTR/L 1212-2JHP	1.80	2.50	12.0	12.0	1.72	100.00	19.5	18.5	3.0	UNF 5/16-24	24.0	TAG 2
TGTR/L 1616-2JHP	1.80	2.50	16.0	16.0	1.72	120.00	21.5	25.5	-	UNF 5/16-24	35.0	TAG 2
TGTR/L 2012-2JHP	1.80	2.50	20.0	12.0	1.72	120.00	25.6	25.5	-	UNF 5/16-24	35.0	TAG 2
TGTR/L 1616-3JHP	2.80	3.50	16.0	16.0	2.50	120.00	24.5	25.5	3.0	UNF 5/16-24	35.0	TAG 3
TGTR/L 2020-3JHP	2.80	3.50	20.0	20.0	2.50	120.00	27.0	35.0	-	G 1/8-28	54.0	TAG 3
TGTR/L 2525-3JHP	2.80	3.50	25.0	25.0	2.50	150.00	32.5	35.0	-	G 1/8-28	56.0	TAG 3
TGTR/L 2020-4JHP	3.70	4.50	20.0	20.0	3.40	120.00	27.0	35.0	-	G 1/8-28	54.0	TAG 4
TGTR/L 2525-4JHP	3.70	4.50	25.0	25.0	3.40	150.00	32.5	35.0	-	G 1/8-28	56.0	TAG 4

- For user guide, see pages 606-615

(1) Minimum cutting width

(2) Maximum cutting width

(3) Maximum workpiece diameter for grooving operation

For inserts, see pages: TAG N-A (583) • TAG N-C (full radius) (579) • TAG N-C/W/M (578) • TAG N-HF (578) • TAG N-J/JS/JT (580) • TAG N-LF (582) • TAG N-MF (580) • TAG N-T (583) • TAG N-UT (582) • TAG R/L-C (579) • TAG R/L-J/JS (581)

For holders, see pages: SBTH-JHP (429)

Flow Rate vs. Pressure

Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
TGTR/L...-2JHP	2-4	4-6	6-8
TGTR/L...-3JHP	7-9	9-11	11-13
TGTR/L...-4JHP	7-9	9-11	11-13

Spare Parts

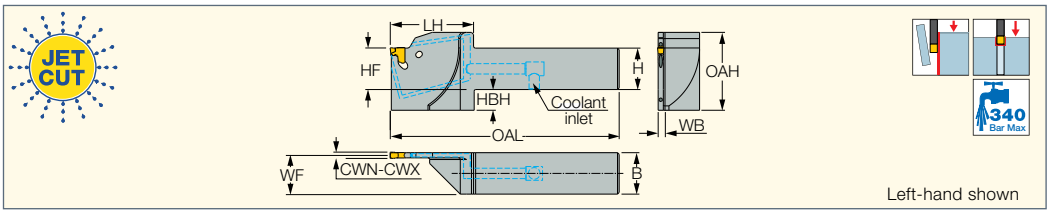
Designation					
TGTR/L 1010-2JHP	ETG 2-SH-T*		SR 5/16UNF TL360		HW 5/32"
TGTR/L 1212-2JHP	ETG 2-SH-T*		SR 5/16UNF TL360		HW 5/32"
TGTR/L 1616-2JHP	ETG 2*		SR 5/16UNF TL360		HW 5/32"
TGTR/L 2012-2JHP	ETG 2*		SR 5/16UNF TL360		HW 5/32"
TGTR/L 1616-3JHP	ETG 3-4-SH*		SR 5/16UNF TL360		HW 5/32"
TGTR/L 2020-3JHP	ETG 3-4-SH*	PLG G1/8 TL360		HW 5.0	
TGTR/L 2525-3JHP	ETG 3-4-SH*	PLG G1/8 TL360	SR 5/16UNF TL360	HW 5.0	HW 5/32"
TGTR/L 2020-4JHP	ETG 3-4-SH*	PLG G1/8 TL360		HW 5.0	
TGTR/L 2525-4JHP	ETG 3-4-SH*	PLG G1/8 TL360	SR 5/16UNF TL360	HW 5.0	HW 5/32"

* Optional, to be ordered separately

TANG-GRIP PARTING LINE

TGTR/L-JHP-MC

Parting and Grooving Toolholders with Bottom Inlets for High-Pressure Coolant Carrying TANG-GRIP Inserts



Designation	CWN(1)	CWX(2)	H	B	HF	WB	OAL	OAH	LH	HBH	CUTDIA(3)	Insert
TGTR/L 2020-D42-2-JHP-MC	1.80	2.50	20.0	20.0	20.0	1.72	99.00	25.70	29.0	-	42.0	TAG 2
TGTR/L 2020-D65-3-JHP-MC	2.80	3.50	20.0	20.0	20.1	2.50	110.50	37.60	40.5	10.0	65.0	TAG 3
TGTR/L 2020-D82-3-JHP-MC	2.80	3.50	20.0	20.0	20.1	2.50	119.00	38.80	49.0	10.0	82.0	TAG 3
TGTR/L 2525-D65-3-JHP-MC	2.80	3.50	25.0	25.0	25.1	2.50	126.00	37.60	41.0	5.0	65.0	TAG 3
TGTR/L 2525-D82-3-JHP-MC	2.80	3.50	25.0	25.0	25.1	2.50	134.50	38.80	49.5	5.0	82.0	TAG 3

- For user guide, see pages 606-615

(1) Minimum cutting width
(2) Maximum cutting width
(3) Maximum cutting diameter

For inserts, see pages: TAG N-A (573) • TAG N-C (full radius) (569) • TAG N-C/W/M (568) • TAG N-HF (568) • TAG N-J/JS/JT (570) • TAG N-LF (572) • TAG N-MF (570) • TAG N-T (573) • TAG N-UT (572) • TAG R/L-C (569) • TAG R/L-J/JS (571)
For holders, see pages: VDI-B1/B4AK-JHPMC (841) • VDI-B2/B3A-JHPMC (841) • VDI-B2/B3AK-JHPMC (841) • VDI-C1/C4A-JHPMC (841) • VDI-C1/C4AK-JHPMC (842) • VDI-C2/C3A-JHPMC (842) • VDI-C2/C3AK-JHPMC (842)

Spare Parts

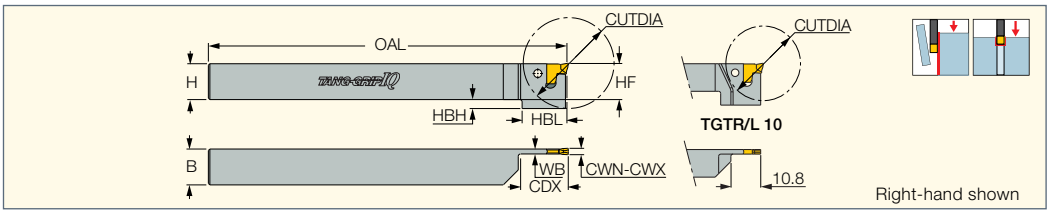
Designation	
TGTR/L 2020-D42-2-JHP-MC	ETG 2*
TGTR/L 2020-D65-3-JHP-MC	ETG 3-4-SH*
TGTR/L 2020-D82-3-JHP-MC	ETG 3-4-SH*
TGTR/L 2525-D65-3-JHP-MC	ETG 3-4-SH*
TGTR/L 2525-D82-3-JHP-MC	ETG 3-4-SH*

* Optional, to be ordered separately

TANG-GRIP IQ 350 LINE

TGTR/L-2T..SH-L120

Integral Shank Short-Head TANG-GRIP Toolholders for Parting and Grooving



Designation	CWN(1)	CWX(2)	H	HF	B	WB	OAL	HBL	HBH	CDX(3)	CUTDIA(4)
TGTR/L 1010-2T10SH-L120-IQ	1.80	2.50	10.0	10.1	10.0	1.65	120.00	15.0	5.0	10.00	26.0
TGTR/L 1212-2T15SH-L120-IQ	1.80	2.50	12.0	12.1	12.0	1.65	120.00	15.0	3.0	15.00	30.0
TGTR/L 1616-2T18SH-L120-IQ	1.80	2.50	16.0	16.1	16.0	1.65	120.00	-	-	18.00	36.0

- For user guide, see pages 606-615

(1) Minimum cutting width
(2) Maximum cutting width
(3) Cutting depth maximum
(4) For parting

For inserts, see pages: TAG N-A (573) • TAG N-C (full radius) (569) • TAG N-C/W/M (568) • TAG N-J/JS/JT (570) • TAG N-LF (572) • TAG N-MF (570) • TAG N-T (573) • TAG N-UT (572) • TAG R/L-C (569) • TAG R/L-J/JS (571)
For holders, see pages: SBTH-JHP (421)

Spare Parts

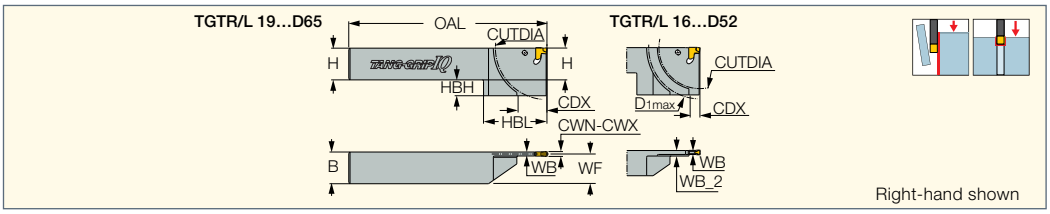
Designation	
TGTR/L-2T..SH-L120	ETG 2-SH-T*

* Optional, to be ordered separately

TANG-GRIP IQ 350 LINE

TGTR/L-D

Integral Shank TANG-GRIP Toolholders with Reinforced Blades for Parting and Grooving Mainly Sub-Spindle Machines



Designation	CW	CWN(1)	CWX(2)	H	B	WB	WB_2	OAL	HBL	WF	HBH	CUTDIA(3)	D1 max	CDX	Insert	
TGTR/L 1616-2-D52-IQ	2.00	1.80	2.40	16.0	16.0	1.65	3.50	125.00	40.0	15.20	14.0	52.0	65.0	6.00	TAG 2	ETG 2*
TGTR/L 2020-2-D65-IQ	2.00	1.80	2.40	20.0	20.0	1.65	-	125.00	40.0	19.20	10.0	65.0	-	18.00	TAG 2	ETG 2*
TGTR/L 1616-3-D52-IQ	3.00	2.80	3.50	16.0	16.0	2.50	3.50	125.00	40.0	14.80	14.0	52.0	65.0	6.00	TAG 3	ETG 3-4-SH*
TGTR/L 2020-3-D65-IQ	3.00	2.80	3.50	20.0	20.0	2.50	-	125.00	40.0	18.80	10.0	65.0	-	18.00	TAG 3	ETG 3-4-SH*

- For user guide, see pages 606-615

(1) Minimum cutting width

(2) Maximum cutting width

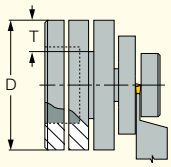
(3) Maximum workpiece diameter for grooving operation

* Optional, to be ordered separately

For inserts, see pages: TAG N-A (573) • TAG N-C (full radius) (569) • TAG N-C/W/M (568) • TAG N-HF (568) • TAG N-J/JS/JT (570) • TAG N-LF (572) • TAG N-MF (570) • TAG N-T (573) • TAG N-UT (572) • TAG R/L-C (569) • TAG R/L-J/JS (571)

Depth Capacity DGTR/L-D

Table Determining Depth of Cut as Function of Workpiece Diameter

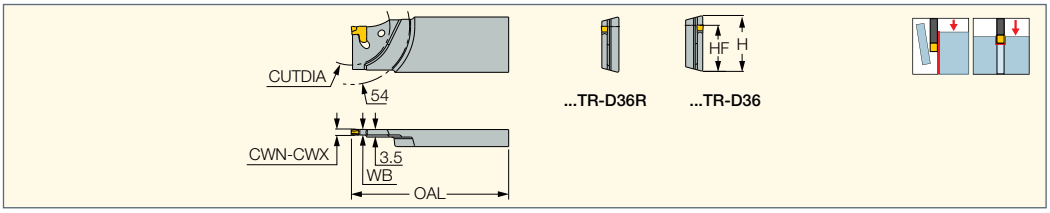


Designation	Tmax									
TGTR/L 1616-2-D52-IQ	20	25	19	16	15	13	11	10	9	8
TGTR/L 2020-2-D65-IQ	20	25	30	31	29	26	24	23	22	20
TGTR/L 1616-3-D52-IQ	20	25	20	17	15	13	11	10	9	8
TGTR/L 2020-3-D65-IQ	20	25	30	31	29	26	24	23	22	20
D →	40	50	60	70	80	100	120	150	200	300

TANG-GRIP PARTING LINE

TGFHL-TR

Reinforced Blades for TRAUB and Index Machines Carrying TANG-GRIP Tangentially Clamped Inserts



Designation	H	CWN(1)	CWX(2)	WB	OAL	HF	CUTDIA(3)	Insert	
TGFHL 26-2TR-D36	26.0	1.80	2.40	1.65	110.00	21.4	36.0	TAG 2	ETG 2*
TGFHL 26-2TR-D36R	26.0	1.80	2.40	1.65	110.00	21.4	36.0	TAG 2	ETG 2*
TGFHL 26-3TR-D36	26.0	2.80	3.50	2.50	110.00	21.4	36.0	TAG 3	ETG 3-4-SH*
TGFHL 26-3TR-D36R	26.0	2.80	3.50	2.50	110.00	21.4	36.0	TAG 3	ETG 3-4-SH*

- For user guide, see pages 606-615

(1) Minimum cutting width

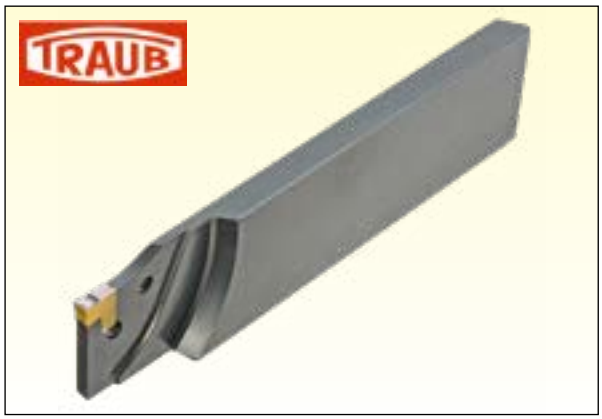
(2) Maximum cutting width

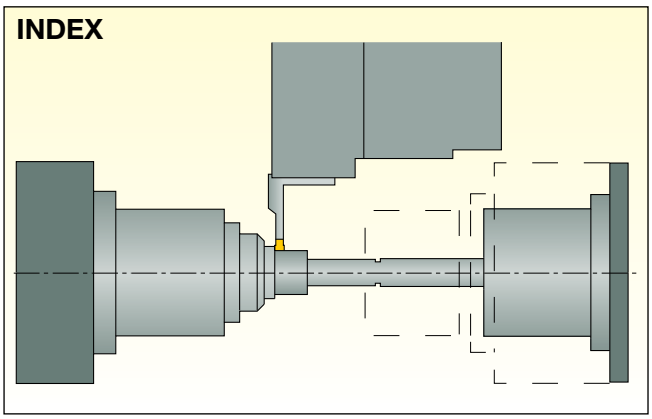
(3) Maximum workpiece diameter for grooving operation

* Optional, to be ordered separately

For inserts, see pages: TAG N-A (573) • TAG N-C (full radius) (569) • TAG N-C/W/M (568) • TAG N-HF (568) • TAG N-J/JS/JT (570) • TAG N-LF (572) • TAG N-MF (570) • TAG N-T (573) • TAG N-UT (572) • TAG R/L-C (569) • TAG R/L-J/JS (571)

For holders, see pages: SGTBR/L (691) • SGTBU/SGTBN (690) • UBHCR/L (691)



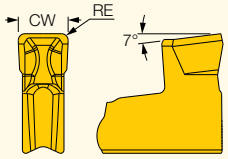


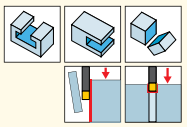
TANG F GRIP HIGH FEED PARTING

TAG N-HF

Single-Ended Inserts for High Feed Parting and Grooving, Hard Materials and Tough Applications







Designation	Dimensions CW	CWTOL(1)	RE	Tough ↔ Hard IC830	IC1030	IC1010	IC808	Recommended Machining Data f groove (mm/rev)
TAG N3HF	3.00	0.040	0.40	●	●	●	●	0.25-0.35
TAG N4HF	4.00	0.040	0.50	●	●	●	●	0.30-0.40
TAG N5HF	5.00	0.040	0.50	●			●	0.30-0.40

• For cutting speed recommendations and user guide, see pages 606-615

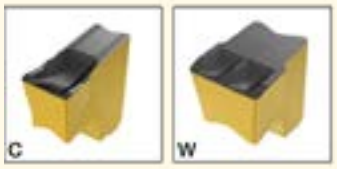
(1) Cutting width tolerance (+/-)

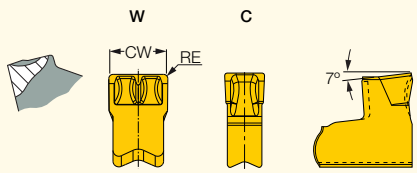
For tools, see pages: ADMP D45 (586) • TAGPAD-JHP (562) • TAGPAD-XL-JHP (562) • TAGPAD-Y-JHP (584) • TGAD (560) • TGAD RE/LE-JHP (560) • TGAQ (579) • TGAQ-ECD (JET-CROWN) (582) • TGAQ-JHP (578) • TGFH-JHP (555) • TGFH-MB (559) • TGFH-S (555) • TGFH/R/L (374) • TGFHL-TR (567) • TGFHR/L (556) • TGFHR/L-JHP (557) • TGFS (564) • TGSU (558) • TGTR/L-D (567) • TGTR/L-IQ (564) • TGTR/L-IQ-2Z (565) • TGTR/L-JHP (565) • TGTR/L-JHP-MC (566)

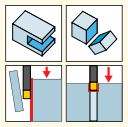
TANG GRIP PARTING LINE

TAG N-C/W/M

Single-Ended Inserts for Parting, Grooving and Slitting Bars, Hard Materials and Tough Applications







Designation	Dimensions CW	CWTOL(3)	RE	Tough ↔ Hard IC830	IC928	IC1030	IC1010	IC808	IC908	IC30N	IC5400	IC20	IC807	Recommended Machining Data f groove (mm/rev)
TAG N1.4C	1.40	0.040	0.16										●	0.04-0.10
TAG N1.6C	1.60	0.040	0.16	●				●						0.04-0.14
TAG N2C	2.00	0.040	0.20	●		●	●	●		●	●	●		0.05-0.16
TAG N2.4C	2.40	0.040	0.16	●				●						0.06-0.18
TAG N3CB (1)	3.00	0.040	0.35	●				●						0.12-0.30
TAG N3C	3.05	0.040	0.20	●	●	●	●	●	●	●	●	●	●	0.10-0.25
TAG N3M (2)	3.05	0.040	0.20	●					●					0.06-0.18
TAG N3W	3.05	0.040	0.20	●					●					0.10-0.25
TAG N4C	4.00	0.040	0.24	●	●	●	●	●	●		●	●	●	0.10-0.30
TAG N4CB (1)	4.00	0.040	0.40	●					●					0.10-0.33
TAG N4M (2)	4.00	0.040	0.24	●					●					0.06-0.20
TAG N4W	4.00	0.040	0.24	●					●					0.10-0.30
TAG N4.8C	4.80	0.040	0.30	●				●						0.10-0.35
TAG N5C	5.05	0.040	0.25	●				●				●		0.10-0.35
TAG N6.3C	6.30	0.040	0.35	●				●						0.15-0.40
TAG N7W	7.00	0.080	0.50	●				●						0.18-0.40
TAG N8C	8.00	0.100	0.50	●				●						0.20-0.70
TAG N9.5W	9.50	0.050	0.50	●				●						0.22-0.80
TAG N9.5C	9.50	0.100	0.50	●				●						0.25-0.80
TAG N12.7W	12.70	0.100	0.85	●				●						0.30-0.80

• Feed values for grade IC20 should be decreased by 50% • For cutting speed recommendations and user guide, see pages 606-615

(1) Larger corner radii for interrupted cut and high feed applications

(2) Similar to C-type, but with a modified edge; improved chip control at medium feeds

(3) Cutting width tolerance (+/-)

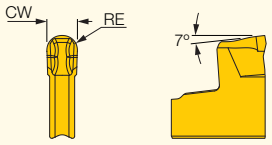
For tools, see pages: ADMP D45 (586) • Anti-Vibration Blades (312) • TAGPAD-JHP (562) • TAGPAD-XL-JHP (562) • TAGPAD-Y-JHP (584) • TGAD (560) • TGAD RE/LE-JHP (560) • TGAQ (579) • TGAQ-ECD (JET-CROWN) (582) • TGAQ-JHP (578) • TGBHR/L (372) • TGBHR/L-JHP (373) • TGFH-JHP (555) • TGFH-MB (559) • TGFH-S (555) • TGFH/R/L (374) • TGFHL-TR (567) • TGFHR/L (556) • TGFHR/L-JHP (557) • TGFS (564) • TGSF-MM-JHP () • TGSU (558) • TGTR/L-2T..SH-L120 (566) • TGTR/L-D (567) • TGTR/L-IQ (564) • TGTR/L-IQ-2Z (565) • TGTR/L-JHP (565) • TGTR/L-JHP-MC (566)

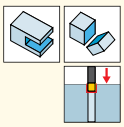
TANG-GRIP PARTING LINE

TAG N-C (full radius)

Grooving and Slitting
Full Radius Inserts







Designation	Dimensions CW	CWTOL(1)	RE	IC1030	Recommended Machining Data f groove (mm/rev)
TAG N1.6C-0.8	1.60	0.040	0.80	●	0.04-0.12
TAG N2.2C-1.1	2.20	0.040	1.10	●	0.06-0.16
TAG N3C-1.5	3.00	0.040	1.50	●	0.08-0.22

NEW

- Feed values for grade IC20 should be decreased by 50%
- For cutting speed recommendations and user guide, see pages 606-615

(1) Cutting width tolerance (+/-)

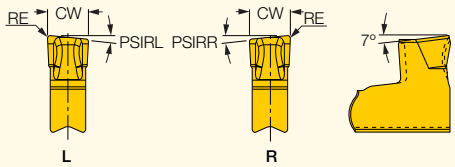
For tools, see pages: ADMP D45 (586) • TAGPAD-JHP (562) • TAGPAD-XL-JHP (562) • TAGPAD-Y-JHP (584) • TGAD (560) • TGAD RE/LE-JHP (560) • TGAQ (579) • TGAQ-ECD (JET-CROWN) (582) • TGAQ-JHP (578) • TGFH-JHP (555) • TGFH-MB (559) • TGFH-S (555) • TGFH/R/L (374) • TGFHL-TR (567) • TGFHR/L (556) • TGFHR/L-JHP (557) • TGFS (564) • TGSU (558) • TGTR/L-2T..SH-L120 (566) • TGTR/L-D (567) • TGTR/L-IQ (564) • TGTR/L-IQ-2Z (565) • TGTR/L-JHP (565) • TGTR/L-JHP-MC (566)

TANG-GRIP PARTING LINE

TAG R/L-C

Single-Ended Inserts for Parting Bars, Hard Materials and Tough Parting Applications







Designation	Dimensions CW	CWTOL(1)	RE	PSIRR	PSIRL	Tough ↔ Hard IC830	IC928	IC808	IC908	IC30N	Recommended Machining Data f groove (mm/rev)
TAG L2C-6D	2.05	0.100	0.20	-	6.0	●		●			0.04-0.12
TAG R2C-6D	2.05	0.100	0.20	6.0	-	●		●			0.04-0.12
TAG R2.4C-8D	2.40	0.100	0.16	8.0	-			●			0.05-0.13
TAG L3C-6D	3.00	0.100	0.20	-	6.0	●	●	●	●		0.08-0.18
TAG R3C-6D	3.00	0.100	0.20	6.0	-	●	●	●	●		0.08-0.18
TAG R3C-8D	3.00	0.100	0.20	8.0	-					●	0.06-0.16
TAG L3C-15D	3.00	0.100	0.20	-	15.0	●	●	●	●		0.08-0.16
TAG R3C-15D	3.00	0.100	0.20	15.0	-	●	●	●	●		0.08-0.16
TAG L4C-4D	4.05	0.100	0.24	-	4.0	●		●			0.08-0.20
TAG R4C-4D	4.05	0.100	0.24	4.0	-	●	●	●	●		0.08-0.20
TAG L5C-4D	5.05	0.100	0.25	-	4.0	●		●			0.10-0.25
TAG R5C-4D	5.05	0.100	0.25	4.0	-	●		●			0.10-0.25
TAG L6.3C-4D	6.35	0.100	0.35	-	4.0	●		●			0.12-0.30
TAG R6.3C-4D	6.35	0.100	0.35	4.0	-	●		●			0.12-0.30

- For cutting speed recommendations and user guide, see pages 606-615

(1) Cutting width tolerance (+/-)

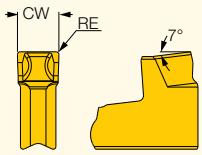
For tools, see pages: ADMP D45 (586) • TAGPAD-JHP (562) • TAGPAD-XL-JHP (562) • TAGPAD-Y-JHP (584) • TGAD (560) • TGAD RE/LE-JHP (560) • TGAQ (579) • TGAQ-ECD (JET-CROWN) (582) • TGAQ-JHP (578) • TGBHR/L (372) • TGFH-JHP (555) • TGFH-MB (559) • TGFH-S (555) • TGFH/R/L (374) • TGFHL-TR (567) • TGFHR/L (556) • TGFHR/L-JHP (557) • TGFS (564) • TGSU (558) • TGTR/L-2T..SH-L120 (566) • TGTR/L-D (567) • TGTR/L-IQ (564) • TGTR/L-IQ-2Z (565) • TGTR/L-JHP (565) • TGTR/L-JHP-MC (566)

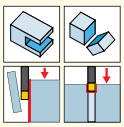
TANG-GRIP PARTING LINE

TAG N-MF

Single-Ended Inserts for Parting Grooving and Slitting Stainless and Alloy Steel at Medium Feed







Designation	Dimensions CW	CWTOL[1]	RE	Tough ↔ Hard IC830	IC1030	IC1010	IC808	IC5400	IC807	Recommended Machining Data f groove (mm/rev)
TAG N2MF	2.00	0.050	0.20	●	●	●	●	●		0.04-0.15
TAG N3MF	3.05	0.050	0.20	●	●	●	●	●	●	0.06-0.18
TAG N4MF	4.00	0.050	0.25	●	●	●	●	●		0.07-0.22
TAG N5MF	5.00	0.050	0.25	●			●			0.08-0.25

- For cutting speed recommendations and user guide, see pages 606-615

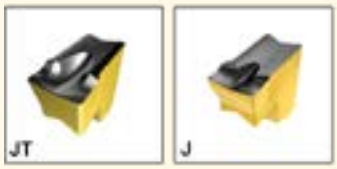
(1) Cutting width tolerance (+/-)

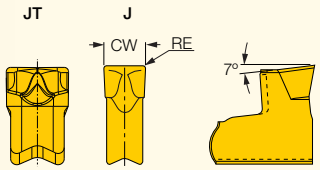
For tools, see pages: ADMP D45 (586) • TAGPAD-JHP (562) • TAGPAD-XL-JHP (562) • TAGPAD-Y-JHP (584) • TGAD (560) • TGAD RE/LE-JHP (560) • TGAQ (579) • TGAQ-ECD (JET-CROWN) (582) • TGAQ-JHP (578) • TGFH-JHP (555) • TGFH-MB (559) • TGFH-S (555) • TGFH/R/L (374) • TGFHL-TR (567) • TGFHR/L (556) • TGFHR/L-JHP (557) • TGFS (564) • TGSU (558) • TGTR/L-2T..SH-L120 (566) • TGTR/L-D (567) • TGTR/L-IQ (564) • TGTR/L-IQ-2Z (565) • TGTR/L-JHP (565) • TGTR/L-JHP-MC (566)

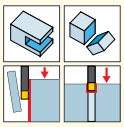
TANG-GRIP PARTING LINE

TAG N-J/JS/JT

Single-Ended Inserts for Parting, Grooving and Slitting Soft Materials







Designation	Dimensions CW	RE	CWTOL[2]	RETOL[3]	Tough ↔ Hard IC830	IC928	IC1030	IC1010	IC808	IC908	IC5400	IC20	IC807	Recommended Machining Data f groove (mm/rev)
TAG N1.4J	1.40	0.16	0.040	0.030	●				●				●	0.03-0.10
TAG N1.6J	1.60	0.16	0.040	0.030	●				●					0.03-0.12
TAG N2JS [1]	2.00	0.02	0.040	0.020	●				●					0.03-0.08
TAG N2J	2.00	0.20	0.040	0.040	●		●	●	●		●	●		0.04-0.12
TAG N2JT	2.00	0.20	0.040	0.040	●	●		●	●	●	●			0.04-0.14
TAG N3JS [1]	3.05	0.02	0.040	0.020	●				●					0.04-0.10
TAG N3J	3.05	0.20	0.040	0.030	●	●	●	●	●	●	●	●	●	0.04-0.16
TAG N3JT	3.05	0.20	0.040	0.030	●				●	●	●			0.05-0.18
TAG N3.2JT	3.25	0.20	0.040	0.030	●				●					0.05-0.18
TAG N4J	4.00	0.24	0.040	0.030	●	●	●	●	●	●	●		●	0.04-0.18
TAG N4JT	4.05	0.24	0.040	0.030	●				●	●	●			0.06-0.20
TAG N5J	5.05	0.25	0.040	0.040	●			●	●					0.05-0.20
TAG N5JT	5.05	0.25	0.040	0.040	●				●	●				0.06-0.22
TAG N6.3J	6.35	0.34	0.040	0.040	●				●					0.06-0.22
TAG N6.3JT	6.35	0.34	0.040	0.040	●					●				0.08-0.25
TAG N7JT	7.05	0.50	0.040	0.040	●				●					0.10-0.28

- JT chipformer has the basic positive configuration of the J-type and a reinforced negative front edge; most suitable for soft materials at low to medium feeds.
- For cutting speed recommendations and user guide, see pages 606-615

(1) Sharp corners cannot be used on TGSF slitting cutters

(2) Cutting width tolerance (+/-)

(3) Corner radius tolerance (+/-)

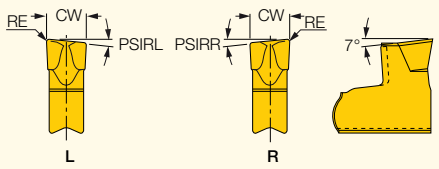
For tools, see pages: ADMP D45 (586) • TAGPAD-JHP (562) • TAGPAD-XL-JHP (562) • TAGPAD-Y-JHP (584) • TGAD (560) • TGAD RE/LE-JHP (560) • TGAQ (579) • TGAQ-ECD (JET-CROWN) (582) • TGAQ-JHP (578) • TGBHR/L (372) • TGFH-JHP (555) • TGFH-MB (559) • TGFH-S (555) • TGFH/R/L (374) • TGFHL-TR (567) • TGFHR/L (556) • TGFHR/L-JHP (557) • TGFS (564) • TGSU (558) • TGTR/L-2T..SH-L120 (566) • TGTR/L-D (567) • TGTR/L-IQ (564) • TGTR/L-IQ-2Z (565) • TGTR/L-JHP (565) • TGTR/L-JHP-MC (566)

TANG-GRIP PARTING LINE

TAG R/L-J/JS

TANG-GRIP Inserts for Parting Soft Materials, Tubes, Small Diameters and Thin-Walled Parts





Designation	Dimensions CW	RE	PSIRL	PSIRR	Tough ↔ Hard IC830	IC928	IC808	IC908	IC807	Recommended Machining Data f groove (mm/rev)
TAG L1.4J-8D	1.40	0.16	8.0	-	●		●		●	0.03-0.08
TAG R1.4J-8D	1.40	0.16	-	8.0	●		●		●	0.03-0.08
TAG L1.4JS-10D (1)	1.40	0.02	10.0	-	●		●		●	0.02-0.06
TAG R1.4JS-10D (1)	1.40	0.02	-	10.0	●		●		●	0.02-0.06
TAG L2J-6D	2.00	0.20	6.0	-	●		●			0.03-0.10
TAG R2J-6D	2.00	0.20	-	6.0	●		●			0.03-0.10
TAG L2JS-6D (1)	2.00	0.02	6.0	-	●		●			0.02-0.08
TAG R2JS-6D (1)	2.00	0.02	-	6.0	●		●			0.02-0.08
TAG L2J-15D	2.00	0.20	15.0	-	●		●			0.03-0.08
TAG R2J-15D	2.00	0.20	-	15.0	●		●			0.03-0.08
TAG L2JS-15D (1)	2.00	0.02	15.0	-	●		●			0.02-0.06
TAG R2JS-15D (1)	2.00	0.02	-	15.0	●		●			0.02-0.06
TAG L3J-6D	3.00	0.20	6.0	-	●	●	●	●		0.04-0.14
TAG R3J-6D	3.00	0.20	-	6.0	●	●	●	●		0.04-0.14
TAG L3JS-6D (1)	3.00	0.02	6.0	-	●		●			0.03-0.10
TAG R3JS-6D (1)	3.00	0.02	-	6.0	●		●			0.03-0.10
TAG L3J-15D	3.00	0.20	15.0	-	●	●	●	●		0.04-0.12
TAG R3J-15D	3.00	0.20	-	15.0	●	●	●	●		0.04-0.12
TAG L3JS-15D (1)	3.00	0.02	15.0	-	●		●			0.03-0.08
TAG R3JS-15D (1)	3.00	0.02	-	15.0	●		●			0.03-0.08
TAG L4J-4D	4.00	0.24	4.0	-	●		●			0.04-0.15
TAG R4J-4D	4.00	0.24	-	4.0	●	●	●	●		0.04-0.15
TAG L5J-4D	5.05	0.25	4.0	-	●		●			0.05-0.18
TAG R5J-4D	5.05	0.25	-	4.0	●		●			0.05-0.18
TAG L6.3J-4D	6.35	0.35	4.0	-	●		●			0.05-0.20
TAG R6.3J-4D	6.35	0.35	-	4.0	●		●			0.05-0.20

• For cutting speed recommendations and user guide, see pages 606-615

(1) Sharp corners cannot be used on TGSF slitting cutters

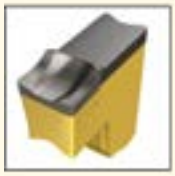
For tools, see pages: ADMP D45 (586) • TAGPAD-JHP (562) • TAGPAD-XL-JHP (562) • TAGPAD-Y-JHP (584) • TGAD (560) • TGAD RE/LE-JHP (560) • TGAQ (579) • TGAQ-ECD (JET-CROWN) (582) • TGAQ-JHP (578) • TGBHR/L (372) • TGFH-JHP (555) • TGFH-MB (559) • TGFH-S (555) • TGFH/R/L (374) • TGFHL-TR (567) • TGFHR/L (556) • TGFHR/L-JHP (557) • TGFS (564) • TGSU (558) • TGTR/L-2T..SH-L120 (566) • TGTR/L-D (567) • TGTR/L-IQ (564) • TGTR/L-IQ-2Z (565) • TGTR/L-JHP (565) • TGTR/L-JHP-MC (566)

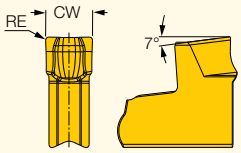


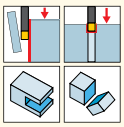
TANG-GRIP PARTING LINE

TAG N-LF

Single-Ended Inserts for Parting, Grooving and Slitting Stainless Steel







Designation	Dimensions CW	RE	CWTOL[1]	RETOL[2]	Tough ↔ Hard IC830	IC1030	IC1010	IC808	IC5400	IC807	Recommended Machining Data f groove (mm/rev)
TAG N2LF	2.00	0.20	0.040	0.030	●	●	●	●	●		0.03-0.08
TAG N3LF	3.05	0.20	0.040	0.030	●	●	●	●	●	●	0.04-0.10

- For cutting speed recommendations and user guide, see pages 606-615

[1] Cutting width tolerance (+/-)

[2] Corner radius tolerance (+/-)

For tools, see pages: ADMP D45 (586) • TAGPAD-JHP (562) • TAGPAD-XL-JHP (562) • TAGPAD-Y-JHP (584) • TGAD (560) • TGAD RE/LE-JHP (560) • TGAQ (579) • TGAQ-ECD (JET-CROWN) (582) • TGAQ-JHP (578) • TGFH-JHP (555) • TGFH-MB (559) • TGFH-S (555) • TGFH/R/L (374) • TGFHL-TR (567) • TGFHR/L (556) • TGFHR/L-JHP (557) • TGSU (558) • TGTR/L-2T..SH-L120 (566) • TGTR/L-D (567) • TGTR/L-IQ (564) • TGTR/L-IQ-2Z (565) • TGTR/L-JHP (565) • TGTR/L-JHP-MC (566)

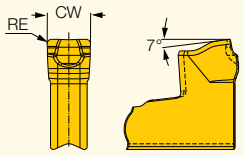
TANG-GRIP PARTING LINE

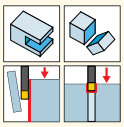
TAG N-UT

Single-Sided Inserts for Parting, Grooving & Slitting at Low Feeds on Cr-Ni Alloys, Ductile Materials & Low Carbon Steel









Designation	Dimensions CW	RE	CWTOL[1]	RETOL[2]	Tough ↔ Hard IC830	IC808	IC908	Recommended Machining Data f groove (mm/rev)
TAG N2UT	2.00	0.20	0.040	0.040	●	●	●	0.03-0.10
TAG N3UT	3.00	0.30	0.040	0.040	●	●		0.04-0.12
TAG N4UT	4.00	0.30	0.040	0.040			●	0.05-0.15
TAG N5UT	5.00	0.30	0.040	0.040			●	0.05-0.18
TAG N6UT	6.00	0.85	0.040	0.040			●	0.06-0.22

- For cutting speed recommendations and user guide, see pages 606-615

[1] Cutting width tolerance (+/-)

[2] Corner radius tolerance (+/-)

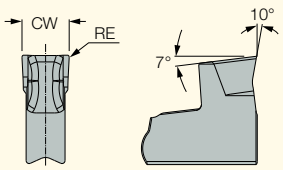
For tools, see pages: ADMP D45 (586) • TAGPAD-JHP (562) • TAGPAD-XL-JHP (562) • TAGPAD-Y-JHP (584) • TGAD (560) • TGAD RE/LE-JHP (560) • TGAQ (579) • TGAQ-ECD (JET-CROWN) (582) • TGAQ-JHP (578) • TGBHR/L (372) • TGFH-JHP (555) • TGFH-MB (559) • TGFH-S (555) • TGFH/R/L (374) • TGFHL-TR (567) • TGFHR/L (556) • TGFHR/L-JHP (557) • TGFS (564) • TGSU (558) • TGTR/L-2T..SH-L120 (566) • TGTR/L-D (567) • TGTR/L-IQ (564) • TGTR/L-IQ-2Z (565) • TGTR/L-JHP (565) • TGTR/L-JHP-MC (566)

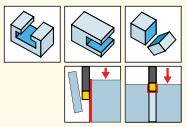
TANG-GRIP PARTING LINE

TAG N-A

Single-Ended Inserts for Parting, Grooving, and Slitting Aluminum







Designation	Dimensions CW	RE	CWTOL[1]	RETOL[2]	IC20	Recommended Machining Data f groove (mm/rev)
TAG N2A	2.00	0.20	0.040	0.040	●	0.02-0.10
TAG N3A	3.07	0.20	0.040	0.040	●	0.03-0.14
TAG N4A	4.05	0.24	0.040	0.030	●	0.03-0.16

- For cutting speed recommendations and user guide, see pages 606-615

[1] Cutting width tolerance (+/-)

[2] Corner radius tolerance (+/-)

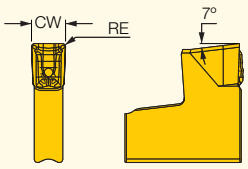
For tools, see pages: ADMP D45 (586) • TAGPAD-JHP (562) • TAGPAD-XL-JHP (562) • TAGPAD-Y-JHP (584) • TGAD (560) • TGAD RE/LE-JHP (560) • TGAQ (579) • TGAQ-ECD (JET-CROWN) (582) • TGAQ-JHP (578) • TGFH-JHP (555) • TGFH-MB (559) • TGFH-S (555) • TGFH/R/L (374) • TGFHL-TR (567) • TGFHR/L (556) • TGFHR/L-JHP (557) • TGFS (564) • TGSU (558) • TGTR/L-2T..SH-L120 (566) • TGTR/L-D (567) • TGTR/L-IQ (564) • TGTR/L-IQ-2Z (565) • TGTR/L-JHP (565) • TGTR/L-JHP-MC (566)

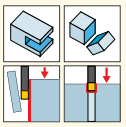
TANG-GRIP PARTING LINE

TAG N-T

Single-Ended Inserts for Parting, Grooving and Slitting Soft Materials







Designation	Dimensions CW	RE	CWTOL[1]	RETOL[2]	Tough ↔ Hard IC1030	IC1010	IC5400	Recommended Machining Data f groove (mm/rev)
TAG N2T	2.00	0.20	0.040	0.040	●	●		0.03-0.10
TAG N3T	3.00	0.20	0.040	0.030	●	●	●	0.03-0.14
TAG N4T	4.00	0.24	0.040	0.030	●	●	●	0.04-0.16

NEW

- For cutting speed recommendations and user guide, see pages 606-615

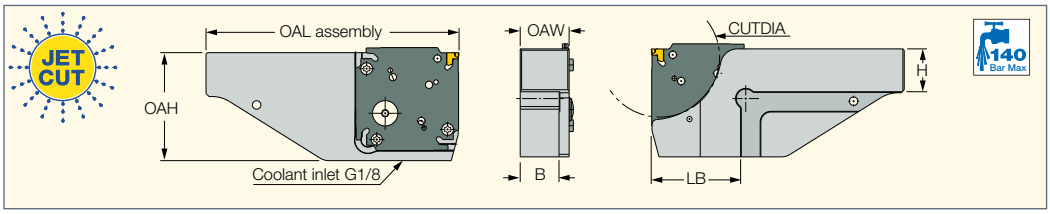
[1] Cutting width tolerance (+/-)

[2] Corner radius tolerance (+/-)

For tools, see pages: TAGPAD-JHP (562) • TAGPAD-XL-JHP (562) • TAGPAD-Y-JHP (584) • TGAD (560) • TGAQ (579) • TGAQ-ECD (JET-CROWN) (582) • TGAQ-JHP (578) • TGFH-JHP (555) • TGFH-MB (559) • TGFH-S (555) • TGFH/R/L (374) • TGFHL-TR (567) • TGFHR/L (556) • TGFHR/L-JHP (557) • TGFS (564) • TGSU (558) • TGTR/L-2T..SH-L120 (566) • TGTR/L-D (567) • TGTR/L-IQ (564) • TGTR/L-IQ-2Z (565) • TGTR/L-JHP (565) • TGTR/L-JHP-MC (566)

LOGIQ F GRIP HIGH FEED GRIP HOLDER

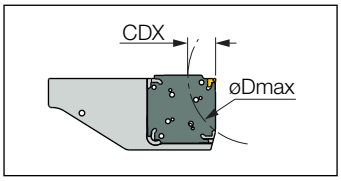
TGTBQ-JHP
Tool Blocks for Square TANG-F-GRIP and DO-F-GRIP Parting and Grooving Adapters for High-Pressure Coolant



Designation	OAH	H	B	OAW	OAL	LB	CUTDIA
TGTBQ 20R/L-D52-JHP	50.00	20.0	20.5	26.50	122.00	34.00	52.0
TGTBQ 25R/L-D52-JHP	50.00	25.0	25.5	31.50	132.00	34.00	52.0
TGTBQ 20R/L-D82-JHP	64.00	20.0	20.5	26.50	140.00	53.00	82.0
TGTBQ 25R/L-D82-JHP	64.00	25.0	25.5	31.50	150.00	53.00	82.0
TGTBQ 32R/L-D82-JHP	64.00	32.0	32.5	38.50	150.50	53.50	82.0
TGTBQ 25R/L-D102-JHP	74.00	25.0	25.5	31.50	160.00	63.00	102.0
TGTBQ 25R/L-D120-JHP	95.00	25.0	25.5	31.50	165.00	67.00	120.0
TGTBQ 32R/L-D120-JHP	95.00	32.0	32.5	38.50	165.00	67.00	120.0
TGTBQ 25R/L-D160-JHP	107.00	25.0	25.5	31.50	190.50	92.50	160.0
TGTBQ 32R/L-D160-JHP	107.00	32.0	32.5	38.50	190.50	92.50	160.0
TGTBQ 40R-D160-JHP	107.00	40.0	40.5	46.50	190.50	92.50	160.0

For tools, see pages: DGAQ (580) • DGAQ-JHP (580) • TGAQ (579) • TGAQ-JHP (578)

Table determining depth of cut for grooving as function of workpiece diameter

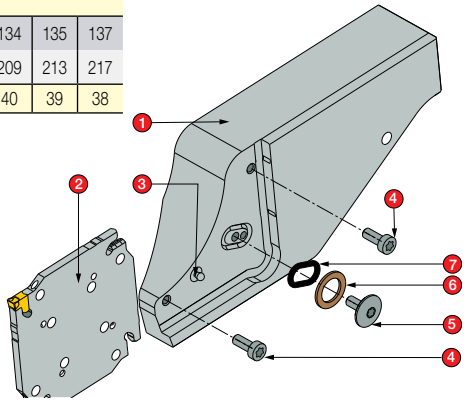


Designation	øDmax																	
TGTBQ...D52-JHP	53	54	55	56	57	59	61	64	67	71	75	81	88	96	107	122	141	169
TGTBQ...D82-JHP	107	110	114	119	124	130	137	145	154	165	178	194	213	237	267	308	363	443
TGTBQ...D120-JHP	202	210	219	229	240	253	267	283	302	324	349	380	417	462	518	592	689	827
TGTBQ...D160-JHP	345	361	377	396	418	441	468	499	534	576	624	682	753	840	951	1096	1294	1583
CDX	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4

Designation	øDmax															
TGTBQ...D82-JHP	83	83	84	84	85	86	87	88	89	91	92	94	96	98	101	103
TGTBQ...D120-JHP	139	141	143	145	148	150	153	156	160	164	168	172	177	183	188	195
TGTBQ...D160-JHP	220	225	229	234	239	245	251	257	264	271	279	288	298	308	320	332
CDX	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22

Designation	øDmax															
TGTBQ...D120-JHP	121	122	123	123	124	125	125	126	127	128	129	130	131	132	134	135	137
TGTBQ...D160-JHP	171	177	181	183	184	186	188	190	193	195	198	200	203	206	209	213	217
CDX	56-60	53-55	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38

1. **Block:** TGTBQ...D...
2. **Blade:** T/DGAQ...
3. **Locating Pin:** Side thrust Pin 3mm
4. **Screw:** SR M4x10 ISO 14580
5. **Screw:** SR M4x9-Seal-JHP
6. **Seal washer:** CSW 1/8"
7. **O-ring:** O-ring 10x2 NBR



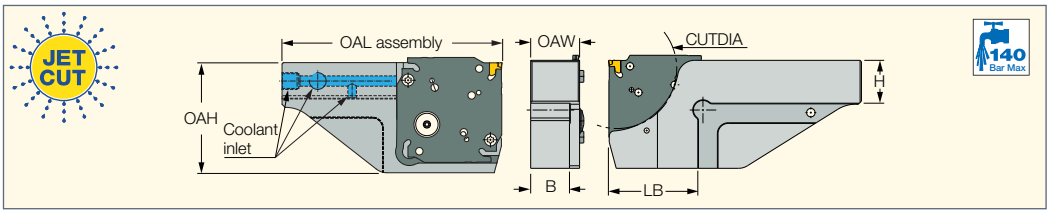
Spare Parts

Designation							
TGTBQ-JHP	SR M4X9-SEAL-JHP	SIDE THRUST PIN 3mm	JHP COPPER SEAL 1/8"	SR M4X10-8.8-T20	SW6-SD	BLD T20/S7	O-RING 10X2 NBR

LOGIQ F GRIP HIGH FEED GRIP HOLDER

TGTBQ-JHP-MC

Tool Blocks which Mount Square Adapters with Three High-Pressure Coolant Inlets for Parting and Grooving



Designation	OAH	H	B	OAW	OAL	LB	CUTDIA
TGTBQ 16R/L-D42-JHP-MC	40.00	16.0	16.0	20.00	100.00	35.00	42.0
TGTBQ 20R/L-D42-JHP-MC	40.00	20.0	20.0	24.00	110.00	35.00	42.0
TGTBQ 25R/L-D42-JHP-MC	40.00	25.0	25.0	29.00	120.00	35.00	42.0
TGTBQ 20R/L-D52-JHP-MC	50.00	20.0	20.5	26.50	112.00	42.00	52.0
TGTBQ 25R/L-D52-JHP-MC	50.00	25.0	26.5	31.50	125.00	40.00	52.0
TGTBQ 20R/L-D82-JHP-MC	64.00	20.0	20.5	26.50	127.50	57.50	82.0
TGTBQ 25R/L-D82-JHP-MC	64.00	25.0	26.5	31.50	142.50	57.50	82.0
TGTBQ 25R/L-D120-JHP-MC	95.00	25.0	26.5	31.50	158.00	73.00	120.0

For tools, see pages: DGAQ (580) • DGAQ-JHP (580) • TGAQ (579) • TGAQ-JHP (578)

Spare Parts

Designation					
TGTBQ 16R/L-D42-JHP-MC		SR 14-555 M4X7.6 T10	T-10/5		
TGTBQ 20R/L-D42-JHP-MC		SR 14-555 M4X7.6 T10	T-10/5		
TGTBQ 25R/L-D42-JHP-MC		SR 14-555 M4X7.6 T10	T-10/5		
TGTBQ 20R/L-D52-JHP-MC	SR M4X9-SEAL-JHP	SR M4X10-8.8-T20		BLD T20/S7	SW6-SD
TGTBQ 25R/L-D52-JHP-MC	SR M4X9-SEAL-JHP	SR M4X10-8.8-T20		BLD T20/S7	SW6-SD
TGTBQ 20R/L-D82-JHP-MC	SR M4X9-SEAL-JHP	SR M4X10-8.8-T20		BLD T20/S7	SW6-SD
TGTBQ 25R/L-D82-JHP-MC	SR M4X9-SEAL-JHP	SR M4X10-8.8-T20		BLD T20/S7	SW6-SD
TGTBQ 25R/L-D120-JHP-MC	SR M4X9-SEAL-JHP	SR M4X10-8.8-T20		BLD T20/S7	SW6-SD

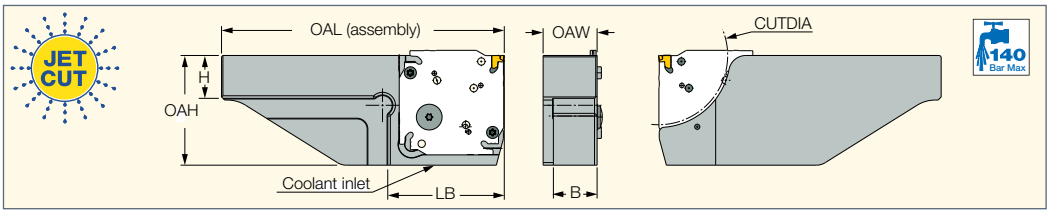
Spare Parts

Designation					
TGTBQ 16R/L-D42-JHP-MC		SR 5/16UNF TL360	HW 5/32"	SIDE THRUST PIN 3mm	
TGTBQ 20R/L-D42-JHP-MC		PLG G1/8 TL360	HW 5.0	SIDE THRUST PIN 3mm	
TGTBQ 25R/L-D42-JHP-MC		PLG G1/8 TL360	HW 5.0	SIDE THRUST PIN 3mm	
TGTBQ 20R/L-D52-JHP-MC	JHP COPPER SEAL 1/8"	PLG G1/8 TL360	HW 5.0	SIDE THRUST PIN 3mm	O-RING 10X2 NBR
TGTBQ 25R/L-D52-JHP-MC	JHP COPPER SEAL 1/8"	PLG G1/8 TL360	HW 5.0	SIDE THRUST PIN 3mm	O-RING 10X2 NBR
TGTBQ 20R/L-D82-JHP-MC	JHP COPPER SEAL 1/8"	PLG G1/8 TL360	HW 5.0	SIDE THRUST PIN 3mm	O-RING 10X2 NBR
TGTBQ 25R/L-D82-JHP-MC	JHP COPPER SEAL 1/8"	PLG G1/8 TL360	HW 5.0	SIDE THRUST PIN 3mm	O-RING 10X2 NBR
TGTBQ 25R/L-D120-JHP-MC	JHP COPPER SEAL 1/8"	PLG G1/8 TL360	HW 5.0	SIDE THRUST PIN 3mm	O-RING 10X2 NBR

LOGIQ F GRIP HIGH FEED GRIP HOLDER

TGTBQ-JHP-RIB

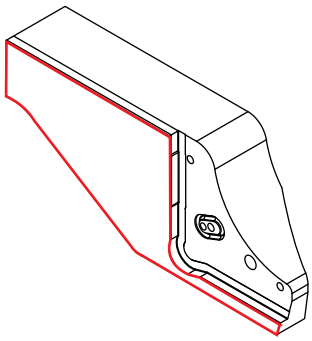
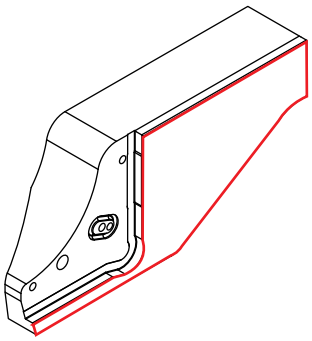
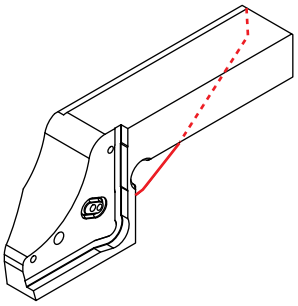
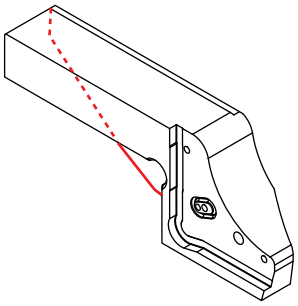
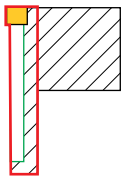
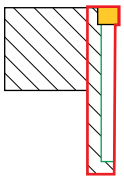
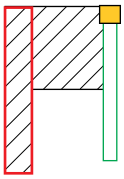
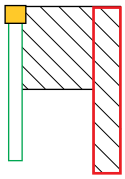
Tool Blocks for Square F-GRIP Parting and Grooving Adapters with High-Pressure Coolant for Machining next to Spindle



Designation	OAH	H	B	OAW	OAL	LB	CUTDIA
TGTBQ 25L-R-D52-JHP	50.00	25.0	25.5	31.50	153.50	55.50	52.0
TGTBQ 25R-L-D52-JHP	50.00	25.0	25.5	31.50	153.50	55.50	52.0
TGTBQ 25L-R-D82-JHP	64.00	25.0	25.5	31.50	165.00	68.00	82.0
TGTBQ 25R-L-D82-JHP	64.00	25.0	25.5	31.50	165.00	68.00	82.0
TGTBQ 25L-R-D120-JHP	95.00	25.0	25.5	31.50	195.00	97.00	120.0
TGTBQ 25R-L-D120-JHP	95.00	25.0	25.5	31.50	195.00	97.00	120.0

NEW

For tools, see pages: DGAQ (580) • DGAQ-JHP (580) • TGAQ (579) • TGAQ-JHP (578)

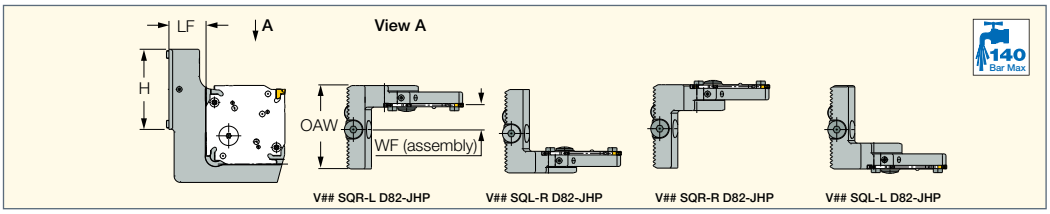
Standard Holders		NEW Reinforced Rib on the Opposite Side	
TGTBQ 25 L -D82 -JHP	TGTBQ 25 R -D82 -JHP	TGTBQ 25 R -D82L -JHP	TGTBQ 25 L -D82R-JHP
			
			
L- Pocket orientation	R- Pocket orientation	R- Pocket orientation L-Reinforcement rib side	L- Pocket orientation R-Reinforcement rib side

Spare Parts

Designation							
TGTBQ-JHP-RIB	SR M4X10-8.8-T20	SIDE THRUST PIN 3mm	SR M4X9-SEAL-JHP	BLD T20/S7	SW6-SD	O-RING 10X2 NBR	JHP COPPER SEAL 1/8"

LOGIQ F GRIP
HIGH FEED GRIP HOLDER

V## SQ#-#-D82-JHP
Intermediate Holders for TANG-F-GRIP and DO-F-GRIP Square Type D82 Adapters Designed for Modular Tooling Systems



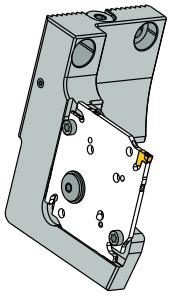
Designation	H	LF	OAW	WF[1]
V60 SQL-L-D82-JHP	62.0	34.70	64.50	28.95
V60 SQL-R-D82-JHP	62.0	34.70	64.50	15.35
V60 SQR-L-D82-JHP	62.0	34.70	64.50	18.85
V60 SQR-R-D82-JHP	62.0	34.70	64.50	32.45
V85 SQL-L-D82-JHP	83.0	34.70	85.00	40.95
V85 SQL-R-D82-JHP	83.0	34.70	85.00	27.35
V85 SQR-L-D82-JHP	83.0	34.70	85.00	27.35
V85 SQR-R-D82-JHP	83.0	34.70	85.00	40.95

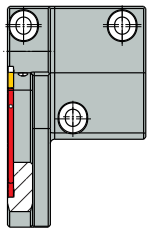
(1) When 3mm width insert is used.

For tools, see pages: DGAQ (580) • DGAQ-JHP (580) • TGAQ (579) • TGAQ-JHP (578)

Identification Legend

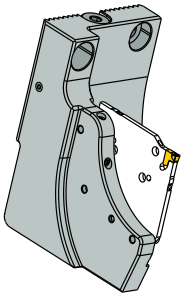
V60 SQL-L-D82-JHP

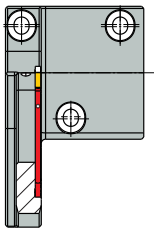




L- Holder (prism) orientation
L- Pocket side

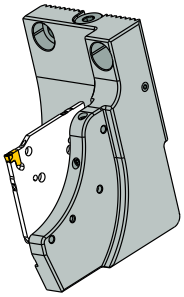
V60 SQL-R-D82-JHP

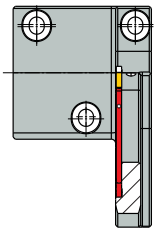




L- Holder (prism) orientation
R- Pocket side

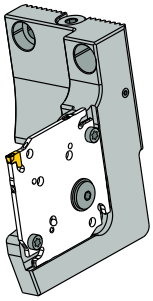
V60 SQR-L-D82-JHP

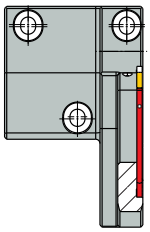




R- Holder (prism) orientation
L- Pocket side

V60 SQR-R-D82-JHP





R- Holder (prism) orientation
R- Pocket side

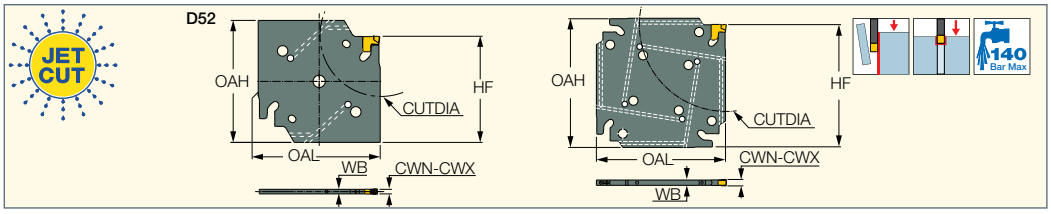
Spare Parts

Designation					
V## SQ#-#-D82-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	O-RING 10X2 NBR	SIDE THRUST PIN 3mm	SR M4X10-8.8-T20

TANG-GRIP HIGH FEED PARTING

TGAQ-JHP

Parting and Grooving Square Adapters with Internal Coolant Holes Carrying TANG-GRIP Tangentially Clamped Inserts



Designation	OAL	OAH	CWN(1)	CWX(2)	WB	HF	CUTDIA(3)	MIID(4)	CSP(5)
TGAQ D52-2-2Z-JHP	50.00	50.00	1.80	2.50	1.65	43.5	52.0	TAG 2	1
TGAQ D52-3-2Z-JHP	50.00	50.00	2.80	3.50	2.50	43.5	52.0	TAG 3	1
TGAQ D52-4-2Z-JHP	50.00	50.00	3.70	4.50	3.40	43.5	52.0	TAG 4	1
TGAQ D82-2-4Z-JHP	61.00	61.00	1.80	2.50	1.65	58.0	82.0	TAG 2	1
TGAQ D82-3-4Z-JHP	61.00	61.00	2.80	3.50	2.50	58.0	82.0	TAG 3	1
TGAQ D82-4-4Z-JHP	61.00	61.00	3.70	4.50	3.40	58.0	82.0	TAG 4	1
TGAQ D102-3-4Z-JHP	71.00	71.00	2.80	3.50	2.50	68.0	102.0	TAG 3	1
TGAQ D102-4-4Z-JHP	71.00	71.00	3.70	4.50	3.40	68.0	102.0	TAG 4	1
TGAQ D120-3-4Z-JHP	90.50	90.50	2.80	3.50	2.50	84.0	120.0	TAG 3	1
TGAQ D120-4-4Z-JHP	90.50	90.50	3.70	4.50	3.40	84.0	120.0	TAG 4	1
TGAQ D120-5-4Z-JHP	90.50	90.50	4.70	5.50	4.00	84.0	120.0	TAG 5	1
TGAQ D160-3-4Z-JHP	100.00	100.00	2.80	3.50	2.50	97.0	160.0	TAG 3	1
TGAQ D160-4-4Z-JHP	100.00	100.00	3.70	4.50	3.40	97.0	160.0	TAG 4	1
TGAQ D160-5-4Z-JHP	100.00	100.00	4.70	5.50	4.00	97.0	160.0	TAG 5	1

- Suitable for all TANG-GRIP inserts • D52 Adapters available with two pockets

(1) Minimum cutting width
(2) Maximum cutting width
(3) Maximum diameter for parting
(4) Master insert identification
(5) 0 - Without coolant supply, 1 - With coolant supply

For inserts, see pages: TAG N-A (573) • TAG N-C (full radius) (569) • TAG N-C/W/M (568) • TAG N-HF (568) • TAG N-J/JS/JT (570) • TAG N-LF (572) • TAG N-MF (570) • TAG N-T (573) • TAG N-UT (572) • TAG R/L-C (569) • TAG R/L-J/JS (571)
For holders, see pages: TGTBQ-JHP (574) • TGTBQ-JHP-MC (575) • TGTBQ-JHP-RIB (576) • TGTBY-JHP (583) • V## SQ#-#-D82-JHP (577)

Flow Rate vs. Pressure

Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
TGAQ D.../-2.../-3...-JHP	4-7	5-8	6-9
TGAQ D.../-4.../-5...-JHP	6-7	7-8	8-9

Spare Parts

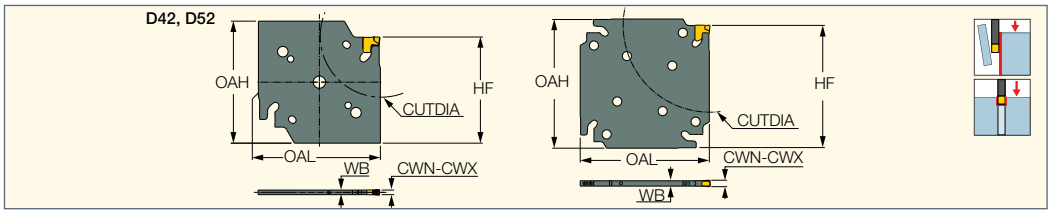
Designation			
TGAQ D52-2-2Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 2*
TGAQ D52-3-2Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 3-4-SH*
TGAQ D52-4-2Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 3-4-SH*
TGAQ D82-2-4Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 2*
TGAQ D82-3-4Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 3-4-SH*
TGAQ D82-4-4Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 3-4-SH*
TGAQ D102-3-4Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 3-4-SH*
TGAQ D102-4-4Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 3-4-SH*
TGAQ D120-3-4Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 3-4-SH*
TGAQ D120-4-4Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 3-4-SH*
TGAQ D120-5-4Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 5-7*
TGAQ D160-3-4Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 3-4-SH*
TGAQ D160-4-4Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 3-4-SH*
TGAQ D160-5-4Z-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	ETG 5-7*

* Optional, to be ordered separately

TANG-GRIP HIGH FEED PARTING

TGAQ

Parting and Grooving Square Adapters Carrying TANG-GRIP Tangentially Clamped Inserts



Designation	OAL	OAH	CWN[1]	CWX[2]	WB	HF	CUTDIA[3]	MIID[4]	CSP[5]
TGAQ D42-2-2Z	32.00	32.00	1.80	2.50	1.65	32.0	42.0	TAG 2	0
TGAQ D42-3-2Z	32.00	32.00	2.80	3.50	2.50	32.0	42.0	TAG 3	0
TGAQ D52-2-2Z	50.00	50.00	1.80	2.50	1.65	43.5	52.0	TAG 2	0
TGAQ D52-3-2Z	50.00	50.00	2.80	3.50	2.50	43.5	52.0	TAG 3	0
TGAQ D52-4-2Z	50.00	50.00	3.70	4.50	3.40	43.5	52.0	TAG 4	0
TGAQ D82-2-4Z	61.00	61.00	1.80	2.50	1.65	58.0	82.0	TAG 2	0
TGAQ D82-3-4Z	61.00	61.00	2.80	3.50	2.50	58.0	82.0	TAG 3	0
TGAQ D82-4-4Z	61.00	61.00	3.70	4.50	3.40	58.0	82.0	TAG 4	0
TGAQ D120-3-4Z	90.50	90.50	2.80	3.50	2.50	84.0	120.0	TAG 3	0
TGAQ D120-4-4Z	90.50	90.50	3.70	4.50	3.40	84.0	120.0	TAG 4	0
TGAQ D120-5-4Z	90.50	90.50	4.70	5.50	4.00	84.0	120.0	TAG 5	0
TGAQ D160-3-4Z	100.00	100.00	2.80	3.50	2.50	97.0	160.0	TAG 3	0
TGAQ D160-4-4Z	100.00	100.00	3.70	4.50	3.40	97.0	160.0	TAG 4	0
TGAQ D160-5-4Z	100.00	100.00	4.70	5.50	4.00	97.0	160.0	TAG 5	0

• Suitable for all TANG-GRIP inserts • D42 and D52 Adapters available with two pockets

[1] Minimum cutting width

[2] Maximum cutting width

[3] Maximum diameter for parting

[4] Master insert identification

[5] 0 - Without coolant supply, 1 - With coolant supply

For inserts, see pages: TAG N-A (573) • TAG N-C (full radius) (569) • TAG N-C/W/M (568) • TAG N-HF (568) • TAG N-J/JS/JT (570) • TAG N-LF (572) • TAG N-MF (570) • TAG N-T (573) • TAG N-UT (572) • TAG R/L-C (569) • TAG R/L-J/JS (571)

For holders, see pages: TGTBQ-JHP (574) • TGTBQ-JHP-MC (575) • TGTBQ-JHP-RIB (576) • TGTBY-JHP (583) • V## SQ#-#-D82-JHP (577)

Spare Parts

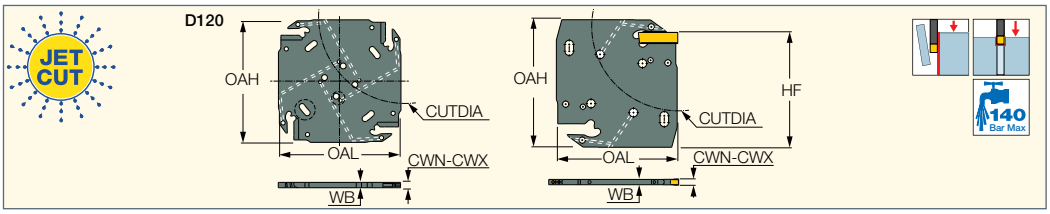
Designation		
TGAQ D42-2-2Z		ETG 2*
TGAQ D42-3-2Z		ETG 3-4-SH*
TGAQ D52-2-2Z	SR M4X10-8.8-T20	ETG 2*
TGAQ D52-3-2Z	SR M4X10-8.8-T20	ETG 3-4-SH*
TGAQ D52-4-2Z	SR M4X10-8.8-T20	ETG 3-4-SH*
TGAQ D82-2-4Z	SR M4X10-8.8-T20	ETG 2*
TGAQ D82-3-4Z	SR M4X10-8.8-T20	ETG 3-4-SH*
TGAQ D82-4-4Z	SR M4X10-8.8-T20	ETG 3-4-SH*
TGAQ D120-3-4Z	SR M4X10-8.8-T20	ETG 3-4-SH*
TGAQ D120-4-4Z	SR M4X10-8.8-T20	ETG 3-4-SH*
TGAQ D120-5-4Z	SR M4X10-8.8-T20	ETG 5-7*
TGAQ D160-3-4Z	SR M4X10-8.8-T20	ETG 3-4-SH*
TGAQ D160-4-4Z	SR M4X10-8.8-T20	ETG 3-4-SH*
TGAQ D160-5-4Z	SR M4X10-8.8-T20	ETG 5-7*

* Optional, to be ordered separately

DOFGRIP TWISTED 2-SIDED

DGAQ-JHP

Parting and Grooving Square Adapters with Internal Coolant Holes Carrying DO-GRIP Inserts



Designation	OAL	OAH	CWN(1)	CWX(2)	WB	HF	CUTDIA(3)	MIID(4)	CSP(5)
DGAQ D52-2-2Z-JHP	50.00	50.00	1.90	2.50	1.72	43.5	52.0	DGN 2	1
DGAQ D52-3-2Z-JHP	50.00	50.00	3.00	3.18	2.50	43.5	52.0	DGN 3	1
DGAQ D52-4-2Z-JHP	50.00	50.00	4.00	4.00	3.20	43.5	52.0	DGN 4	1
DGAQ D82-3-2Z-JHP	64.40	64.40	3.00	3.18	2.50	58.0	82.0	DGN 3	1
DGAQ D82-4-2Z-JHP	64.40	64.40	4.00	4.00	3.20	58.0	82.0	DGN 4	1
DGAQ D82-5-2Z-JHP	64.40	64.40	5.00	5.00	4.00	58.0	82.0	DGN 5	1
DGAQ D120-4-4Z-JHP	90.50	90.50	4.00	4.00	3.20	84.0	120.0	DGN 4	1
DGAQ D120-5-4Z-JHP	90.50	90.50	5.00	5.00	4.00	84.0	120.0	DGN 5	1

- When using 2 and 3mm double-sided inserts, the depth of cut is limited up to 19mm. For larger depth, use a DGNM type single-ended insert.

(1) Minimum cutting width
(2) Maximum cutting width
(3) Maximum diameter for parting
(4) Master insert identification
(5) 0 - Without coolant supply, 1 - With coolant supply

For inserts, see pages: DGN-B (542) • DGN-LF/LFT (546) • DGN-MF (541) • DGN-P (548) • DGN-T (541) • DGN-UT/UA (547) • DGN-W (540) • DGN-WP (549) • DGN-Z (546) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGR-P (548) • DGR-WP (549) • DGR-Z/ZS (547) • DGR/L-B (542) • DGR/L-C DGRC/LC-C (540) • DGR/L-J/JS (545)

For holders, see pages: TGTBQ-JHP (574) • TGTBQ-JHP-MC (575) • TGTBQ-JHP-RIB (576) • TGTBY-JHP (583) • V## SQ#-#-D82-JHP (577)

Flow Rate vs. Pressure

Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
DGAQ D.../-2/-3...-JHP	4-7	5-8	6-9
DGAQ D.../-4/-5...-JHP	6-7	7-8	8-9

Spare Parts

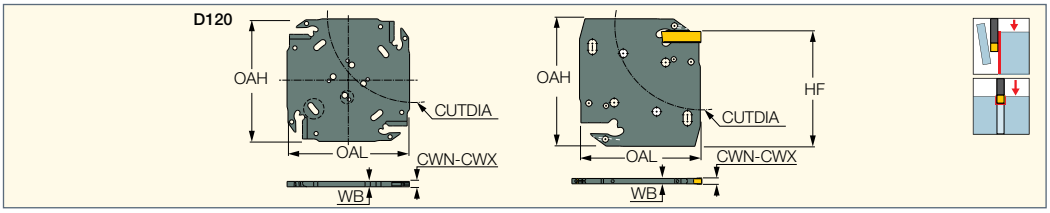
Designation			
DGAQ-JHP	SR M4X9-SEAL-JHP	JHP COPPER SEAL 1/8"	EDG 33A*

* Optional, to be ordered separately

DOFGRIP TWISTED 2-SIDED

DGAQ

Parting and Grooving Square Adapters Carrying DO-GRIP Inserts



Designation	OAL	OAH	CWN(1)	CWX(2)	WB	HF	CUTDIA(3)	MIID(4)	CSP(5)
DGAQ D52-2-2Z	50.00	50.00	1.90	2.50	1.72	43.5	52.0	DGN 2	0
DGAQ D52-3-2Z	50.00	50.00	3.00	3.18	2.50	43.5	52.0	DGN 3	0
DGAQ D52-4-2Z	50.00	50.00	4.00	4.00	3.20	43.5	52.0	DGN 4	0
DGAQ D82-3-2Z	64.40	64.40	3.00	3.18	2.50	58.0	82.0	DGN 3	0
DGAQ D82-4-2Z	64.40	64.40	4.00	4.00	3.20	58.0	82.0	DGN 4	0
DGAQ D82-5-2Z	64.40	64.40	5.00	5.00	4.00	58.0	82.0	DGN 5	0
DGAQ D120-4-4Z	90.50	90.50	4.00	4.00	3.20	84.0	120.0	DGN 4	0
DGAQ D120-5-4Z	90.50	90.50	5.00	5.00	4.00	84.0	120.0	DGN 5	0

- When using 2 and 3mm double-sided inserts, the depth of cut is limited up to 19mm. For larger depth, use a DGNM type single-ended insert.

(1) Minimum cutting width
(2) Maximum cutting width
(3) Maximum diameter for parting
(4) Master insert identification
(5) 0 - Without coolant supply, 1 - With coolant supply

For inserts, see pages: DGN-B (542) • DGN-LF/LFT (546) • DGN-MF (541) • DGN-P (548) • DGN-T (541) • DGN-UT/UA (547) • DGN-W (540) • DGN-WP (549) • DGN-Z (546) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGR-P (548) • DGR-WP (549) • DGR-Z/ZS (547) • DGR/L-B (542) • DGR/L-C DGRC/LC-C (540) • DGR/L-J/JS (545)

For holders, see pages: TGTBQ-JHP (574) • TGTBQ-JHP-MC (575) • TGTBQ-JHP-RIB (576) • TGTBY-JHP (583) • V## SQ#-#-D82-JHP (577)

Spare Parts

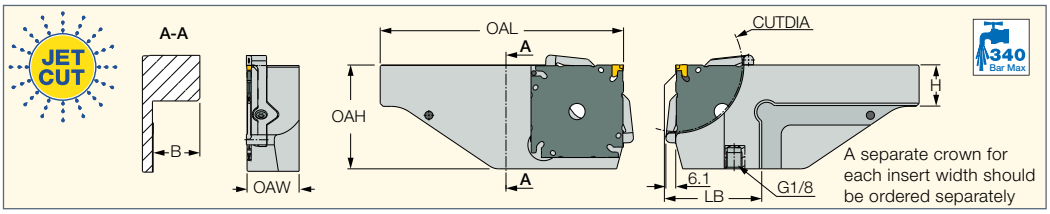
Designation		
DGAQ	SR M4X10-8.8-T20	EDG 33A*

* Optional, to be ordered separately

JETCROWN
LOGIQ JET COOLANT

TGTBQ-ECD-JHP (JET-CROWN)

Tool Blocks for Square TANG-F-GRIP (TGAQ-ECD) Parting and Grooving Adapters for High-Pressure Coolant



Designation	OAH	H	B	OAW	OAL	LB	CUTDIA			
TGTBQ 20L-D65-ECD-JHP	55.00	20.0	20.5	26.50	129.00	42.00	65.0	SR M7-R-L	BLD T20/S7	SW6-SD
TGTBQ 20R-D65-ECD-JHP	55.00	20.0	20.5	26.50	129.00	42.00	65.0	SR M7-R-L	BLD T20/S7	SW6-SD
TGTBQ 25L-D65-ECD-JHP	55.00	25.0	25.5	31.50	139.00	42.00	65.0	SR M7-R-L	BLD T20/S7	SW6-SD
TGTBQ 25R-D65-ECD-JHP	55.00	25.0	25.5	31.50	139.00	42.00	65.0	SR M7-R-L	BLD T20/S7	SW6-SD
TGTBQ 20L-D82-ECD-JHP	64.00	20.0	20.5	26.50	140.00	53.00	82.0	SR M7-R-L	BLD T20/S7	SW6-SD
TGTBQ 20R-D82-ECD-JHP	64.00	20.0	20.5	26.50	140.00	53.00	82.0	SR M7-R-L	BLD T20/S7	SW6-SD
TGTBQ 25L-D82-ECD-JHP	64.00	25.0	25.5	31.50	150.00	53.00	82.0	SR M7-R-L	BLD T20/S7	SW6-SD
TGTBQ 25R-D82-ECD-JHP	64.00	25.0	25.5	31.50	150.00	53.00	82.0	SR M7-R-L	BLD T20/S7	SW6-SD

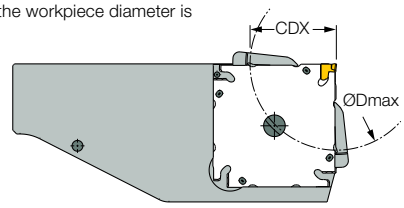
- A separate crown for each insert width should be ordered separately

For tools, see pages: TGAQ-ECD (JET-CROWN) (582)

Depth of cut as function of workpiece diameter

Designation	Dmax																				
TGTBQ ..R/L-D65-ECD	98	95	90	87	84	81	78	76	74	73	72	70	69	68	67	66	65				
CDX	8	9	10	11	12	13	14	15	16	17	18	19	20-21	22	23-24	25-33	32.5				
TGTBQ ..R/L-D82-ECD	118	116	112	108	105	102	99	97	95	93	91	90	89	88	87	86	85	84	83	82	
CDX	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	31	41	

The tool cannot be used for grooving applications when the workpiece diameter is larger than 118mm.

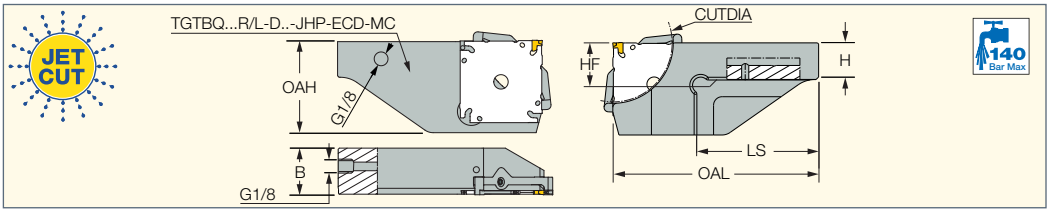




JETCROWN
LOGIQ JET COOLANT

TGTBQ-JHP-ECD-MC

Tool Blocks for Square TANG-F-GRIP (TGAQ-ECD) Parting and Grooving Adapters for High-Pressure Coolant



Designation	H	B	CUTDIA	OAH	HF	OAL	LS
TGTBQ 20R/L-D65-JHP-ECD-MC	20.0	26.5	65.0	55.00	20.0	113.00	70.0
TGTBQ 25R/L-D65-JHP-ECD-MC	25.0	31.5	65.0	55.00	25.0	127.00	85.0
TGTBQ 20R/L-D82-JHP-ECD-MC	20.0	26.5	82.0	64.00	20.0	128.00	70.0
TGTBQ 25R/L-D82-JHP-ECD-MC	25.0	31.5	82.0	64.00	25.0	143.00	85.0

NEW

- A separate crown for each insert width should be ordered separately

For tools, see pages: TGAQ-ECD (JET-CROWN) (582)

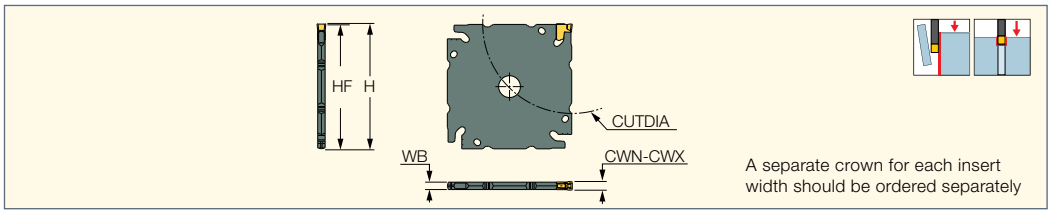
Spare Parts

Designation					
TGTBQ-JHP-ECD-MC	SR M7-R-L	HW 5.0	PLG G1/8 TL360	BLD T20/S7	SW6-SD

JETCROWN
LOGIQ JET COOLANT

TGAQ-ECD (JET-CROWN)

Parting and Grooving Square Adapters Compatible with TANG-GRIP Inserts (Single-Ended)



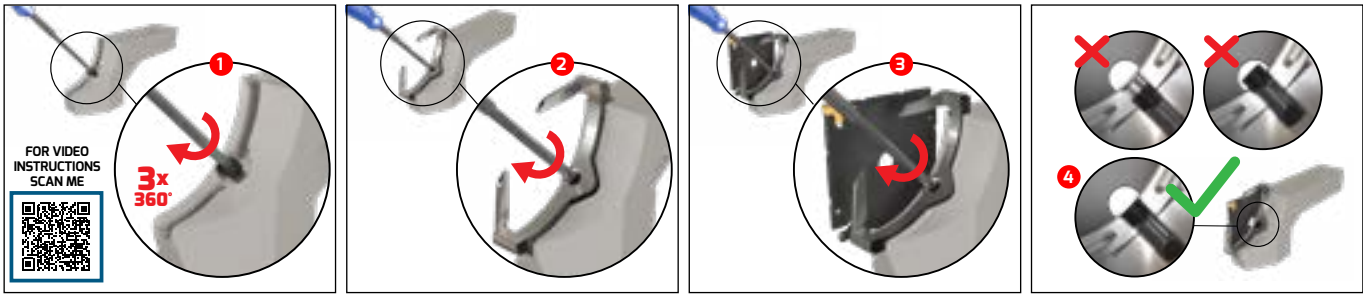
Designation	CWN(1)	CWX(2)	WB	H	HF(3)	CUTDIA	MIID(4)		
TGAQ D65-2-4Z-ECD	1.80	2.50	1.65	49.0	48.7	65.0	TAG N2	ECD D65-2-TG*	ETG 2*
TGAQ D65-3-4Z-ECD	2.80	3.50	2.50	49.0	48.7	65.0	TAG N3	ECD D65-3-TG*	ETG 3-4-SH*
TGAQ D82-2-4Z-ECD	1.80	2.50	1.65	58.0	57.7	82.0	TAG N2	ECD D82-2-TG*	ETG 2*
TGAQ D82-3-4Z-ECD	2.80	3.50	2.50	58.0	57.7	82.0	TAG N3	ECD D82-3-TG*	ETG 3-4-SH*
TGAQ D82-4-4Z-ECD	3.70	4.50	3.40	58.0	57.7	82.0	TAG N4	ECD D82-4-TG*	ETG 3-4-SH*

- Suitable for all TANG-GRIP inserts

(1) Minimum cutting width
(2) Maximum cutting width
(3) Related to insert
(4) Master insert identification
* Optional, to be ordered separately

For inserts, see pages: TAG N-A (573) • TAG N-C (full radius) (569) • TAG N-C/W/M (568) • TAG N-HF (568) • TAG N-J/JS/JT (570) • TAG N-LF (572) • TAG N-MF (570) • TAG N-T (573) • TAG N-UT (572) • TAG R/L-C (569) • TAG R/L-J/JS (571)

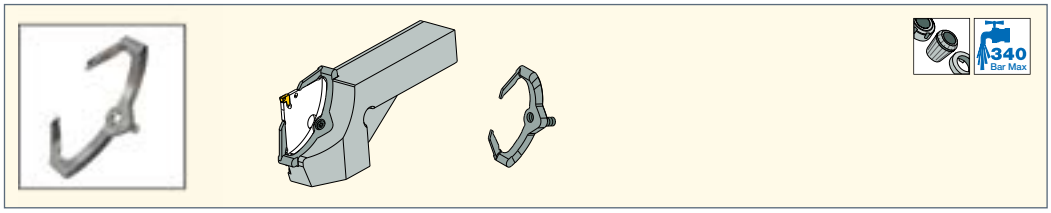
For holders, see pages: TGTBQ-ECD-JHP (JET-CROWN) (581) • TGTBQ-JHP-ECD-MC (581) • V## SQ#-#-D65-ECD (882)



JETCROWN
LOGIQ JET COOLANT

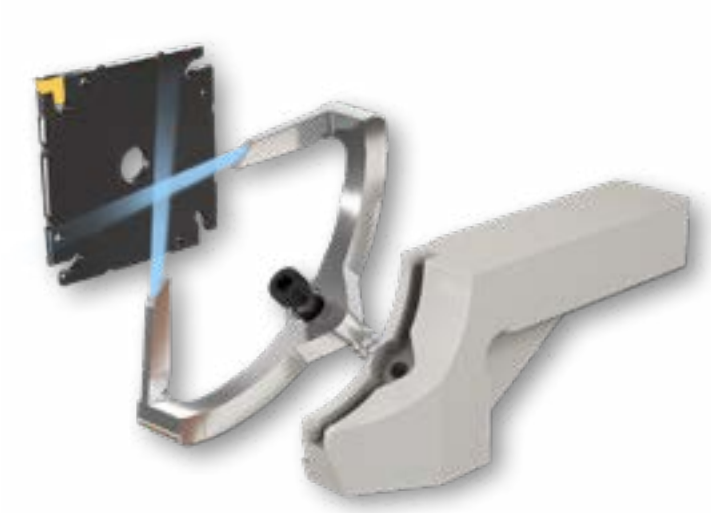
CROWN (ECD)

Crown Clamping Mechanism with a Single Screw for Fast Clamping and Indexing. Features Two Effective Coolant Holes



Designation	CW(1)	CUTDIA(2)
ECD D65-2-TG	2.00	65.0
ECD D65-3-TG	3.00	65.0
ECD D82-2-TG	2.00	82.0
ECD D82-3-TG	3.00	82.0
ECD D82-4-TG	4.00	82.0

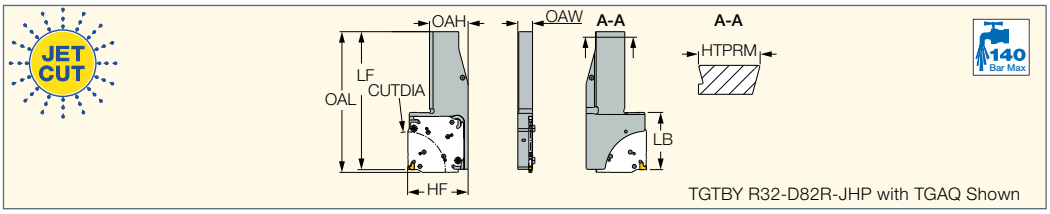
(1) Related insert cutting width
(2) Maximum parting diameter



LOGIQFGRIP HIGH FEED Y-AXIS

TGTBY-JHP

Y-Axis Intermediate Prismatic Holders for Square JHP Adapters on Multi-Task Machines for Parting and Grooving



TGTBY R32-D82R-JHP with TGAQ Shown

Designation	OAH	HF	OAW	LF	LB	CUTDIA	OAL(1)	HTPRM	OAL_2(2)
TGTBY R/L32-D82R-JHP	42.00	65.8	16.00	150.00	62.00	82.0	153.00	32.00	156.40
TGTBY R/L32-D82L-JHP	42.00	65.8	16.00	150.00	62.00	82.0	153.00	32.00	156.40

- Can be used also for X-axis (multi-task machines) - location pin should beremoved

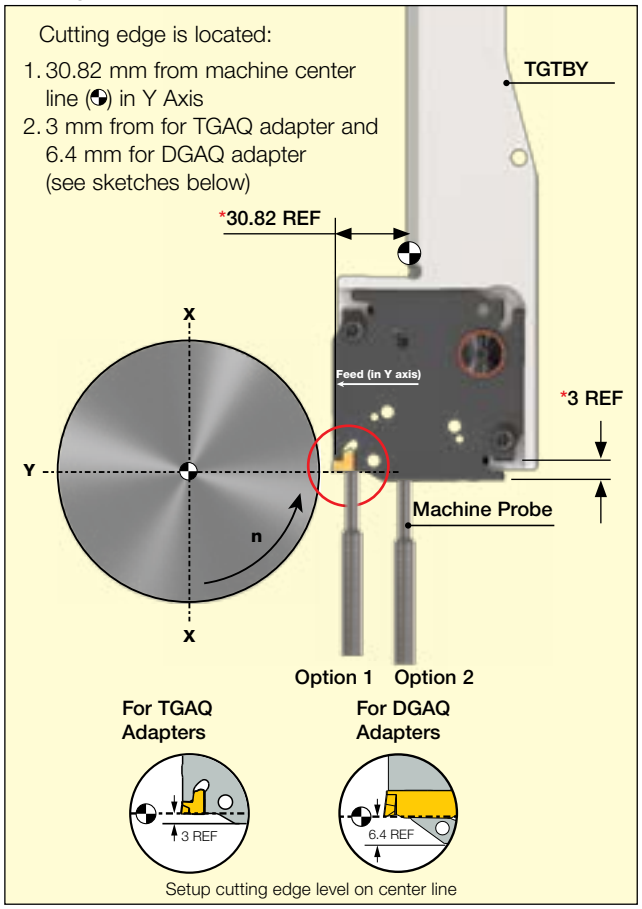
(1) Overall length with TGAQ adapter

(2) Overall length with DGAQ adapter

For tools, see pages: DGAQ (580) • DGAQ-JHP (580) • TGAQ (579) • TGAQ-JHP (578)

Y-Axis Tool Setup on Multi-Task Machines

Parting and Setup in Y-Axis Direction



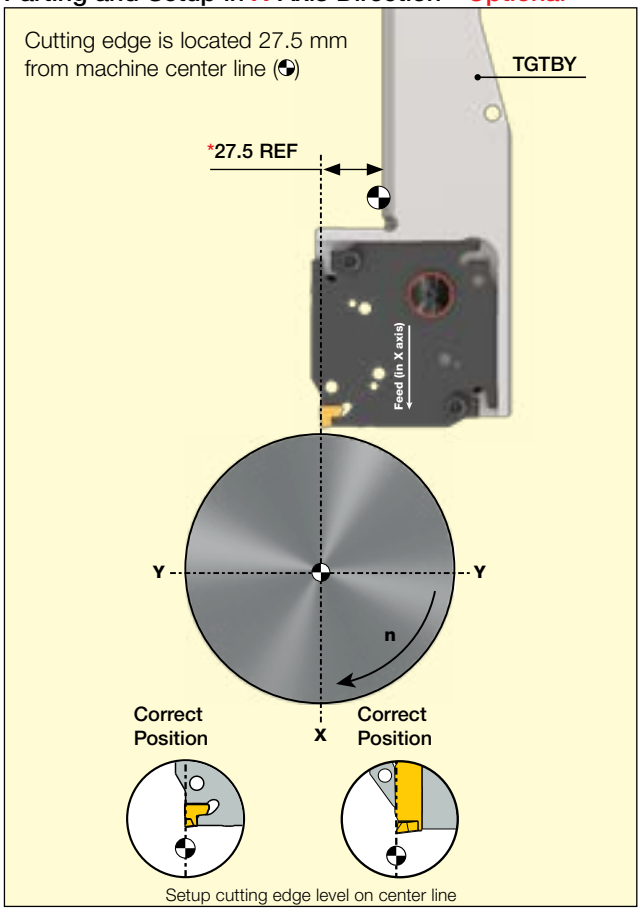
* For Y-Axis cut off, compensate 30.82 mm in Y-Axis direction and compensate 3 mm for TGAQ adapters or 6.4 mm for DGAQ adapters in X-Axis direction.

Set the cutting edge on the center line:

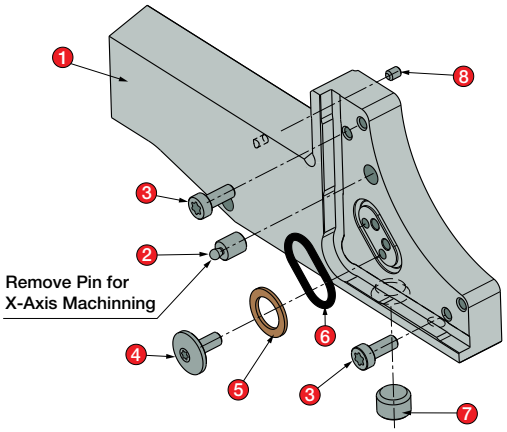
Option 1 - Gauge the cutting edge - this is preferable due to better accuracy

Option 2 - Gauge the blade and compensate 3mm / 6.4mm

Parting and Setup in X-Axis Direction - Optional



* For X-Axis cut off, compensate 27.5 mm in Y-Axis direction. Location pin should be removed.



1. **Block:** TGTBY
2. **Locating pin:** Side thrust Pin 3 mm
3. **Clamping screw :** SR M4x10 ISO 14580
4. **Clamping & sealing screw:** SR M4x9-Seal-JHP
5. **Seal washer:** CSW 1/8"
6. **O-ring:** O-ring 10x2 NBR
7. **Lower sealing plug:** Plug G1/8-6.5 TL360
8. **Upper sealing screw:** SR M3x4-**DIN913**

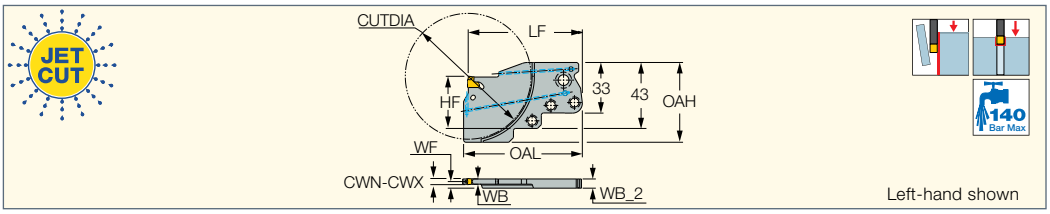
Spare Parts

Designation									
TGTBY-JHP	SR M4X10-8.8-T20	SR M4X9-SEAL-JHP	OR 16X2 NBR	JHP COPPER SEAL 1/8"	BLD T20/S7	SW6-SD	PLG G1/8 TL360	HW 5.0	SIDE THRUST PIN 3mm

TANG-GRIP Y AXIS PARTING LINE

TAGPAD-Y-JHP

Y-Axis Adapters for Parting & Grooving on Multi-Task Machines & Turning Centers with JHP Channels and TANG-GRIP Inserts



Designation	CWN(1)	CWX(2)	WF	WB	WB_2	LF	OAL	OAH	HF	CUTDIA	MIID(3)	
TAGPAD-Y-D82R/L-3C	2.80	3.50	4.80	2.40	6.0	74.40	77.40	52.00	34.0	82.0	TAG N3HF	ETG 3-4-SH*
TAGPAD-Y-D82R/L-4C	3.70	4.50	4.30	3.40	6.0	74.40	77.40	52.00	34.0	82.0	TAG N4HF	ETG 3-4-SH*
TAGPAD-Y-D125R/L-3C	2.80	3.50	4.80	2.40	6.0	105.90	108.90	75.50	34.0	125.0	TAG N3HF	ETG 3-4-SH*
TAGPAD-Y-D125R/L-4C	3.70	4.50	4.30	3.40	6.0	105.90	108.90	75.50	34.0	125.0	TAG N4HF	ETG 3-4-SH*

- For set up procedure user guide and accessories, see pages 583, 606-616

(1) Minimum cutting width

(2) Maximum cutting width

(3) Master insert identification

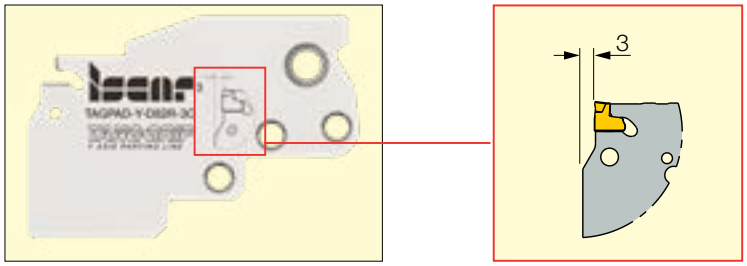
* Optional, to be ordered separately

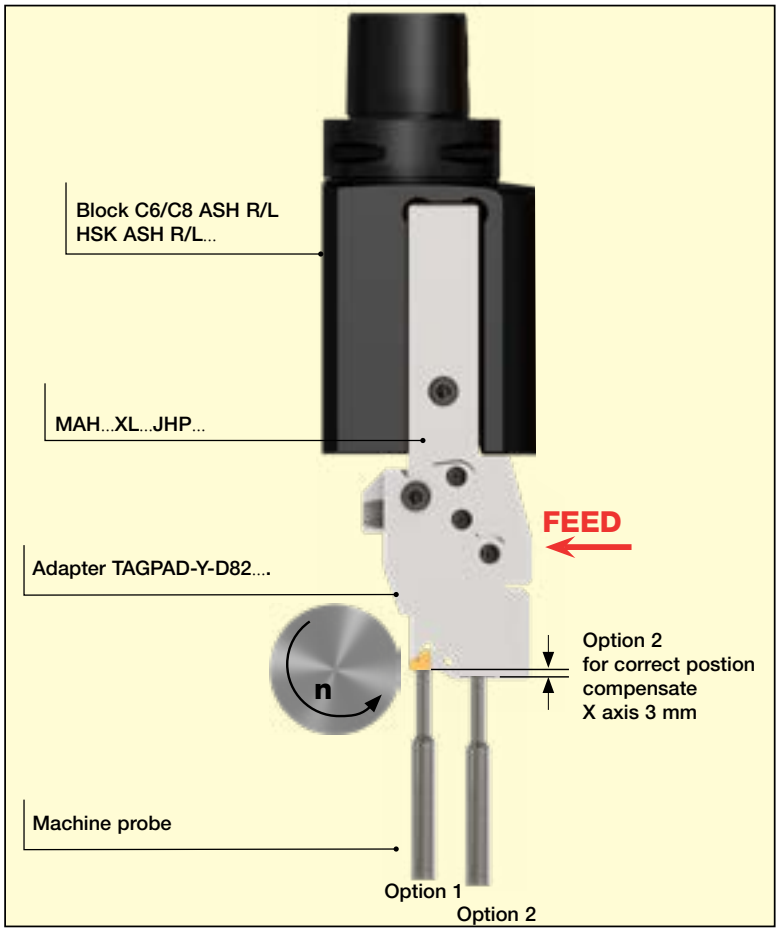
For inserts, see pages: TAG N-A (573) • TAG N-C (full radius) (569) • TAG N-C/W/M (568) • TAG N-HF (568) • TAG N-J/JS/JT (570) • TAG N-LF (572) • TAG N-MF (570) • TAG N-T (573) • TAG N-UT (572) • TAG R/L-C (569) • TAG R/L-J/JS (571)

For holders, see pages: ABC MAHDR-#-XL-JHP (884) • MAHPR/L-XL-JHP (642) • MAHR/L-MG-XL-JHP (563) • MAHR/L-MG-XL-JHP-MC (563) • TR45 MAHDR-#-XL-JHP (883) • V## MAHD#-#-XL-##-JHP (880)

Y Axis TAGPAD setup on Multi-Task and Turning Center Machines

For setup in X direction, use the dimensions marked on the adapter. Setup in Y Axis is not needed.





* Option 1 is preferable due to better accuracy

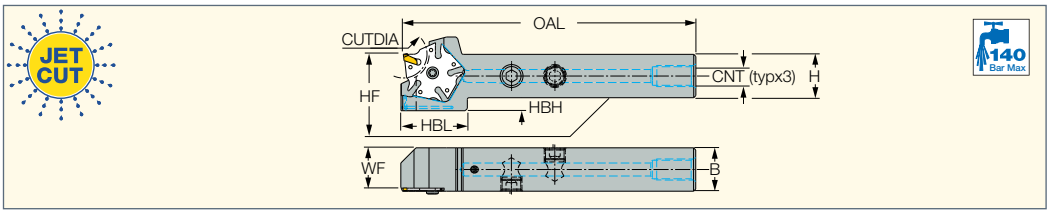
Setting in X Axis

Set the cutting edge on the center line:
Option 1 - Gauge the cutting edge
Option 2 - Gauge the blade and compensate 3mm

SLIMGRIP NARROW INSERTS

THMPR/L D22-JHP

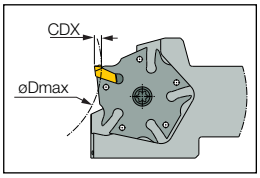
Holders with High-Pressure Coolant Channels for Pentagonal SLIM-GRIP Adapters



Designation	H	HF	HBH	B	WF	CUTDIA	OAL	HBL	CNT
THMPR/L 16-D22-JHP	16.0	16.1	10.0	16.0	14.60	22.0	135.00	29.6	UNF 5/16-24
THMPR/L 20-D22-JHP	20.0	20.1	6.0	20.0	18.60	22.0	135.00	29.6	G1/8

For tools, see pages: ADMP D22 (585)

THMPR/L...-D22-JHP CDX to øDmax								
CDX	≤2.0	≤3.0	≤4.0	≤5.0	≤6.0	≤7.0	≤8.0	≤11.0
øDmax	85	80	75	70	65	60	55	50



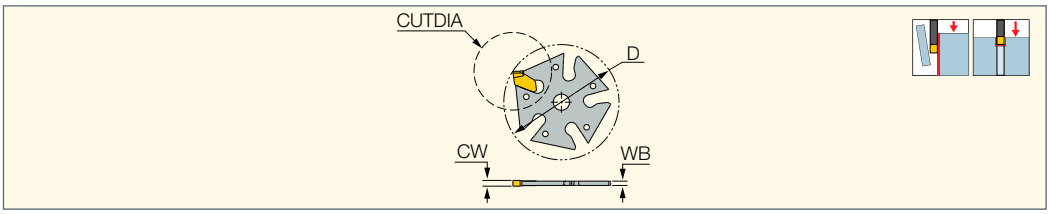
Spare Parts

Designation				
THMPR/L 16-D22-JHP	SR 5/16UNF TL360	HW 5/32"	SR M4-39432	T-15/5
THMPR/L 20-D22-JHP	PLG G1/8 TL360	HW 5.0	SR M4-39432	T-15/5

SLIMGRIP NARROW INSERTS

ADMP D22

Parting and Grooving Adapters with 5 Pockets for SLIM-GRIP Inserts



Designation	CW	WB	D	CUTDIA	Insert
ADMP D22-1.2	1.20	1.06	32	22.0	GFT 1.2
ADMP D22-1.6	1.60	1.20	32	22.0	GFT 1.6

- For user guide, see pages 606-615

For inserts, see pages: GFT-C (586) • GFT-J (585)
For holders, see pages: THMPR/L D22-JHP (585)

Spare Parts

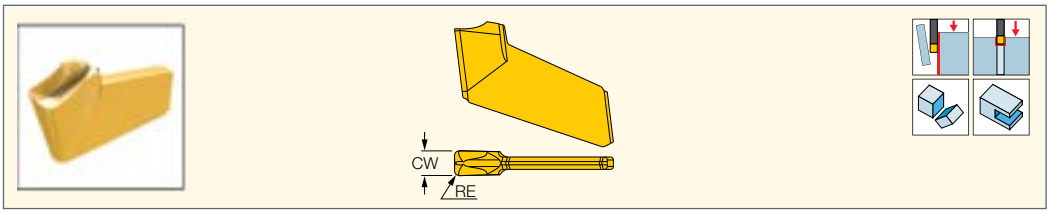
Designation	
ADMP D22	ESG-SLM*

* Optional, to be ordered separately

SLIMGRIP NARROW INSERTS

GFT-J

Thin Parting, Grooving and Slitting Single-Ended Inserts for Soft Materials



Designation	Dimensions CW	RE	Tough ↔ Hard IC1028	IC1008	Recommended Machining Data f groove (mm/rev)
GFT 0.6J-0.1	0.60	0.10	•	•	0.03-0.05
GFT 0.8J-0.1	0.80	0.10	•	•	0.03-0.07
GFT 1.0J-0.1	1.00	0.10	•	•	0.03-0.09
GFT 1.2J-0.14	1.20	0.14	•	•	0.03-0.10
GFT 1.6J-0.16	1.60	0.16	•	•	0.03-0.12

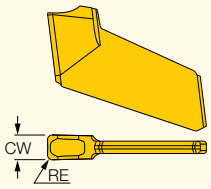
For tools, see pages: ADMP D22 (585) • SGAQ (431)

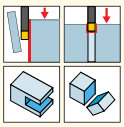
SLIMGRIP NARROW INSERTS

GFT-C

Thin Parting, Grooving & Slitting Single-Ended Inserts for Soft Materials







Designation	Dimensions CW	RE	Tough ↔ Hard IC1028	IC1008	Recommended Machining Data f groove (mm/rev)
GFT 1.6C-0.16	1.60	0.16	•	•	0.05-0.15

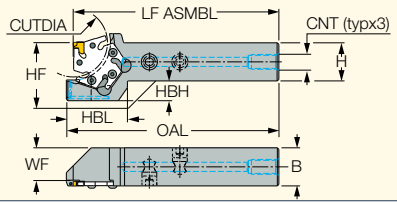
For tools, see pages: ADMP D22 (585)

TANG-GRIP PARTING AND GROOVING

THMPR/L D45-JHP

Holders with High-Pressure Coolant Channels for Pentagonal TANG-GRIP Adapters







Designation	H	HF	HBH	B	WF	CUTDIA	LF ASMBL	OAL	HBL	CNT
THMPR/L 20-D45-JHP	20.0	20.1	18.0	20.0	17.35	45.0	107.60	112.00	42.0	G1/8
THMPR/L 25-D45-JHP	25.0	25.1	13.0	25.0	22.35	45.0	120.60	125.00	40.0	G1/8

For tools, see pages: ADMP D45 (586)

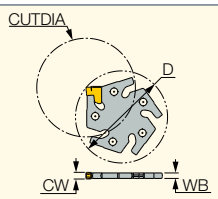
Spare Parts

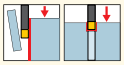
Designation				
THMPR/L 20-D45-JHP	SR M3X8 ISO 14580 BLACK	T-10/5	PLG G1/8 TL360	HW 5.0
THMPR/L 25-D45-JHP	SR M3X8 ISO 14580 BLACK	T-10/5	PLG G1/8 TL360	HW 5.0

TANG-GRIP PARTING AND GROOVING

ADMP D45

Parting and Grooving Adapters with 5 Pockets for TANG-GRIP Tangentially Clamped Inserts





Designation	CWN(1)	CWX(2)	WB	D	CUTDIA	Insert
ADMP D45-2.0	1.80	2.40	1.60	42	45.0	TAG 2
ADMP D45-3.0	2.80	3.50	2.50	42	45.0	TAG 3

• For user guide, see pages 606-615

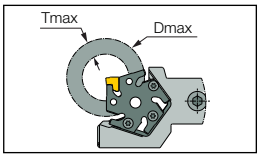
(1) Minimum cutting width

(2) Maximum cutting width

For inserts, see pages: TAG N-A (573) • TAG N-C (full radius) (569) • TAG N-C/W/M (568) • TAG N-HF (568) • TAG N-J/JS/JT (570) • TAG N-LF (572) • TAG N-MF (570) • TAG N-UT (572) • TAG R/L-C (569) • TAG R/L-J/JS (571)

For holders, see pages: THMPR/L D45-JHP (586)

THMPR/L...-D45-JHP Tmax. to Dmax.									
Tmax	T≤3.0	T≤4.0	T≤5.0	T≤6.0	T≤7.0	T≤8.0	T≤9.0	T≤10.0	T≤22.5
Dmax	85	80	75	70	65	60	55	50	45



Spare Parts

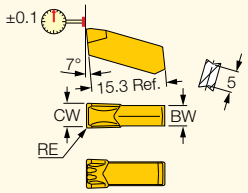
Designation	
ADMP D45-2.0	ETG 2*
ADMP D45-3.0	ETG 3-4-SH*

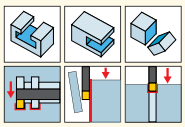
* Optional, to be ordered separately

CUTGRIP

GIM-C
Parting and Grooving
Single-Sided Inserts for
Parting Bars, Hard Materials
and Tough Applications





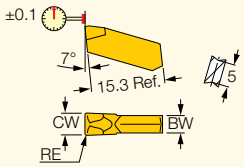


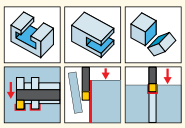
Designation	Dimensions CW	RE	CWTOL(1)	BW	Tough ↔ Hard IC328	IC830	IC354	IC908	IC20	Recommended Machining Data f groove (mm/rev)
GIM 3C	3.00	0.22	0.050	2.40	●	●	●	●	●	0.15-0.25
GIM 4C	4.00	0.25	0.050	3.40				●		0.15-0.25
GIM 5C	5.00	0.40	0.050	4.00	●	●	●	●	●	0.15-0.30
GIM 6C	6.00	0.40	0.050	4.80	●		●	●	●	0.15-0.30

CUTGRIP

GIM-J
Utility Single-Sided Inserts
for Parting and Grooving
Soft Materials, Tubes
and Small Diameters







Designation	Dimensions CW	RE	CWTOL(1)	BW	Tough ↔ Hard IC328	IC830	IC54	IC354	IC908	IC20	Recommended Machining Data f groove (mm/rev)
GIM 2.2J	2.20	0.17	0.050	1.70	●	●	●	●	●	●	0.06-0.13
GIM 3J	3.00	0.25	0.050	2.40	●	●		●	●	●	0.08-0.15
GIM 4J	4.00	0.25	0.050	3.20	●	●		●	●	●	0.08-0.18

• For cutting speed recommendations and user guide, see pages 606-615

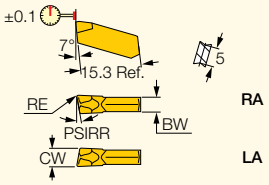
(1) Cutting width tolerance (+/-)

For tools, see pages: C#-GHDR/L (301) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-S (309) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300) • GHSR/L (428) • GHSR/L-JHP-SL (429) • GM-DG () • NQCH-GHSR/L-JHP (428)

CUTGRIP

GIM-J-RA/LA
Utility Single-Sided Inserts for Parting and Grooving Soft Materials, Parting Tubes and Small Diameters





Designation	Dimensions CW	RE	CWTOL(1)	PSIRL	PSIRR	BW	Tough ↔ Hard IC656	IC328	IC830	IC54	IC354	IC908	IC20	Recommended Machining Data f groove (mm/rev)
GIM 2.2J-8LA	2.20	0.17	0.050	8.0	-	1.70		●			●	●	●	0.05-0.10
GIM 2.2J-8RA	2.20	0.17	0.050	-	8.0	1.70	●	●	●		●	●	●	0.05-0.10
GIM 2.2JS-15LA	2.20	0.02	0.050	15.0	-	1.70		●				●	●	0.05-0.10
GIM 2.2JS-15RA	2.20	0.02	0.050	-	15.0	1.70		●	●	●	●	●	●	0.05-0.10
GIM 3J-4LA	3.00	0.22	0.050	4.0	-	2.40					●		●	0.05-0.12
GIM 3J-4RA	3.00	0.25	0.050	-	4.0	2.40		●	●		●		●	0.05-0.12
GIM 3J-8LA	3.00	0.25	0.050	8.0	-	2.40		●			●	●	●	0.05-0.12
GIM 3J-8RA	3.00	0.25	0.050	-	8.0	2.40	●	●	●		●	●	●	0.05-0.12
GIM 3JS-15LA	3.00	0.02	0.050	15.0	-	2.40		●	●				●	0.05-0.12
GIM 3JS-15RA	3.00	0.02	0.050	-	15.0	2.40		●	●			●	●	0.05-0.12
GIM 4J-6LA	4.00	0.25	0.050	6.0	-	3.20							●	0.08-0.15
GIM 4J-6RA	4.00	0.25	0.050	-	6.0	3.20					●		●	0.08-0.15

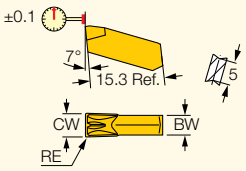
• For cutting speed recommendations and user guide, see pages 606-615
(1) Cutting width tolerance (+/-)

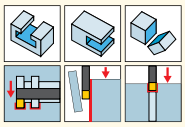
For tools, see pages: C#-GHDR/L (301) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-S (309) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300) • GHSR/L (428) • GHSR/L-JHP-SL (429) • NQCH-GHSR/L-JHP (428)

CUTGRIP

GIM-W
Single-Sided Inserts with Center Ridged Chipformer and Reinforced Edge for Parting and Grooving Alloy Steel







Designation	Dimensions CW	RE	CWTOL(1)	BW	Tough ↔ Hard IC328	IC830	IC54	IC354	IC908	IC20	Recommended Machining Data f groove (mm/rev)
GIM 2.4	2.40	0.18	0.050	2.40				●	●	●	0.10-0.18
GIM 3	3.00	0.22	0.050	2.40	●	●	●	●	●	●	0.10-0.18
GIM 3.2	3.20	0.22	0.050	2.54	●	●	●	●	●	●	0.10-0.20
GIM 4	4.00	0.25	0.050	3.20	●	●	●	●	●	●	0.15-0.20

• For cutting speed recommendations and user guide, see pages 606-615
(1) Cutting width tolerance (+/-)

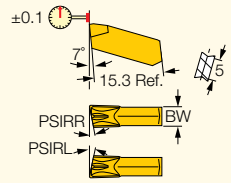
For tools, see pages: C#-GHDR/L (301) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-S (309) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300)

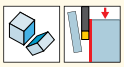
CUTGRIP

GIM-W-RA/LA

Single-Sided Screw-Clamped Inserts with Central Ridged Chipformer for Parting Alloy Steel







Designation	Dimensions CW	RE	CWTOL(1)	PSIRL	PSIRR	BW	Tough ↔ Hard IC656	IC328	IC830	IC54	IC354	IC908	IC20	Recommended Machining Data f groove (mm/rev)
GIM 3-4LA	3.00	0.20	0.050	4.0	-	2.40		●			●		●	0.08-0.16
GIM 3-8LA	3.00	0.20	0.050	8.0	-	2.40		●		●	●	●	●	0.08-0.16
GIM 3S-15RA	3.00	0.22	0.050	-	15.0	2.40		●						0.08-0.16
GIM 3-4RA	3.00	0.25	0.050	-	4.0	2.40	●	●	●	●	●	●	●	0.08-0.16
GIM 3-8RA	3.00	0.25	0.050	-	8.0	2.40		●	●		●	●	●	0.08-0.16
GIM 3.2-4LA	3.20	0.22	0.050	4.0	-	2.50					●			0.08-0.16
GIM 3.2-4RA	3.20	0.22	0.050	-	4.0	2.50		●			●		●	0.08-0.16
GIM 3.2-8LA	3.20	0.22	0.050	8.0	-	2.50					●			0.08-0.16
GIM 3.2-8RA	3.20	0.22	0.050	-	8.0	2.50		●			●	●	●	0.08-0.16
GIM 4-4LA	4.00	0.25	0.050	4.0	-	3.20					●		●	0.10-0.16
GIM 4-4RA	4.00	0.25	0.050	-	4.0	3.20	●				●	●	●	0.10-0.16
GIM 4-8LA	4.00	0.25	0.050	8.0	-	3.20					●			0.10-0.16
GIM 4-8RA	4.00	0.25	0.050	-	8.0	3.20		●			●	●	●	0.10-0.16

- For cutting speed recommendations and user guide, see pages 606-615

(1) Cutting width tolerance (+/-)

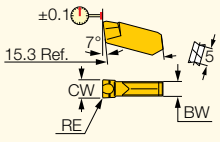
For tools, see pages: C#-GHDR/L (301) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-S (309) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300)

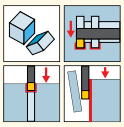
CUTGRIP

GIM-UT

Single-Ended Screw-Clamped Inserts for Parting and Grooving at Low Feeds on CrNi Alloys and Low Carbon Steel







Designation	Dimensions CW	RE	CWTOL(1)	BW	Tough ↔ Hard IC656	IC328	Recommended Machining Data f groove (mm/rev)
GIM 4.6UT	4.60	0.60	0.030	3.80	●	●	0.03-0.10

- For cutting speed recommendations and user guide, see pages 606-615

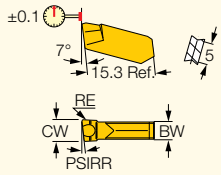
(1) Cutting width tolerance (+/-)

For tools, see pages: C#-GHDR/L (301) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-S (309) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300)

CUTGRIP

GIM-UT-RA/LA
Single-Ended Screw-Clamped Inserts for Parting at Low Feeds on CrNi Alloys and Low Carbon Steel





Designation	Dimensions CW	RE	CWTOL(1)	PSIRR	BW	IC328	Recommended Machining Data f groove (mm/rev)
GIM 3UT-1.5RA	3.12	0.25	0.030	1.5	2.50	●	0.03-0.10

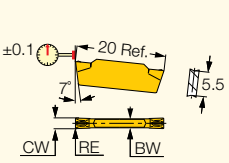
• For cutting speed recommendations and user guide, see pages 606-615
(1) Cutting width tolerance (+/-)

For tools, see pages: C#-GHDR/L (301) • CGHN 26-M (399) • CGHN 32-DGM (400) • CGHN 32-M (400) • CGHN-D (310) • CGHN-DG (310) • CGHN-S (309) • CGPAD (308) • CGPAD-JHP (309) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305) • GHMPR/L (300) • GHMR/L (300)

CUTGRIP

GDMW 2.4
Utility Double-Ended Inserts for External Turning, Grooving and Parting





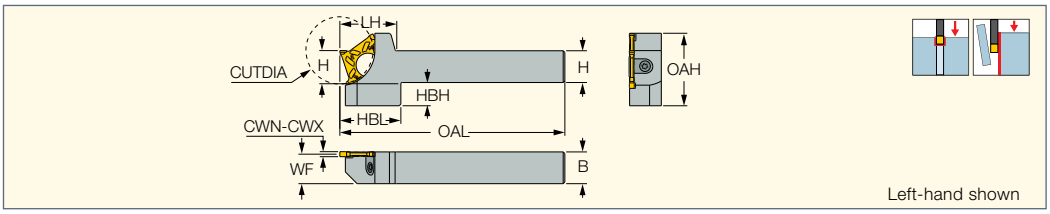
Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	CDX(3)	Tough ↔ Hard IC830	IC808	IC908	IC20	IC20N	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GDMW 2.4	2.40	0.18	0.040	0.030	2.00	18.00	●	●	●	●	●	0.25-1.50	0.07-0.12	0.05-0.08

• For cutting speed recommendations and user guide, see pages 606-615
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

For tools, see pages: PADR/L (338) • PHGR/L (338) • PHSR/L (427)

PENTA IQ GRIP PARTING LINE

PCHR/L-D-IQ
Grooving and Parting Tools Carrying Inserts with 5 Cutting Edges



Designation	H	B	CWN[1]	CWX[2]	WF	CUTDIA[3]	OAL	LH	HBL	HBH	OAH
PCHR/L 12-D22-2-IQ	12.0	12.0	2.00	2.40	11.40	22.0	100.00	26.9	25.70	8.0	25.5
PCHR/L 16-D22-2-IQ	16.0	16.0	2.00	2.40	15.40	22.0	120.00	26.9	23.20	4.0	25.5
PCHR/L 20-D22-2-IQ	20.0	20.0	2.00	2.40	19.40	22.0	120.00	26.9	-	-	25.5
PCHR/L 12-D22-3-IQ	12.0	12.0	3.00	3.20	10.70	22.0	120.00	19.7	20.00	11.0	25.5
PCHR/L 16-D22-3-IQ	16.0	16.0	3.00	3.20	14.70	22.0	120.00	19.7	20.00	7.0	25.5
PCHR/L 20-D22-3-IQ	20.0	20.0	3.00	3.20	18.70	22.0	120.00	19.7	-	-	25.5
PCHR/L 12-D32-2-IQ	12.0	12.0	2.00	2.40	11.50	32.0	100.00	28.4	29.50	14.0	33.6
PCHR/L 16-D32-2-IQ	16.0	16.0	2.00	2.40	15.50	32.0	120.00	28.4	29.50	10.0	33.6
PCHR/L 20-D32-2-IQ	20.0	20.0	2.00	2.40	19.50	32.0	120.00	28.4	29.50	6.0	33.6
PCHR/L 25-D32-2-IQ	25.0	25.0	2.00	2.40	24.50	32.0	120.00	28.4	-	-	33.6
PCHR/L 12-D32-3-IQ	12.0	12.0	3.00	3.20	10.70	32.0	100.00	26.0	32.00	16.0	32.6
PCHR/L 16-D32-3-IQ	16.0	16.0	3.00	3.20	14.70	32.0	120.00	26.0	32.00	12.0	32.6
PCHR/L 20-D32-3-IQ	20.0	20.0	3.00	3.20	18.70	32.0	120.00	26.0	32.00	8.0	32.6
PCHR/L 25-D32-3-IQ	25.0	25.0	3.00	3.20	23.70	32.0	120.00	26.0	-	-	32.6
PCHR/L 16-D40-3-IQ	16.0	16.0	3.00	3.20	14.70	40.0	135.00	33.3	36.80	17.0	43.5
PCHR/L 20-D40-3-IQ	20.0	20.0	3.00	3.20	18.70	40.0	135.00	33.3	35.60	13.0	43.5
PCHR/L 25-D40-3-IQ	25.0	25.0	3.00	3.20	23.70	40.0	135.00	33.3	33.60	8.0	43.5
PCHR/L 32-D40-3-IQ	32.0	32.0	3.00	3.20	30.70	40.0	135.00	33.3	-	-	43.5

[1] Minimum cutting width
[2] Maximum cutting width
[3] Maximum workpiece diameter for grooving operation

For inserts, see pages: PENTA D-N-C (593) • PENTA D-N-J (593) • PENTA D-N-PB (594) • PENTA D-R/L-C (594) • PENTA D-R/L-J (593)

Tmax as a Function of Dmax for PENTA D22

Tmax	T≤1.2	T≤2.0	T≤3.0	T≤4.0	T≤5.0	T≤7.0	T≤9.0	T≤11.0
Dmax	N.L[1]	600	130	60	40	30	25	22

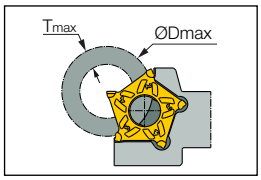
Tmax as a Function of Dmax for PENTA D32

Tmax	T≤1.2	T≤2	T≤3.0	T≤4.0	T≤5.0	T≤6.0	T≤7.0	T≤8.0	T≤9.0	T≤16.0
Dmax	N.L[1]	N.L[1]	250	130	80	60	50	45	40	32

Tmax as a Function of Dmax for PENTA D40

Tmax	T≤1.2	T≤2	T≤3.0	T≤4.0	T≤5.0	T≤6.0	T≤7.0	T≤8.0	T≤9.0	T≤10.0	T≤11.0	T≤12.0	T≤13.0	T≤16.0	T≤20.0
Dmax	N.L[1]	N.L[1]	N.L[1]	350	200	140	105	85	75	65	60	55	50	45	40

[1] N.L = No Limit



Spare Parts

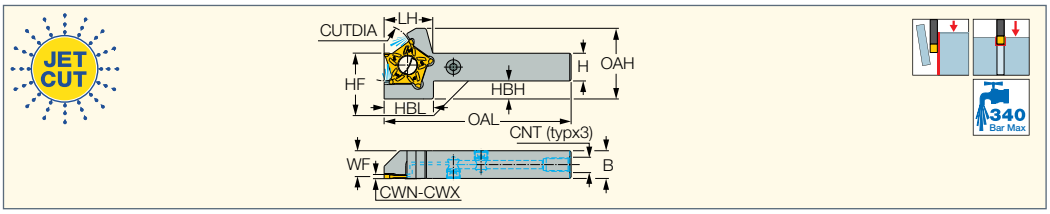
Designation				
PCHR/L 12-D22-2-IQ	SR M6-R-L	LEVER PD22-2 INJ	BLD T15/S7	SW6-SD
PCHR/L 16-D22-2-IQ	SR M6-R-L	LEVER PD22-2 INJ	BLD T15/S7	SW6-SD
PCHR/L 20-D22-2-IQ	SR M6-R-L	LEVER PD22-2 INJ	BLD T15/S7	SW6-SD
PCHR/L 12-D22-3-IQ	SR M6-R-L	LEVER PD22-3 INJ	BLD T15/S7	SW6-SD
PCHR/L 16-D22-3-IQ	SR M6-R-L	LEVER PD22-3 INJ	BLD T15/S7	SW6-SD
PCHL 20-D22-3-IQ		LEVER PD22-3 INJ*		
PCHR/L 20-D22-3-IQ	SR M6-R-L		BLD T15/S7	SW6-SD
PCHR 20-D22-3-IQ		LEVER PD22-3 INJ		
PCHR/L 12-D32-2-IQ	SR M6-R-L	LEVER PD32-2 INJ	BLD T15/S7	SW6-SD
PCHR/L 16-D32-2-IQ	SR M6-R-L	LEVER PD32-2 INJ	BLD T15/S7	SW6-SD
PCHR/L 20-D32-2-IQ	SR M6-R-L	LEVER PD32-2 INJ	BLD T15/S7	SW6-SD
PCHR/L 25-D32-2-IQ	SR M6-R-L	LEVER PD32-2 INJ	BLD T15/S7	SW6-SD
PCHL 12-D32-3-IQ		LEVER PD32-3 INJ		
PCHR/L 12-D32-3-IQ	SR M6-R-L		BLD T15/S7	SW6-SD
PCHR 12-D32-3-IQ		LEVER PD32-3 INJ*		
PCHR/L 16-D32-3-IQ	SR M6-R-L	LEVER PD32-3 INJ	BLD T15/S7	SW6-SD
PCHR/L 20-D32-3-IQ	SR M6-R-L	LEVER PD32-3 INJ	BLD T15/S7	SW6-SD
PCHR/L 25-D32-3-IQ	SR M6-R-L	LEVER PD32-3 INJ	BLD T15/S7	SW6-SD
PCHR/L 16-D40-3-IQ	SR M7-R-L	LEVER PD40 INJ	BLD T20/S7	SW6-SD
PCHR/L 20-D40-3-IQ	SR M7-R-L	LEVER PD40 INJ	BLD T20/S7	SW6-SD
PCHR/L 25-D40-3-IQ	SR M7-R-L	LEVER PD40 INJ	BLD T20/S7	SW6-SD
PCHR/L 32-D40-3-IQ	SR M7-R-L	LEVER PD40 INJ	BLD T20/S7	SW6-SD

* Optional, to be ordered separately

PENTA IQ GRIP PARTING LINE

PCHR/L-D-JHP

Grooving and Parting Tools with Channels for High-Pressure Coolant Carrying Inserts with 5 Cutting Edges



Designation	H	HF	HBH	B	CWN(1)	CWX(2)	WF	CUTDIA(3)	OAL	LH	HBL	OAH	CNT
PCHR/L 12-D22-2-JHP	12.0	0.0	9.0	12.0	2.00	2.40	11.00	22.0	101.50	29.0	29.50	32.0	UNF 5/16-24
PCHR/L 16-D22-2-JHP	16.0	0.0	5.0	16.0	2.00	2.40	15.00	22.0	121.50	29.0	29.50	32.0	UNF 5/16-24
PCHR/L 20-D22-2-JHP	20.0	0.0	1.0	20.0	2.00	2.40	19.00	22.0	121.50	29.0	29.50	32.0	G 1/8-28
PCHR/L 12-D32-2-JHP	12.0	12.1	14.5	12.0	2.00	2.40	11.15	32.0	100.00	30.5	31.00	41.0	UNF 5/16-24
PCHR/L 16-D32-2-JHP	16.0	16.1	10.0	16.0	2.00	2.40	15.21	32.0	120.00	25.9	27.00	41.0	UNF 5/16-24
PCHR/L 20-D32-2-JHP	20.0	20.1	6.5	20.0	2.00	2.40	18.40	32.0	120.00	30.5	31.00	41.0	G 1/8-28
PCHR/L 25-D32-2-JHP	25.0	25.1	1.5	25.0	2.00	2.40	23.40	32.0	120.00	29.0	29.50	41.0	G 1/8-28
PCHR/L 16-D40-3-JHP	16.0	16.0	17.0	16.0	3.00	3.20	14.60	40.0	135.00	36.3	36.80	51.0	UNF 5/16-24
PCHR/L 20-D40-3-JHP	20.0	20.0	13.0	20.0	3.00	3.20	18.60	40.0	135.00	35.1	35.60	51.0	G 1/8-28
PCHR/L 25-D40-3-JHP	25.0	25.0	8.0	25.0	3.00	3.20	23.60	40.0	135.00	33.1	33.60	51.0	G 1/8-28

(1) Minimum cutting width
(2) Maximum cutting width
(3) Maximum workpiece diameter for grooving operation

For inserts, see pages: PENTA D-N-C (593) • PENTA D-N-J (593) • PENTA D-N-PB (594) • PENTA D-R/L-C (594) • PENTA D-R/L-J (593) • PENTA D-R/L-PB (595)

PCHR/L D22-2...-JHP Dmax for Partting Off 22/T11

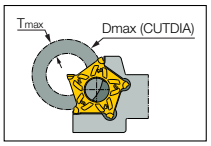
Tmax	T≤1.0	T≤2.0	T≤3.0	T≤4.0	T≤5.0	T≤6.0	T≤7.0	T≤8.0	T≤9.0	T≤10.0
Dmax	89	64	48	40	34	31	28	27	24	21

PCHR/L D32-2...-JHP Dmax for Partting Off 32/T16

Tmax	T≤1.0	T≤2.0	T≤3.0	T≤4.0	T≤5.0	T≤6.0	T≤7.0	T≤8.0	T≤9.0	T≤10.0
Dmax	150	125	100	78	65	57	51	46	43	40
Tmax	T≤11.0	T≤12.0	T≤13.0	T≤14.0	T≤15.0					
Dmax	39	37	35	34	33					

PCHR/L D40-3...-JHP Dmax for Partting Off 40/T20

Tmax	T≤1.0	T≤2.0	T≤3.0	T≤4.0	T≤5.0	T≤6.0	T≤7.0	T≤8.0	T≤9.0	T≤10.0
Dmax	400	300	200	145	114	95	82	73	66	61
Tmax	T≤11.0	T≤12.0	T≤13.0	T≤14.0	T≤15.0	T≤16.0	T≤17.0	T≤18.0	T≤19.0	
Dmax	57	54	51	49	47	46	45	44	42	



Flow Rate vs. Pressure

Designation	70 bar Flow Rate (liters/min)	100 bar Flow Rate (liters/min)	140 bar Flow Rate (liters/min)
PCHR/L...-2JHP	2-4	4-6	6-8
PCHR/L...-3JHP	7-9	9-11	11-13

Spare Parts

Designation							
PCHR/L 12-D22-2-JHP	SR M6-R-L	LEVER PD22-2 INJ	BLD T15/S7	SW6-SD	HW 5/32"		SR 5/16UNF TL360
PCHR/L 16-D22-2-JHP	SR M6-R-L	LEVER PD22-2 INJ	BLD T15/S7	SW6-SD	HW 5/32"		SR 5/16UNF TL360
PCHR/L 20-D22-2-JHP	SR M6-R-L	LEVER PD22-2 INJ*	BLD T15/S7	SW6-SD	HW 5.0	PLG G1/8 TL360	
PCHR/L 12-D32-2-JHP	SR M6-R-L	LEVER PD32-2 INJ	BLD T15/S7	SW6-SD	HW 5/32"		SR 5/16UNF TL360
PCHR/L 16-D32-2-JHP	SR M6-R-L	LEVER PD32-2 INJ	BLD T15/S7	SW6-SD	HW 5/32"		SR 5/16UNF TL360
PCHR/L 20-D32-2-JHP	SR M6-R-L	LEVER PD32-2 INJ	BLD T15/S7	SW6-SD	HW 5.0	PLG G1/8 TL360	
PCHR/L 25-D32-2-JHP	SR M6-R-L	LEVER PD32-2 INJ	BLD T15/S7	SW6-SD	HW 5.0	PLG G1/8 TL360	
PCHR/L 16-D40-3-JHP	SR M7-R-L	LEVER PD40 INJ	BLD T20/S7	SW6-SD	HW 5/32"		SR 5/16UNF TL360
PCHR/L 20-D40-3-JHP	SR M7-R-L	LEVER PD40 INJ	BLD T20/S7	SW6-SD	HW 5.0	PLG G1/8 TL360	
PCHR/L 25-D40-3-JHP	SR M7-R-L	LEVER PD40 INJ	BLD T20/S7	SW6-SD	HW 5.0	PLG G1/8 TL360	

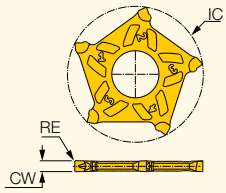
* Optional, to be ordered separately

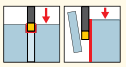
PENTA IQ GRIP PARTING LINE

PENTA D-N-J

Inserts with 5 Cutting Edges for Parting and Grooving Soft Materials, Parting Tubes, Small and Thin-Walled Parts







Designation	Dimensions CW	RE	CWTOL[1]	RETOL[2]	IC	IC808G	Recommended Machining Data f groove (mm/rev)
PENTA D22N200J020	2.00	0.20	0.020	0.030	22.00	●	0.04-0.12
PENTA D22N300J020	3.00	0.20	0.020	0.030	22.00	●	0.04-0.16

- For cutting speed recommendations and user guide, see pages 606-615

[1] Cutting width tolerance (+/-)

[2] Corner radius tolerance (+/-)

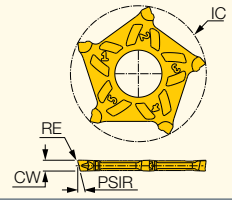
For tools, see pages: PCHR/L-D-IQ (591) • PCHR/L-D-JHP (592)

PENTA IQ GRIP PARTING LINE

PENTA D-R/L-J

Inserts with 5 Cutting Edges for Parting Tubes, Small and Thin-Walled Parts







Right-hand shown

Designation	Dimensions CW	RE	IC	PSIRL	PSIRR	IC808G	Recommended Machining Data f groove (mm/rev)
PENTA D22L200J-6D	2.00	0.20	22.00	6.0	-	●	0.04-0.10
PENTA D22R200J-6D	2.00	0.20	22.00	-	6.0	●	0.04-0.10
PENTA D22L200J-15D	2.00	0.20	22.00	15.0	-	●	0.04-0.08
PENTA D22R200J-15D	2.00	0.20	22.00	-	15.0	●	0.04-0.08
PENTA D22R300J-6D	3.00	0.20	22.00	-	6.0	●	0.04-0.12
PENTA D22L300J-15D	3.00	0.20	22.00	15.0	-	●	0.04-0.10
PENTA D22R300J-15D	3.00	0.20	22.00	-	15.0	●	0.04-0.10

- For cutting speed recommendations and user guide, see pages 606-615

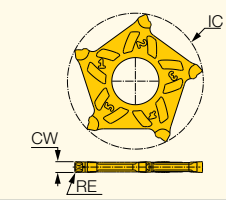
For tools, see pages: PCHR/L-D-IQ (591) • PCHR/L-D-JHP (592)

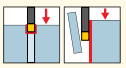
PENTA IQ GRIP PARTING LINE

PENTA D-N-C

Inserts with 5 Cutting Edges for Parting and Grooving Hard Materials, Tough and General Applications







Right-hand shown

Designation	Dimensions RE	CW	RETOL[1]	CWTOL[2]	IC	IC808G	Recommended Machining Data f groove (mm/rev)
PENTA D32N200C020	0.20	2.00	0.030	0.020	30.25	●	0.04-0.14
PENTA D32N300C020	0.20	3.00	0.030	0.020	30.25	●	0.06-0.22
PENTA D40N300C020	0.20	3.02	0.030	0.020	37.80	●	0.06-0.22

- For cutting speed recommendations and user guide, see pages 606-615

[1] Corner radius tolerance (+/-)

[2] Cutting width tolerance (+/-)

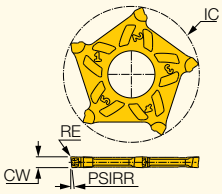
For tools, see pages: PCHR/L-D-IQ (591) • PCHR/L-D-JHP (592)

PENTA IQ GRIP PARTING LINE

PENTA D-R/L-C

Inserts with 5 Cutting Edges for Parting Hard Materials, Tough and General Applications







Right-hand shown

Designation	Dimensions CW	RE	IC	PSIRL	PSIRR	IC808G	Recommended Machining Data f groove (mm/rev)
PENTA D32L200C-6D	2.00	0.10	30.25	6.0	-	●	0.04-0.12
PENTA D32R200C-6D	2.00	0.10	30.25	-	6.0	●	0.04-0.12
PENTA D32L200C-15D	2.00	0.20	30.25	15.0	-	●	0.04-0.10
PENTA D32R200C-15D	2.00	0.20	30.25	-	15.0	●	0.04-0.10
PENTA D32L300C-6D	3.00	0.20	30.25	6.0	-	●	0.04-0.14
PENTA D32R300C-6D	3.00	0.20	30.25	-	6.0	●	0.04-0.14
PENTA D32L300C-15D	3.00	0.20	30.25	15.0	-	●	0.04-0.10
PENTA D32R300C-15D	3.00	0.20	30.25	-	15.0	●	0.04-0.10
PENTA D40L300C-6D	3.00	0.20	37.80	6.0	-	●	0.04-0.14
PENTA D40R300C-6D	3.00	0.20	37.80	-	6.0	●	0.04-0.14
PENTA D40L300C-15D	3.00	0.20	37.80	15.0	-	●	0.04-0.10
PENTA D40R300C-15D	3.00	0.20	37.80	-	15.0	●	0.04-0.10

- For cutting speed recommendations and user guide, see pages 606-615

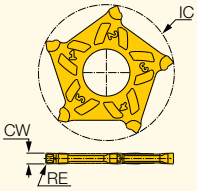
For tools, see pages: PCHR/L-D-IQ (591) • PCHR/L-D-JHP (592)

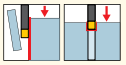
PENTA IQ GRIP PARTING LINE

PENTA D-N-PB

Pentagonal Inserts for Parting and Grooving Bearing Steel and Other Ductile Materials







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	IC	IC808G	Recommended Machining Data f groove (mm/rev)
PENTA D40N300PB020	3.00	0.20	0.020	0.030	37.80	●	0.03-0.10

- For cutting speed recommendations and user guide, see pages 606-615

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

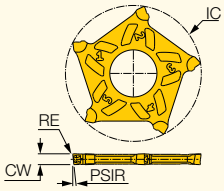
For tools, see pages: PCHR/L-D-IQ (591) • PCHR/L-D-JHP (592)

PENTA IQ GRIP PARTING LINE

PENTA D-R/L-PB

Pentagonal Inserts for Parting Bearing Steel and other Ductile Materials







Right-hand shown

Designation	Dimensions CW	RE	IC	PSIRL	PSIRR	IC808G	Recommended Machining Data f groove (mm/rev)
PENTA D40L300PB-6D	3.00	0.20	37.80	6.0	-	●	0.03-0.08
PENTA D40R300PB-6D	3.00	0.20	37.80	-	6.0	●	0.03-0.08
PENTA D40L300PB-15D	3.00	0.10	37.80	15.0	-	●	0.03-0.06
PENTA D40R300PB-15D	3.00	0.10	37.80	-	15.0	●	0.03-0.06

• For cutting speed recommendations and user guide, see pages 606-615

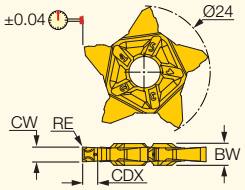
For tools, see pages: PCHR/L-D-IQ (591) • PCHR/L-D-JHP (592)

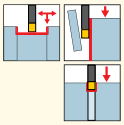
PENTACUT

PENTA 24N-C-SL

First Choice for The Parting of Bars, Hard Materials, and Tough Applications with a Negative Cutting Rake Angle







Designation	Dimensions CW	CWTOL(1)	RE	RETOL(2)	CDX(3)	BW	IC808G	Recommended Machining Data f groove (mm/rev)
PENTA 24N200C020SL	2.00	0.020	0.20	0.030	6.00	4.00	●	0.05-0.16
PENTA 24N300C020SL	3.00	0.020	0.20	0.030	6.20	4.00	●	0.06-0.20

NEW

• CUTDIA as a function of depth of cut (CDX). • For cutting speed recommendations and user guide, see pages 606-615

(1) Cutting width tolerance (+/-)

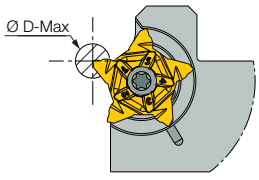
(2) Corner radius tolerance (+/-)

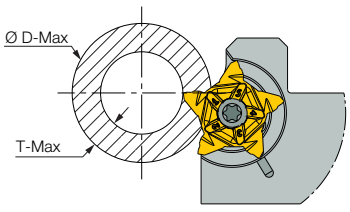
(3) Cutting depth maximum

For tools, see pages: NQCH-PCHR/L-24-JHP (348) • PCAD RE/LE-JHP (561) • PCADR/L (353) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-24 (346) • PCHR/L-24-JHP (347) • PCHR/L-24-JHP-MC (348) • PCHR/L-24-JHP-QC/MC (349)

Designation	CW ± 0.02	Parting to Center D-Max	Parting Hollow Bars T-Max	Parting Hollow Bars D-Max
PENTA 24...SL	CW = 0.50	5	2.5*	250
	CW = 1.00	7	3.5	250
	CW = 1.50	10	5.0	30
	CW = 2.00	12	6.0	20
	CW = 2.47	10	5.0	30
	CW = 3.00	12.4	6.2	20

*Refers to PENTA 24N050J004SL





Designation	T-Max	D-Max As a Function of Depth of Cut (T) T≤3.0	T≤3.5	T≤4.0	T≤4.5	T≤5.0	T≤5.5	T≤6.0	T≤6.2
PENTA 24N200C020SL	6.0	N.L.	470	210	120	75	45	20	-
PENTA 24N300C020SL	6.2	N.L.	470	210	120	75	60	40	20

(1) The data in those tables refers to standard inserts only.

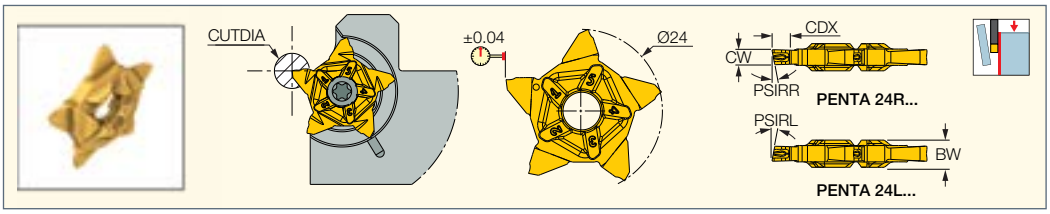
(2) As T decreases ,D-Max Increases. See tables for further data.

(3) N.L. = No Limit.

PENTACUT

PENTA 24R/L-DSL

Parting Insert with 5 Angled Cutting Edges to Minimize Burr Size. Can Be Clamped Also on Standard PENTA-CUT Holders.



Designation	Dimensions CW	CWTOL(1)	CDX(2)	PSIRL	PSIRR	CUTDIA	IC1010	Recommended Machining Data f groove (mm/rev)
PENTA 24L100J15DSL	1.00	0.020	3.50	15.0	-	7.0	●	0.02-0.05
PENTA 24R100J15DSL	1.00	0.020	3.50	-	15.0	7.0	●	0.02-0.05
PENTA 24L150J06DSL	1.50	0.020	5.00	6.0	-	10.0	●	0.03-0.08
PENTA 24R150J06DSL	1.50	0.020	5.00	-	6.0	10.0	●	0.03-0.08
PENTA 24L200J06DSL	2.00	0.020	6.00	6.0	-	12.0	●	0.03-0.10
PENTA 24R200J06DSL	2.00	0.020	6.00	-	6.0	12.0	●	0.03-0.10

NEW

• CUTDIA - parting to center • For cutting speed recommendations and user guide, see pages 606-615

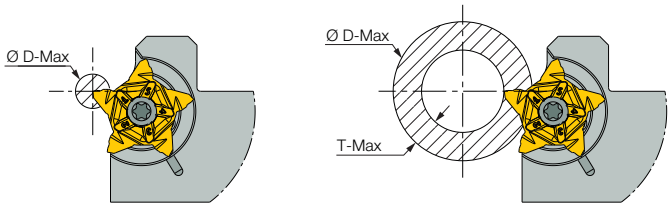
(1) Cutting width tolerance (+/-)

(2) Cutting depth maximum

For tools, see pages: NQCH-PCHR/L-24-JHP (348) • PCAD RE/LE-JHP (561) • PCADR/L (353) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-24 (346) • PCHR/L-24-JHP (347) • PCHR/L-24-JHP-MC (348) • PCHR/L-24-JHP-QC/MC (349)

Designation	CW ± 0.02	Parting to Center D-Max	Parting Hollow Bars T-Max	Parting Hollow Bars D-Max
PENTA 24...SL	CW = 0.50	5	2.5*	250
	CW = 1.00	7	3.5	250
	CW = 1.50	10	5.0	30
	CW = 2.00	12	6.0	20
	CW = 2.47	10	5.0	30
	CW = 3.00	12.4	6.2	20

*Refers to PENTA 24N050J004SL

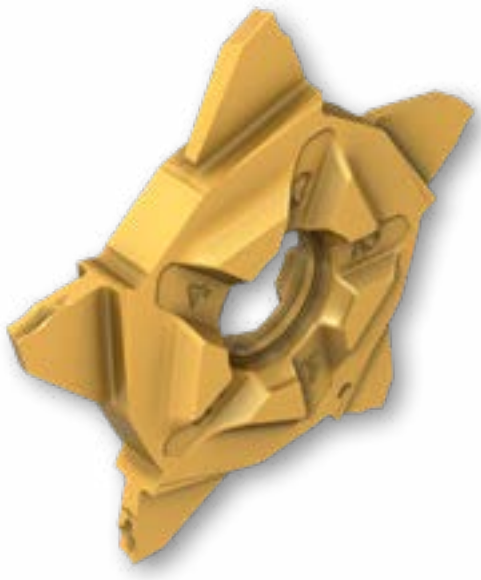


Designation	Parting to Center D-Max	D-Max As a Function of Depth of Cut (T) (for Parting Hollow Bars) T≤3.0	T≤3.5	T≤4.0	T≤4.5	T≤5.0	T≤5.5	T≤6.0
PENTA 24R/L100J15DSL	7	N.L.	250	-	-	-	-	-
PENTA 24R/L150J06DSL	10	N.L.	470	210	70	30	-	-
PENTA 24R/L200J06DSL	12	N.L.	470	210	120	75	45	20

(1) The data in those tables refers to standard inserts only.

(2) As T decreases ,D-Max Increases. See tables for further data.

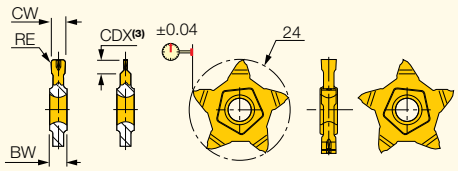
(3) N.L. = No Limit.



PENTACUT

PENTA 24N-J
Inserts with 5 Cutting Edges for Parting and Grooving Soft Materials, Tubes, Small and Thin-Walled Parts





Designation	Dimensions						Tough ↔ Hard				Recommended Machining Data
	CW	RE	CWTOL(1)	RETOL(2)	BW	CDX(3)	IC1010	IC1008	IC908	IC807G	f groove (mm/rev)
PENTA 24N050J000	0.50	0.00	0.020	0.020	4.00	1.00			●		0.02-0.04
PENTA 24N050J004	0.50	0.04	0.020	0.020	4.00	2.50		●			0.02-0.05
PENTA 24N080J000	0.80	0.00	0.020	0.020	4.00	1.60			●		0.02-0.05
PENTA 24N100J004	1.00	0.04	0.020	0.020	4.00	3.50			●		0.03-0.07
PENTA 24N100J006	1.00	0.06	0.020	0.020	4.00	3.50		●		●	0.03-0.07
PENTA 24N104J000	1.04	0.00	0.020	0.020	4.00	2.00			●		0.02-0.07
PENTA 24N120J000	1.20	0.00	0.020	0.020	4.00	2.00			●	●	0.03-0.07
PENTA 24N125J010	1.25	0.10	0.020	0.020	4.00	2.00			●		0.03-0.07
PENTA 24N140J000	1.40	0.00	0.020	0.020	4.00	2.00			●		0.03-0.08
PENTA 24N147J000	1.47	0.00	0.020	0.020	4.00	2.50			●		0.03-0.08
PENTA 24N150J010	1.50	0.10	0.000	0.020	4.00	5.00	●	●	●	●	0.03-0.10
PENTA 24N157J015	1.57	0.15	0.020	0.030	4.00	3.00			●	●	0.00-0.12
PENTA 24N170J010	1.70	0.10	0.020	0.030	4.00	3.00			●	●	0.03-0.12
PENTA 24N178J018	1.78	0.18	0.020	0.030	4.00	3.00			●	●	0.04-0.12
PENTA 24N185J015	1.85	0.15	0.020	0.030	4.00	3.00			●		0.04-0.12
PENTA 24N196J015	1.96	0.15	0.020	0.030	4.00	3.00			●	●	0.04-0.12
PENTA 24N196J040	1.96	0.40	0.020	0.030	4.00	3.00			●		0.03-0.10
PENTA 24N200J020	2.00	0.20	0.020	0.030	4.00	6.00	●	●	●	●	0.04-0.12
PENTA 24N222J015	2.22	0.15	0.020	0.030	4.00	3.50			●	●	0.04-0.16
PENTA 24N230J020	2.30	0.20	0.020	0.030	4.00	3.50			●	●	0.04-0.16
PENTA 24N239J015	2.39	0.15	0.020	0.030	4.00	5.00			●	●	0.04-0.16
PENTA 24N247J020	2.47	0.20	0.020	0.030	4.00	5.00			●	●	0.04-0.16
PENTA 24N250J020	2.50	0.20	0.020	0.030	4.00	5.00			●		0.04-0.16
PENTA 24N270J010	2.70	0.10	0.020	0.020	4.00	5.00			●		0.04-0.16
PENTA 24N287J020	2.87	0.20	0.020	0.030	4.00	6.50			●		0.04-0.16
PENTA 24N300J000	3.00	0.00	0.020	0.020	4.00	6.50			●		0.04-0.10
PENTA 24N300J020	3.00	0.20	0.020	0.030	4.00	6.50	●		●	●	0.04-0.16
PENTA 24N300J040	3.00	0.40	0.020	0.030	4.00	6.50			●	●	0.04-0.16
PENTA 24N315J015	3.15	0.15	0.020	0.030	4.00	6.50			●		0.04-0.16
PENTA 24N318J020	3.18	0.20	0.020	0.030	4.00	6.50			●	●	0.04-0.16
PENTA 24N330J010	3.30	0.10	0.020	0.030	5.00	6.40			●		0.04-0.16
PENTA 24N348J020	3.48	0.20	0.020	0.030	5.00	6.40			●		0.04-0.18
PENTA 24N356J020	3.56	0.20	0.020	0.030	5.00	6.40			●		0.04-0.18
PENTA 24N374J020	3.74	0.20	0.020	0.030	5.00	6.40			●		0.04-0.18
PENTA 24N398J020	3.98	0.20	0.020	0.030	5.00	6.20			●		0.04-0.18
PENTA 24N400J040	4.00	0.40	0.020	0.030	5.00	6.20			●		0.04-0.18
PENTA 24N423J010	4.23	0.10	0.020	0.030	5.00	6.20			●		0.04-0.18

• Recessing is possible only with 2.39 mm and wider inserts • For cutting speed recommendations and user guide, see pages 606-615

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

(3) For grooving and parting depth relative to part diameter, see page 600

For tools, see pages: NQCH-PCHR/L-24-JHP (348) • PCAD RE/LE-JHP (561) • PCADR/L (353) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-24 (346) • PCHR/L-24-JHP (347) • PCHR/L-24-JHP-MC (348)

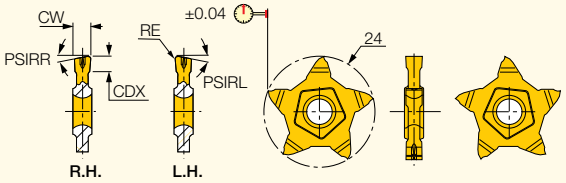
Identification System for Standard Inserts

PENTA	24	N	150	J	010
Family name	Circular circumference of the insert	Insert lead angle (K) N, R, L	Cutting edge width CW(mm) x100	Chipbreaker style J, Z	Corner radius RE (mm)x100 for neutral insert. (k=0) Or lead angle for right- or left-hand inserts. (eg. 15D=15°)

PENTACUT

PENTA 24R/L-J
Inserts with 5 Cutting Edges for Parting Tubes, Small and Thin-Walled Parts





Designation	Dimensions							IC1008	Recommended Machining Data
	CW	CDX[1]	RE	CWTOL[2]	PSIRL	PSIRR	CUTDIA[3]		f groove (mm/rev)
PENTA 24L100J15D	1.00	3.50	0.06	0.020	15.0	-	7.0	●	0.02-0.06
PENTA 24R100J15D	1.00	3.50	0.06	0.020	-	15.0	7.0	●	0.02-0.06
PENTA 24L150J06D	1.50	5.00	0.10	0.020	6.0	-	10.0	●	0.03-0.09
PENTA 24L150J15D	1.50	5.00	0.06	0.020	15.0	-	10.0	●	0.03-0.08
PENTA 24R150J06D	1.50	5.00	0.06	0.020	-	6.0	10.0	●	0.03-0.09
PENTA 24R150J15D	1.50	5.00	0.06	0.020	-	15.0	10.0	●	0.03-0.08
PENTA 24L200J06D	2.00	6.00	0.10	0.020	6.0	-	12.0	●	0.04-0.10
PENTA 24L200J15D	2.00	6.00	0.10	0.020	15.0	-	12.0	●	0.04-0.09
PENTA 24R200J06D	2.00	6.00	0.10	0.020	-	6.0	12.0	●	0.04-0.10
PENTA 24R200J15D	2.00	6.00	0.10	0.020	-	15.0	12.0	●	0.04-0.09

• For cutting speed recommendations and user guide, see pages 606-615

(1) Cutting depth maximum

(2) Cutting width tolerance (+/-)

(3) For grooving and parting depths relative to part diameter, see page 600

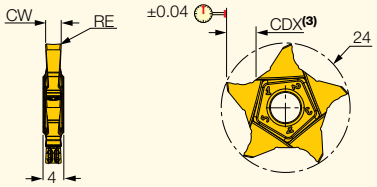
For tools, see pages: NQCH-PCHR/L-24-JHP (348) • PCAD RE/LE-JHP (561) • PCADR/L (353) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-24 (346) • PCHR/L-24-JHP (347) • PCHR/L-24-JHP-MC (348)

PENTACUT

PENTA 24N-Z

Inserts with 5 Cutting Edges for Grooving and Parting Tubes, Small and Thin-Walled Parts





Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	IC908	Recommended Machining Data f groove (mm/rev)
PENTA 24N150Z010	1.50	0.10	0.020	0.020	5.00	●	0.05-0.08
PENTA 24N200Z020	2.00	0.20	0.020	0.030	6.40	●	0.04-0.12
PENTA 24N300Z020	3.00	0.20	0.020	0.000	6.40	●	0.04-0.16

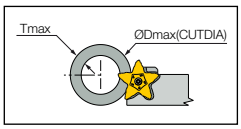
- Cutting edge with high positive rake, suitable for parting tubes, thin walled parts and for small diameters
- Suitable for machining soft materials and bearing steel at low to medium feeds
- For cutting speed recommendations and user guide, see pages 606-615

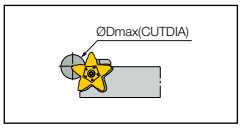
(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

For tools, see pages: NQCH-PCHR/L-24-JHP (348) • PCAD RE/LE-JHP (561) • PCADR/L (353) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-24 (346) • PCHR/L-24-JHP (347) • PCHR/L-24-JHP-MC (348)

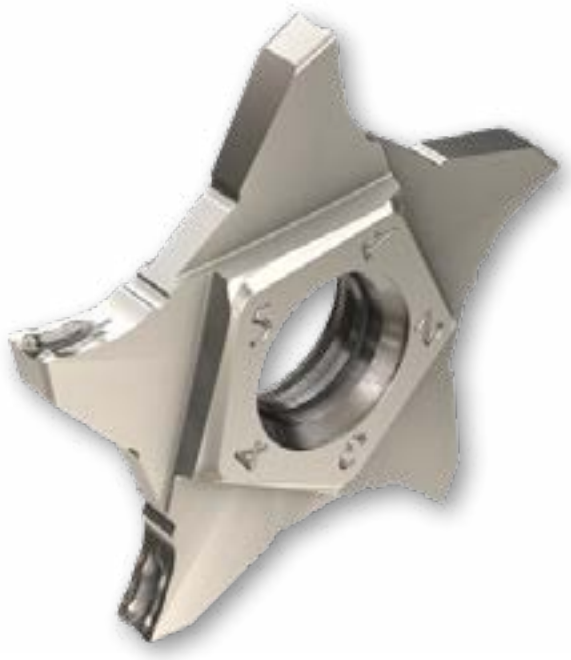
W±0.02	Tmax(1)	Tmax / Dmax	Dmax as a Function of Parting / Grooving Depth (T) for PENTA 24 Inserts T≤3.0	T≤3.5	T≤4.0	T≤4.5	T≤5.0	T≤5.5	T≤6.0	T≤6.2	T≤6.4
W=0.50	1.0	1.0 / N.L.	-	-	-	-	-	-	-	-	-
W=0.50	2.5	2.5 / N.L.	-	-	-	-	-	-	-	-	-
W=0.80	1.6	1.6 / N.L.	-	-	-	-	-	-	-	-	-
W=1.00	3.5		N.L.	250	-	-	-	-	-	-	-
1.04≤W≤1.40	2.0	2.0 / N.L.	-	-	-	-	-	-	-	-	-
W=1.47	2.5	2.5 / N.L.	-	-	-	-	-	-	-	-	-
W=1.50	5.0		N.L.	470	210	70	30	-	-	-	-
1.57≤W≤1.96	3.0		N.L.	-	-	-	-	-	-	-	-
W=2.00	6.0(2)		N.L.	470	210	130	75	45	20	-	-
2.22≤W≤2.30	3.5		N.L.	250	-	-	-	-	-	-	-
2.39≤W≤2.50	5.0		N.L.	470	210	70	30	-	-	-	-
2.70≤W≤3.18	6.2		N.L.	470	210	135	100	70	40	20	-
3.19≤W≤3.74	6.4		N.L.	350	180	115	80	52	32	26	20
3.75≤W≤4.00	6.2		N.L.	350	180	115	80	62	32	18	-
4.01≤W≤4.23	6.2		N.L.	350	180	115	80	62	42	25	-





(1) Dmax for parting = 2 x Tmax

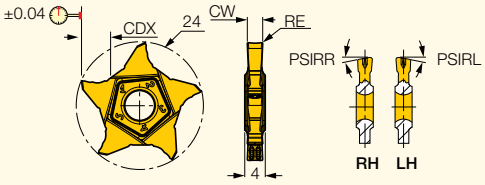
(2) For full radius insert , Tmax = 3.0, Dmax = No limit



PENTACUT

PENTA 24R/L-Z
Inserts with 5 Cutting Edges for Parting Tubes, Small and Thin-Walled Parts





Designation	Dimensions CW	PSIRL	PSIRR	RE	CUTDIA(1)	CDX(2)	IC1008	Recommended Machining Data f groove (mm/rev)
PENTA 24L150Z06D	1.50	6.0	-	0.06	10.0	5.00	●	0.03-0.09
PENTA 24L150Z15D	1.50	15.0	-	0.06	10.0	5.00	●	0.03-0.08
PENTA 24R150Z06D	1.50	-	6.0	0.06	10.0	5.00	●	0.03-0.09
PENTA 24R150Z15D	1.50	-	15.0	0.06	10.0	5.00	●	0.03-0.08
PENTA 24L200Z06D	2.00	6.0	-	0.10	12.8	6.40	●	0.04-0.10
PENTA 24L200Z15D	2.00	15.0	-	0.10	12.8	6.40	●	0.04-0.09
PENTA 24R200Z06D	2.00	-	6.0	0.10	12.8	6.40	●	0.04-0.10
PENTA 24R200Z15D	2.00	-	15.0	0.10	12.8	6.40	●	0.04-0.09
PENTA 24L300Z06D	3.00	6.0	-	0.20	12.8	6.40	●	0.04-0.13
PENTA 24L300Z15D	3.00	15.0	-	0.20	12.8	6.40	●	0.04-0.12
PENTA 24R300Z06D	3.00	-	6.0	0.20	12.8	6.40	●	0.04-0.15
PENTA 24R300Z15D	3.00	-	15.0	0.20	12.8	6.40	●	0.04-0.14

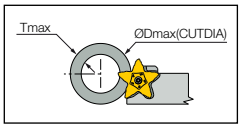
- Cutting edge with high positive rake, suitable for parting tubes, thin walled parts and for small diameters
- Suitable for machining soft materials and bearing steel at low to medium feeds
- For cutting speed recommendations and user guide, see pages 606-615

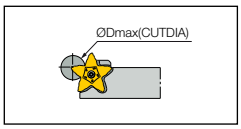
(1) Maximum workpiece diameter for grooving operation

(2) Cutting depth maximum

For tools, see pages: NQCH-PCHR/L-24-JHP (348) • PCAD RE/LE-JHP (561) • PCADR/L (353) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-24 (346) • PCHR/L-24-JHP (347) • PCHR/L-24-JHP-MC (348)

W±0.02	Tmax(1)	Tmax / Dmax	Dmax as a Function of Parting / Grooving Depth (T) for PENTA 24 Inserts T≤3.0	T≤3.5	T≤4.0	T≤4.5	T≤5.0	T≤5.5	T≤6.0	T≤6.2	T≤6.4
W=0.50	1.0	1.0 / N.L.	-	-	-	-	-	-	-	-	-
W=0.50	2.5	2.5 / N.L.	-	-	-	-	-	-	-	-	-
W=0.80	1.6	1.6 / N.L.	-	-	-	-	-	-	-	-	-
W=1.00	3.5		N.L.	250	-	-	-	-	-	-	-
1.04≤W≤1.40	2.0	2.0 / N.L.	-	-	-	-	-	-	-	-	-
W=1.47	2.5	2.5 / N.L.	-	-	-	-	-	-	-	-	-
W=1.50	5.0		N.L.	470	210	70	30	-	-	-	-
1.57≤W≤1.96	3.0		N.L.	-	-	-	-	-	-	-	-
W=2.00	6.0(2)		N.L.	470	210	130	75	45	20	-	-
2.22≤W≤2.30	3.5		N.L.	250	-	-	-	-	-	-	-
2.39≤W≤2.50	5.0		N.L.	470	210	70	30	-	-	-	-
2.70≤W≤3.18	6.2		N.L.	470	210	135	100	70	40	20	-
3.19≤W≤3.74	6.4		N.L.	350	180	115	80	52	32	26	20
3.75≤W≤4.00	6.2		N.L.	350	180	115	80	62	32	18	-
4.01≤W≤4.23	6.2		N.L.	350	180	115	80	62	42	25	-





(1) Dmax for parting = 2 x Tmax

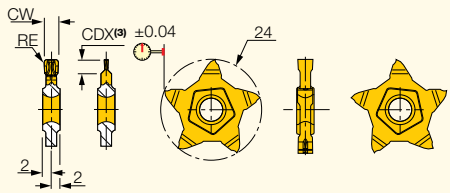
(2) For full radius insert , Tmax = 3.0, Dmax = No limit

PENTACUT

PENTA 24N-C

Inserts with 5 Cutting Edges for Parting and Grooving Bars, Hard Materials and Tough Applications





Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	IC908	Recommended Machining Data f groove (mm/rev)
PENTA 24N150C010	1.50	0.10	0.020	0.050	5.00	●	0.05-0.11
PENTA 24N157C015	1.57	0.15	0.020	0.050	3.00	●	0.05-0.12
PENTA 24N170C010	1.70	0.10	0.020	0.050	3.00	●	0.05-0.13
PENTA 24N178C018	1.78	0.18	0.020	0.050	3.00	●	0.05-0.14
PENTA 24N196C015	1.96	0.15	0.020	0.050	3.00	●	0.05-0.15
PENTA 24N200C020	2.00	0.20	0.020	0.050	6.00	●	0.05-0.16
PENTA 24N222C015	2.22	0.15	0.020	0.050	3.50	●	0.05-0.16
PENTA 24N230C020	2.30	0.20	0.020	0.050	3.50	●	0.06-0.17
PENTA 24N239C015	2.39	0.15	0.020	0.050	5.00	●	0.07-0.18
PENTA 24N247C020	2.47	0.20	0.020	0.050	5.00	●	0.08-0.18
PENTA 24N270C010	2.70	0.10	0.020	0.050	6.20	●	0.09-0.18
PENTA 24N287C020	2.87	0.20	0.020	0.050	6.20	●	0.10-0.18
PENTA 24N300C020	3.00	0.20	0.020	0.050	6.20	●	0.10-0.20
PENTA 24N300C040	3.00	0.40	0.020	0.050	6.20	●	0.10-0.20
PENTA 24N318C020	3.18	0.20	0.020	0.050	6.20	●	0.10-0.20
PENTA 24N478C055	4.78	0.55	0.020	0.050	6.20	●	0.10-0.25
PENTA 24N486C040	4.86	0.40	0.020	0.050	6.20	●	0.10-0.25
PENTA 24N500C040	5.00	0.40	0.020	0.050	6.20	●	0.10-0.25

- Recessing is possible only with 2.39 mm and wider inserts
- For cutting speed recommendations and user guide, see pages 606-615

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

(3) For grooving and parting depths relative to part diameter, see page 600

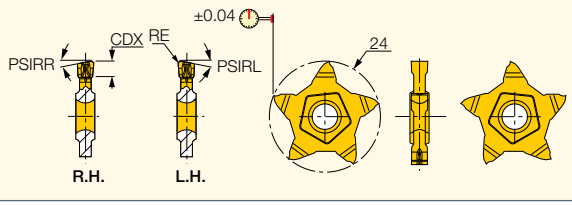
For tools, see pages: NQCH-PCHR/L-24-JHP (348) • PCAD RE/LE-JHP (561) • PCADR/L (353) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-24 (346) • PCHR/L-24-JHP (347) • PCHR/L-24-JHP-MC (348)

PENTACUT

PENTA 24R-C

Inserts with 5 Cutting Edges for Parting Bars, Hard Materials and Tough Applications





Designation	Dimensions CW	RE	CWTOL(1)	CDX(2)	PSIRR	IC1008	Recommended Machining Data f groove (mm/rev)
PENTA 24R150C06D	1.50	0.06	0.020	5.00	6.0	●	0.03-0.10
PENTA 24R200C06D	2.00	0.10	0.020	6.00	6.0	●	0.04-0.12

- For cutting speed recommendations and user guide, see pages 600, 606-615

(1) Cutting width tolerance (+/-)

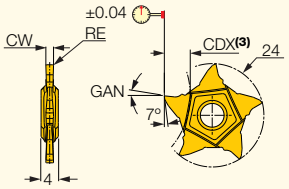
(2) Cutting depth maximum

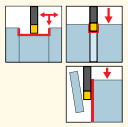
For tools, see pages: NQCH-PCHR/L-24-JHP (348) • PCAD RE/LE-JHP (561) • PCADR/L (353) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-24 (346) • PCHR/L-24-JHP (347) • PCHR/L-24-JHP-MC (348)

PENTACUT

PENTA 24N-PF/P
Pentagonal Inserts with a High Positive Flat Rake for Parting and Precision Grooving







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	GAN	Tough ↔ Hard IC1008	IC908	IC30N	Recommended Machining Data f groove (mm/rev)
PENTA 24N050PF005	0.50	0.05	0.020	0.020	2.50	6.0			●	0.01-0.04
PENTA 24N075PF005	0.75	0.05	0.020	0.020	2.50	6.0			●	0.02-0.05
PENTA 24N095PF005	0.95	0.05	0.020	0.020	4.00	6.0			●	0.02-0.05
PENTA 24N100P005	1.00	0.05	0.020	0.020	3.50	12.0	●			0.02-0.05
PENTA 24N100PF010	1.00	0.10	0.020	0.020	4.00	6.0		●	●	0.03-0.06
PENTA 24N125PF020	1.25	0.20	0.020	0.020	5.00	6.0			●	0.03-0.06
PENTA 24N145PF020	1.45	0.20	0.020	0.020	6.20	6.0			●	0.03-0.06
PENTA 24N150P005	1.50	0.05	0.020	0.020	5.00	12.0	●			0.02-0.07
PENTA 24N150PF020	1.50	0.20	0.020	0.030	6.00	6.0		●	●	0.03-0.09
PENTA 24N175PF020	1.75	0.20	0.020	0.030	6.20	6.0			●	0.02-0.08
PENTA 24N185PF020	1.85	0.20	0.020	0.030	6.00	6.0			●	0.03-0.10
PENTA 24N200P005	2.00	0.05	0.020	0.020	6.00	12.0	●			0.02-0.08
PENTA 24N200PF020	2.00	0.20	0.020	0.030	6.50	6.0		●	●	0.04-0.10
PENTA 24N230PF020	2.30	0.20	0.020	0.030	6.20	6.0			●	0.04-0.14
PENTA 24N239PF015	2.39	0.15	0.020	0.030	6.50	6.0		●		0.04-0.14
PENTA 24N250PF020	2.50	0.20	0.020	0.030	6.50	6.0		●	●	0.04-0.14
PENTA 24N300PF020	3.00	0.20	0.020	0.030	6.50	6.0		●	●	0.04-0.14
PENTA 24N300PF030	3.00	0.30	0.020	0.030	6.20	6.0			●	0.04-0.15
PENTA 24N400PF020	4.00	0.20	0.020	0.030	6.50	6.0			●	0.04-0.16
PENTA 24N400PF040	4.00	0.40	0.020	0.030	6.20	6.0			●	0.04-0.16

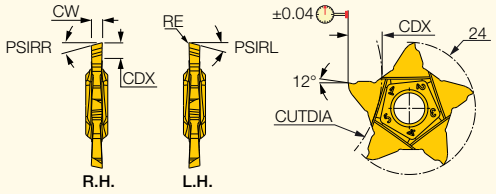
• For cutting speed recommendations and user guide, see pages 606-615
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) For grooving and parting depths relative to part diameter, see page 600

For tools, see pages: NQCH-PCHR/L-24-JHP (348) • PCAD RE/LE-JHP (561) • PCADR/L (353) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-24 (346) • PCHR/L-24-JHP (347) • PCHR/L-24-JHP-MC (348)

PENTACUT

PENTA 24R-P
Inserts with 5 Cutting Edges for Parting Soft Materials, Thin Walls and Miniature Parts







Designation	Dimensions CW	CDX(1)	RE	CWTOL(2)	CUTDIA(3)	PSIRR	IC1008	Recommended Machining Data f groove (mm/rev)
PENTA 24R100P06D	1.00	3.50	0.05	0.020	7.2	6.0	●	0.02-0.04
PENTA 24R100P15D	1.00	3.50	0.05	0.020	7.2	15.0	●	0.02-0.03
PENTA 24R150P06D	1.50	5.00	0.05	0.020	11.0	6.0	●	0.02-0.05
PENTA 24R150P15D	1.50	5.00	0.05	0.020	11.0	15.0	●	0.02-0.04
PENTA 24R200P06D	2.00	6.00	0.05	0.020	12.6	6.0	●	0.02-0.07
PENTA 24R200P15D	2.00	6.00	0.05	0.020	12.6	15.0	●	0.02-0.05

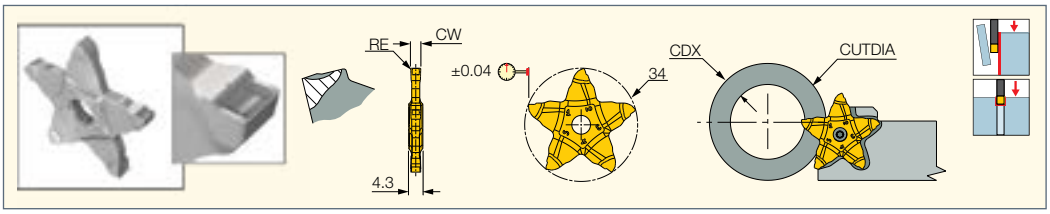
• For cutting speed recommendations and user guide, see pages 606-615
(1) Cutting depth maximum
(2) Cutting width tolerance (+/-)
(3) For grooving and parting depths relative to part diameter, see page 600

For tools, see pages: NQCH-PCHR/L-24-JHP (348) • PCAD RE/LE-JHP (561) • PCADR/L (353) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-24 (346) • PCHR/L-24-JHP (347) • PCHR/L-24-JHP-MC (348)

PENTACUT

PENTA 34N-C

Inserts with 5 Cutting Edges for Parting and Grooving Hard Materials, Tough and General Applications



Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	IC908	Recommended Machining Data f groove (mm/rev)
PENTA 34N150C015	1.50	0.15	0.020	0.030	8.00	●	0.03-0.07
PENTA 34N200C020	2.00	0.20	0.020	0.030	8.00	●	0.04-0.14
PENTA 34N200C100	2.00	1.00	0.020	0.050	8.00	●	0.05-0.16
PENTA 34N222C015	2.22	0.15	0.020	0.030	8.00	●	0.05-0.14
PENTA 34N230C020	2.30	0.20	0.020	0.030	8.00	●	0.05-0.14
PENTA 34N239C015	2.39	0.15	0.020	0.030	8.00	●	0.05-0.15
PENTA 34N239C120	2.39	1.20	0.020	0.050	8.00	●	0.05-0.18
PENTA 34N247C020	2.47	0.20	0.020	0.030	8.00	●	0.05-0.18
PENTA 34N250C020	2.50	0.20	0.020	0.030	8.00	●	0.05-0.18
PENTA 34N270C010	2.70	0.10	0.020	0.030	10.00	●	0.05-0.18
PENTA 34N287C020	2.87	0.20	0.020	0.030	10.00	●	0.05-0.18
PENTA 34N300C000	3.00	0.00	0.020	0.020	10.00	●	0.04-0.10
PENTA 34N300C020	3.00	0.20	0.020	0.030	10.00	●	0.06-0.22
PENTA 34N300C040	3.00	0.40	0.020	0.030	10.00	●	0.06-0.25
PENTA 34N300C150	3.00	1.50	0.020	0.050	10.00	●	0.06-0.20
PENTA 34N315C015	3.15	0.15	0.020	0.030	10.00	●	0.06-0.20
PENTA 34N318C020	3.18	0.20	0.020	0.030	10.00	●	0.06-0.22
PENTA 34N330C010	3.30	0.10	0.020	0.020	10.00	●	0.06-0.20
PENTA 34N348C020	3.48	0.20	0.020	0.030	10.00	●	0.06-0.25
PENTA 34N350C025	3.50	0.25	0.020	0.030	10.00	●	0.06-0.30
PENTA 34N398C020	3.98	0.20	0.020	0.030	10.00	●	0.06-0.30
PENTA 34N400C030	4.00	0.30	0.020	0.030	10.00	●	0.06-0.30

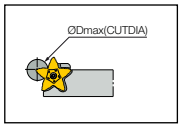
• For cutting speed recommendations and user guide, see pages 606-615

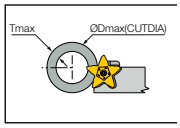
(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

For tools, see pages: PCADR/L (353) • PCADR/L 34N-RE (354) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-34 (351) • PCHR/L-34-JHP (351) • PCHR/L-34-JHP-MC (352)

CW±0.02	ØDmax as a Function of Parting / Grooving Depth (T) for PENTA 34 Inserts T≤5.0	T≤6.0	T≤7.0	T≤8.0	T≤8.5	T≤9.0	T≤10.0
1.50 ≤ CW ≤ 2.69	N.L.	350	165	100	55	-	-
2.70 ≤ CW ≤ 4.00						55	20





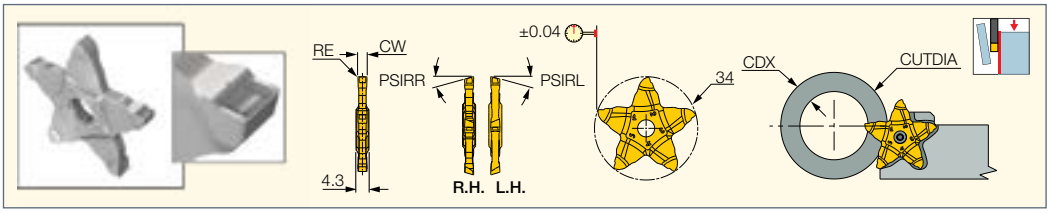
CUTDIA for parting = 2 x CDX

N.L. = No Limit

PENTACUT

PENTA 34R/L-C

Inserts with 5 Cutting Edges for Parting Hard Materials, Tough and General Applications



Designation	Dimensions CW	RE	CUTDIA(1)	CDX(2)	PSIRL	PSIRR	IC908	Recommended Machining Data f groove (mm/rev)
PENTA 34L150C08D	1.50	0.07	18.0	8.00	8.0	-	●	0.03-0.08
PENTA 34R150C08D	1.50	0.07	18.0	8.00	-	8.0	●	0.03-0.08
PENTA 34L200C06D	2.00	0.10	18.0	8.00	6.0	-	●	0.04-0.12
PENTA 34R200C06D	2.00	0.10	18.0	8.00	-	6.0	●	0.04-0.12
PENTA 34L200C15D	2.00	0.10	18.0	8.00	15.0	-	●	0.04-0.10
PENTA 34R200C15D	2.00	0.10	18.0	8.00	-	15.0	●	0.04-0.10
PENTA 34L300C06D	3.00	0.20	20.0	10.00	6.0	-	●	0.04-0.14
PENTA 34R300C06D	3.00	0.20	20.0	10.00	-	6.0	●	0.06-0.14
PENTA 34L300C15D	3.00	0.20	20.0	10.00	15.0	-	●	0.04-0.10
PENTA 34R300C15D	3.00	0.20	20.0	10.00	-	15.0	●	0.06-0.12

• For cutting speed recommendations and user guide, see pages 606-615

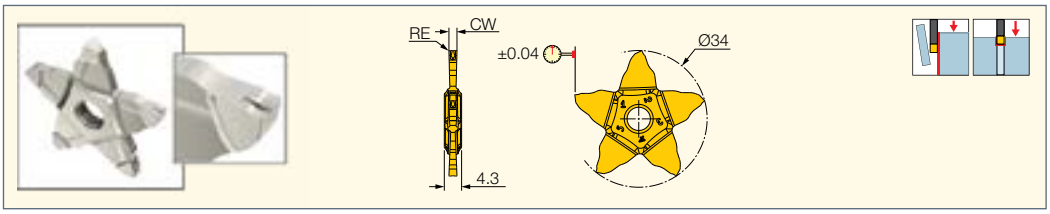
(1) For grooving and parting depths relative to part diameter, see page 603

(2) Cutting depth maximum

For tools, see pages: PCADR/L (353) • PCADR/L 34N-RE (354) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-34 (351) • PCHR/L-34-JHP (351) • PCHR/L-34-JHP-MC (352)

PENTACUT

PENTA 34N-J
Inserts with 5 Cutting Edges for Parting and Grooving Soft Materials, Parting Tubes, Small and Thin-Walled Parts



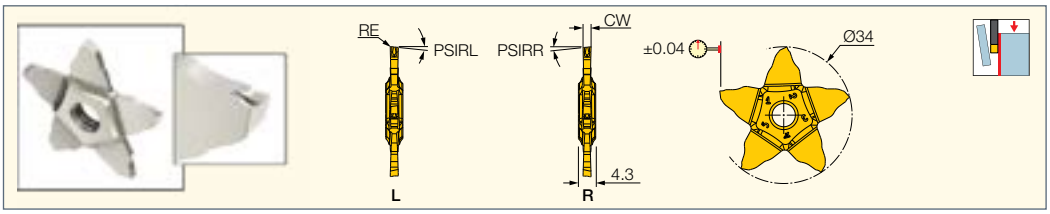
Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	IC908	Recommended Machining Data f groove (mm/rev)
PENTA 34N150J015	1.50	0.15	0.020	0.002	8.50	●	0.03-0.10
PENTA 34N200J020	2.00	0.20	0.020	0.002	8.50	●	0.04-0.12
PENTA 34N200J100	2.00	1.00	0.020	0.002	8.50	●	0.05-0.12
PENTA 34N239J015	2.39	0.15	0.020	0.002	8.50	●	0.04-0.16
PENTA 34N239J120	2.39	1.20	0.020	0.002	8.50	●	0.06-0.16
PENTA 34N250J020	2.50	0.20	0.020	0.002	8.50	●	0.04-0.16
PENTA 34N270J010	2.70	0.10	0.020	0.002	10.00	●	0.04-0.16
PENTA 34N300J000	3.00	0.00	0.020	0.000	10.00	●	0.04-0.10
PENTA 34N300J020	3.00	0.20	0.020	0.002	10.00	●	0.04-0.16
PENTA 34N300J040	3.00	0.40	0.020	0.002	10.00	●	0.04-0.16
PENTA 34N300J150	3.00	1.50	0.020	0.002	10.00	●	0.06-0.20
PENTA 34N318J020	3.18	0.20	0.020	0.002	10.00	●	0.20-0.16

• Recessing is possible only with 2.39 mm and wider inserts • For cutting speed recommendations and user guide, see pages 606-615
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) For grooving and parting depths relative to part diameter, see page 60

For tools, see pages: PCADR/L (353) • PCADR/L 34N-RE (354) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-34 (351) • PCHR/L-34-JHP (351) • PCHR/L-34-JHP-MC (352)

PENTACUT

PENTA 34R/L-J
Inserts with 5 Cutting Edges for Parting Tubes, Small and Thin-Walled Parts



Designation	Dimensions CW	RE	CWTOL(1)	CUTDIA(2)	PSIRL	PSIRR	IC908	Recommended Machining Data f groove (mm/rev)
PENTA 34L150J06D	1.50	0.07	0.020	18.0	6.0	-	●	0.03-0.09
PENTA 34L150J15D	1.50	0.07	0.020	18.0	15.0	-	●	0.03-0.08
PENTA 34R150J06D	1.50	0.07	0.020	18.0	-	6.0	●	0.03-0.09
PENTA 34R150J15D	1.50	0.07	0.020	18.0	-	15.0	●	0.03-0.08
PENTA 34L200J06D	2.00	0.10	0.020	18.0	6.0	-	●	0.04-0.10
PENTA 34L200J15D	2.00	0.10	0.020	18.0	15.0	-	●	0.04-0.09
PENTA 34R200J06D	2.00	0.10	0.020	18.0	-	6.0	●	0.04-0.10
PENTA 34R200J15D	2.00	0.10	0.020	18.0	-	15.0	●	0.04-0.09

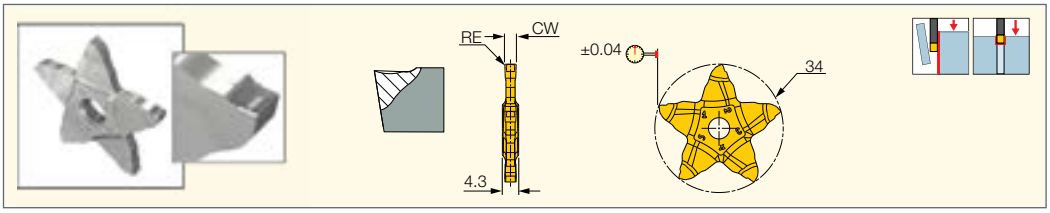
• For cutting speed recommendations and user guide, see pages 606-615
(1) Cutting width tolerance (+/-)
(2) For grooving and parting depths relative to part diameter, see page 603

For tools, see pages: PCADR/L (353) • PCADR/L 34N-RE (354) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-34 (351) • PCHR/L-34-JHP (351) • PCHR/L-34-JHP-MC (352)

PENTACUT

PENTA 34N-PB

Parting and Grooving Pentagonal Inserts for Parting Bearing Steel and Other Ductile Materials



Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX(3)	IC908	Recommended Machining Data f groove (mm/rev)
PENTA 34N150PB015	1.50	0.15	0.020	0.030	8.50	●	0.03-0.06
PENTA 34N200PB020	2.00	0.20	0.020	0.030	8.50	●	0.03-0.08
PENTA 34N300PB020	3.00	0.20	0.020	0.030	9.50	●	0.03-0.10

• For cutting speed recommendations and user guide, see pages 606-615

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

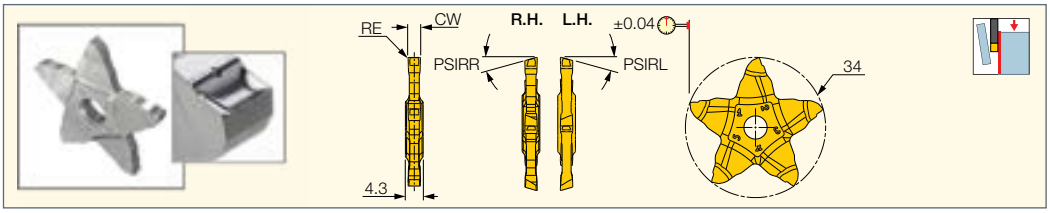
(3) For grooving and parting depths relative to part diameter, see page 605

For tools, see pages: PCADR/L (353) • PCADR/L 34N-RE (354) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-34 (351) • PCHR/L-34-JHP (351) • PCHR/L-34-JHP-MC (352)

PENTACUT

PENTA 34R/L-PB

Pentagonal Inserts for Parting Bearing Steel and other Ductile Materials



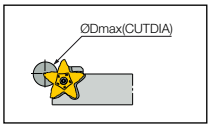
Designation	Dimensions CW	RE	CUTDIA(1)	PSIRL	PSIRR	IC908	Recommended Machining Data f groove (mm/rev)
PENTA 34R150PB-6D	1.50	0.07	18.0	-	6.0	●	0.03-0.05
PENTA 34L150PB-6D	1.50	0.07	18.0	6.0	-	●	0.03-0.05
PENTA 34R200PB-6D	2.00	0.10	18.0	-	6.0	●	0.03-0.06
PENTA 34L200PB-6D	2.00	0.10	18.0	6.0	-	●	0.03-0.06
PENTA 34R300PB-6D	3.00	0.20	20.0	-	6.0	●	0.03-0.08
PENTA 34L300PB-6D	3.00	0.20	20.0	6.0	-	●	0.03-0.08

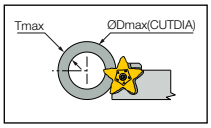
• For cutting speed recommendations and user guide, see pages 606-615

(1) Maximum workpiece diameter for grooving operation

For tools, see pages: PCADR/L (353) • PCADR/L 34N-RE (354) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-34 (351) • PCHR/L-34-JHP (351) • PCHR/L-34-JHP-MC (352)

W±0.02	Dmax as a Function of Parting / Grooving Depth (T) for PENTA 34 Inserts T≤5.0	T≤6.0	T≤7.0	T≤8.0	T≤8.5	T≤9.0	T≤10.0
1.50 ≤ W ≤ 2.69	N.L.	350	165	100	55	-	-
2.70 ≤ W ≤ 4.00						55	20





Dmax for parting = 2 x Tmax

N.L. = No Limit

Parting and Grooving

Selection of Inserts

For a proper match of insert and cutting material to application, the following variables must be taken into consideration:

- Width of cut (width of insert)
- Chipformer style
- Lead angle
- Corner radius
- Carbide grade

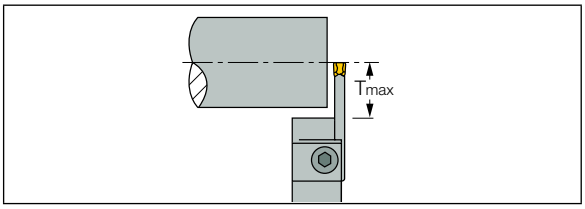
Width of Cut (W.O.C.) and Depth of Cut (D.O.C.)

In selecting **W.O.C.**, the main factor to consider is the required **D.O.C.** The ratio **D.O.C.**≈ 8x**W.O.C.** is of practical use on alloy steel of average machinability. For example, applying a 3 mm **W.O.C.** insert **TAG N3C** to cut-off a 48 mm solid bar.
Additional factors which affect **D.O.C.** capacity, relative to the ratio, are:

Holder or Blade Size

To minimize risk of vibration and deflection always choose:

- Blade or toolholder with smallest possible overhang.
- Toolholder with maximum shank dimension.
- Blade height (B) dimension which is larger than Tmax.
- Blade or holder with maximum blade width (largest possible insert seat size).
  Example:
- A **W.O.C.** 9.5 mm on blade TGFH 53K-9
- (B=52.6 mm) extends the ratio of **D.O.C.** to **W.O.C.** by some 50% to 120 mm.



Insert Support

A self-clamped tool is recommended for deep radial machining. A screw-clamp holder is recommended for axial and small **D.O.C.** machining.

90˚ Mounting

It is very important that the insert is mounted at 90º to the center line of the workpiece in order to obtain perpendicular surfaces and reduce the risk of vibration.

Workpiece Machinability

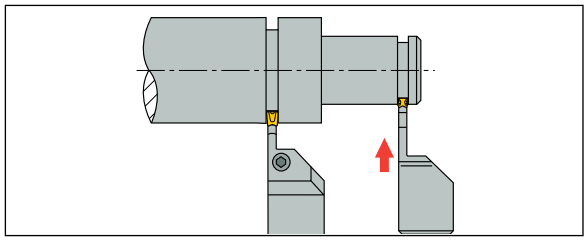
The workpiece material affects all of the above factors.

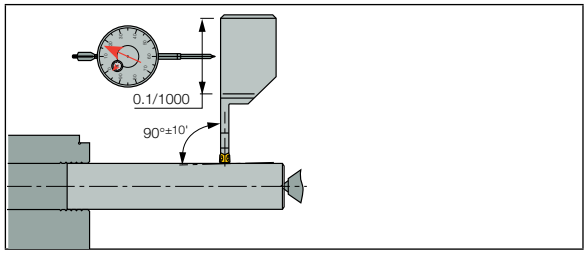
Machine Power and Setup Rigidity

Excessive **W.O.C.** on a light-duty machine will yield vibration and may even stop spindle rotation.

Expensive Workpiece Material

On costly metals the narrowest applicable **W.O.C.** should be used.



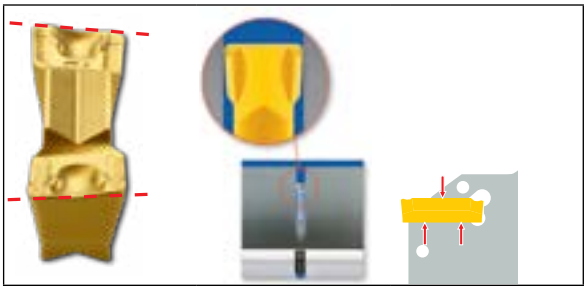


Insert Positioning

The Twisted Insert for Cut-Off and Grooving Applications

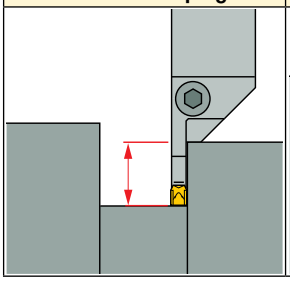
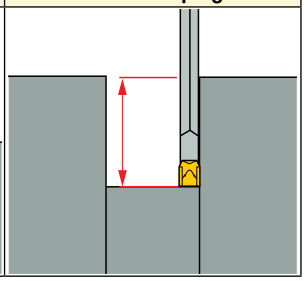
Machining depths longer than insert length is made possible with the double-ended, twisted insert body.

The rear edge is slanted in relation to the frontal edge so it does not come into contact with the machined groove surface when the tool penetrates deeply into the workpiece.



Clamping

Extended, prismatic surfaces guarantee reliable, foolproof clamping even in unstable machining conditions.

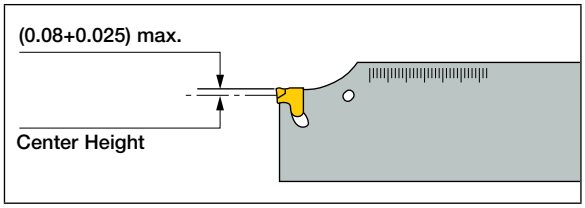
Screw-Clamping	Self-Clamping
	
Small diameters **(D.O.C.)** with screw-clamped Inserts	Large diameters **(D.O.C.)** with self-clamped Inserts

Setup

- The optimal cutting edge height above the center of **TANG-GRIP** tools is up to 0.08 mm + 0.025 mm **W.O.C.**, an advantage when cutting solid bar to center
- Cut-off as close to chuck as possible
- On new applications, first machine in the low or middle range of recommended speeds and feeds

Machining

- Consistency of speed and feed improves performance
- Apply coolant abundantly
- Secure inserts into clean pockets
- Cutting forces on soft workpiece materials may be insufficient to push insert well into pocket. Tap insert into place using a plastic hammer
- On a conventional lathe, lock the carriage to prevent axial motion during cut-off

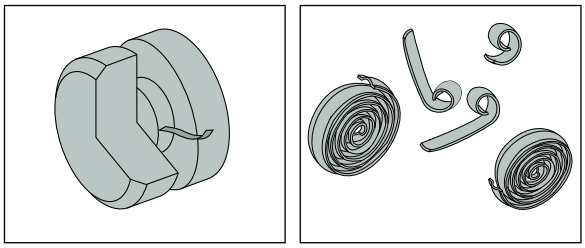


Usage

- Replace worn inserts promptly, the price of a new one is much less than the risk of damage from continuing with one that is worn out
- Replace blades that have worn or damaged pockets
- Never try to repair damaged pockets
- Chip curling is dependent on the chipformer type and the machining conditions

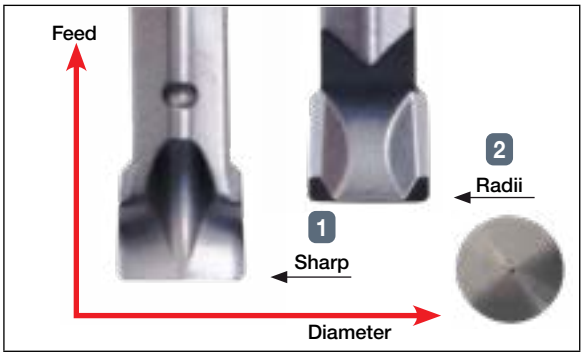
Chipformer Features

- Narrows the chip
- Eliminates friction with groove walls, prevents chip jam overload
- Permits higher feeds
- Produces unscratched surfaces, eliminating additional facing
- Curls the chips into compact spirals for easy disposal



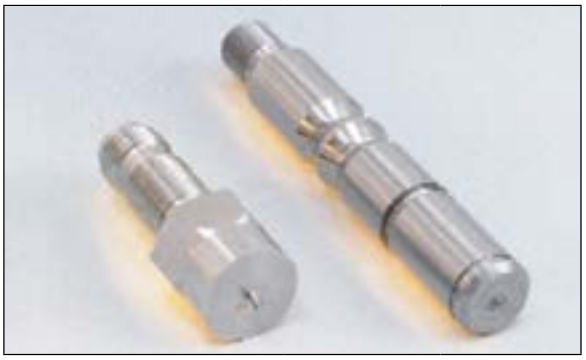
Selection of Corner Radius

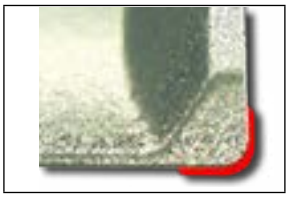
1 A smaller corner radius (r) will reduce the load on the workpiece and produce a smaller size burr
2 At the same time, a large corner radius allows for higher feeds and increased tool life

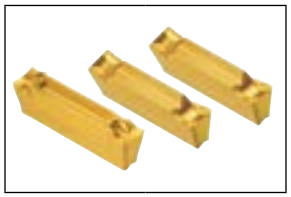


Standard Corner Radius

- Standard medium corner size
- For general applications and materials





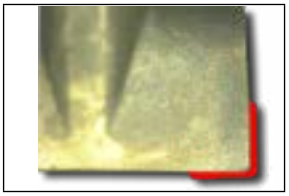


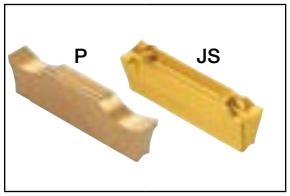
Medium (Standard) Corner Radius

"S" Sharp Corners

- Cutting edge with positive rake and sharp corners
- When a minimum burr (pip) size is essential
- For small feeds
- For small diameters or thin walls
- For CNCs, multi-spindle and screw machines







Sharp Corner

"B" Large Corner Radius

- Reinforced corners with stronger cutting edge
- For tough applications and interrupted cuts



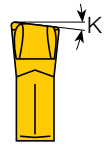
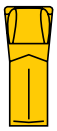
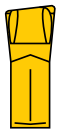


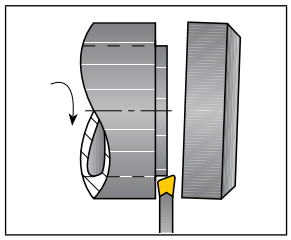


Large Corner Radius

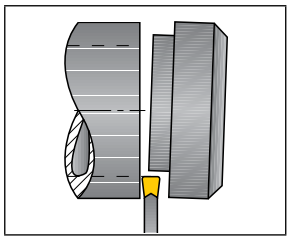
Lead Angle

Lead angle **(K)** on cut-off inserts reduces size of burr remaining on workpiece. Increasing the lead angle reduces the burr, but also reduces possible feed rates and tool life. Therefore, neutral inserts are recommended for parts on which a burr is tolerated.
Insert designations such as **TAG R... DGR (R.H.)** and **TAG L... DGL (L.H.)** comply with standard terms for turning direction. When looking toward the chuck from the workpiece, **R.H.**=counterclockwise **(C.C.)** rotation of workpiece and **L.H.**=clockwise **(C)** rotation of workpiece. **C.C.** requires right-hand inserts; C requires left-hand inserts. A neutral insert with 0º lead angle increases **D.O.C.** capacity.

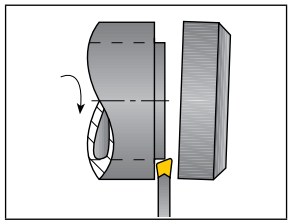
Left	Neutral	Right
TAG L/DGL	TAG N/DGN	TAG R/DGR
		



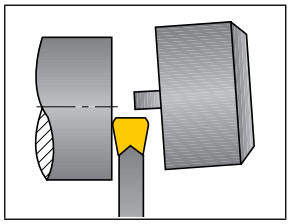
TAGR/GFR/DGR



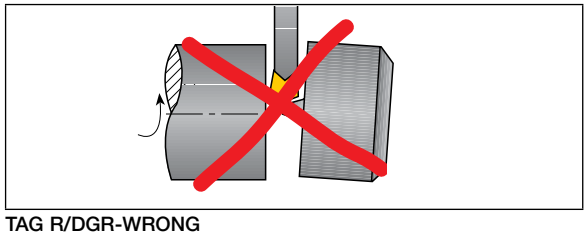
TAGR/GFN/DGN



TAG R/DGR

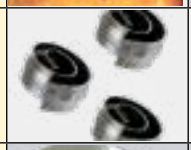


TAG N/DGN



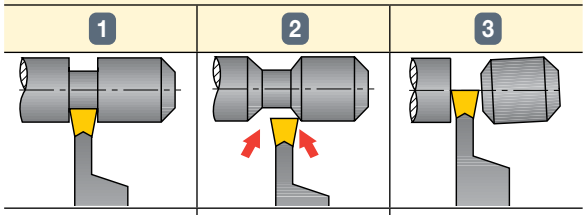
TAG R/DGR-WRONG

Neutral Insert vs. Lead Angle Type

			
Lifetime		✔	
Chip Control		✔	
Burr Size			✔
Surface Finish		✔	
Part Straightness		✔	

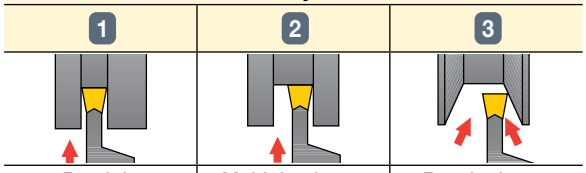
General Rules for Specific Applications

Chamfer and Cut-Off



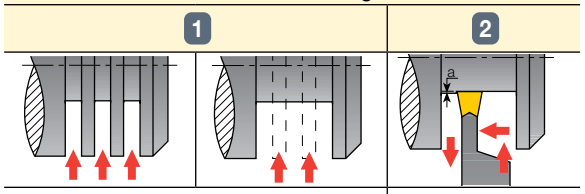
1	2	3
Break in and/ or groove	Chamfer	Cut-off

V-Belt Pulley Grooves



1	2	3
Break in	Multiple plunge to depth at minor width of groove	Bevel, plunge and turn to minor diameter

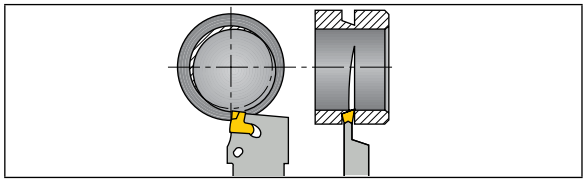
Neck Recessing



1	2
Multiple plunge grooves	Necking On neck turning, DOC (a)=up to size of insert corner radius

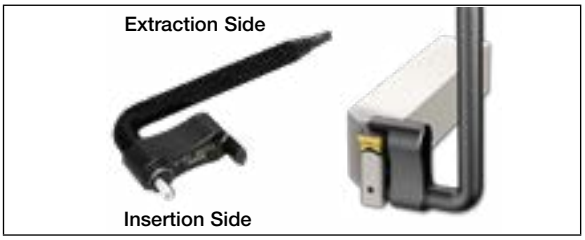
Parting on Eccentric Tubes

Inserts with 4° lead angle are usually recommended for tubes. However, the combination of eccentric bore and machine resiliency may increase feed-snap on breakthrough and damage the cutting edge. Changing to 6° lead angle inserts will moderate breakthrough. Alternatively, inserts with an extra negative rake-land that strengthens the cutting edge are available on request.

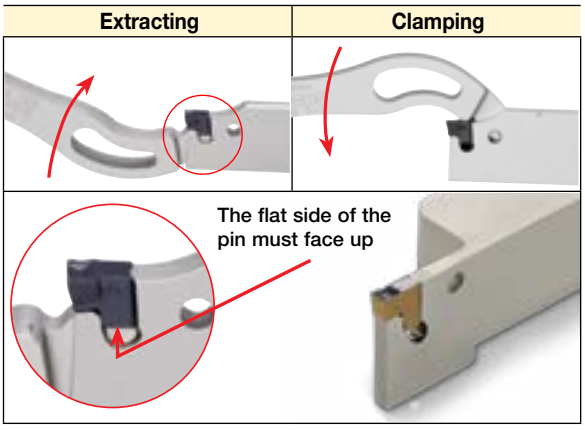


Clamping / Extraction Instructions

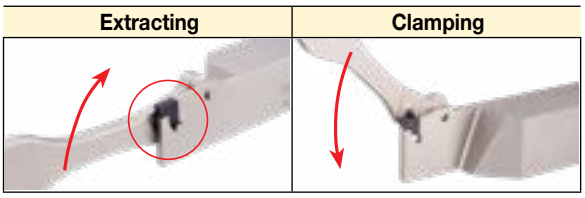
TANG-GRIP The tools are equipped with a user-friendly clamping and extraction device.



ETG 8-12 Extractor for 8 to 12.7 mm inserts



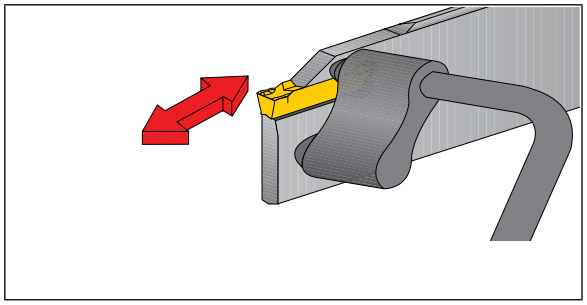
ETG 5-7 (for 5-7 mm tools)
ETG 2 (for 2 mm tools)
ETG 1.4 (for 1.4 mm tools)



ETG 3-4 (for 3 and 4 mm tools)

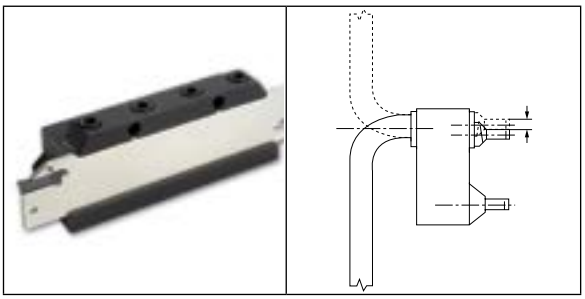
Clamping / Extraction Instructions

Extractor for DGN/R/L Double-Ended Inserts
Do-Grip Insert Clamping/Extracting

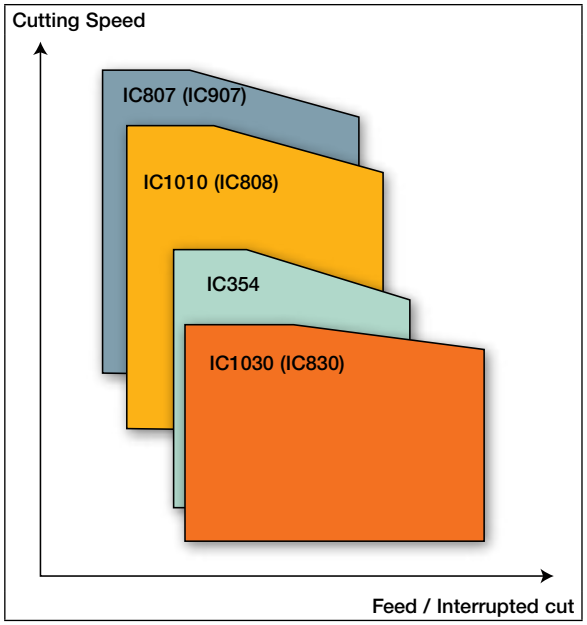


Extracting the insert

Eccentric Extractor for Insert Indexing
Simple to operate; controlled rotation requires low force; guarantees limited upper jaw movement and secures maximum load on blade.



Grade Application Range



Selection Guide for Parting Grades

Material groups		ISO P 1-11 Steel	ISO P 12-13 Stainless Steel Ferritic & Martensitic	ISO M 14 Stainless Steel Austenitic & Duplex (Ferritic - Austenitic)	ISO K 15-20 Cast Iron	ISO N 21-28 Non-ferrous	ISO S 31-37 High Temperature Alloys	ISO H 38-41 Hard Steel & Cast Iron
PARTING	Harder	IC807 (IC907)	IC807 (IC907)	IC807 (IC907)		**IC20**	**IC807 (IC907)**	**IC807 (IC907)**
			IC808	IC808	**IC807 (IC907)**		IC20	
		IC808	IC1010	IC1010	IC20		IC808	IC808
		IC1010	IC5400	IC5400	IC808		IC1010	IC1010
		IC830	**IC830**	IC830	IC1010		IC830	
	Tougher	IC1030	IC1030	**IC1030**			IC1030	

First choice

Machining Data and Parting Speed Recommendations

ISO	Material		Condition	Tensile Strength [N/mm²]	Hardness HB	Material Group No.
P	non-alloy steel and cast steel, free cutting steel	<0.25% C	annealed	420	125	1
		≥0.25% C	annealed	650	190	2
		<0.55% C	quenched and tempered	850	250	3
		≥0.55% C	annealed	750	220	4
			quenched and tempered	1000	300	5
	low alloy and cast steel (less than 5% of alloying elements)		annealed	600	200	6
			quenched and tempered	930	275	7
				1000	300	8
				1200	350	9
	high alloyed steel, cast steel and tool steel		annealed	680	200	10
			quenched and tempered	1100	325	11
	stainless steel and cast steel		ferritic / martensitic	680	200	12
			martensitic	820	240	13
M	stainless steel and cast steel		austenitic, duplex	600	180	14
K	gray cast iron (GG)		ferritic / pearlitic		180	15
			pearlitic / martensitic		260	16
	nodular cast iron (GGG)		ferritic		160	17
			pearlitic		250	18
	malleable cast iron		ferritic		130	19
			pearlitic		230	20
N	aluminum-wrought alloys		not hardenable		60	21
			hardenable		100	22
	aluminum-cast alloys	≤12% Si	not hardenable		75	23
			hardenable		90	24
		>12% Si	high temperature		130	25
	copper alloys	>1% Pb	free cutting		110	26
			brass		90	27
			electrolytic copper		100	28
	non metallic		duroplastics, fiber plastics			29
			hard rubber			30
S	high temperature alloys	Fe based	annealed		200	31
			hardened		280	32
		Ni or Co based	annealed		250	33
			hardened		350	34
			cast		320	35
	titanium alloys		pure	RM 400		36
			alpha+beta alloys, hardened	RM 1050		37
H	hardened steel		hardened		55 HRC	38
			hardened		60 HRC	39
	chilled cast iron		cast		400	40
	cast iron		hardened		55 HRC	41

Material Group No.	IC907/807	IC30N	IC354	IC1010/ IC908/808/1008	IC5400	IC1030/ IC830/928/1028	IC328
1	160 - 240	130 - 190	115 - 170	135 - 200	110 - 160	100 - 150	95 - 140
2	150 - 205	120 - 160	105 - 145	125 - 170	100 - 135	95 - 125	85 - 120
3	115 - 170	90 - 135	80 - 120	95 - 140	75 - 110	70 - 105	65 - 100
4	125 - 190	100 - 150	90 - 135	105 - 160	85 - 130	80 - 120	75 - 110
5	100 - 160	80 - 130	70 - 115	85 - 135	70 - 110	65 - 100	60 - 95
6	125 - 190	100 - 150	90 - 135	105 - 160	85 - 130	80 - 120	75 - 110
7	100 - 170	80 - 135	70 - 120	85 - 140	70 - 110	65 - 105	60 - 100
8	100 - 160	80 - 130	70 - 115	85 - 135	70 - 110	65 - 100	60 - 95
9	90 - 150	70 - 120	65 - 105	75 - 125	60 - 100	55 - 95	50 - 85
10	150 - 205	120 - 160	105 - 145	125 - 170	100 - 135	95 - 125	85 - 120
11	90 - 150	70 - 120	65 - 105	75 - 125	60 - 100	55 - 95	50 - 85

	IC20N	IC907/807	IC808	IC908	IC5400	IC830/928/1028	IC328
12	170 - 300	115 - 210	110 - 200	105 - 190	85 - 150	80 - 140	75 - 135
13	150 - 290	105 - 200	100 - 190	95 - 180	75 - 145	70 - 135	65 - 125

	IC20N	IC907/807	IC808	IC908	IC5400	IC830/928/1028	IC328
14	140 - 260	95 - 175	90 - 170	85 - 160	70 - 130	65 - 120	60 - 110

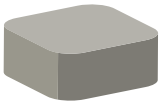
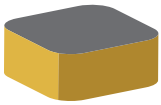
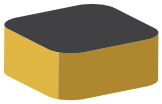
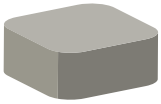
	IC907/807	IC808	IC908	IC20			
15	170 - 305	145 - 270	140 - 255	70 - 125			
16	150 - 215	130 - 190	125 - 180	60 - 90			
17	160 - 265	140 - 230	135 - 220	65 - 110			
18	125 - 205	110 - 180	105 - 170	50 - 85			
19	190 - 320	170 - 280	160 - 265	80 - 130			
20	160 - 265	140 - 230	135 - 220	65 - 110			

	IC907/807	IC908/808	IC20				
21	360 - 1080	330 - 990	300 - 900				
22	270 - 900	250 - 825	225 - 750				
23	270 - 900	250 - 825	225 - 750				
24	180 - 540	165 - 495	150 - 450				
25	180 - 360	165 - 330	150 - 300				
26	180 - 360	165 - 330	150 - 300				
27	130 - 270	120 - 250	110 - 225				
28	90 - 180	80 - 165	75 - 150				
29	40 - 180	40 - 165	35 - 150				

	IC807	IC907	IC908	IC808	IC830/328/928/1028	IC20	
31	50 - 70	45 - 70	40 - 60	40 - 65	30 - 45	30 - 40	
32	35 - 55	35 - 50	30 - 45	30 - 45	20 - 35	20 - 30	
33	35 - 55	35 - 50	30 - 45	30 - 45	20 - 35	20 - 30	
34	30 - 50	30 - 45	25 - 40	25 - 40	20 - 30	15 - 30	
35	25 - 35	25 - 35	20 - 30	20 - 30	15 - 20	15 - 20	
36	115 - 190	110 - 185	95 - 160	100 - 170	70 - 120	65 - 110	
37	40 - 50	40 - 50	35 - 45	35 - 45	30 - 40	40 - 50	

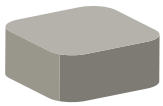
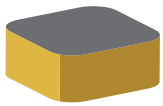
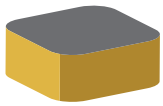
	IC807	IC907	IC808	IC908			
38	35-45	30-40	30-40	25-35			
39	30-40	25-35	25-35	20-30			
40	45-65	40-60	40-60	30-50			
41	40-50	35-45	35-45	30-40			

Parting Materials Grades Chart

		Grade	ISO	Grade Description	Coating Layers	Coating Color*
Tough	PVD COATED	IC1030	P30-P45 M25-M40	A tough substrate with PVD coating, suitable for machining steel and stainless steel at low to medium cutting speeds and moderate to high feeds. Recommended for interrupted cuts and machining under unstable conditions.	TiN AlTiN Base	
		IC328	P30-P45 M25-M40	A tough substrate with PVD coating, suitable for a wide range of applications on steels and stainless steel at low to medium speeds and medium to high feeds. The grade is recommended for interrupted cuts and machining under unstable conditions.	AlTiN Base	
		IC928	P30-P45 M25-M40	A tough substrate with PVD coating, suitable for machining steel and stainless steel at low to medium cutting speeds and moderate to high feeds. The grade is recommended for interrupted cuts and machining under unstable conditions.	AlTiCrN Base	
		IC1028	P30-P45 M25-M40	A tough substrate with PVD coating, suitable for machining steel and stainless steel at low to medium cutting speeds and moderate to high feeds. The grade is recommended for interrupted cuts and machining under unstable conditions.	TiN AlTiCrN Base	
		IC830	P30-P45 M25-M40	A tough substrate with PVD coating and a special SUMOTEC surface treatment. Suitable for machining steel and stainless steel at low to medium cutting speeds and moderate to high feeds. The grade features high toughness and recommended for interrupted cuts and machining under unstable conditions. May be used on high temperature alloys at low cutting speeds.	TiN TiAlN Base	
	CVD COATED	IC5400	P30-P45 M25-M45	A tough substrate with MTCVD coating and a special SUMOTEC post coating treatment. Suitable for machining steel and stainless steel at low to medium cutting speeds and moderate to high feeds under stable and unstable machining conditions.	TiN Al_2O_3 TiCN Base	
	PVD COATED	IC354	P20-P40 M20-M30	A tough substrate with PVD coating, suitable for general use on a wide range of carbon steels, alloy steels and stainless steel at moderate speeds and feeds.	AlTiN Base	
Hard	PVD COATED	IC308	P15-P30 S15-S30	A tough submicron grain size substrate with PVD coating. Suitable for steel, alloy steels and stainless steel at low to medium cutting speeds under stable conditions.	AlTiN Base	

* For coated grades

Parting Materials Grades Chart

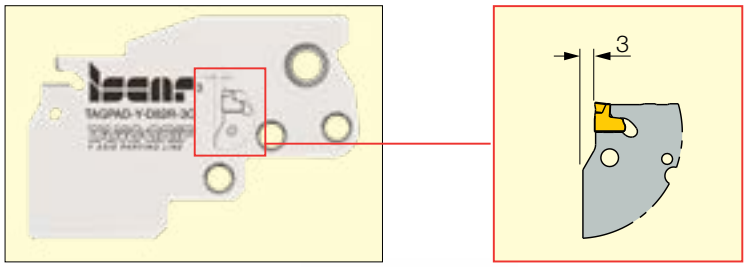
	Grade	ISO	Grade Description	Coating Layers	Coating Color*
Tough / PVD COATED	IC1010	P15-P30 M20-M30 K20-K40 S15-S30 H20-H30	A tough submicron grain size substrate with PVD coating. Recommended for general use on a wide range of applications and materials such as steels, alloy steels, austenitic stainless steel and high temperature alloys at moderate cutting speeds and low to medium feeds. The grade features improved toughness and wear resistance which extends tool life.	TiN AlTiN Base	
	IC1008	P15-P30 M20-M30 K20-K40 S15-S30 H20-H30	A tough submicron grain size substrate with PVD coating. Recommended for general use on a wide range of applications and materials as steels, alloy steels, austenitic stainless steel and high temperature alloys at moderate cutting speeds.	TiN TiAlN Base	
	IC908	P15-P30 M20-M30 K20-K40 S15-S30 H20-H30	A tough submicron grain size substrate with PVD coating, recommended general use in a large variety of operations and materials such as steels, alloy steels, austenitic stainless steel and high temperature alloys at moderate cutting speeds. Features high wear resistance and chipping durability.	TiAlN Base	
	IC808	P15-P30 M20-M30 K20-K40 S15-S30 H20-H30	A tough submicron grain size substrate with PVD coating and a special SUMOTEC surface treatment. Recommended for general use for a large variety of applications and materials such as steels, alloy steels, austenitic stainless steel and high temperature alloys at moderate cutting speeds and feeds. Features high wear resistance and chipping durability.	TiN TiAlN Base	
	IC907	P10-P20 M05-M15 K15-K30 S10-S20 H05-H15	A hard submicron grain size substrate with PVD coating, suitable for a wide range of materials such as steels, alloy steels, hard steels, austenitic stainless steel and heat resistant alloys at moderate to relatively high cutting speeds under stable conditions. Features high wear resistance and plastic deformation durability.	TiAlN Base	
Hard	IC807	P10-P20 M05-M15 K15-K30 S10-S20 H05-H15	A hard submicron grain size substrate with PVD coating and a special SUMOTEC surface treatment. Suitable for machining steels, alloy steels, austenitic stainless steel, high temperature alloys and hard steels at moderate to relatively high cutting speeds under stable conditions. Features high wear resistance and plastic deformation durability.	TiN TiAlN Base	

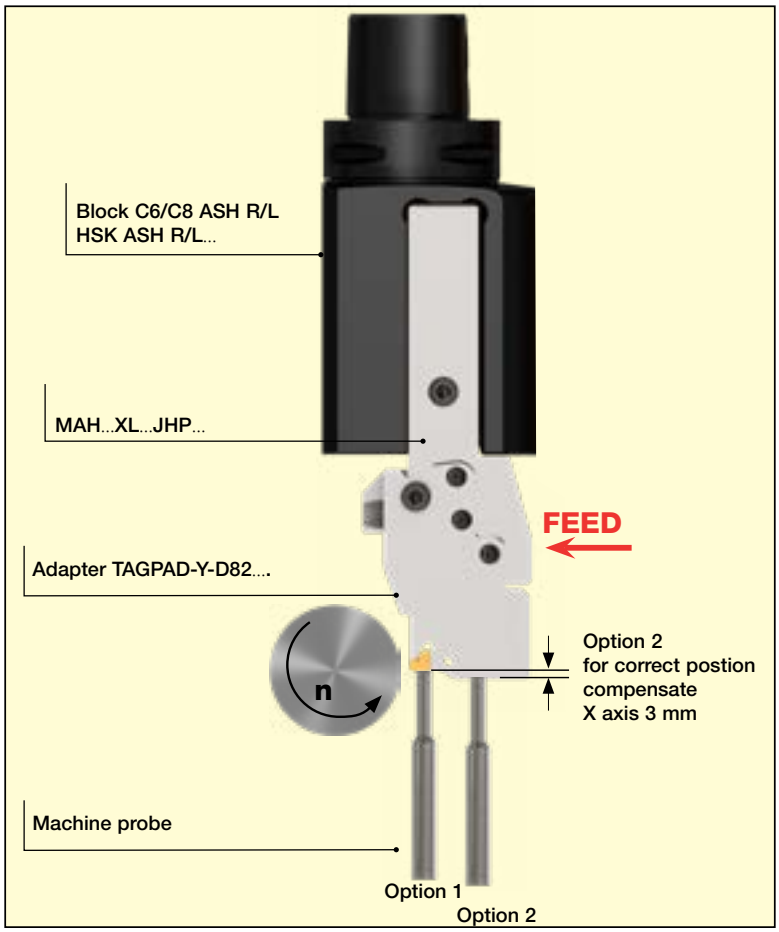
* For coated grades

	Grade	ISO	Grade Description	Uncoated Layers	Uncoated
CERMET	IC30N	P10-P30 M10-M20 	A tough cermet grade, suitable for machining, steels and stainless steel at medium to high cutting speeds and low feeds. Features excellent surface finish, very good wear resistance and prevents built-up edge.	Base	
UNCOATED	IC20	 K10-K20 N05-N25 S10-S20 H10-H20	A hard-uncoated carbide grade for machining aluminum and other non-ferrous materials at medium to high cutting speeds. Can be used for cast iron at low cutting speeds. Suitable also for machining high temperature and Titanium alloys, at low cutting speeds.	Base	

Y Axis TAGPAD setup on Multi-Task and Turning Center Machines

For setup in X direction, use the dimensions marked on the adapter. Setup in Y Axis is not needed.





* Option 1 is preferable due to better accuracy

Setting in X Axis

Set the cutting edge on the center line:
Option 1 - Gauge the cutting edge
Option 2 - Gauge the blade and compensate 3mm

FACE GROOVING AND TURNING



CONTENTS

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PICCO-CUT 626
CHAM-GROOVE 632
MINCUT 633

TOOLS AND INSERTS 636

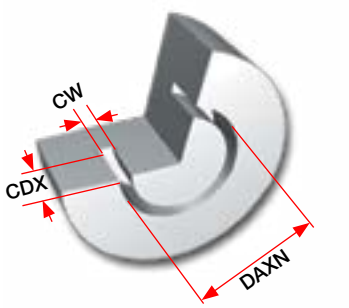
HELI-FACE 637
CUT-GRIP 659
TANG-GRIP 665
SELF-GRIP 670
PENTA-CUT 674

USER GUIDE 676

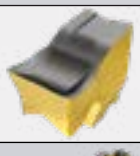
Cutting Speed Recommendations 676
Face Grooving Grades Chart 679

HELIFACE

A Variety of Inserts for Face Machining Applications



Face Grooving DAXN 6–40 mm

		DAXN	DAXX	CWN	CWX	CDX	Page
Picco		6	-	1	3	30	626-632
MIFR/MEFL		8	-	1.5	3.5	15	633-635
GFQR		12	19	1	2.5	3	632-633
HGPL		12	∞	3	6	∞	658
GRIP		12	∞	3	6.35	∞	657-658
DGN		21	∞	4	6	∞	539-543
HFPR/L		12	∞	3	6	∞	656
TNF		30	700	3	6	∞	666-667
HFPN		27	130	2	2	14	655

Face Grooving DAXN 24–80 mm

		DAXN	DAXX	CWN	CWX	CDX	Page
PENTA 34F		22	∞	2.39	4	5	675
GDMY/N		50	∞	8	8	27	663, 319
GIF		80	∞	8	10	27	322
GIFG 8		50	∞	8	8	25	661
GIMM 8CC		80	∞	8	8	∞	664
GDMM CC		50	∞	7	8	∞	664
GIA-K		80	∞	8	8	25	662
GFF		25	55	2.1	6	35	673

HELIFACE

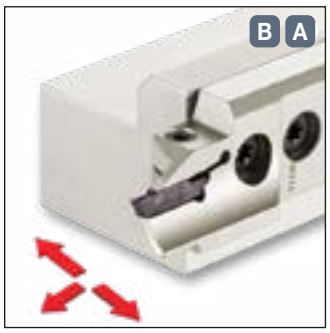
Small Diameter
Face Machining Systems



Tool: HGHR/L see page 638
Insert: GRIP... / HGPL...

CW = 3-6.35 mm
CDX = 6 mm
DAXN = 12 mm

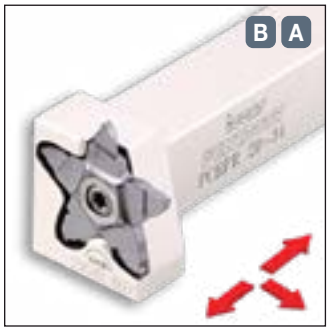
Integral shank toolholder with double-ended inserts.
Used for face grooving and face turning of small parts for 12 mm minimum groove diameter.



Tool: HGAER/L... (adapter) see page 646
Tool: HFAER/L... (adapter) see pages 646-647
Insert: HFPR/L...

CW = 3-6 mm
CDX = 32 mm
DAXN = 12 mm

Exchangeable external adapters.
Used with **HELIFACE** and GRIP inserts for deep face machining.



Tool: PCHPR/L see page 674
Insert: PENTA 34F...

CW = 2.39-4 mm
CDX = 5 mm
DAXN = 22 mm

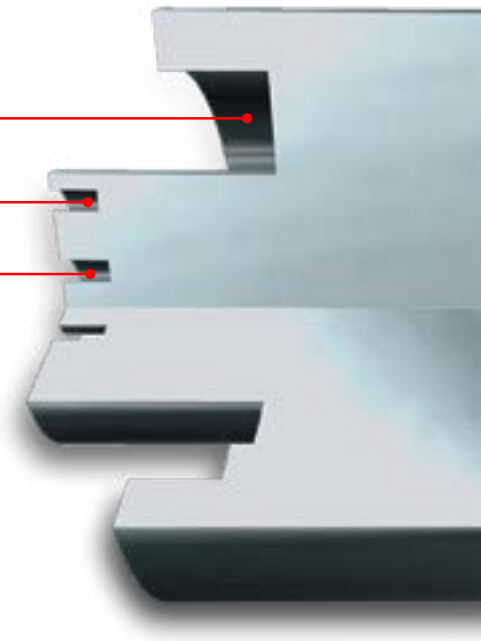
Pentagonal insert for face grooving and recessing up to 5 mm depth of cut at a minimum of 22 mm diameter.



Tool: PICCO R010 see page 627-628

CW = 1-5 mm
CDX = 6 mm
DAXN = 6 mm

Small solid carbide bars for machining shallow grooves from 6 mm minimum diameter.







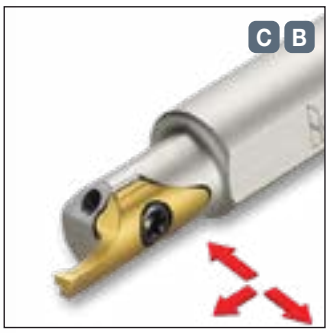
Tool: PICCO R015 see page 632

CW = 2.5-3 mm

CDX = 30 mm

DAXN = 8 mm

Small solid carbide bars for machining deep face grooves of up to 30 and 8 mm minimum diameter.



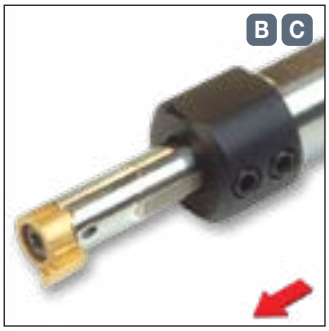
Tool: MIFHR ... see page 633
Insert: MIFR ...

CW = 1.5-3.5 mm

CDX = 5.5 mm

DAXN = 8 mm

MINCUT-A family of internal face grooving and face turning tools for machining small diameters ranging from 8-60 mm.
Strong and stable tangential pocket with internal coolant.



Tool: MGCH 09C see page 632
Insert: GFQR...

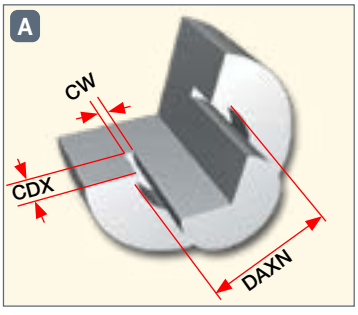
CW = 1-2.5 mm

CDX = 3 mm

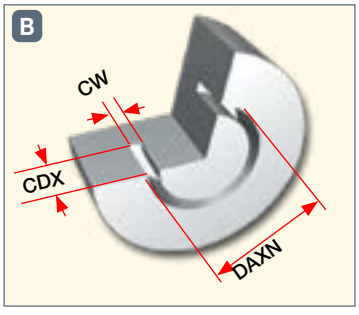
DAXN = 12 mm

A screw-clamped insert on an internal coolant solid carbide bar. Used for machining shallow grooves from 12 mm minimum diameter.

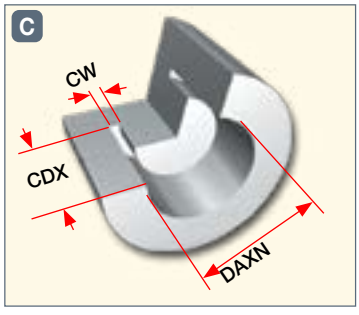
Main Applications



Grooving Next to a Shaft



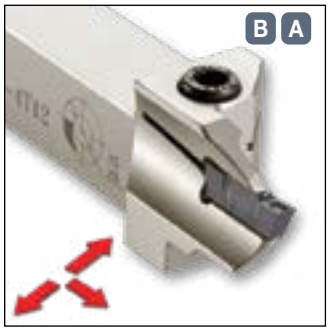
External Grooving



Internal Grooving

HELIFACE

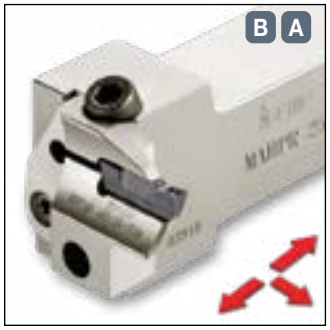
Medium Diameter
Face Machining Systems



Tool: HFHR/L... see pages 638-641
Insert: HFPR/L...

CW = 3-6 mm
CDX = 32 mm
DAXN = 25 mm

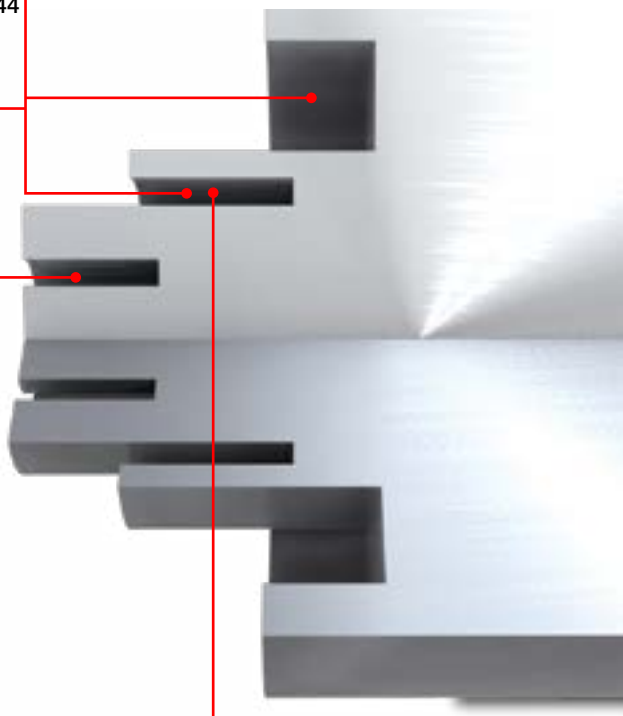
Integral shank toolholders carrying **HELIFACE** and GRIP inserts. For deep face grooving and side face turning.

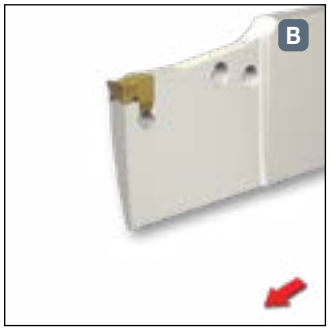


Tool: HFPAD... (adapter) see pages 642-644
Insert: HFPR/L...

CW = 3-6 mm
CDX = 20 mm
DAXN = 25 mm

Slanted, screw-clamped adapter carrying **HELIFACE** and GRIP inserts. A part of the **MODULAR-GRIP** system. Very rigid, for tough face operations.

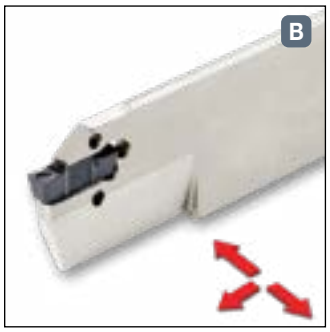




Tool: TNFFH see page 665
Insert: TNF 3-6C...

CW = 3-6 mm
CDX = 35 mm
DAXN = 30 mm

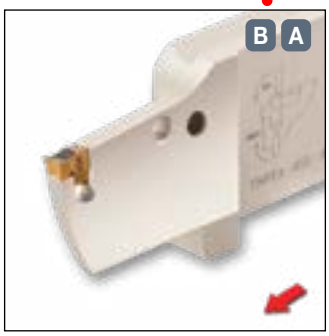
Adapter and blade toolholders carrying TNF 3-6C inserts. For deep face grooving.



Tool: HFFR/L... see page 645
Insert: HFPR/L...

CW = 4-6 mm
CDX = 38 mm
DAXN = 48 mm

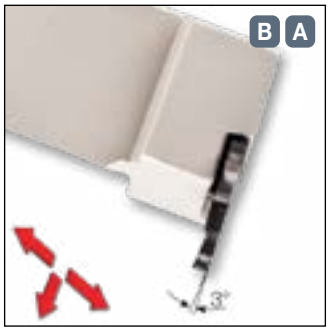
Economical, double-ended blades carrying **HELIFACE** and GRIP inserts. Recommended for deep face grooving and face turning to a maximum depth of 38 mm.



Tool: TNFFA see page 666
Insert: TNF 3-6C...

CW = 3-6 mm
CDX = 35 mm
DAXN = 30 mm

Reinforced blades carrying TNF 3-6C inserts. Recommended for face grooving only. Can machine along a shaft. Excellent chip evacuation.



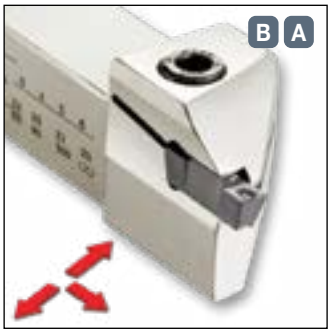
Tool: PCHPRS/LS see page 675
Insert: PENTA 34F-RS/LS...

CW = 2.39-4 mm

CDX = 5 mm

DAXN = 22 mm

Pentagonal insert for face grooving and recessing next to shoulders up to 5 mm depth of cut at a minimum of 22 mm diameter.



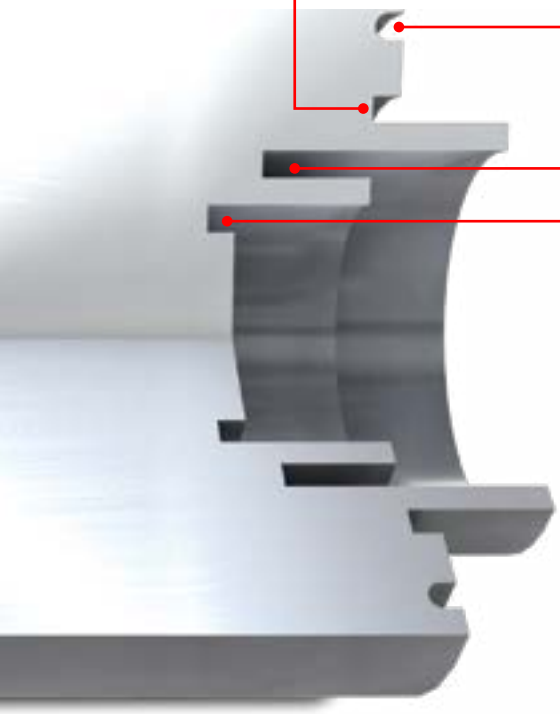
Tool: HFHR/L..-M see page 647
Insert: HFPR/L...

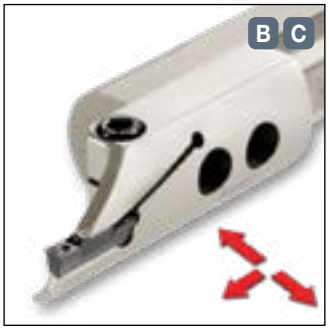
CW = 3-6 mm

CDX = 5.3 mm

DAXN = 20 mm

Integral toolholders carrying **HELIFACE** and GRIP inserts. For machining up to 5.3 mm depth of cut. 3-6 mm wide inserts can be mounted in the same pocket.





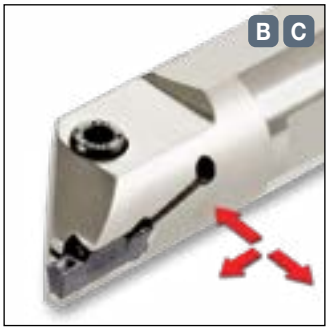
Tool: HFAIR/L...& HGAIR/L (adapter) see pages 651, 648
Insert: HFPR/L...

CW = 3-6 mm

CDX = 12 mm

DAXN = 32 mm

Exchangeable, internal coolant adapters carrying **HELIFACE** and GRIP inserts. Recommended for deep internal face machining.



Tool: HFIR/L..-MC see page 653-654
Insert: HFPR/L...

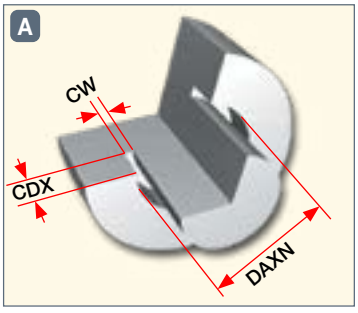
CW = 3-6 mm

CDX = 5 mm

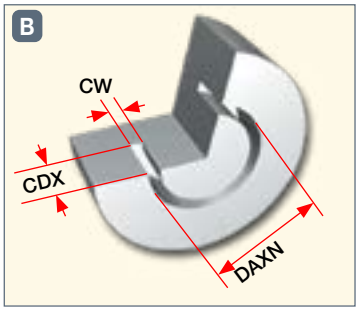
DAXN = 20 mm

Boring bars for shallow face machining of up to 5 mm depth carrying **HELIFACE** and GRIP inserts. Internal coolant. 3-6 mm width inserts can be mounted in the same pocket.

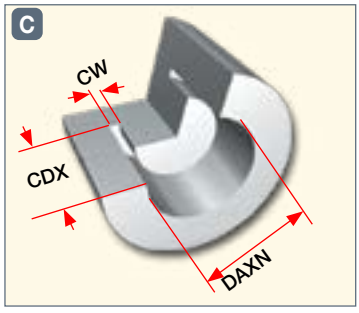
Main Applications



Grooving Next to a Shaft

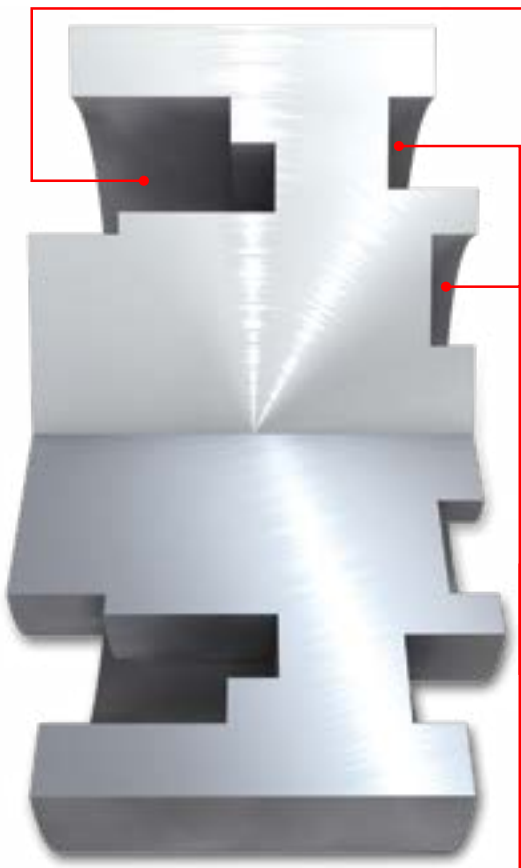


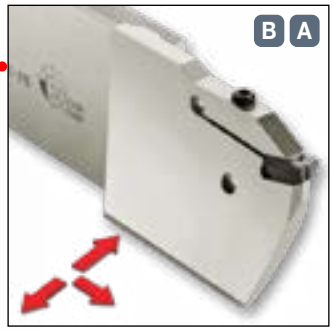
External Grooving



Internal Grooving

Large Diameter
Face Machining Systems





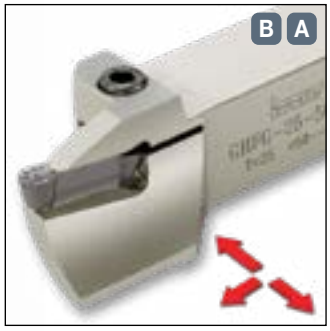
Tool: CGFG 51-..R/L-P8
see page 661
Insert: GIMY 8...

CW = 8 mm

CDX = 120 mm

DAXN = 180 mm

Blades carrying 8 mm single-ended **CUT-GRIP** inserts. Can machine up to 120 mm depth next to a shaft. Used for large diameters.



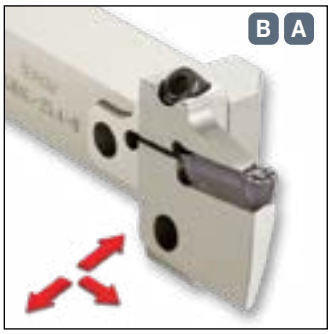
Tool: GHFG ..R/L-8 **see page 659**
Insert: GDMY 8..

CW = 8 mm

CDX = 25 mm

DAXN = 50 mm

Integral toolholders carrying 8 mm **CUT-GRIP** inserts. For heavy machining of medium and large parts. Can machine next to a shaft of up to 25 mm depth.



Tool: GAFG ..R/L-8 (adapter) **see page 661**
Insert: GDMM 8CC

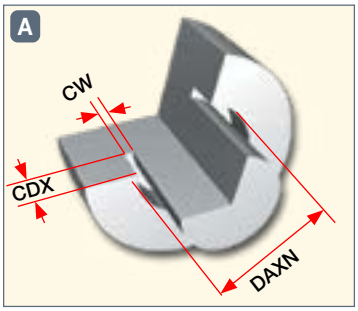
CW = 8 mm

CDX = 25 mm

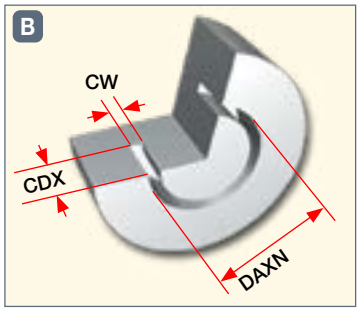
DAXN = 80 mm

Exchangeable adapters carrying 8 mm **CUT-GRIP** inserts. Can machine up to 25 mm depth next to a shaft. For heavy machining of medium and large parts.

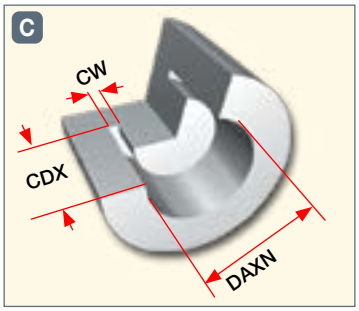
Main Applications



Grooving Next to a Shaft



External Grooving



Internal Grooving

FACE GROOVING TOOLS FOR MINIATURE PARTS

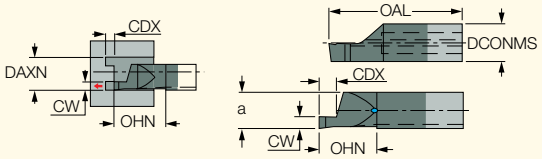


PICCOJET
COOLANT THROUGH

PICJ R/LF-D6/8-T (Face Grooving)

Inserts with an Internal Coolant Channels for Face Grooving





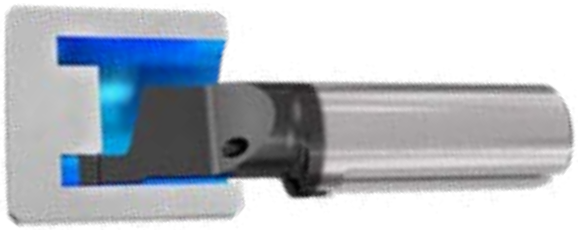
Designation	Dimensions							IC908	Recommended Machining Data
	DAXN(1)	CW	CDX	DCONMS	OHN(2)	OAL	a		f face-groove (mm/rev)
PICJ RF10D6T1.5-10	6.0	1.00	1.50	6.00	11.0	26.00	5.20	●	0.01-0.04
PICJ RF15D6T2.0-10	6.0	1.50	2.00	6.00	11.0	26.00	5.20	●	0.01-0.04
PICJ LF15D8T2.5-20	8.0	1.50	2.50	7.00	21.0	35.00	5.90	●	0.01-0.04
PICJ RF10D8T1.5-10-6	8.0	1.00	1.50	6.00	11.0	26.00	5.20	●	0.01-0.04
PICJ RF10D8T1.5-20-7	8.0	1.00	1.50	7.00	21.0	35.00	5.90	●	0.01-0.04
PICJ RF10D8T1.5-30-7	8.0	1.00	1.50	7.00	30.0	45.00	5.90	●	0.01-0.04
PICJ RF15D8T2.5-10-6	8.0	1.50	2.50	6.00	11.0	26.00	5.20	●	0.01-0.04
PICJ RF15D8T2.5-20-6	8.0	1.50	2.50	6.00	20.0	35.00	5.20	●	0.01-0.04
PICJ RF15D8T2.5-30-7	8.0	1.50	2.50	7.00	30.0	45.00	5.90	●	0.01-0.04
PICJ RF20D8T3.0-10-6	8.0	2.00	3.00	7.00	11.0	26.00	5.90	●	0.02-0.05
PICJ RF20D8T3.0-20-6	8.0	2.00	3.00	6.00	20.0	35.00	5.20	●	0.02-0.05
PICJ R/LF20D8T3.0-30-7	8.0	2.00	3.00	7.00	30.0	45.00	5.90	●	0.02-0.05
PICJ RF25D8T3.5-10-6	8.0	2.50	3.50	7.00	11.0	26.00	5.90	●	0.02-0.05
PICJ RF25D8T3.5-20-7	8.0	2.50	3.50	7.00	21.0	35.00	5.90	●	0.02-0.05
PICJ RF30D8T3.5-10-6	8.0	3.00	3.50	7.00	11.0	26.00	5.90	●	0.02-0.06
PICJ RF30D8T3.5-20-6	8.0	3.00	3.50	7.00	21.0	35.00	5.90	●	0.02-0.06
PICJ RF30D8T3.5-30-7	8.0	3.00	3.50	7.00	30.0	45.00	5.90	●	0.02-0.06

NEW

- Only right-hand inserts are available as standard
- All inserts are with sharp corners
- For detailed cutting data, see page 678

(1) Minimum axial grooving diameter

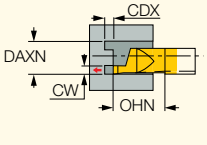
(2) Minimum overhang

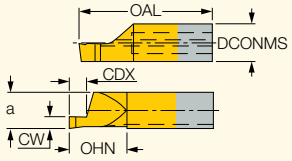


PICCOCUT

PICCO-010/610
(Face Grooving)
Inserts for Face Grooving









Right-hand shown

Designation	Dimensions							IC228	Recommended Machining Data
	DAXN[1]	CW	CDX	DCONMS	OHN[2]	OAL	a		f face-groove (mm/rev)
PICCO R 010.1006-10	6.0	1.00	1.50	6.00	11.0	26.00	5.20	●	0.01-0.04
PICCO R 010.1506-10	6.0	1.50	2.00	6.00	11.0	26.00	5.20	●	0.01-0.04
PICCO R/L 010.1508-20	8.0	1.50	2.50	7.00	21.0	35.00	5.90	●	0.01-0.04
PICCO R/L 010.1508-30	8.0	1.50	2.50	7.00	30.0	45.00	5.90	●	0.01-0.04
PICCO R/L 010.2008-30	8.0	2.00	3.00	7.00	30.0	45.00	5.90	●	0.02-0.05
PICCO R 010.1008-10	8.0	1.00	1.50	7.00	11.0	26.00	5.90	●	0.01-0.04
PICCO R 010.1008-20	8.0	1.00	1.50	7.00	21.0	35.00	5.90	●	0.01-0.04
PICCO R 010.1008-30	8.0	1.00	1.50	7.00	30.0	45.00	5.90	●	0.01-0.04
PICCO R 010.1508-10	8.0	1.50	2.50	7.00	11.0	26.00	5.90	●	0.01-0.04
PICCO R 010.2008-10	8.0	2.00	3.00	7.00	11.0	26.00	5.90	●	0.02-0.05
PICCO R 010.2008-20	8.0	2.00	3.00	7.00	21.0	35.00	5.90	●	0.02-0.05
PICCO R 010.2508-10	8.0	2.50	3.50	7.00	11.0	26.00	5.90	●	0.02-0.05
PICCO R 010.2508-20	8.0	2.50	3.50	7.00	21.0	35.00	5.90	●	0.02-0.05
PICCO R 010.2508-30	8.0	2.50	3.50	7.00	30.0	45.00	5.90	●	0.02-0.05
PICCO R 010.3008-10	8.0	3.00	3.50	7.00	11.0	26.00	5.90	●	0.02-0.06
PICCO R 010.3008-20	8.0	3.00	3.50	7.00	21.0	35.00	5.90	●	0.02-0.06
PICCO R 010.3008-30	8.0	3.00	3.50	7.00	30.0	45.00	5.90	●	0.02-0.06
PICCO R 610.1008-10	8.0	1.00	1.50	6.00	11.0	26.00	5.20	●	0.01-0.04
PICCO R 610.1008-20	8.0	1.00	1.50	6.00	20.0	35.00	5.20	●	0.01-0.04
PICCO R 610.1508-10	8.0	1.50	2.50	6.00	11.0	26.00	5.20	●	0.01-0.04
PICCO R 610.1508-20	8.0	1.50	2.50	6.00	20.0	35.00	5.20	●	0.01-0.04
PICCO R 610.2008-10	8.0	2.00	3.00	6.00	11.0	26.00	5.20	●	0.02-0.05
PICCO R 610.2008-20	8.0	2.00	3.00	6.00	20.0	35.00	5.20	●	0.02-0.05
PICCO R 610.2508-10	8.0	2.50	3.50	6.00	11.0	26.00	5.20	●	0.02-0.05
PICCO R 610.2508-20	8.0	2.50	3.50	6.00	20.0	35.00	5.20	●	0.02-0.05
PICCO R 610.3008-10	8.0	3.00	3.50	6.00	11.0	26.00	5.20	●	0.02-0.06
PICCO R 610.3008-20	8.0	3.00	3.50	6.00	20.0	35.00	5.20	●	0.02-0.06

• Only right-hand inserts are available as standard • All inserts are with sharp corners • For detailed cutting data, see page 678

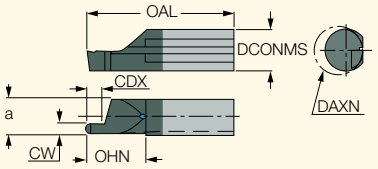
[1] Minimum axial grooving diameter

[2] Minimum overhang

PICCOJET COOLANT THROUGH

PICJ RF-T
(Round Face Grooving)
Inserts with an Internal Coolant Channel for Round Profile Face Grooving





Designation	Dimensions DAXN(1)	CW	CDX	DCONMS	OHN(2)	OAL	a	RE	IC908	Recommended Machining Data f face-groove (mm/rev)
PICJ RF10D8T2.0-10	8.0	1.00	2.00	7.00	11.0	26.00	5.90	0.50	●	0.01-0.04
PICJ RF10D8T2.0-20	8.0	1.00	2.00	7.00	20.0	35.00	5.90	0.50	●	0.01-0.04
PICJ RFP16D8T3-10	8.0	1.60	3.00	7.00	11.0	26.00	5.90	0.80	●	0.01-0.05
PICJ RFP16D8T3-20	8.0	1.60	3.00	7.00	20.0	35.00	5.90	0.80	●	0.01-0.05
PICJ RFP20D8T4-10	8.0	2.00	4.00	7.00	11.0	26.00	5.90	1.00	●	0.02-0.05
PICJ RFP20D8T4-20	8.0	2.00	4.00	7.00	20.0	35.00	5.90	1.00	●	0.02-0.05
PICJ RFP25D8T5-10	8.0	2.50	5.00	7.00	11.0	26.00	5.90	1.25	●	0.02-0.05
PICJ RFP30D8T6-10	8.0	3.00	6.00	7.00	11.0	26.00	5.90	1.50	●	0.02-0.05
PICJ RFP30D8T6-20	8.0	3.00	6.00	7.00	20.0	35.00	5.90	1.50	●	0.02-0.05

NEW

- Only right-hand inserts are available as standard, left-hand inserts on request
- For detailed cutting data, see page 678

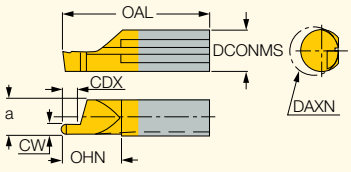
(1) Minimum axial grooving diameter
(2) Minimum overhang



PICCOCUT

PICCO-010
(Round Face Groove)
Inserts for Round Profile Face Grooving





Right-hand shown

Designation	Dimensions DAXN(1)	CW	CDX	DCONMS	OHN(2)	OAL	a	RE	IC1008	Recommended Machining Data f face-groove (mm/rev)
PICCO R 010.1005-10	8.0	1.00	2.00	7.00	11.0	26.00	5.90	0.50	●	0.01-0.04
PICCO R 010.1005-20	8.0	1.00	2.00	7.00	20.0	35.00	5.90	0.50	●	0.01-0.04
PICCO R 010.1608-10	8.0	1.60	3.00	7.00	11.0	26.00	5.90	0.80	●	0.01-0.05
PICCO R 010.1608-20	8.0	1.60	3.00	7.00	20.0	35.00	5.90	0.80	●	0.01-0.05
PICCO R 010.2010-10	8.0	2.00	4.00	7.00	11.0	26.00	5.90	1.00	●	0.02-0.05
PICCO R 010.2010-20	8.0	2.00	4.00	7.00	20.0	35.00	5.90	1.00	●	0.02-0.05
PICCO R 010.2512-10	8.0	2.50	5.00	7.00	11.0	26.00	5.90	1.25	●	0.02-0.05
PICCO R 010.2512-20	8.0	2.50	5.00	7.00	20.0	35.00	5.90	1.25	●	0.02-0.05
PICCO R 010.3015-10	8.0	3.00	6.00	7.00	11.0	26.00	5.90	1.50	●	0.02-0.05
PICCO R 010.3015-20	8.0	3.00	6.00	7.00	20.0	35.00	5.90	1.50	●	0.02-0.05

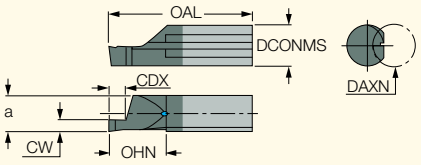
- Only right-hand inserts are available as standard, left-hand inserts on request
- For detailed cutting data, see page 678

(1) Minimum axial grooving diameter
(2) Minimum overhang

PICCOJET
COOLANT THROUGH

PICJ RF-T-20
(Grooving Along Shaft)
Inserts with an Internal Coolant Channel for Grooving Along Shaft Dmin 6 mm





Designation	Dimensions DAXN(1)	CW	CDX	DCONMS	OHN(2)	OAL	a	IC908	Recommended Machining Data f face-groove (mm/rev)
PICJ RF10D6T2.0-20	6.0	1.00	2.00	6.00	20.0	35.00	5.20	●	0.01-0.04
PICJ RF15D6T3.0-20	6.0	1.50	3.00	6.00	20.0	35.00	5.20	●	0.01-0.05
PICJ RF20D6T4.0-20	6.0	2.00	4.00	6.00	20.0	35.00	5.20	●	0.02-0.06
PICJ RF25D6T5.0-20	6.0	2.50	5.00	6.00	20.0	35.00	5.20	●	0.02-0.06
PICJ RF30D6T6.0-20	6.0	3.00	6.00	6.00	20.0	35.00	5.20	●	0.02-0.06

NEW

- Only right-hand inserts are available as standard, left-hand inserts on request
- All carbide inserts are with sharp corners
- For detailed cutting data, see page 678

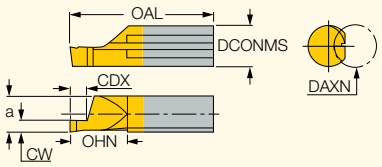
(1) Minimum axial grooving diameter
(2) Minimum overhang



PICCOCUT

PICCO-620
(Groove Along Shaft)
Inserts for Grooving Along a Shaft Dmin 6 mm





Right-hand shown

Designation	Dimensions DAXN(1)	CW	CDX	DCONMS	OHN(2)	OAL	a	IC1008	Recommended Machining Data f face-groove (mm/rev)
PICCO R 620.1006-20	6.0	1.00	2.00	6.00	20.0	35.00	5.20	●	0.01-0.04
PICCO R 620.1506-20	6.0	1.50	3.00	6.00	20.0	35.00	5.20	●	0.01-0.05
PICCO R 620.2006-20	6.0	2.00	4.00	6.00	20.0	35.00	5.20	●	0.02-0.06
PICCO R 620.2506-20	6.0	2.50	5.00	6.00	20.0	35.00	5.20	●	0.02-0.06
PICCO R 620.3006-20	6.0	3.00	6.00	6.00	20.0	35.00	5.20	●	0.02-0.06

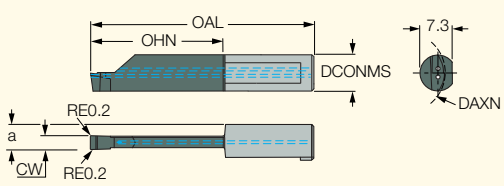
- Only right-hand inserts are available as standard, left-hand inserts on request
- All carbide inserts are with sharp corners
- For detailed cutting data, see page 678

(1) Minimum axial grooving diameter
(2) Minimum overhang

PICCOJET
COOLANT THROUGH

PICJ RF-D16/20-T
(Face Grooving)
Inserts with an Internal Coolant Channel for Deep Face Grooving



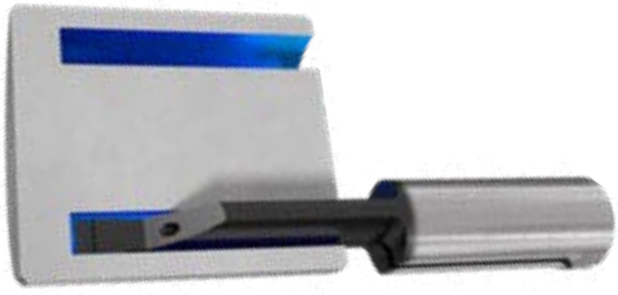


Designation	Dimensions DAXN(1)	CW	DCONMS	OHN(2)	OAL	a	IC908	Recommended Machining Data f face-groove (mm/rev)
PICJ RF30D16T10-10	16.0	3.00	8.00	10.0	30.00	5.50	●	0.01-0.05
PICJ RF30D16T20-20	16.0	3.00	8.00	20.0	40.00	5.50	●	0.01-0.05
PICJ RF40D16T20-20	16.0	4.00	8.00	20.0	40.00	6.00	●	0.01-0.05
PICJ RF30D20T25-25	20.0	3.00	8.00	25.0	45.00	5.50	●	0.01-0.05
PICJ RF30D20T30-30	20.0	3.00	8.00	30.0	50.00	5.50	●	0.01-0.04
PICJ RF30D20T40-40	20.0	3.00	8.00	40.0	60.00	5.50	●	0.01-0.04
PICJ RF40D20T25-25	20.0	4.00	8.00	25.0	45.00	6.00	●	0.01-0.06
PICJ RF40D20T30-30	20.0	4.00	8.00	30.0	50.00	6.00	●	0.01-0.06
PICJ RF40D20T40-40	20.0	4.00	8.00	40.0	60.00	6.00	●	0.01-0.05
PICJ RF50D20T25-25	20.0	5.00	8.00	25.0	45.00	6.50	●	0.02-0.06
PICJ RF50D20T30-30	20.0	5.00	8.00	30.0	50.00	6.50	●	0.02-0.06
PICJ RF50D20T35-35	20.0	5.00	8.00	35.0	55.00	6.50	●	0.02-0.05
PICJ RF50D20T40-40	20.0	5.00	8.00	40.0	60.00	6.50	●	0.02-0.05

NEW

- All inserts have two coolant holes which may be used with coolant pressure up to 100 bars
- For detailed cutting data, see page 678

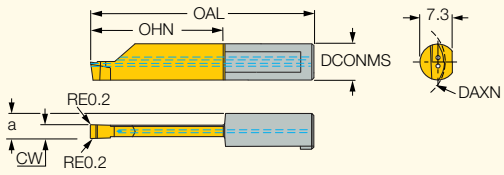
(1) Minimum axial grooving diameter
(2) Minimum overhang



PICCOCUT

PICCO-016/020
(Face Grooving)
Inserts with an Internal Coolant Channel for Deep Face Grooving





Right-hand shown

Designation	Dimensions DAXN(1)	CW	DCONMS	OHN(2)	OAL	a	IC1008	Recommended Machining Data f face-groove (mm/rev)
PICCO R 016.0300-10	16.0	3.00	8.00	10.0	30.00	5.50	●	0.01-0.05
PICCO R 016.0300-20	16.0	3.00	8.00	20.0	40.00	5.50	●	0.01-0.05
PICCO R 016.0400-10	16.0	4.00	8.00	10.0	30.00	6.00	●	0.01-0.05
PICCO R 016.0400-20	16.0	4.00	8.00	20.0	40.00	6.00	●	0.01-0.05
PICCO R 020.0300-25	20.0	3.00	8.00	25.0	45.00	5.50	●	0.01-0.05
PICCO R 020.0300-30	20.0	3.00	8.00	30.0	50.00	5.50	●	0.01-0.04
PICCO R 020.0300-35	20.0	3.00	8.00	35.0	55.00	5.50	●	0.01-0.04
PICCO R 020.0300-40	20.0	3.00	8.00	40.0	60.00	5.50	●	0.01-0.04
PICCO R 020.0400-25	20.0	4.00	8.00	25.0	45.00	6.00	●	0.01-0.06
PICCO R 020.0400-30	20.0	4.00	8.00	30.0	50.00	6.00	●	0.01-0.06
PICCO R 020.0400-35	20.0	4.00	8.00	35.0	55.00	6.00	●	0.01-0.05
PICCO R 020.0400-40	20.0	4.00	8.00	40.0	60.00	6.00	●	0.01-0.05
PICCO R 020.0500-20	20.0	5.00	8.00	20.0	40.00	6.50	●	0.02-0.06
PICCO R 020.0500-25	20.0	5.00	8.00	25.0	45.00	6.50	●	0.02-0.06
PICCO R 020.0500-30	20.0	5.00	8.00	30.0	50.00	6.50	●	0.02-0.06
PICCO R 020.0500-35	20.0	5.00	8.00	35.0	55.00	6.50	●	0.02-0.05
PICCO R 020.0500-40	20.0	5.00	8.00	40.0	60.00	6.50	●	0.02-0.05

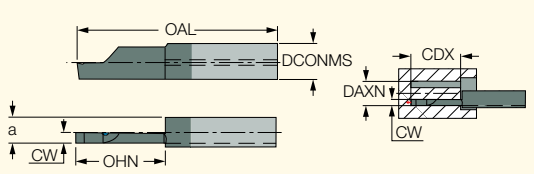
- All inserts have two coolant holes which may be used with coolant pressure up to 100 bars
- For detailed cutting data, see page 678

(1) Minimum axial grooving diameter
(2) Minimum overhang

PICCOJET
COOLANT THROUGH

PICJ RF-D8-T
(Face Grooving)
Inserts with an Internal Coolant Channel for Deep Face Grooving





Designation	Dimensions DAXN(1)	CW	CDX	DCONMS	OHN(2)	OAL	a	IC908	Recommended Machining Data f face-groove (mm/rev)
PICJ RF25D8T20-20	8.0	2.50	19.00	7.00	20.0	35.00	5.90	●	0.01-0.04
PICJ RF30D8T20-20	8.0	3.00	19.00	7.00	20.0	35.00	5.90	●	0.02-0.05
PICJ RF30D8T30-30	8.0	3.00	29.00	7.00	30.0	45.00	5.90	●	0.01-0.04

NEW

- Only right-hand inserts are available as standard, left-hand inserts on request
- All inserts are with sharp corners
- For detailed cutting data, see page 678

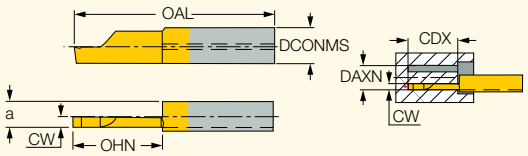
(1) Minimum axial grooving diameter
(2) Minimum overhang



PICCOCUT

PICCO-015 (Face Grooving)
Inserts for Deep Face Grooving





Right-hand shown

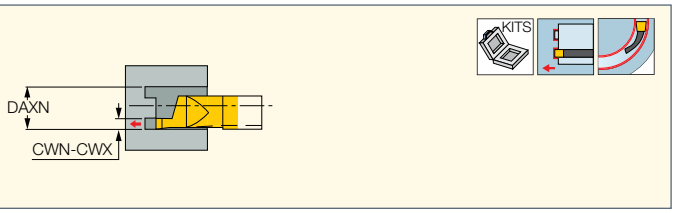
Designation	Dimensions							IC228	Recommended Machining Data
	DAXN(1)	CW	CDX	DCONMS	OHN(2)	OAL	a		f face-groove (mm/rev)
PICCO R/L 015.3015-20	15.0	3.00	19.00	7.00	20.0	35.00	5.90	•	0.02-0.05
PICCO R 015.2515-20	15.0	2.50	19.00	7.00	20.0	35.00	5.90	•	0.01-0.04
PICCO R 015.3015-30	15.0	3.00	29.00	7.00	30.0	45.00	5.90	•	0.01-0.04

- Only right-hand inserts are available as standard, left-hand inserts on request
- All inserts are with sharp corners
- For detailed cutting data, see page 678

(1) Minimum axial grooving diameter
(2) Minimum overhang

PICCOCUT

KIT PICCO Face
Contains One Toolholder and a Set of Solid Carbide Miniature Face Turning and Grooving Boring Bars



Designation	DAXN(1)	CWN(2)	CWX(3)
KIT PICCO SET-4R	8.0	1.00	3.00

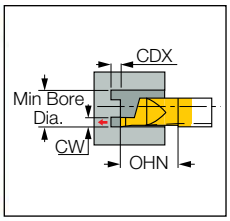
(1) Minimum axial grooving diameter
(2) Minimum cutting width
(3) Maximum cutting width

PICCO

Face Grooving PICCO Mini-Bar Tool Set - 4R

Designation	Mini Bore Dia.	OHN	CDX	CW	Pcs.	Designation
PICCO 16.D6					1x	Holder
PICCO R/L 010.1008-10	8.0	11	1.5	1.0	1x	Mini Carbide Bar
PICCO R/L 010.1508-10	8.0	11	2.5	1.5	1x	Mini Carbide Bar
PICCO R/L 010.2008-10	8.0	11	3.0	2.0	1x	Mini Carbide Bar
PICCO R/L 010.2508-20	8.0	21	3.5	2.5	1x	Mini Carbide Bar
PICCO R/L 010.3008-20	8.0	21	3.5	3.0	1x	Mini Carbide Bar

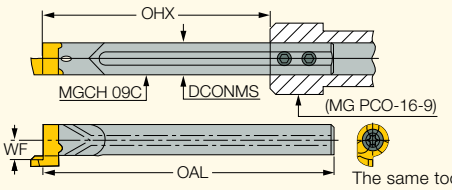




Available grade: IC228

CHAMGROOVE

MGCH-C (face)
Face Machining Tools Carrying GFQR Inserts for Dmin 12 - Dmax 19 mm Penetration Range



The same tool applies for right-and left-machining

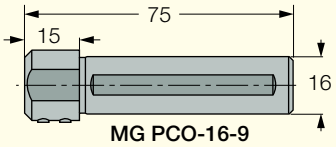
Designation	DCONMS	OAL	OHX(1)	WF		
MGCH 09C	9.00	83.50	65.0	5.50	SR 76-2145	T-15/5

(1) Maximum overhang

For inserts, see pages: GFQR (633)
For holders, see pages: PICCO/MG PCO (Holder) (441)

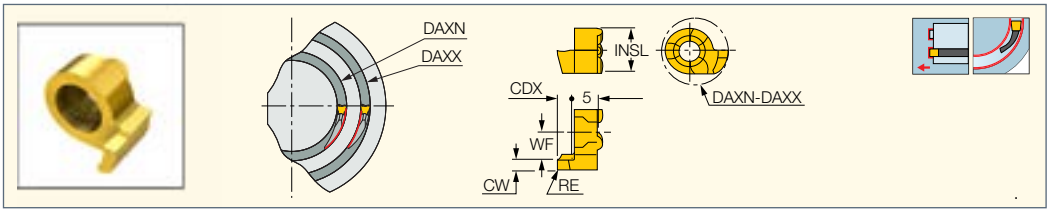
MG PCO

Holder Bar for Adjustable Shank



CHAMGROOVE

GFQR
Face Grooving Inserts



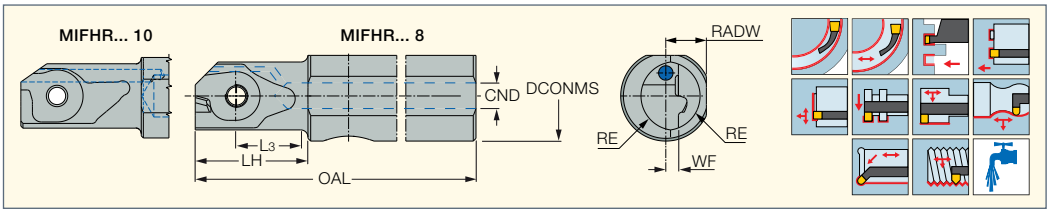
Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	CDX	DAXN(3)	DAXX(4)	IC528	Recommended Machining Data f face-groove (mm/rev)
GFQR 12-1.00-0.05	1.00	0.05	0.020	0.030	1.50	12.0	16.0	•	0.01-0.04
GFQR 12-1.50-0.20	1.50	0.20	0.020	0.030	2.50	12.0	17.0	•	0.01-0.04
GFQR 12-2.00-0.20	2.00	0.20	0.020	0.030	3.00	12.4	18.0	•	0.02-0.05
GFQR 12-2.50-0.20	2.50	0.20	0.020	0.030	3.00	13.0	19.0	•	0.02-0.05

• For detailed cutting data, see page 678
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Minimum penetration diameter
(4) Maximum penetration diameter

For tools, see pages: MGCH-C (face) (632)

MIN CUT MINI FACE LINE

MIFHR
Bars for Face and Internal Grooving, Undercutting and Threading Inserts



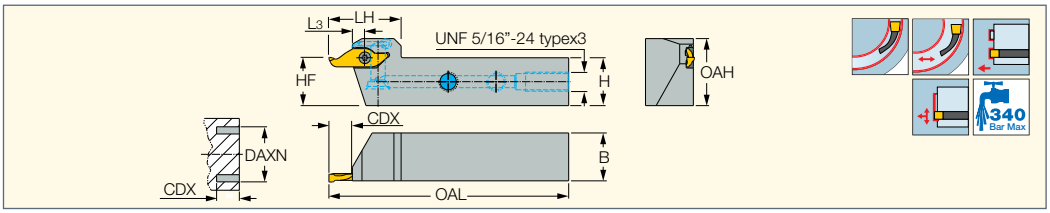
Designation	DCONMS	CND(3)	WF	RADW	OAL	L3	LH	RE	Insert			
MIFHR 8SC-8-SRK (1)	8.00	1.2	1.4	3.70	75.00	7.40	11.7	3.80	MI.R 8	SR 14-297	T-8/5	
MIFHR 10C-8	10.00	5.0	1.4	4.50	102.50	7.40	12.5	3.80	MI.R 8	SR 14-297	T-8/5	
MIFHR 12C-8	12.00	5.0	1.4	5.50	102.50	7.40	12.5	3.80	MI.R 8	SR 14-297	T-8/5	
MIFHR 12C-10 (2)	12.00	6.0	2.4	5.50	90.00	11.20	17.2	4.60	MI.R 10	SR 34-506 M3X0.5	T-9/5	
MIFHR 16C-10 (2)	16.00	6.0	2.4	7.50	90.00	11.20	17.2	4.60	MI.R 10	SR 34-506 M3X0.5	T-9/5	
MIFHR 16C-15	16.00	8.0	2.7	7.50	100.00	12.50	19.0	10.30	MI.R 15	SR 34-506/L	T-9/5	PL 16
MIFHR 20C-15	20.00	8.5	4.7	9.00	100.00	12.50	19.0	11.30	MI.R 15	SR 34-506/L	T-9/5	PL 20

(1) Solid carbide shank
(2) Only face grooving inserts are available for this tool
(3) Coolant entry diameter

For inserts, see pages: MEFL (635) • MIFR (634) • MIGR 8 (469) • MITR 8-MT (731) • MIUR 8 (469)
For holders, see pages: PICCO/MG PCO (Holder) (441) • SC-PICCO (420)

MIN CUT MINI FACE LINE

MFHR-JHP
Square Shank Tools for MIFR 10 Face Grooving Inserts



Designation	H	B	OAL	LH	L3	CDX	DAXN(1)	OAH	HF	Insert			
MFHR 12C-10-JHP	12.0	12.0	100.00	27.0	5.20	9.00	10.0	20.0	12.0	MI.R 10	SR 34-506 M3X0.5	T-9/5	SR 5/16UNF TL360
MFHR 16C-10-JHP	16.0	16.0	100.00	27.0	5.20	9.00	10.0	24.0	16.0	MI.R 10	SR 34-506 M3X0.5	T-9/5	SR 5/16UNF TL360
MFHR 20C-10-JHP	20.0	20.0	100.00	30.0	5.20	9.00	10.0	28.0	20.0	MI.R 10	SR 34-506 M3X0.5	T-9/5	SR 5/16UNF TL360

• For DAXN, refer to insert data • For user guide and accessories, see pages 676-688
(1) Minimum axial grooving diameter

For inserts, see pages: MEFL (635) • MIFR (634)

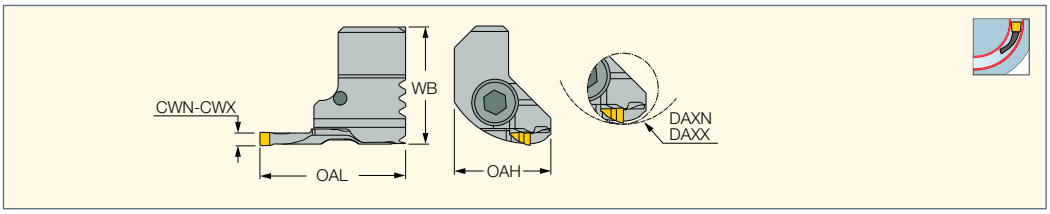
Flow Rate vs. Pressure

Designation	70 Bar Flow Rate (liters/min)	100 Bar Flow Rate (liters/min)	140 Bar Flow Rate (liters/min)
MFHR 12C-10-JHP	3	5-9	9-11
MFHR 16C-10-JHP	3	7-9	9-11

MIN CUT MINI FACE LINE

IHSR-MIFR

Trepanning Cartridges Carrying MINCUT Inserts Mounted on a BHR MB32-32X63 Boring Head



Designation	DAXN(1)	DAXX(2)	CWN(3)	CWX(4)	OAL	WB	OAH	Insert		
IHSR 8-21 MIFR8	8.0	21.0	1.50	2.20	32.00	23.00	17.50	MI.R 8	SR 14-297	T-8/5
IHSR 19-34 MIFR10	19.0	34.0	2.00	3.00	27.00	22.00	17.80	MI.R 10	SR 34-506 M3X0.5	T-9/5

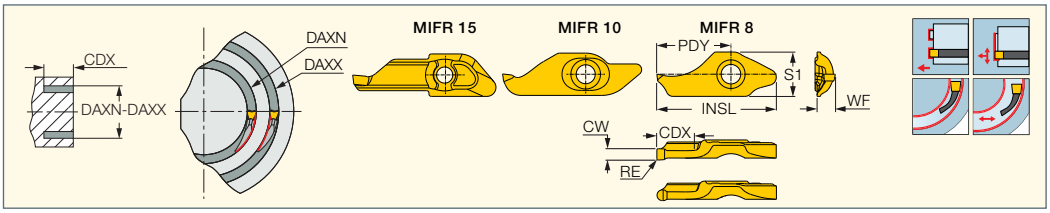
(1) Minimum axial grooving diameter
(2) Maximum axial grooving diameter
(3) Minimum cutting width
(4) Maximum cutting width

For inserts, see pages: MIFR (634)

MIN CUT MINI FACE LINE

MIFR

Screw-Clamped Inserts for Internal Face Grooving and Turning



Designation	Dimensions											IC908	Recommended Machining Data	
	CW	RE	CWTOL(1)	RETOL(2)	CDX	DAXN(3)	DAXX(4)	WF	S1	INSL	PDY		f face-groove (mm/rev)	f face-turn (mm/rev)
MIFR 8-1.50-0.20	1.50	0.20	0.020	0.020	5.50	8.0	11.5	2.60	6.50	17.70	11.00	●	0.02-0.10	0.02-0.06
MIFR 8-1.60-0.80	1.60	0.80	0.020	0.020	5.50	8.0	12.1	2.60	6.50	17.70	11.00	●	0.02-0.10	0.02-0.06
MIFR 10-2.00-0.20	2.00	0.20	0.020	0.020	9.00	10.0	-	3.00	7.60	25.10	14.80	●	0.02-0.10	0.02-0.06
MIFR 8-2.00-0.20	2.00	0.20	0.020	0.020	5.50	8.0	16.0	2.80	6.50	17.70	11.00	●	0.02-0.10	0.02-0.06
MIFR 10-2.00-1.00	2.00	1.00	0.020	0.020	9.00	10.0	-	3.00	7.60	25.10	14.80	●	0.02-0.10	0.02-0.06
MIFR 8-2.20-0.20	2.20	0.20	0.020	0.020	5.50	8.0	21.0	2.90	6.50	17.70	11.00	●	0.02-0.10	0.02-0.06
MIFR 10-2.50-0.20	2.50	0.20	0.020	0.020	9.00	10.0	30.0	3.10	7.60	25.10	14.80	●	0.02-0.10	0.02-0.06
MIFR 15-2.50-0.20	2.50	0.20	0.020	0.020	15.00	15.0	60.0	5.55	9.00	30.00	19.30	●	0.03-0.05	0.03-0.04
MIFR 10-2.50-1.25	2.50	1.25	0.020	0.020	9.00	10.0	-	3.30	7.60	25.10	14.80	●	0.02-0.10	0.02-0.06
MIFR 15-2.50-1.25	2.50	1.25	0.020	0.020	15.00	12.0	47.0	5.55	9.00	30.00	19.30	●	0.03-0.05	0.03-0.04
MIFR 10-3.00-0.20	3.00	0.20	0.020	0.020	9.00	10.0	30.0	3.40	7.60	25.10	14.80	●	0.02-0.10	0.02-0.06
MIFR 15-3.00-0.20	3.00	0.20	0.020	0.020	15.00	15.0	60.0	5.85	9.00	30.00	19.30	●	0.03-0.05	0.03-0.04
MIFR 10-3.00-1.50	3.00	1.50	0.020	0.020	9.00	10.0	34.0	3.30	7.60	25.10	14.80	●	0.02-0.10	0.02-0.06
MIFR 15-3.00-1.50	3.00	1.50	0.020	0.020	15.00	10.0	-	5.85	9.00	30.00	19.30	●	0.03-0.05	0.03-0.04
MIFR 15-3.50-0.20	3.50	0.20	0.020	0.020	15.00	10.0	-	6.00	9.00	30.00	19.30	●	0.03-0.05	0.03-0.04

- Recommended cutting speeds and feeds can be increased by 20-30% for aluminim, and reduced by 20-30% for titanium and Inconel
- For cutting speed recommendaions, see page 678

(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Minimum axial grooving diameter
(4) Maximum axial grooving diameter

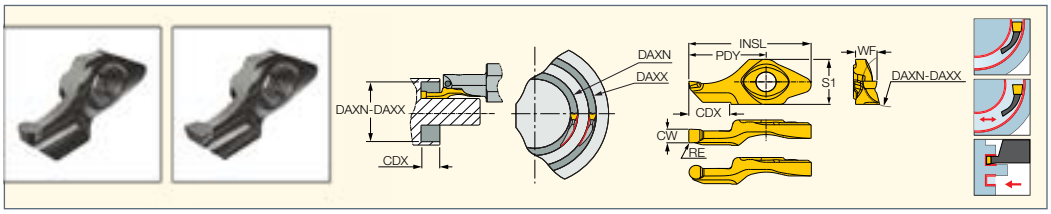
For tools, see pages: IHSR-MIFR (634) • MFHR-JHP (633) • MIFHR (468)



MIN CUT MINI FACE LINE

MEFL

Screw-Clamped Inserts for External Face Grooving and Turning Next to Shafts



Designation	Dimensions											IC908	Recommended Machining Data	
	CW	RE	CWTOL(1)	RETOL(2)	CDX	DAXN(3)	DAXX(4)	WF	S1	PDY	INSL		f face-groove (mm/rev)	f face-turn (mm/rev)
MEFL 8-1.50-0.20	1.50	0.20	0.020	0.020	5.50	8.0	15.0	2.60	6.60	11.00	17.40	●	0.02-0.10	0.02-0.06
MEFL 8-1.60-0.80	1.60	0.80	0.020	0.020	5.50	7.0	12.1	2.70	6.60	11.00	17.40	●	0.02-0.10	0.02-0.06
MEFL 8-2.00-0.20	2.00	0.20	0.020	0.020	5.50	7.0	20.0	3.10	6.60	11.00	17.40	●	0.02-0.10	0.02-0.06
MEFL 8-2.00-1.00	2.00	1.00	0.020	0.020	5.50	7.0	14.0	2.90	6.60	11.00	17.40	●	0.02-0.10	0.02-0.06
MEFL 8-2.20-0.20	2.20	0.20	0.020	0.020	5.50	7.0	20.0	3.10	6.60	11.00	17.40	●	0.02-0.10	0.02-0.06
MEFL 10-2.50-0.20	2.50	0.20	0.020	0.020	9.00	10.0	45.0	3.15	7.60	14.85	24.50	●	0.02-0.06	0.02-0.05
MEFL 10-2.50-1.25	2.50	1.25	0.020	0.020	9.00	10.0	45.0	3.15	7.60	14.85	24.50	●	0.02-0.06	0.02-0.05
MEFL 10-3.00-0.20	3.00	0.20	0.020	0.020	9.00	10.0	100.0	3.60	7.60	14.85	24.50	●	0.02-0.06	0.02-0.05
MEFL 10-3.00-1.50	3.00	1.50	0.020	0.020	9.00	10.0	100.0	3.40	7.60	14.85	24.50	●	0.02-0.06	0.02-0.05

• For cutting speed recommendations, see page 678

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

(3) Minimum axial grooving diameter

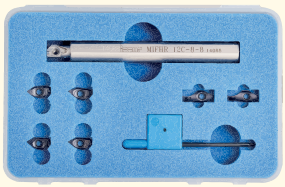
(4) Maximum axial grooving diameter

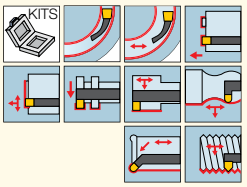
For tools, see pages: MFHR-JHP (633) • MIFHR (468)

MIN CUT MINI FACE LINE

MINCUT KIT

Contains One Toolholder and a Set of 6 Different Inserts for Internal Face Grooving and Turning Applications





Designation	Qty
KIT MINCUT	7

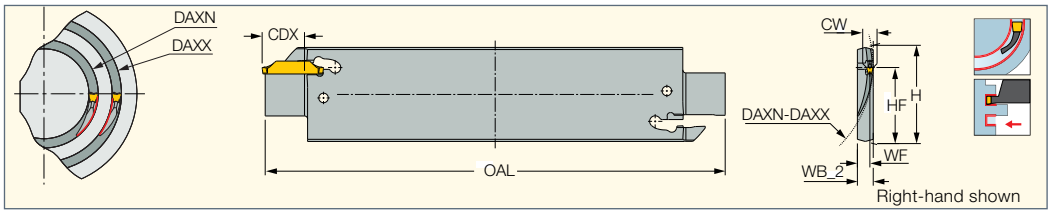
Catalog No	Designation	Quantity
2801631	MIFHR 12.7C-8	1
6404029	MIGR 8-1.60-0.80	1
6404045	MIFR 8-2.20-0.20	1
6404049	MIFR 8-1.60-0.80	1
6405165	MITR 8-MT1-0.05	1
6405188	MIUR 8-1.00-0.50	1
6405194	MIGR 8-2.00-0.10	1

TOOLS AND INSERTS



HELIFACE

HFFH
Face Grooving Blades



Designation	CW	CDX	DAXN(1)	DAXX(2)	WF	WB_2	HF	H	OAL	MIID(3)
HFFH 100R/L-2	2.00	14.00	100.0	130.0	4.40	5.2	24.8	32.0	150.00	HFPN 2002
HFFH 38R/L-2	2.00	14.00	38.0	45.0	4.50	5.2	24.8	32.0	150.00	HFPN 2002
HFFH 45R/L-2	2.00	14.00	45.0	60.0	4.40	5.2	24.8	32.0	150.00	HFPN 2002
HFFH 60R/L-2	2.00	14.00	60.0	80.0	4.40	5.2	24.8	32.0	150.00	HFPN 2002
HFFH 80R/L-2	2.00	14.00	80.0	100.0	4.40	5.2	24.8	32.0	150.00	HFPN 2002

- H dimension links blades and blocks

(1) Minimum penetration diameter
(2) Maximum penetration diameter
(3) Master insert identification

For inserts, see page: HFPN (655)
For holders, see pages: C#-TBK-R/L (695) • HSK A-WH-TBK-R/L (706) • SGTBF (691) • SGTBK (691) • SGTBU/SGTBN (690) • UBHCR/L (691)

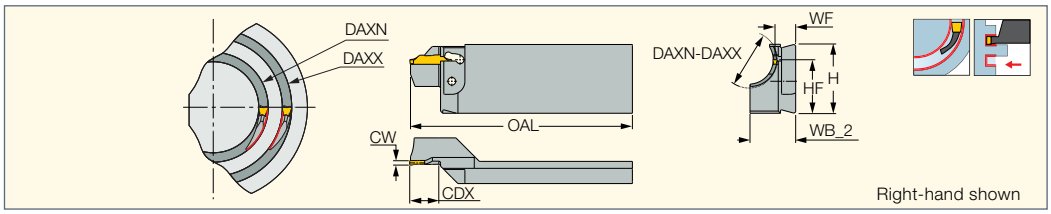
Spare Parts

Designation	
HFFH	EDG 33B*

* Optional, to be ordered separately

HELIFACE

HFFA
Reinforced Face Grooving Blades



Designation	CW	CDX	DAXN(1)	DAXX(2)	WF	WB_2	HF	H	OAL	MIID(3)
HFFA 27R/L-2	2.00	14.00	27.0	29.0	9.30	19.0	24.8	32.0	90.00	HFPN 2002
HFFA 29R/L-2	2.00	14.00	29.0	33.0	9.30	18.0	24.8	32.0	90.00	HFPN 2002
HFFA 33R/L-2	2.00	14.00	33.0	38.0	9.30	16.7	24.8	32.0	90.00	HFPN 2002
HFFA 38R/L-2	2.00	14.00	38.0	46.0	9.30	14.5	24.8	32.0	90.00	HFPN 2002
HFFA 46R/L-2	2.00	14.00	46.0	60.0	9.30	13.5	24.8	32.0	90.00	HFPN 2002
HFFA 60R/L-2	2.00	14.00	60.0	80.0	9.30	13.5	24.8	32.0	90.00	HFPN 2002
HFFA 80R/L-2	2.00	14.00	80.0	105.0	9.30	13.5	24.8	32.0	90.00	HFPN 2002

- For user guide, see pages 676-688

(1) Minimum penetration diameter
(2) Maximum penetration diameter
(3) Master insert identification

For inserts, see page: HFPN (655)
For holders, see pages: SGTBF (691) • SGTBU/SGTBN (690) • UBHCR/L (691)

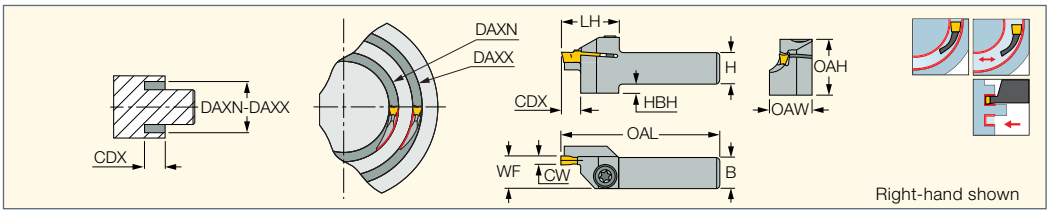
Spare Parts

Designation	
HFFA	EDG 33B*

* Optional, to be ordered separately

HELIFACE

HGHR/L-3
Integral Holders for Face Grooving and Turning



Designation	CW	CDX	DAXN(1)	DAXX(2)	WF	H	OAH	B	OAW	OAL	LH	HBH	MIID(3)		
HGHL 1212-12-3T6	3.00	6.00	12.0	16.0	11.00	12.0	19.00	12.0	15.70	120.00	19.0	-	HGPL 3003Y	SR 76-1400	T-20/3
HGHL 1616-12-3T6	3.00	6.00	12.0	16.0	15.00	16.0	21.00	16.0	19.70	120.00	19.0	-	HGPL 3003Y	SR 76-1400	T-20/3
HGHL 1616-16-3T6	3.00	6.00	16.0	25.0	15.00	16.0	21.00	16.0	18.80	120.00	19.0	-	HGPL 3003Y	SR 76-1400	T-20/3
HGHL 2020-12-3T6	3.00	6.00	12.0	16.0	20.00	20.0	25.00	20.0	24.00	120.00	19.0	-	HGPL 3003Y	SR 76-1400	T-20/3
HGHL 2020-16-3T6	3.00	6.00	16.0	25.0	20.00	20.0	25.00	20.0	24.00	120.00	19.0	-	HGPL 3003Y	SR 76-1400	T-20/3
HGHL 2525-12-3T6	3.00	6.00	12.0	16.0	25.00	25.0	30.00	25.0	29.00	120.00	19.0	-	HGPL 3003Y	SR 76-1400	T-20/3
HGHL 2525-16-3T6	3.00	6.00	16.0	25.0	25.00	25.0	30.00	25.0	29.00	120.00	19.0	-	HGPL 3003Y	SR 76-1400	T-20/3
HGHR 1010-12-3T6	3.00	6.00	12.0	16.0	9.50	10.0	19.00	10.0	13.70	120.00	19.0	2.0	GRIP 3003Y	SR 76-1400	T-20/3
HGHR 1010-16-3T6	3.00	6.00	16.0	25.0	9.50	10.0	19.00	10.0	12.80	120.00	19.0	2.0	GRIP 3003Y	SR 76-1400	T-20/3
HGHR 1212-12-3T6	3.00	6.00	12.0	16.0	11.00	12.0	19.00	12.0	15.70	120.00	19.0	-	GRIP 3003Y	SR 76-1400	T-20/3
HGHR 1212-16-3T6	3.00	6.00	16.0	25.0	11.00	12.0	19.00	12.0	14.80	120.00	19.0	-	GRIP 3003Y	SR 76-1400	T-20/3
HGHR 1616-12-3T6	3.00	6.00	12.0	16.0	15.00	16.0	21.00	16.0	19.70	120.00	19.0	-	GRIP 3003Y	SR 76-1400	T-20/3
HGHR 1616-16-3T6	3.00	6.00	16.0	25.0	15.00	16.0	21.00	16.0	18.80	120.00	19.0	-	GRIP 3003Y	SR 76-1400	T-20/3
HGHR 2020-12-3T6	3.00	6.00	12.0	16.0	20.00	20.0	25.00	20.0	24.00	120.00	19.0	-	GRIP 3003Y	SR 76-1400	T-20/3
HGHR 2020-16-3T6	3.00	6.00	16.0	25.0	20.00	20.0	25.00	20.0	24.00	120.00	19.0	-	GRIP 3003Y	SR 76-1400	T-20/3
HGHR 2525-12-3T6	3.00	6.00	12.0	16.0	25.00	25.0	30.00	25.0	29.00	120.00	19.0	-	GRIP 3003Y	SR 76-1400	T-20/3
HGHR 2525-16-3T6	3.00	6.00	16.0	25.0	25.00	25.0	30.00	25.0	29.00	120.00	19.0	-	GRIP 3003Y	SR 76-1400	T-20/3

• HGN & GRIP inserts can be used only with right-hand toolholders, HGPL inserts only with left-hand toolholders • For user guide, see pages 676-688

(1) Minimum penetration diameter

(2) Maximum penetration diameter

(3) Master insert identification

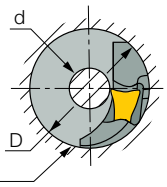
For inserts, see pages: GRIPA (296) • GRIPA (full radius) (296) • GRIP (294) • GRIP (full radius) (295) • HGN-C (549) • HGN-J (550) • HGN-UT (551) • HGPL (658)

Groove can be widened with no limitation toward or away from the center except for the following tools:

HGHR/L...-12-3T6

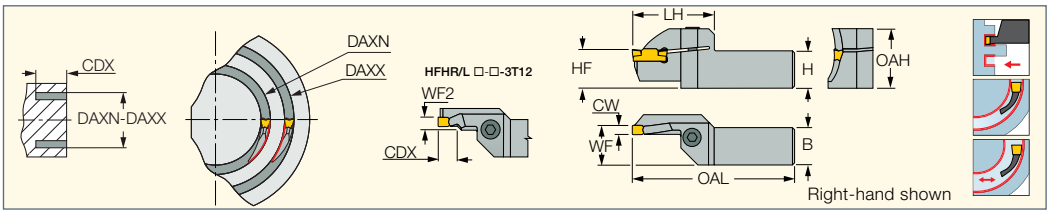
D	d
12.0	4.0
13.0	1.0
13.5	0

Limitation of widening toward center depends on the major diameter (D) as per chart.



HELIFACE

HFHR/L-3T
Integral Holders for Facing



Designation	CW	CDX	DAXN(2)	DAXX(3)	WF	HF	H	OAH	B	OAL	WF2	LH	MIID(4)		
HFHR/L 20-25-3T12	3.00	12.00	25.0	30.0	20.50	20.0	20.0	28.00	20.0	140.00	5.3	38.0	HFPL 3003	SR M6X16 DIN912	HW 5.0
HFHR/L 20-30-3T12	3.00	12.00	30.0	38.0	20.50	20.0	20.0	29.00	20.0	140.00	5.3	38.0	HFPL 3003	SR M6X16 DIN912	HW 5.0
HFHR/L 20-38-3T12	3.00	12.00	38.0	48.0	20.50	20.0	20.0	30.00	20.0	140.00	5.3	38.0	HFPL 3003	SR M6X16 DIN912	HW 5.0
HFHR/L 20-48-3T12	3.00	12.00	48.0	60.0	20.50	20.0	20.0	30.00	20.0	140.00	5.3	38.0	HFPL 3003	SR M6X16 DIN912	HW 5.0
HFHR/L 25-25-3T12	3.00	12.00	25.0	30.0	25.50	25.0	25.0	33.00	25.0	150.00	5.3	38.0	HFPL 3003	SR M6X16 DIN912	HW 5.0
HFHR/L 25-30-3T12	3.00	12.00	30.0	38.0	25.50	25.0	25.0	34.00	25.0	150.00	5.3	38.0	HFPL 3003	SR M6X16 DIN912	HW 5.0
HFHR/L 25-38-3T12	3.00	12.00	38.0	48.0	25.50	25.0	25.0	35.00	25.0	150.00	5.3	38.0	HFPL 3003	SR M6X16 DIN912	HW 5.0
HFHR/L 20-60-3T22 (1)	3.00	22.00	60.0	75.0	20.50	20.0	20.0	31.00	20.0	140.00	-	40.0	HFPL 3003	SR M6X16 DIN912	HW 5.0
HFHR/L 25-48-3T22 (1)	3.00	22.00	48.0	60.0	25.50	25.0	25.0	36.00	25.0	150.00	-	40.0	HFPL 3003	SR M6X16 DIN912	HW 5.0
HFHR/L 25-60-3T22 (1)	3.00	22.00	60.0	75.0	25.50	25.0	25.0	36.00	25.0	150.00	-	40.0	HFPL 3003	SR M6X16 DIN912	HW 5.0
HFHR/L 20-75-3T25 (1)	3.00	25.00	75.0	100.0	20.50	20.0	20.0	31.00	20.0	140.00	-	43.0	HFPL 3003	SR M6X16 DIN912	HW 5.0
HFHR/L 25-75-3T25 (1)	3.00	25.00	75.0	100.0	25.50	25.0	25.0	36.00	25.0	150.00	-	43.0	HFPL 3003	SR M6X16 DIN912	HW 5.0

• For user guide, see pages 676-688

(1) For deep face grooving only.

(2) Minimum penetration diameter

(3) Maximum penetration diameter

(4) Master insert identification

For inserts, see pages: HFPR/L (656) • HFPR/L (full radius) (656)

Penetration Range
No limitation for widening groove toward or away from center, except for the following tools:

HFHR/L-#-25-3T12

D	d
25	5
26	2
≥27	0

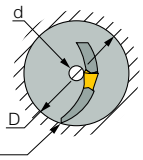
HFHR/L-#-25-4T12

D	d
25	1
≥26	0

HFHR/L-#-29-4T12

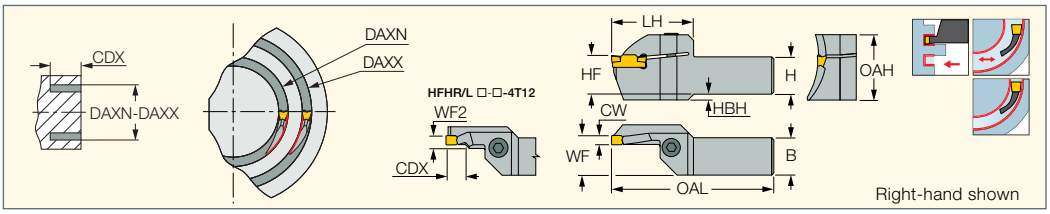
D	d
29	1
≥46	0

Limitation of widening toward center (d) depends on the major diameter (D) as per chart



HELIFACE

HFHR/L-4T
Integral Holders for Facing



Designation	CW	CDX	DAXN(1)	DAXX(2)	WF	HF	H	OAH	B	OAL	WF2	LH	HBH	MIID(3)		
HFHL 20-25-4T12	4.00	12.00	25.0	29.0	20.60	20.0	20.0	29.00	20.0	140.00	6.2	39.0	-	HFPL 4004	SR M6X16 DIN912	HW 5.0
HFHL 20-29-4T12	4.00	12.00	29.0	34.0	20.60	20.0	20.0	30.00	20.0	140.00	6.2	39.0	-	HFPL 4004	SR M6X16 DIN912	HW 5.0
HFHL 25-25-4T12	4.00	12.00	25.0	29.0	25.60	25.0	25.0	34.00	25.0	150.00	6.2	39.0	-	HFPL 4004	SR M6X16 DIN912	HW 5.0
HFHL 25-29-4T12	4.00	12.00	29.0	34.0	25.60	25.0	25.0	35.00	25.0	150.00	6.2	39.0	-	HFPL 4004	SR M6X16 DIN912	HW 5.0
HFHR 20-25-4T12	4.00	12.00	25.0	29.0	20.60	20.0	20.0	29.00	20.0	140.00	6.2	39.0	-	GRIP 4004Y	SR M6X16 DIN912	HW 5.0
HFHR 20-29-4T12	4.00	12.00	29.0	34.0	20.60	20.0	20.0	30.00	20.0	140.00	6.2	39.0	-	GRIP 4004Y	SR M6X16 DIN912	HW 5.0
HFHR 25-25-4T12	4.00	12.00	25.0	29.0	25.60	25.0	25.0	34.00	25.0	150.00	6.2	39.0	-	GRIP 4004Y	SR M6X16 DIN912	HW 5.0
HFHR 25-29-4T12	4.00	12.00	29.0	34.0	25.60	25.0	25.0	35.00	25.0	150.00	6.2	39.0	-	GRIP 4004Y	SR M6X16 DIN912	HW 5.0
HFHL 20-34-4T20	4.00	20.00	34.0	40.0	20.60	20.0	20.0	30.00	20.0	140.00	-	39.0	-	HFPL 4004	SR M6X16 DIN912	HW 5.0
HFHL 25-34-4T20	4.00	20.00	34.0	40.0	25.60	25.0	25.0	35.00	25.0	150.00	-	39.0	-	HFPL 4004	SR M6X16 DIN912	HW 5.0
HFHR 20-34-4T20	4.00	20.00	34.0	40.0	20.60	20.0	20.0	30.00	20.0	140.00	-	39.0	-	GRIP 4004Y	SR M6X16 DIN912	HW 5.0
HFHR 25-34-4T20	4.00	20.00	34.0	40.0	25.60	25.0	25.0	35.00	25.0	150.00	-	39.0	-	GRIP 4004Y	SR M6X16 DIN912	HW 5.0
HFHL 20-40-4T25	4.00	25.00	40.0	48.0	20.60	20.0	20.0	31.00	20.0	140.00	-	44.0	-	HFPL 4004	SR M6X16 DIN912	HW 5.0
HFHL 20-48-4T25	4.00	25.00	48.0	60.0	20.60	20.0	20.0	32.00	20.0	140.00	-	44.0	-	HFPL 4004	SR M6X16 DIN912	HW 5.0
HFHL 20-60-4T25	4.00	25.00	60.0	75.0	20.60	20.0	20.0	32.00	20.0	140.00	-	44.0	-	HFPL 4004	SR M6X16 DIN912	HW 5.0
HFHL 20-75-4T25	4.00	25.00	75.0	100.0	20.60	20.0	20.0	34.00	20.0	140.00	-	44.0	2.0	HFPL 4004	SR M6X16 DIN912	HW 5.0
HFHL 25-100-4T25	4.00	25.00	100.0	140.0	25.60	25.0	25.0	37.00	25.0	150.00	-	44.0	-	HFPL 4004	SR M6X16 DIN912	HW 5.0
HFHL 25-140-4T25	4.00	25.00	140.0	240.0	25.74	25.0	25.0	37.00	25.0	150.00	-	44.0	-	HFPL 4004	SR M6X16 DIN912	HW 5.0
HFHL 25-240-4T25	4.00	25.00	240.0	800.0	25.60	25.0	25.0	37.00	25.0	150.00	-	44.0	-	HFPL 4004	SR M6X16 DIN912	HW 5.0
HFHL 25-40-4T25	4.00	25.00	40.0	48.0	25.60	25.0	25.0	36.00	25.0	150.00	-	44.0	-	HFPL 4004	SR M6X16 DIN912	HW 5.0
HFHL 25-48-4T25	4.00	25.00	48.0	60.0	25.60	25.0	25.0	37.00	25.0	150.00	-	44.0	-	HFPL 4004	SR M6X16 DIN912	HW 5.0
HFHL 25-60-4T25	4.00	25.00	60.0	75.0	25.60	25.0	25.0	37.00	25.0	150.00	-	44.0	-	HFPL 4004	SR M6X16 DIN912	HW 5.0
HFHL 25-75-4T25	4.00	25.00	75.0	100.0	25.60	25.0	25.0	37.00	25.0	150.00	-	44.0	-	HFPL 4004	SR M6X16 DIN912	HW 5.0
HFHR 20-40-4T25	4.00	25.00	40.0	48.0	20.60	20.0	20.0	31.00	20.0	140.00	-	44.0	-	GRIP 4004Y	SR M6X16 DIN912	HW 5.0
HFHR 20-48-4T25	4.00	25.00	48.0	60.0	20.60	20.0	20.0	32.00	20.0	140.00	-	44.0	-	GRIP 4004Y	SR M6X16 DIN912	HW 5.0
HFHR 20-60-4T25	4.00	25.00	60.0	75.0	20.60	20.0	20.0	32.00	20.0	140.00	-	44.0	-	GRIP 4004Y	SR M6X16 DIN912	HW 5.0
HFHR 20-75-4T25	4.00	25.00	75.0	100.0	20.60	20.0	20.0	34.00	20.0	140.00	-	44.0	2.0	GRIP 4004Y	SR M6X16 DIN912	HW 5.0
HFHR 25-100-4T25	4.00	25.00	100.0	140.0	25.74	25.0	25.0	37.00	25.0	150.00	-	44.0	-	GRIP 4004Y	SR M6X16 DIN912	HW 5.0
HFHR 25-140-4T25	4.00	25.00	140.0	240.0	25.60	25.0	25.0	37.00	25.0	150.00	-	44.0	-	GRIP 4004Y	SR M6X16 DIN912	HW 5.0
HFHR 25-240-4T25	4.00	25.00	240.0	800.0	25.60	25.0	25.0	37.00	25.0	150.00	-	44.0	-	GRIP 4004Y	SR M6X16 DIN912	HW 5.0
HFHR 25-40-4T25	4.00	25.00	40.0	48.0	25.60	25.0	25.0	36.00	25.0	150.00	-	44.0	-	GRIP 4004Y	SR M6X16 DIN912	HW 5.0
HFHR 25-48-4T25	4.00	25.00	48.0	60.0	25.60	25.0	25.0	37.00	25.0	150.00	-	44.0	-	GRIP 4004Y	SR M6X16 DIN912	HW 5.0
HFHR 25-60-4T25	4.00	25.00	60.0	75.0	25.60	25.0	25.0	37.00	25.0	150.00	-	44.0	-	GRIP 4004Y	SR M6X16 DIN912	HW 5.0
HFHR 25-75-4T25	4.00	25.00	75.0	100.0	25.80	25.0	25.0	37.00	25.0	150.00	-	44.0	-	GRIP 4004Y	SR M6X16 DIN912	HW 5.0

• DGN & GRIP 4 mm inserts can be used only with right-hand tools, HGPL 4 mm with left-hand tools • For user guide, see pages 676-688

(1) Minimum penetration diameter
(2) Maximum penetration diameter
(3) Master insert identification

For inserts, see pages: DGN-MF (541) • DGR/L-B (542) • GRIP-T (295) • GRIPA (296) • GRIPA (full radius) (296) • HFPR/L (656) • HFPR/L (full radius) (656) • GRIP (294) • GRIP (full radius) (295) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • HGPL (658)

Groove can be widened with no limitation toward or away from the center except for the following tools:

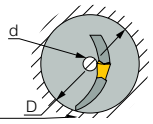
HFHR/L-#-25-4T12

D	d
25	1
≥26	0

HFHR/L-#-29-4T12

D	d
29	1
≥46	0

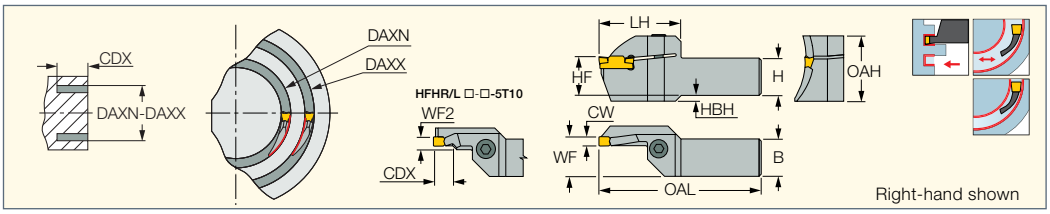
Limitation of widening toward center (d) depends on the major diameter (D) as per chart





HELIFACE

HFHR/L-5T
Integral Toolholders for External Facing



Designation	CW	CDX	DAXN(1)	DAXX(2)	WF	WF2	HF	H	OAH	B	OAL	LH	HBH	MIID(3)		
HFHL 20-25-5T10	5.00	10.00	25.0	30.0	21.00	7.1	20.0	20.0	28.00	20.0	140.00	38.0	-	HFPL 5004	SR M6X16 DIN912	HW 5.0
HFHL 25-25-5T10	5.00	10.00	25.0	30.0	26.00	7.1	25.0	25.0	33.00	25.0	150.00	38.0	-	HFPL 5004	SR M6X16 DIN912	HW 5.0
HFHR 20-25-5T10	5.00	10.00	25.0	30.0	21.00	7.1	20.0	20.0	28.00	20.0	140.00	38.0	-	GRIP 5005Y	SR M6X16 DIN912	HW 5.0
HFHR 25-25-5T10	5.00	10.00	25.0	30.0	26.00	7.1	25.0	25.0	33.00	25.0	150.00	38.0	-	GRIP 5005Y	SR M6X16 DIN912	HW 5.0
HFHL 25-110-5T14	5.00	14.00	110.0	200.0	23.50	-	25.0	25.0	33.00	25.0	150.00	32.5	-	HFPL 5004	SR M6X16 DIN912	HW 5.0
HFHL 25-52-5T14	5.00	14.00	52.0	75.0	23.50	-	25.0	25.0	33.00	25.0	150.00	32.5	-	HFPL 5004	SR M6X16 DIN912	HW 5.0
HFHL 25-75-5T14	5.00	14.00	75.0	110.0	23.50	-	25.0	25.0	33.00	25.0	150.00	32.5	-	HFPL 5004	SR M6X16 DIN912	HW 5.0
HFHR 25-110-5T14	5.00	14.00	110.0	200.0	23.50	-	25.0	25.0	33.00	25.0	150.00	32.5	-	GRIP 5005Y	SR M6X16 DIN912	HW 5.0
HFHR 25-52-5T14	5.00	14.00	52.0	75.0	23.50	-	25.0	25.0	33.00	25.0	150.00	32.5	-	GRIP 5005Y	SR M6X16 DIN912	HW 5.0
HFHR 25-75-5T14	5.00	14.00	75.0	110.0	23.50	-	25.0	25.0	33.00	25.0	150.00	32.5	-	GRIP 5005Y	SR M6X16 DIN912	HW 5.0
HFHL 20-28-5T17	5.00	17.00	28.0	31.0	21.00	-	20.0	20.0	30.00	20.0	140.00	34.0	-	HFPL 5004	SR M6X16 DIN912	HW 5.0
HFHL 20-31-5T17	5.00	17.00	31.0	35.0	21.00	-	20.0	20.0	30.00	20.0	140.00	34.0	-	HFPL 5004	SR M6X16 DIN912	HW 5.0
HFHL 25-28-5T15	5.00	17.00	28.0	31.0	26.00	-	25.0	25.0	35.00	25.0	150.00	34.0	-	HFPL 5004	SR M6X16 DIN912	HW 5.0
HFHL 25-31-5T15	5.00	17.00	31.0	35.0	26.00	-	25.0	25.0	35.00	25.0	150.00	34.0	-	HFPL 5004	SR M6X16 DIN912	HW 5.0
HFHR 20-28-5T17	5.00	17.00	28.0	31.0	21.00	-	20.0	20.0	30.00	20.0	140.00	34.0	-	GRIP 5005Y	SR M6X16 DIN912	HW 5.0
HFHR 20-31-5T17	5.00	17.00	31.0	35.0	21.00	-	20.0	20.0	30.00	20.0	140.00	34.0	-	GRIP 5005Y	SR M6X16 DIN912	HW 5.0
HFHR 25-28-5T15	5.00	17.00	28.0	31.0	26.00	-	25.0	25.0	35.00	25.0	150.00	34.0	-	GRIP 5005Y	SR M6X16 DIN912	HW 5.0
HFHR 25-31-5T15	5.00	17.00	31.0	35.0	26.00	-	25.0	25.0	35.00	25.0	150.00	34.0	-	GRIP 5005Y	SR M6X16 DIN912	HW 5.0
HFHL 20-35-5T20	5.00	20.00	35.0	40.0	21.00	-	20.0	20.0	31.00	20.0	140.00	39.0	-	HFPL 5004	SR M6X16 DIN912	HW 5.0
HFHL 20-40-5T20	5.00	20.00	40.0	45.0	21.00	-	20.0	20.0	31.00	20.0	140.00	39.0	-	HFPL 5004	SR M6X16 DIN912	HW 5.0
HFHL 25-200-5T20	5.00	20.00	200.0	800.0	26.00	-	25.0	25.0	33.00	25.0	150.00	32.5	-	HFPL 5004	SR M6X16 DIN912	HW 5.0
HFHL 25-35-5T20	5.00	20.00	35.0	40.0	26.00	-	25.0	25.0	36.00	25.0	150.00	39.0	-	HFPL 5004	SR M6X16 DIN912	HW 5.0
HFHL 25-40-5T20	5.00	20.00	40.0	45.0	26.00	-	25.0	25.0	36.00	25.0	150.00	39.0	-	HFPL 5004	SR M6X16 DIN912	HW 5.0
HFHR 20-35-5T20	5.00	20.00	35.0	40.0	21.00	-	20.0	20.0	31.00	20.0	140.00	39.0	-	GRIP 5005Y	SR M6X16 DIN912	HW 5.0
HFHR 20-40-5T20	5.00	20.00	40.0	45.0	21.00	-	20.0	20.0	31.00	20.0	140.00	39.0	-	GRIP 5005Y	SR M6X16 DIN912	HW 5.0
HFHR 25-200-5T20	5.00	20.00	200.0	800.0	26.00	-	25.0	25.0	33.00	25.0	150.00	32.5	-	GRIP 5005Y	SR M6X16 DIN912	HW 5.0
HFHR 25-35-5T20	5.00	20.00	35.0	40.0	26.00	-	25.0	25.0	36.00	25.0	150.00	39.0	-	GRIP 5005Y	SR M6X16 DIN912	HW 5.0
HFHR 25-40-5T20	5.00	20.00	40.0	45.0	26.00	-	25.0	25.0	36.00	25.0	150.00	39.0	-	GRIP 5005Y	SR M6X16 DIN912	HW 5.0
HFHL 20-45-5T25	5.00	25.00	45.0	55.0	21.00	-	20.0	20.0	32.00	20.0	140.00	44.0	-	HFPL 5004	SR M6X16 DIN912	HW 5.0
HFHL 20-55-5T25	5.00	25.00	55.0	70.0	21.00	-	20.0	20.0	35.00	20.0	140.00	44.0	3.0	HFPL 5004	SR M6X16 DIN912	HW 5.0
HFHL 25-45-5T25	5.00	25.00	45.0	55.0	26.00	-	25.0	25.0	37.00	25.0	150.00	44.0	-	HFPL 5004	SR M6X16 DIN912	HW 5.0
HFHL 25-55-5T25	5.00	25.00	55.0	70.0	26.00	-	25.0	25.0	37.00	25.0	150.00	44.0	-	HFPL 5004	SR M6X16 DIN912	HW 5.0
HFHR 20-45-5T25	5.00	25.00	45.0	55.0	21.00	-	20.0	20.0	32.00	20.0	140.00	44.0	-	GRIP 5005Y	SR M6X16 DIN912	HW 5.0
HFHR 20-55-5T25	5.00	25.00	55.0	70.0	21.00	-	20.0	20.0	35.00	20.0	140.00	44.0	3.0	GRIP 5005Y	SR M6X16 DIN912	HW 5.0
HFHR 25-45-5T25	5.00	25.00	45.0	55.0	26.00	-	25.0	25.0	37.00	25.0	150.00	44.0	-	GRIP 5005Y	SR M6X16 DIN912	HW 5.0
HFHR 25-55-5T25	5.00	25.00	55.0	70.0	26.00	-	25.0	25.0	37.00	25.0	150.00	44.0	-	GRIP 5005Y	SR M6X16 DIN912	HW 5.0
HFHL 20-70-5T28	5.00	28.00	70.0	95.0	21.00	-	20.0	20.0	35.00	20.0	140.00	47.0	3.0	HFPL 5004	SR M6X16 DIN912	HW 5.0
HFHR 20-70-5T28	5.00	28.00	70.0	95.0	21.00	-	20.0	20.0	35.00	20.0	140.00	47.0	3.0	GRIP 5005Y	SR M6X16 DIN912	HW 5.0
HFHL 25-130-5T32	5.00	32.00	130.0	180.0	26.00	-	25.0	25.0	37.00	25.0	150.00	51.0	-	HFPL 5004	SR M6X16 DIN912	HW 5.0
HFHL 25-180-5T32	5.00	32.00	180.0	800.0	26.00	-	25.0	25.0	37.00	25.0	150.00	51.0	-	HFPL 5004	SR M6X16 DIN912	HW 5.0
HFHL 25-70-5T32	5.00	32.00	70.0	95.0	26.00	-	25.0	25.0	37.00	25.0	150.00	51.0	-	HFPL 5004	SR M6X16 DIN912	HW 5.0
HFHL 25-95-5T32	5.00	32.00	95.0	130.0	26.00	-	25.0	25.0	37.00	25.0	150.00	51.0	-	HFPL 5004	SR M6X16 DIN912	HW 5.0
HFHR 25-130-5T32	5.00	32.00	130.0	180.0	26.00	-	25.0	25.0	37.00	25.0	150.00	51.0	-	GRIP 5005Y	SR M6X16 DIN912	HW 5.0
HFHR 25-180-5T32	5.00	32.00	180.0	800.0	26.00	-	25.0	25.0	37.00	25.0	150.00	51.0	-	GRIP 5005Y	SR M6X16 DIN912	HW 5.0
HFHR 25-70-5T32	5.00	32.00	70.0	95.0	26.00	-	25.0	25.0	37.00	25.0	150.00	51.0	-	GRIP 5005Y	SR M6X16 DIN912	HW 5.0
HFHR 25-95-5T32	5.00	32.00	95.0	130.0	26.00	-	25.0	25.0	37.00	25.0	150.00	51.0	-	GRIP 5005Y	SR M6X16 DIN912	HW 5.0

• DGN & GRIP 5.. inserts can be used only with right-hand tools, HGPL 5.. inserts with left-hand tools • For user guide, see pages 676-688

(1) Minimum penetration diameter

(2) Maximum penetration diameter

(3) Master insert identification

For inserts, see pages: DGR/L-B (542) • GRIP-T (295) • GRIPA (296) • HFPR/L (656) • HFPR/L (full radius) (656) • GRIP (294) • GRIP (full radius) (295) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGN-W (540) • HGPL (658)

No limitation for widening groove toward or away from center, except for the following tools:

HFHR/L- □ -31-5T15

D	d
31	15
32	10
33	7
34	4
35	2
≥36	0

HFHR/L- □ -30-6T10

D	d
30	7
31	4
32	1
≥33	0

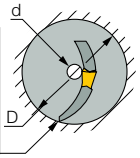
HFHR/L-□-25-5T10

D	d
25	4
26	1
≥27	0

HFHR/L- □ -28-5T15

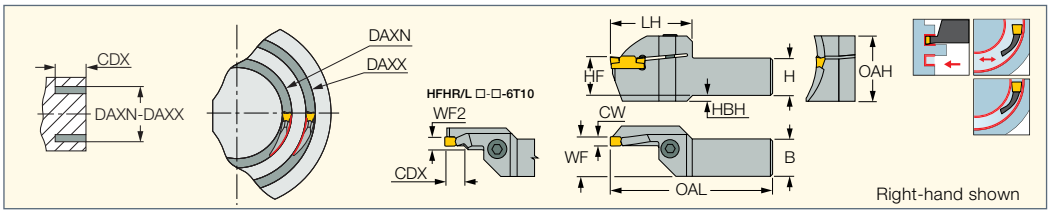
D	d
28	13
29	8
30	5
31	3
32	1
≥33	0

Limitation of widening toward center (d) depends on the major diameter (D) as per chart



HELIFACE

HFHR/L-6T
Integral Toolholders for External Facing



Designation	CW	CDX	DAXN(1)	DAXX(2)	WF	WF2	HF	H	OAH	B	OAL	LH	HBH	MIID(3)		
HFHL 20-26-6T10	6.00	10.00	26.0	30.0	21.40	7.9	20.0	20.0	29.00	20.0	140.00	39.0	-	HFPL 6004	SR M6X16 DIN912	HW 5.0
HFHL 20-30-6T17	6.00	17.00	30.0	38.0	21.40	-	20.0	20.0	30.00	20.0	140.00	36.0	-	HFPL 6004	SR M6X16 DIN912	HW 5.0
HFHL 25-30-6T15	6.00	17.00	30.0	38.0	26.40	-	25.0	25.0	35.00	25.0	150.00	36.0	-	HFPL 6004	SR M6X16 DIN912	HW 5.0
HFHR 20-30-6T17	6.00	17.00	30.0	38.0	21.40	-	20.0	20.0	30.00	20.0	140.00	36.0	-	GRIP 6030Y	SR M6X16 DIN912	HW 5.0
HFHR 25-30-6T15	6.00	17.00	30.0	38.0	26.40	-	25.0	25.0	35.00	25.0	150.00	36.0	-	GRIP 6030Y	SR M6X16 DIN912	HW 5.0
HFHL 20-38-6T20	6.00	20.00	38.0	50.0	21.40	-	20.0	20.0	31.00	20.0	140.00	39.0	-	HFPL 6004	SR M6X16 DIN912	HW 5.0
HFHL 25-100-6T20	6.00	20.00	100.0	200.0	26.00	-	25.0	25.0	33.00	25.0	150.00	40.0	-	HFPL 6004	SR M6X16 DIN912	HW 5.0
HFHL 25-200-6T20	6.00	20.00	200.0	3000.0	23.00	-	25.0	25.0	33.00	25.0	150.00	37.5	-	HFPL 6004	SR M6X16 DIN912	HW 5.0
HFHL 25-38-6T20	6.00	20.00	38.0	50.0	26.40	-	25.0	25.0	36.00	25.0	150.00	39.0	-	HFPL 6004	SR M6X16 DIN912	HW 5.0
HFHL 25-50-6T20	6.00	20.00	50.0	65.0	23.00	-	25.0	25.0	33.00	25.0	150.00	37.5	-	HFPL 6004	SR M6X16 DIN912	HW 5.0
HFHL 25-65-6T20	6.00	20.00	65.0	100.0	23.00	-	25.0	25.0	33.00	25.0	150.00	37.5	-	HFPL 6004	SR M6X16 DIN912	HW 5.0
HFHR 20-38-6T20	6.00	20.00	38.0	50.0	21.40	-	20.0	20.0	31.00	20.0	140.00	39.0	-	GRIP 6030Y	SR M6X16 DIN912	HW 5.0
HFHR 25-100-6T20	6.00	20.00	100.0	200.0	26.00	-	25.0	25.0	33.00	25.0	150.00	40.0	-	GRIP 6030Y	SR M6X16 DIN912	HW 5.0
HFHR 25-200-6T20	6.00	20.00	200.0	3000.0	23.00	-	25.0	25.0	33.00	25.0	150.00	37.5	-	GRIP 6030Y	SR M6X16 DIN912	HW 5.0
HFHR 25-38-6T20	6.00	20.00	38.0	50.0	26.40	-	25.0	25.0	36.00	25.0	150.00	39.0	-	GRIP 6030Y	SR M6X16 DIN912	HW 5.0
HFHR 25-50-6T20	6.00	20.00	50.0	65.0	23.00	-	25.0	25.0	33.00	25.0	150.00	37.5	-	GRIP 6030Y	SR M6X16 DIN912	HW 5.0
HFHR 25-65-6T20	6.00	20.00	65.0	100.0	23.00	-	25.0	25.0	33.00	25.0	150.00	39.0	-	GRIP 6030Y	SR M6X16 DIN912	HW 5.0
HFHL 20-50-6T25	6.00	25.00	50.0	70.0	21.40	-	20.0	20.0	32.00	20.0	140.00	44.0	-	HFPL 6004	SR M6X16 DIN912	HW 5.0
HFHL 25-50-6T25	6.00	25.00	50.0	70.0	26.40	-	25.0	25.0	37.00	25.0	150.00	44.0	-	HFPL 6004	SR M6X16 DIN912	HW 5.0
HFHR 20-50-6T25	6.00	25.00	50.0	70.0	21.40	-	20.0	20.0	32.00	20.0	140.00	44.0	-	GRIP 6030Y	SR M6X16 DIN912	HW 5.0
HFHR 25-50-6T25	6.00	25.00	50.0	70.0	26.40	-	25.0	25.0	37.00	25.0	150.00	44.0	-	GRIP 6030Y	SR M6X16 DIN912	HW 5.0
HFHL 25-100-6T32	6.00	32.00	100.0	180.0	26.40	-	25.0	25.0	37.00	25.0	150.00	51.0	-	HFPL 6004	SR M6X16 DIN912	HW 5.0
HFHL 25-180-6T32	6.00	32.00	180.0	400.0	26.40	-	25.0	25.0	40.00	25.0	150.00	51.0	3.0	HFPL 6004	SR M6X16 DIN912	HW 5.0
HFHL 25-400-6T32	6.00	32.00	400.0	3000.0	26.40	-	25.0	25.0	40.00	25.0	150.00	51.0	3.0	HFPL 6004	SR M6X16 DIN912	HW 5.0
HFHL 25-70-6T32	6.00	32.00	70.0	100.0	26.40	-	25.0	25.0	37.00	25.0	150.00	51.0	-	HFPL 6004	SR M6X16 DIN912	HW 5.0
HFHR 25-100-6T32	6.00	32.00	100.0	180.0	26.40	-	25.0	25.0	37.00	25.0	150.00	51.0	-	GRIP 6030Y	SR M6X16 DIN912	HW 5.0
HFHR 25-180-6T32	6.00	32.00	180.0	400.0	26.40	-	25.0	25.0	40.00	25.0	150.00	51.0	3.0	GRIP 6030Y	SR M6X16 DIN912	HW 5.0
HFHR 25-400-6T32	6.00	32.00	400.0	3000.0	26.40	-	25.0	25.0	40.00	25.0	150.00	51.0	3.0	GRIP 6030Y	SR M6X16 DIN912	HW 5.0
HFHR 25-70-6T32	6.00	32.00	70.0	100.0	26.40	-	25.0	25.0	37.00	25.0	150.00	51.0	-	GRIP 6030Y	SR M6X16 DIN912	HW 5.0

• DGN & GRIP 6.. inserts can be used only with right-hand tools, HGPL 6.. inserts with left-hand tools • For user guide, see pages 676-688

(1) Minimum penetration diameter

(2) Maximum penetration diameter

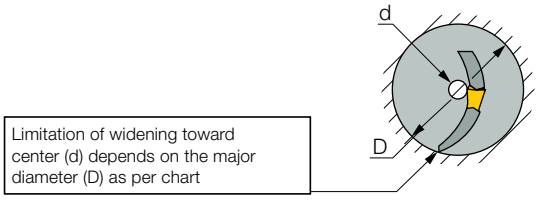
(3) Master insert identification

For inserts, see pages: DGR/L-B (542) • HFPR/L (656) • HFPR/L (full radius) (656) • GRIP (294) • GRIP (full radius) (295) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • HGPL (658)

Groove can be widened with no limitation toward or away from the center except for the following tools:

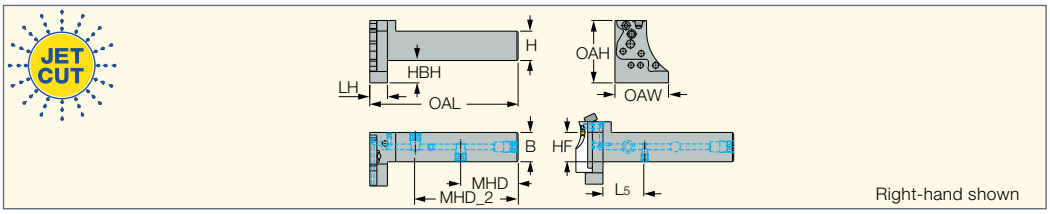
HFHR/L-#-30-6T10

D	d
30	7
31	4
32	1
≥33	0



MODULAR-GRIP

MAHPR/L-XL-JHP
Holders with High-Pressure Coolant Channels for MODULAR-GRIP Perpendicularly Mounted Adapters



Designation	H	B	LH	OAL	HBH	OAH	OAW	HF	L5	MHD	MHD_2
MAHPR/L-XL-20-JHP-MCG	20.0	20.0	23.0	120.00	24.0	53.00	45.00	20.0	29.00	50.00	85.00
MAHPR/L-XL-25-JHP-MCG	25.0	25.0	15.0	120.00	19.0	53.00	45.50	25.0	35.00	50.00	90.00

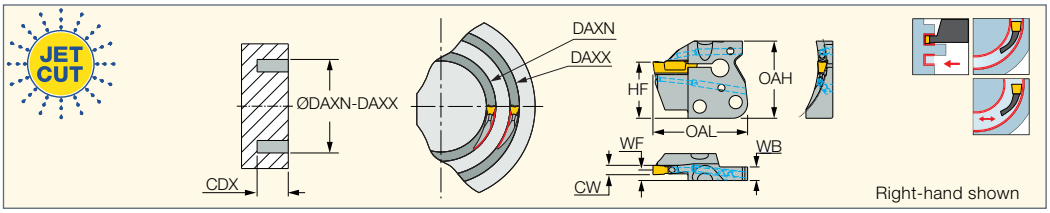
For tools, see pages: DGPAD-XL-JHP (548) • HFPAD-JHP (652) • TAGPAD-XL-JHP (572) • TAGPAD-Y-JHP (594) • TNFPAD-XL-JHP (678)

Spare Parts

Designation									
MAHPR/L-XL-20-JHP-MCG	SR M5-04451	T-20/5	SR M6X16 DIN912	HW 5.0	OR 5X1N	SR M4X4 DIN913 TL360	SR M6X6 DIN913 TL360	PLG G1/8 TL360	SUPPORT MG-XL-5113377
MAHPR/L-XL-25-JHP-MCG	SR M5-04451	T-20/5	SR M6X16 DIN912	HW 5.0	OR 5X1N	SR M4X4 DIN913 TL360	SR M6X6 DIN913 TL360	PLG G1/8 TL360	SUPPORT MG-XL-5113377

MODULAR-GRIP

HFPAD-JHP
Adapters for Face Machining



Designation	CW	CDX	DAXN(1)	DAXX(2)	WF	HF	OAH	WB	OAL	MIID(3)
HFPAD 3L-40-T10-JHP	3.00	10.00	40.0	65.0	4.80	24.0	33.00	5.80	39.50	HGPL 3003Y
HFPAD 3R-40-T10-JHP	3.00	10.00	40.0	65.0	4.80	24.0	33.00	5.80	39.50	GRIP 3003Y
HFPAD 3L-115-T18-JHP	3.00	18.00	115.0	400.0	4.80	24.0	33.00	5.80	43.50	HGPL 3003Y
HFPAD 3L-65-T18-JHP	3.00	18.00	65.0	115.0	4.80	24.0	33.00	5.80	43.50	HGPL 3003Y
HFPAD 3R-115-T18-JHP	3.00	18.00	115.0	400.0	4.80	24.0	33.00	5.80	43.50	GRIP 3003Y
HFPAD 3R-65-T18-JHP	3.00	18.00	65.0	115.0	4.80	24.0	33.00	5.80	43.50	GRIP 3003Y
HFPAD 4L-44-T14-JHP	4.00	14.00	44.0	58.0	4.80	24.0	33.00	5.80	40.50	HFPL 4004
HFPAD 4L-58-T14-JHP	4.00	14.00	58.0	88.0	4.80	24.0	33.00	5.80	40.50	HFPL 4004
HFPAD 4L-88-T14-JHP	4.00	14.00	88.0	175.0	4.50	24.0	33.00	5.80	40.50	HFPL 4004
HFPAD 4R-44-T14-JHP	4.00	14.00	44.0	58.0	4.80	24.0	33.00	5.80	40.50	GRIP 4004Y
HFPAD 4R-58-T14-JHP	4.00	14.00	58.0	88.0	4.80	24.0	33.00	5.80	40.50	GRIP 4004Y
HFPAD 4R-88-T14-JHP	4.00	14.00	88.0	175.0	4.50	24.0	33.00	5.80	40.50	GRIP 4004Y
HFPAD 4L-175-T20-JHP	4.00	20.00	175.0	800.0	4.80	24.0	33.00	6.50	45.50	HFPL 4004
HFPAD 4R-175-T20-JHP	4.00	20.00	175.0	800.0	4.80	24.0	33.00	6.50	45.50	GRIP 4004Y
HFPAD 5R/L-110-T14-JHP	5.00	14.00	110.0	200.0	4.50	24.0	33.00	6.30	45.50	GRIP 5005Y
HFPAD 5L-40-T14-JHP	5.00	14.00	40.0	50.0	4.50	24.0	33.00	6.30	40.50	HFPL 5004
HFPAD 5R/L-50-T14-JHP	5.00	14.00	50.0	75.0	4.50	24.0	33.00	6.30	40.50	HFPL 5004
HFPAD 5L-75-T14-JHP	5.00	14.00	75.0	110.0	4.50	24.0	33.00	6.30	40.50	HFPL 5004
HFPAD 5R-40-T14-JHP	5.00	14.00	40.0	50.0	4.50	24.0	33.00	6.30	40.50	GRIP 5005Y
HFPAD 5R-75-T14-JHP	5.00	14.00	75.0	110.0	4.50	24.0	33.00	6.30	40.50	GRIP 5005Y
HFPAD 5L-200-T20-JHP	5.00	20.00	200.0	800.0	4.50	24.0	33.00	6.60	45.50	HFPL 5004
HFPAD 5R-200-T20-JHP	5.00	20.00	200.0	800.0	4.50	24.0	33.00	6.60	45.50	GRIP 5005Y
HFPAD 6L-60-T14-JHP	6.00	14.00	60.0	100.0	4.50	24.0	33.00	6.80	40.50	HFPL 6004
HFPAD 6R-60-T14-JHP	6.00	14.00	60.0	100.0	4.50	24.0	33.00	6.80	40.50	GRIP 6030Y
HFPAD 6L-100-T20-JHP	6.00	20.00	100.0	200.0	4.50	24.0	33.00	6.80	45.50	HFPL 6004
HFPAD 6L-200-T20-JHP	6.00	20.00	200.0	3000.0	4.50	24.0	33.00	7.10	45.50	HFPL 6004
HFPAD 6R-100-T20-JHP	6.00	20.00	100.0	200.0	4.50	24.0	33.00	6.80	45.50	GRIP 6030Y
HFPAD 6R-200-T20-JHP	6.00	20.00	200.0	3000.0	4.50	24.0	33.00	7.10	45.50	GRIP 6030Y

- WF(assembly)=WF(shank) + WF(adapter) • HGN,GRIP,DGN inserts can be used only with right-hand adapters, HGPL inserts with left-hand adapters
- For information regarding compatibility with the HATA system, please refer to the additional information provided for each of the intermediate serrated cartridges: IH-HFPAD
- For user guide, see pages 676-688

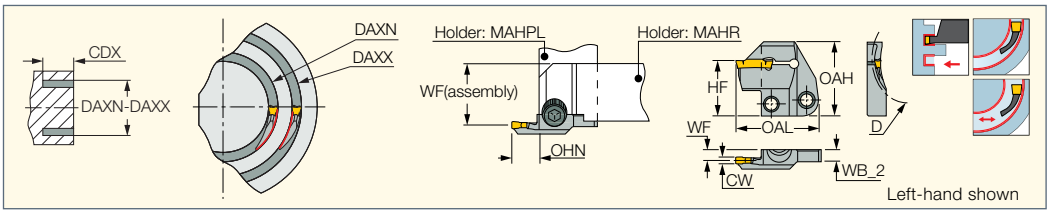
(1) Minimum axial grooving diameter
(2) Maximum axial grooving diameter
(3) Master insert identification

For inserts, see pages: DGN-MF (541) • DGN-W (540) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGR/L-B (542) • GRIP (294) • GRIP (full radius) (295) • GRIP-T (295) • GRIPA (296) • GRIPA (full radius) (296) • HFPR/L (656) • HFPR/L (full radius) (656) • HGN-C (549) • HGN-J (550) • HGN-UT (551) • HGPL (658)

For holders, see pages: C#-MAHD-JHP (697) • C#-MAHPD-JHP (698) • IH-HFPAD (650) • MAHPR/L-JHP (308) • MAHPR/L-XL-JHP (642) • MAHR/L-JHP (306) • MAHR/L-JHP-MC (307)

MODULAR GRIP

HFPAD-3
Adapters for Face Machining



Designation	CW	CDX	DAXN(1)	DAXX(2)	WF(3)	WB_2	HF	OAH	OHN(4)	OAL	MIID(5)
HFPAD 3L-25-T10	3.00	10.00	25.0	30.0	4.80	5.8	24.0	32.00	15.0	39.50	HGPL 3003Y
HFPAD 3L-30-T10	3.00	10.00	30.0	40.0	4.80	5.8	24.0	32.00	15.0	39.50	HGPL 3003Y
HFPAD 3L-40-T10	3.00	10.00	40.0	65.0	4.80	5.8	24.0	32.00	15.0	39.50	HGPL 3003Y
HFPAD 3R-25-T10	3.00	10.00	25.0	30.0	4.80	5.8	24.0	32.00	15.0	39.50	GRIP 3003Y
HFPAD 3R-30-T10	3.00	10.00	30.0	40.0	4.80	5.8	24.0	32.00	15.0	39.50	GRIP 3003Y
HFPAD 3R-40-T10	3.00	10.00	40.0	65.0	4.80	5.8	24.0	32.00	15.0	39.50	GRIP 3003Y
HFPAD 3L-115-T18	3.00	18.00	115.0	400.0	4.80	5.8	24.0	32.00	19.0	43.50	HGPL 3003Y
HFPAD 3L-65-T18	3.00	18.00	65.0	115.0	4.80	5.8	24.0	32.00	19.0	43.50	HGPL 3003Y
HFPAD 3R-115-T18	3.00	18.00	115.0	400.0	4.80	5.8	24.0	32.00	19.0	43.50	GRIP 3003Y
HFPAD 3R-65-T18	3.00	18.00	65.0	115.0	4.80	5.8	24.0	32.00	19.0	43.50	GRIP 3003Y

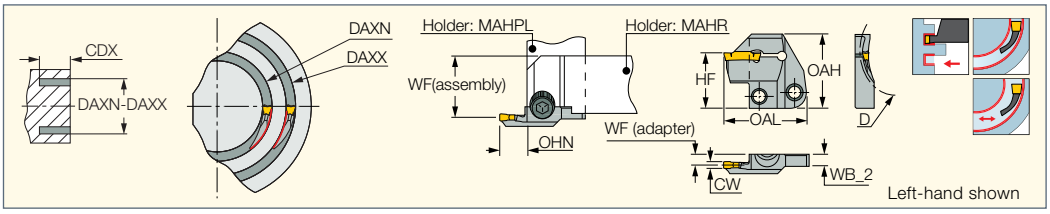
- WF(assembly)=WF(shank) + WF(adapter) • HGN & GRIP 3.. inserts can be used only with right-hand adapters, HGPL 3.. inserts with left-hand adapters
- For information regarding compatibility with the HATA system, please refer to the additional information provided for each of the intermediate serrated cartridges: IH-HFPAD
- For user guide, see pages 676-688

(1) Minimum penetration diameter
(2) Maximum penetration diameter
(3) WF(adapter)
(4) Minimum overhang
(5) Master insert identification

For inserts, see pages: GRIP (294) • GRIP-T (295) • GRIPA (full radius) (296) • GRIP (full radius) (295) • HGN-C (549) • HGN-J (550) • HGN-UT (551) • HGPL (658)
For holders, see pages: C#-MAHD-JHP (697) • C#-MAHPD-JHP (698) • IH-HFPAD (650) • MAHR/L-JHP-MC (307) • MAHPR/L-JHP (308) • MAHR/L-JHP (306) • MAHR/L (306) • MAHPR/L (307) • C#-MAHD (697) • C#-MAHPD (698) • C#-MAHDR-45 (696) • HSK A63WH-MAHUR/L (706) • HSK A63WH-MAHDR-45 (705) • HSK A63WH-MAHDOR (705) • IM-MAHD (707) • IM-MAHPD (707)

MODULAR GRIP

HFPAD-4
Adapters for Face Machining



Designation	CW	CDX	DAXN(1)	DAXX(2)	WF(3)	WB_2	HF	OAH	OHN(4)	OAL	MIID(5)
HFPAD 4L-25-T10	4.00	10.00	25.0	31.0	4.50	5.8	24.0	32.00	16.0	40.50	HFPL 4004
HFPAD 4L-31-T10	4.00	10.00	31.0	44.0	4.50	5.8	24.0	32.00	16.0	40.50	HFPL 4004
HFPAD 4R-25-T10	4.00	10.00	25.0	31.0	4.50	5.8	24.0	32.00	16.0	40.50	GRIP 4004Y
HFPAD 4R-31-T10	4.00	10.00	31.0	44.0	4.50	5.8	24.0	32.00	16.0	40.50	GRIP 4004Y
HFPAD 4L-44-T14	4.00	14.00	44.0	58.0	4.50	5.8	24.0	32.00	16.0	40.50	HFPL 4004
HFPAD 4L-58-T14	4.00	14.00	58.0	88.0	4.50	5.8	24.0	32.00	16.0	40.50	HFPL 4004
HFPAD 4L-88-T14	4.00	14.00	88.0	175.0	4.50	5.8	24.0	32.00	16.0	40.50	HFPL 4004
HFPAD 4R-44-T14	4.00	14.00	44.0	58.0	4.50	5.8	24.0	32.00	16.0	40.50	GRIP 4004Y
HFPAD 4R-58-T14	4.00	14.00	58.0	88.0	4.50	5.8	24.0	32.00	16.0	40.50	GRIP 4004Y
HFPAD 4R-88-T14	4.00	14.00	88.0	175.0	4.50	5.8	24.0	32.00	16.0	40.50	GRIP 4004Y
HFPAD 4L-175-T20	4.00	20.00	175.0	800.0	4.80	6.5	24.0	32.00	21.0	45.50	HFPL 4004
HFPAD 4R-175-T20	4.00	20.00	175.0	800.0	4.50	6.5	24.0	32.00	21.0	45.50	GRIP 4004Y

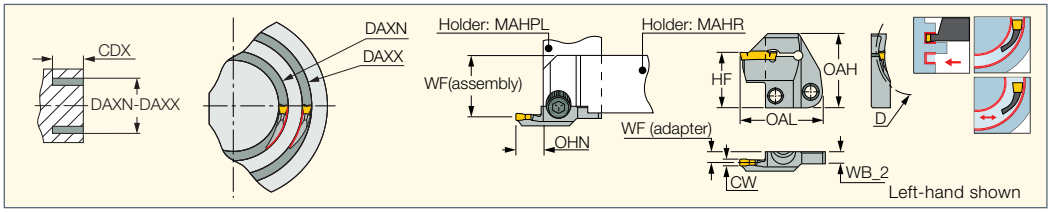
- WF(assembly)=WF(shank) + WF(adapter) • DGN & GRIP 4.. inserts can be used only with right-hand adapters, HGPL 4.. inserts with left-hand adapters
- For information regarding compatibility with the HATA system, please refer to the additional information provided for each of the intermediate serrated cartridges: IH-HFPAD.
- For user guide, see pages 676-688

(1) Minimum penetration diameter
(2) Maximum penetration diameter
(3) WF(adapter)
(4) Minimum overhang
(5) Master insert identification

For inserts, see pages: DGN-MF (541) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGR/L-B (542) • GRIP (294) • GRIP (full radius) (295) • GRIP-T (295) • GRIPA (full radius) (296) • HFPR/L (656) • HGPL (658)
For holders, see pages: C#-MAHD-JHP (697) • C#-MAHPD-JHP (698) • IH-HFPAD (650) • MAHR/L-JHP-MC (307) • MAHPR/L-JHP (308) • MAHR/L-JHP (306) • MAHR/L (306) • MAHPR/L (307) • C#-MAHD (697) • C#-MAHPD (698) • C#-MAHDR-45 (696) • HSK A63WH-MAHUR/L (706) • HSK A63WH-MAHDR-45 (705) • HSK A63WH-MAHDOR (705) • IM-MAHD (707) • IM-MAHPD (707)

MODULAR GRIP

HFPAD-5
Adapters for Face Machining



Designation	CW	CDX	DAXN(1)	DAXX(2)	WF(3)	WB_2	HF	OAH	OHN(4)	OAL	MIID(5)
HFPAD 5L-110-T14	5.00	14.00	110.0	200.0	4.50	6.3	24.0	32.00	16.0	40.50	HFPL 5004
HFPAD 5L-40-T14	5.00	14.00	40.0	50.0	4.50	6.3	24.0	32.00	16.0	40.50	HFPL 5004
HFPAD 5L-50-T14	5.00	14.00	50.0	75.0	4.50	6.3	24.0	32.00	16.0	40.50	HFPL 5004
HFPAD 5L-75-T14	5.00	14.00	75.0	110.0	4.50	6.3	24.0	32.00	16.0	40.50	HFPL 5004
HFPAD 5R-110-T14	5.00	14.00	110.0	200.0	4.50	6.3	24.0	32.00	16.0	40.50	GRIP 5005Y
HFPAD 5R-40-T14	5.00	14.00	40.0	50.0	4.50	6.3	24.0	32.00	16.0	40.50	GRIP 5005Y
HFPAD 5R-50-T14	5.00	14.00	50.0	75.0	4.50	6.3	24.0	32.00	16.0	40.50	GRIP 5005Y
HFPAD 5R-75-T14	5.00	14.00	75.0	110.0	4.50	6.3	24.0	32.00	16.0	40.50	GRIP 5005Y
HFPAD 5L-200-T20	5.00	20.00	200.0	800.0	4.50	6.6	24.0	32.00	21.0	45.50	HFPL 5004
HFPAD 5R-200-T20	5.00	20.00	200.0	800.0	4.50	6.6	24.0	32.00	21.0	45.50	GRIP 5005Y

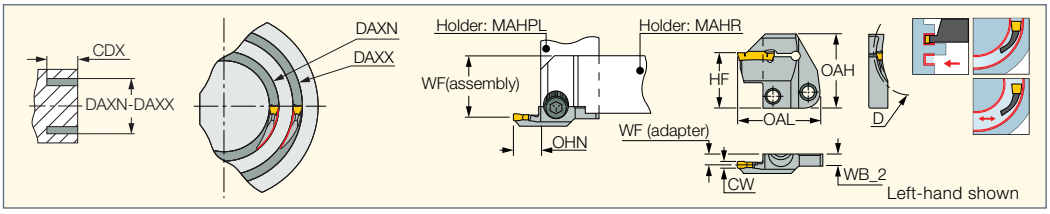
- WF(assembly)=WF(shank) + WF(adapter) • DGN & GRIP 5.. inserts can be used only with right-hand adapters, HGPL 5.. inserts with left-hand adapters
- For information regarding compatibility with the HATA system, please refer to the additional information provided for each of the intermediate serrated cartridges: IH-HFPAD.
- For user guide, see pages 676-688

(1) Minimum penetration diameter
(2) Maximum penetration diameter
(3) WF(adapter)
(4) Minimum overhang
(5) Master insert identification

For inserts, see pages: DGR/L-B (542) • GRIP-T (295) • HFPR/L (656) • HFPR/L (full radius) (656) • GRIP (294) • GRIP (full radius) (295) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGN-W (540) • HGPL (658)
For holders, see pages: C#-MAHD-JHP (697) • C#-MAHPD-JHP (698) • IH-HFPAD (650) • MAHR/L-JHP-MC (307) • MAHPR/L-JHP (308) • MAHR/L-JHP (306) • MAHR/L (306) • MAHPR/L (307) • C#-MAHD (697) • C#-MAHPD (698) • C#-MAHDR-45 (696) • HSK A63WH-MAHUR/L (706) • HSK A63WH-MAHDR-45 (705) • HSK A63WH-MAHDOR (705) • IM-MAHD (707) • IM-MAHPD (707)

MODULAR GRIP

HFPAD-6
Adapters for Face Machining



Designation	CW	CDX	DAXN(1)	DAXX(2)	WF(3)	WB_2	HF	OAH	OHN(4)	OAL	MIID(5)
HFPAD 6L-60-T14	6.00	14.00	60.0	100.0	4.50	6.8	24.0	32.00	16.0	40.50	HFPL 6004
HFPAD 6R-60-T14	6.00	14.00	60.0	100.0	4.50	6.8	24.0	32.00	16.0	40.50	GRIP 6030Y
HFPAD 6L-100-T20	6.00	20.00	100.0	200.0	4.50	6.8	24.0	32.00	21.0	45.50	HFPL 6004
HFPAD 6L-200-T20	6.00	20.00	200.0	3000.0	4.50	7.1	24.0	32.00	21.0	45.50	HFPL 6004
HFPAD 6R-100-T20	6.00	20.00	100.0	200.0	4.50	6.8	24.0	32.00	21.0	45.50	GRIP 6030Y
HFPAD 6R-200-T20	6.00	20.00	200.0	3000.0	4.50	7.1	24.0	32.00	21.0	45.50	GRIP 6030Y

- WF(assembly)=WF(shank) + WF(adapter) • DGN & GRIP 6.. inserts can be used only with right-hand adapters, HGPL 6.. inserts with left-hand adapters
- For information regarding compatibility with the HATA system, please refer to the additional information provided for each of the intermediate serrated cartridges: IH-HFPAD.
- For user guide, see pages 676-688

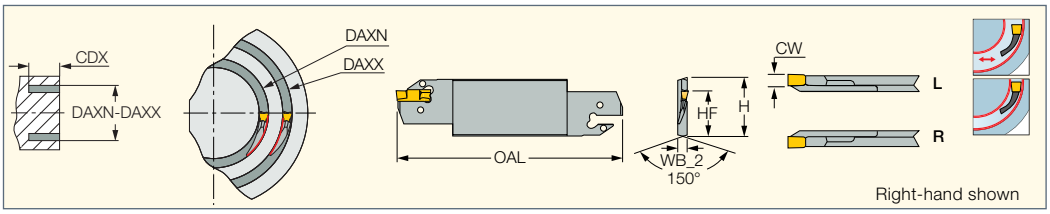
(1) Minimum penetration diameter
(2) Maximum penetration diameter
(3) WF(adapter)
(4) Minimum overhang
(5) Master insert identification

For inserts, see pages: DGR/L-B (542) • GRIP-T (295) • GRIPA (full radius) (296) • HFPR/L (656) • HFPR/L (full radius) (656) • GRIP (294) • GRIP (full radius) (295) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • HGPL (658)
For holders, see pages: C#-MAHD-JHP (697) • C#-MAHPD-JHP (698) • IH-HFPAD (650) • MAHR/L-JHP-MC (307) • MAHPR/L-JHP (308) • MAHR/L-JHP (306) • MAHR/L (306) • MAHPR/L (307) • C#-MAHD (697) • C#-MAHPD (698) • C#-MAHDR-45 (696) • HSK A63WH-MAHUR/L (706) • HSK A63WH-MAHDR-45 (705) • HSK A63WH-MAHDOR (705) • IM-MAHD (707) • IM-MAHPD (707)



HELIFACE

HFFR/L-T
Blades for Face Machining



Designation	CW	CDX	DAXN(2)	DAXX(3)	HF	H	WB_2	OAL	MIID(4)	
HFFL 48-4T25 (1)	4.00	25.00	48.0	60.0	24.8	32.0	5.2	150.00	HFPL 4004	EDG 33B*
HFFL 60-4T25	4.00	25.00	60.0	75.0	24.8	32.0	5.2	150.00	HFPL 4004	EDG 33B*
HFFR 48-4T25	4.00	25.00	48.0	60.0	24.8	32.0	5.2	150.00	GRIP 4004Y	EDG 33B*
HFFR 60-4T25	4.00	25.00	60.0	75.0	24.8	32.0	5.2	150.00	GRIP 4004Y	EDG 33B*
HFFL 140-4T30	4.00	30.00	140.0	1500.0	24.8	32.0	3.2	150.00	HFPL 4004	EDG 33B*
HFFL 75-4T30	4.00	30.00	75.0	140.0	24.8	32.0	5.2	150.00	HFPL 4004	EDG 33B*
HFFR 140-4T30	4.00	30.00	140.0	1500.0	24.8	32.0	3.2	150.00	GRIP 4004Y	EDG 33B*
HFFR 75-4T30	4.00	30.00	75.0	140.0	24.8	32.0	5.2	150.00	GRIP 4004Y	EDG 33B*
HFFL 70-5T32	5.00	32.00	70.0	95.0	24.8	32.0	5.2	150.00	HFPL 5004	EDG 33B*
HFFR 70-5T32	5.00	32.00	70.0	95.0	24.8	32.0	5.2	150.00	GRIP 5005Y	EDG 33B*
HFFL 95-5T35	5.00	35.00	95.0	130.0	24.8	32.0	5.2	150.00	HFPL 5004	EDG 33B*
HFFR 95-5T35	5.00	35.00	95.0	130.0	24.8	32.0	5.2	150.00	GRIP 5005Y	EDG 33B*
HFFL 130-5T38	5.00	38.00	130.0	180.0	24.8	32.0	5.2	150.00	HFPL 5004	EDG 33B*
HFFL 180-5T38	5.00	38.00	180.0	1500.0	24.8	32.0	4.0	150.00	HFPL 5004	EDG 33B*
HFFR 130-5T38	5.00	38.00	130.0	180.0	24.8	32.0	5.2	150.00	GRIP 5005Y	EDG 33B*
HFFR 180-5T38	5.00	38.00	180.0	1500.0	24.8	32.0	4.0	150.00	GRIP 5005Y	EDG 33B*
HFFL 90-6T32	6.00	32.00	90.0	180.0	24.8	32.0	5.2	150.00	HFPL 6004	EDG 33B*
HFFR 90-6T32	6.00	32.00	90.0	180.0	24.8	32.0	5.2	150.00	GRIP 6030Y	EDG 33B*
HFFL 180-6T38	6.00	38.00	180.0	400.0	24.8	32.0	5.2	150.00	HFPL 6004	EDG 33B*
HFFR 180-6T38	6.00	38.00	180.0	400.0	24.8	32.0	5.2	150.00	GRIP 6030Y	EDG 33B*

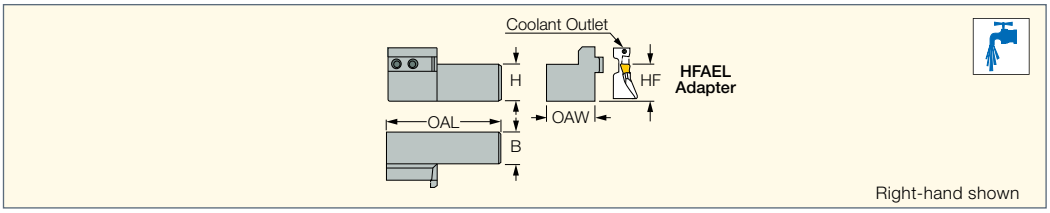
- After initial groove, no limitation of widening groove outward or toward center.
- DGN & GRIP inserts can be used only with right-hand adapters, HGPL inserts with left-hand blades
- For user guide, see pages 676-688

(1) HGPL 4...Y with LH blade
(2) Minimum penetration diameter
(3) Maximum penetration diameter
(4) Master insert identification
* Optional, to be ordered separately

For inserts, see pages: DGN-MF (541) • DGR/L-B (542) • GRIP-T (295) • GRIPA (296) • GRIPA (full radius) (296) • HFPR/L (656) • HFPR/L (full radius) (656) • GRIP (294) • GRIP (full radius) (295) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGN-W (540) • HGPL (658)
For holders, see pages: SGTBF (691) • SGTBU/SGTBN (690) • UBHCR/L (691)

HELIFACE

HAR/L
Face Machining Adapter Holders



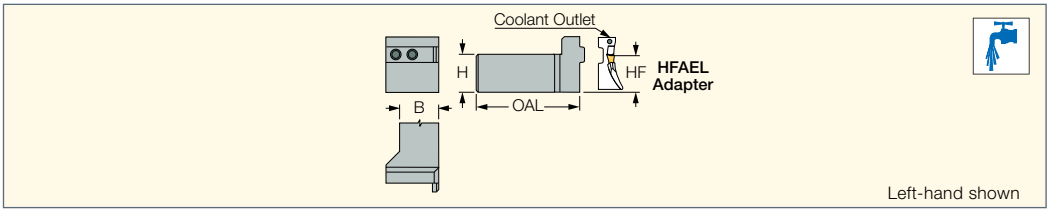
Designation	OAL	B	H	HF	OAW		
HAR/L 25C	110.00	25.0	25.0	25.0	39.00	SR 14-519	T-20/3
HAR/L 32C	130.00	32.0	32.0	32.0	46.00	SR 14-519	T-20/3

- Holders for adapters HFAER/L & HGAER/L, HFAIR/L & HGAIR/L

For tools, see pages: HFAER/L-4 (646) • HFAER/L-5T, 6T (647) • HFAIR/L-4 (651) • HFAIR/L-DG (652) • HGAER/L-3 (646) • HGAIR/L-3 (648)

HELIFACE

HAPR/L
Face Machining Perpendicular Holders for Adapters



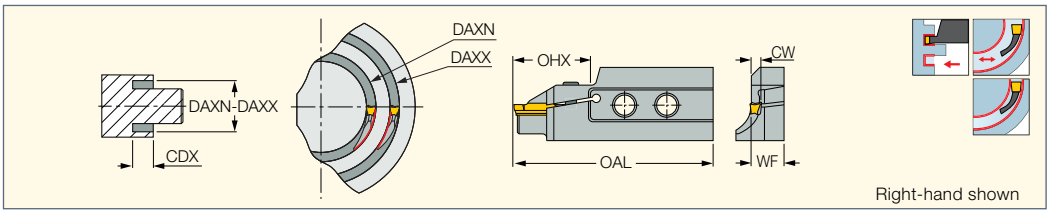
Designation	OAL	H	HF	B		
HAPR/L 25C	124.00	25.0	25.0	25.0	SR 14-519	T-20/3
HAPR/L 32C	144.00	32.0	32.0	32.0	SR 14-519	T-20/3

- Holders for adapters HFAER/L & HGAER/L, HFAIR/L & HGAIR/L.

For tools, see pages: HFAER/L-4 (646) • HFAER/L-5T, 6T (647) • HFAIR/L-4 (651) • HFAIR/L-DG (652) • HGAER/L-3 (646) • HGAIR/L-3 (648)

HELIFACE

HGAER/L-3
Adapters for External Facing Along Shafts



Designation	CW	CDX	DAXN(1)	DAXX(2)	WF	OHX(3)	OAL	MIID(4)
HGAEL 12-3M	3.00	2.00	12.0	500.0	10.20	21.0	55.00	HGPL 3003Y
HGAER 12-3M	3.00	2.00	12.0	500.0	10.20	21.0	55.00	GRIP 3003Y
HGAEL 12-3T6	3.00	6.00	12.0	15.0	10.20	21.0	55.00	HGPL 3003Y
HGAER 12-3T6	3.00	6.00	12.0	15.0	10.20	21.0	55.00	GRIP 3003Y
HGAEL 14-3T7	3.00	7.00	14.0	17.0	10.20	21.0	55.00	HGPL 3003Y
HGAER 14-3T7	3.00	7.00	14.0	17.0	10.20	21.0	55.00	GRIP 3003Y
HGAEL 17-3T8	3.00	8.00	17.0	21.0	10.20	21.0	55.00	HGPL 3003Y
HGAER 17-3T8	3.00	8.00	17.0	21.0	10.20	21.0	55.00	GRIP 3003Y
HGAEL 21-3T9	3.00	9.00	21.0	25.0	10.20	21.0	55.00	HGPL 3003Y
HGAER 21-3T9	3.00	9.00	21.0	25.0	10.20	21.0	55.00	GRIP 3003Y

• GRIP 3... inserts can be used with right-hand adapters only, HGPL 3 with left-hand adapters • For information regarding compatibility with the HATA system, please refer to the additional information provided for each of the intermediate serrated cartridges: IH-HFAIR
• For user guide, see pages 676-688
(1) Minimum penetration diameter
(2) Maximum penetration diameter
(3) Maximum overhang
(4) Master insert identification

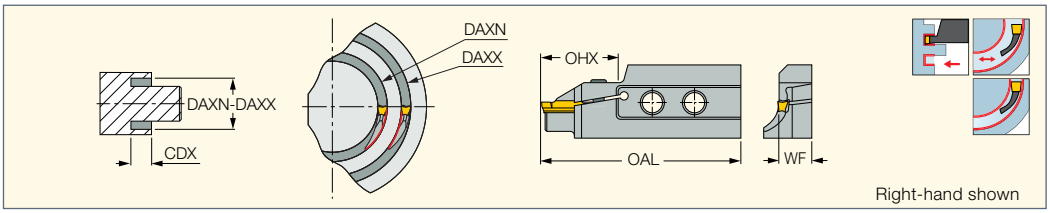
For inserts, see pages: GRIPA (296) • GRIPA (full radius) (296) • GRIP (294) • GRIP (full radius) (295) • HGPL (658)
For holders, see pages: C#-HAD (700) • C#-HAPR/L (700) • HAPR/L (645) • HAR/L (645) • IM-HAD (708) • IM-HAPR/L (708)

Spare Parts

Designation		
HGAER/L-3	SR 16-236 P	T-15/3

HELIFACE

HFAER/L-4
Adapters for External Facing Along Shafts



Designation	CW	CDX	DAXN(1)	DAXX(2)	WF	OHX(3)	OAL		
HFAER/L 40-4T20	4.00	20.00	40.0	48.0	11.60	21.0	68.50	SR M5X16 DIN912	HW 4.0
HFAER/L 48-4T20	4.00	20.00	48.0	60.0	11.60	21.0	68.50	SR M5X16 DIN912	HW 4.0
HFAER/L 60-4T25	4.00	25.00	60.0	75.0	11.60	26.0	68.50	SR M5X16 DIN912	HW 4.0
HFAER/L 75-4T25	4.00	25.00	75.0	100.0	11.60	26.0	68.50	SR M5X16 DIN912	HW 4.0

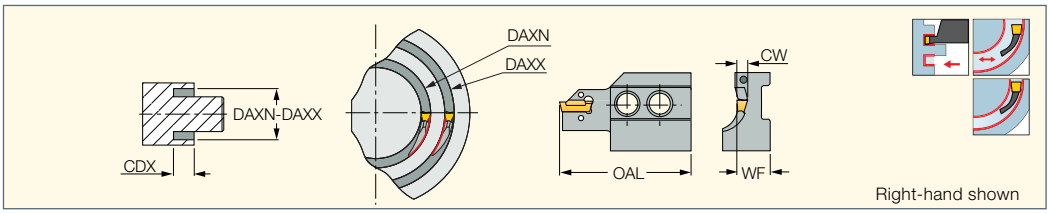
• DGN & GRIP inserts can be used only with right-hand adapters, HGPL inserts with left-hand blades • For user guide, see pages 676-688
(1) Minimum penetration diameter
(2) Maximum penetration diameter
(3) Maximum overhang

For inserts, see pages: DGN-MF (541) • GRIP-T (295) • GRIPA (296) • GRIPA (full radius) (296) • HFPR/L (656) • HFPR/L (full radius) (656) • GRIP (294) • GRIP (full radius) (295) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • HGPL (658)
For holders, see pages: C#-HAD (700) • C#-HAPR/L (700) • HAPR/L (645) • HAR/L (645) • IM-HAD (708) • IM-HAPR/L (708)



HELIFACE

HFAER/L-5T, 6T
Adapters for External Facing Along Shafts



Designation	CW	CDX	DAXN(1)	DAXX(2)	WF	OAL	MIID(3)	
HFAEL 70C-5T25	5.00	25.00	70.0	95.0	12.20	66.00	HFPL 5004	EDG 33B*
HFAEL 95C-5T25	5.00	25.00	95.0	130.0	12.20	66.00	HFPL 5004	EDG 33B*
HFAER 70C-5T25	5.00	25.00	70.0	95.0	12.20	66.00	GRIP 5005Y	EDG 33B*
HFAER 95C-5T25	5.00	25.00	95.0	130.0	12.20	66.00	GRIP 5005Y	EDG 33B*
HFAEL 70C-6T28	6.00	28.00	70.0	100.0	12.30	69.00	HFPL 6004	EDG 33B*
HFAER 70C-6T28	6.00	28.00	70.0	100.0	12.30	69.00	GRIP 6030Y	EDG 33B*
HFAEL 100C-6T32	6.00	32.00	100.0	180.0	12.30	73.00	HFPL 6004	EDG 33B*
HFAEL 180C-6T32	6.00	32.00	180.0	400.0	12.30	73.00	HFPL 6004	EDG 33B*
HFAER 100C-6T32	6.00	32.00	100.0	180.0	12.30	73.00	GRIP 6030Y	EDG 33B*
HFAER 180C-6T32	6.00	32.00	180.0	400.0	12.30	73.00	GRIP 6030Y	EDG 33B*

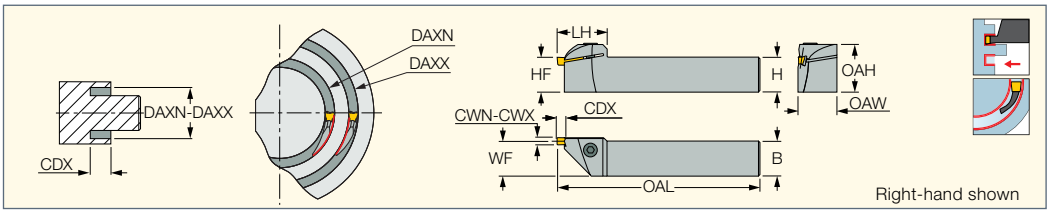
- After initial groove, no limitation to widening groove outward from or toward center
- Adapters can be mounted on standard HAR/L, HAPR/L, HAI holders for external machining
- DGN & GRIP inserts can be used only with right-hand adapters, HGPL inserts with left-hand blades
- For user guide, see pages 676-688

(1) Minimum penetration diameter
(2) Maximum penetration diameter
(3) Master insert identification
* Optional, to be ordered separately

For inserts, see pages: GRIP-T (295) • GRIPA (296) • GRIPA (full radius) (296) • HFPR/L (656) • HFPR/L (full radius) (656) • GRIP (294) • GRIP (full radius) (295) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGN-W (540) • HGPL (658)
For holders, see pages: C#-HAD (700) • C#-HAPR/L (700) • HAPR/L (645) • HAR/L (645) • IM-HAD (708) • IM-HAPR/L (708)

HELIFACE

HFHR/L-M
Toolholders for Shallow Face Grooving



Designation	CWN(1)	CWX(2)	CDX	DAXN(3)	DAXX(4)	WF	HF	H	OAH	B	OAW	OAL	MIID(5)		
HFHL 20M	3.00	6.00	5.30	20.0	2000.0	20.00	20.0	20.0	29.00	20.0	22.50	130.00	HFPL 4004	SR M6X16 DIN912	HW 5.0
HFHR 20M	3.00	6.00	5.30	20.0	2000.0	20.00	20.0	20.0	29.00	20.0	22.50	130.00	HFPR 4004	SR M6X16 DIN912	HW 5.0
HFHL 25M	3.00	6.00	5.30	20.0	2000.0	25.00	25.0	25.0	34.00	25.0	27.50	150.00	HFPL 4004	SR M6X16 DIN912	HW 5.0
HFHR 25M	3.00	6.00	5.30	20.0	2000.0	25.00	25.0	25.0	34.00	25.0	27.50	150.00	HFPR 4004	SR M6X16 DIN912	HW 5.0

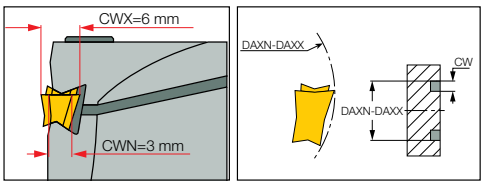
- DGN & GRIP 4.. - 6.. inserts can be used only with right-hand tools, HGPL 4.. - 6.. inserts with left-hand tools
- After initial groove, no limitation to widening groove outward or toward center
- For user guide, see pages 676-688

(1) Minimum cutting width
(2) Maximum cutting width
(3) Minimum penetration diameter
(4) Maximum penetration diameter
(5) Master insert identification

For inserts, see pages: HFPR/L (656) • HFPR/L (full radius) (656)

HFHR/L- ☐ M & HFHPR/L- ☐ M
Integral Toolholders

For shallow machining up to max. 5 mm depth of groove. One toolholder can be mounted with inserts in 3-6 mm widths. The initial major diameter groove is limited by the insert's geometry of each size.
After the initial groove, face recessing outward or toward the center is not limited by the insert's geometry.

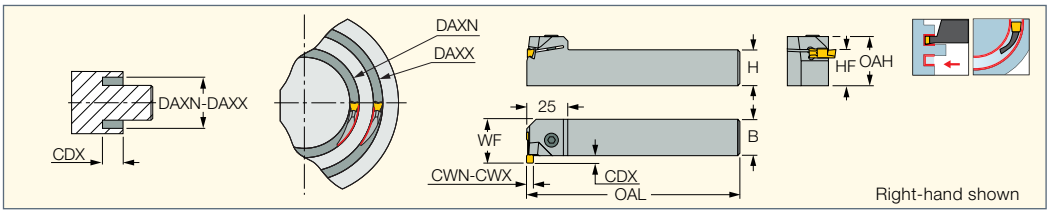


Insert initial face grooving range

DAXN-DAXX		
CW	DAXN	DAXX
3	25.6	51.5
4	24.1	73.7
5	22.1	170
6	20.8	∞

HELIFACE

HFHPR/L-M
Perpendicular Toolholders
for Shallow Face Grooving



Designation	CDX	DAXN(2)	DAXX(3)	CWN(4)	CWX(5)	WF	HF	H	B	OAH	OAL	MIID(6)		
HFHPL 20M	5.00	20.0	2000.0	3.00	6.00	25.30	20.0	20.0	20.0	29.00	130.00	HFPL 4004	SR M6X16 DIN912	HW 5.0
HFHPL 25M	5.00	20.0	2000.0	3.00	6.00	30.30	25.0	25.0	25.0	34.00	150.00	HFPL 4004	SR M6X16 DIN912	HW 5.0
HFHPR 20M (1)	5.00	20.0	2000.0	3.00	6.00	25.30	20.0	20.0	20.0	29.00	130.00	HFPR 4004	SR M6X16 DIN912	HW 5.0
HFHPR 25M (1)	5.00	20.0	2000.0	3.00	6.00	30.30	25.0	25.0	25.0	34.00	150.00	HFPR 4004	SR M6X16 DIN912	HW 5.0

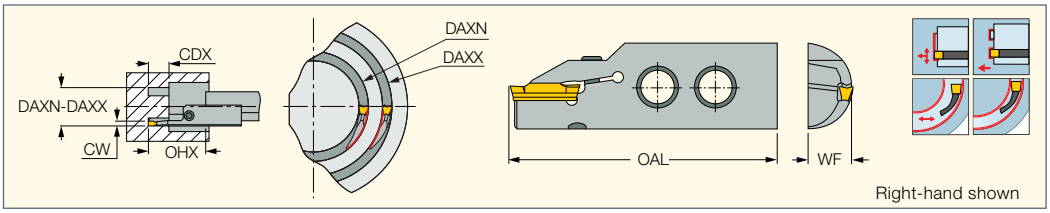
- DGN & GRIP 4.. - 6.. inserts can be used only with right-hand tools, HGPL 4.. - 6.. inserts with left-hand tools
- After initial groove, no limitation to widening groove outward or toward center
- For user guide, see pages 676-688

(1) DGN & GRIP 4, 5, 6 mm inserts can be used only with right-hand toolholders.
(2) Minimum penetration diameter
(3) Maximum penetration diameter
(4) Minimum cutting width
(5) Maximum cutting width
(6) Master insert identification

For inserts, see pages: HFPR/L (656) • HFPR/L (full radius) (656)

HELIFACE

HGAIR/L-3
Adapters for Internal Face
Grooving and Turning



Designation	CW	CDX	DAXN(1)	DAXX(2)	WF	OHX(3)	OAL	MIID(4)		
HGAIR/L 12-3M	3.00	2.00	12.0	500.0	10.20	21.0	55.00	GRIP 3003Y	SR 16-236 P	T-15/3
HGAIL 12-3T6	3.00	6.00	12.0	15.0	10.20	21.0	55.00	GRIP 3003Y	SR 16-236 P	T-15/3
HGAIR 12-3T6	3.00	6.00	12.0	15.0	10.20	21.0	55.00	GRIP 3003Y	SR 16-236 P	T-15/3
HGAIL 14-3T7	3.00	7.00	14.0	17.0	10.20	21.0	55.00	GRIP 3003Y	SR 16-236 P	T-15/3
HGAIR 14-3T7	3.00	7.00	14.0	17.0	10.20	21.0	55.00	GRIP 3003Y	SR 16-236 P	T-15/3
HGAIR/L 17-3T8	3.00	8.00	17.0	21.0	10.20	21.0	55.00	GRIP 3003Y	SR 16-236 P	T-15/3
HGAIR/L 21-3T9	3.00	9.00	21.0	25.0	10.20	21.0	55.00	GRIP 3003Y	SR 16-236 P	T-15/3
HGAIR/L 25-3T9	3.00	9.00	25.0	34.0	10.20	21.0	55.00	GRIP 3003Y	SR 16-236 P	T-15/3
HGAIR/L 35-3T10	3.00	10.00	35.0	45.0	10.30	22.0	56.00	GRIP 3003Y	SR 16-236 P	T-15/3
HGAIR/L 45-3T10	3.00	10.00	45.0	65.0	10.30	22.0	56.00	GRIP 3003Y	SR 16-236 P	T-15/3
HGAIR/L 115-3T18	3.00	18.00	115.0	400.0	11.30	30.0	64.00	GRIP 3003Y	SR 16-236 P	T-15/3
HGAIR/L 65-3T18	3.00	18.00	65.0	115.0	11.30	30.0	64.00	GRIP 3003Y	SR 16-236 P	T-15/3

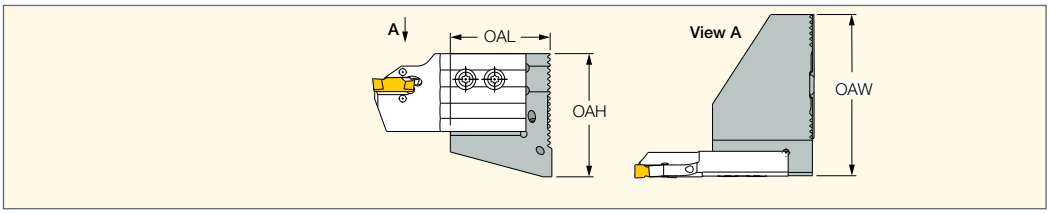
- HGN & GRIP 3.. inserts can be used only with right-hand adapters, HGPL 3.. inserts with left-hand adapters.
- For information regarding compatibility with the HATA system, please refer to the additional information provided for each of the intermediate serrated cartridges: IH-HFAIR
- For user guide, see pages 676-688

(1) Minimum penetration diameter
(2) Maximum penetration diameter
(3) Maximum overhang
(4) Master insert identification

For inserts, see pages: GRIP-T (295) • GRIPA (296) • GRIPA (full radius) (296) • GRIP (294) • GRIP (full radius) (295) • HGN-C (549) • HGN-J (550) • HGN-UT (551) • HGPL (658)
For holders, see pages: C#-HAD (700) • C#-HAPR/L (700) • HAI-C (651) • HAPR/L (645) • HAR/L (645) • IH-HFAIR (649) • IM-HAD (708) • IM-HAPR/L (708)

HELIFACE

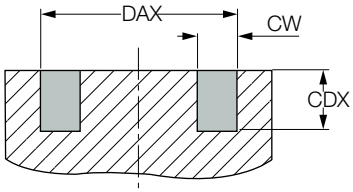
IH-HFAIR
Intermediate Serrated
Cartridge for standard
HELI-FACE HFAIR Adapters

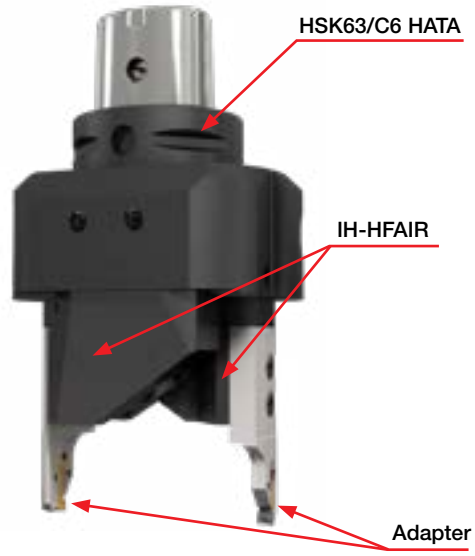


Designation	OAH	OAW	OAL
IH-HFAIR	55.40	72.50	44.90

For tools, see pages: HFAIR/L-DG (652) • HGAIR/L-3 (648)

HSK63 HATA+IH-HFAIR
C6 HATA+IH-HFAIR





Adapters	CW (min)	CW (max)	CDX	DAX (min)	DAX (max)
HGAIR 12-3M	3	5.1	2	83.8	123.4
HGAIR 65-3T18	3	5.1	18	86	115
HGAIR 115-3T18	3	5.1	18	115	125.6
HFAIR 75C-4T30DG	4	6.9	30	85.2	124.8
HFAIR 70C-5T25DG	5	8.1	25	87.2	95
HFAIR 95C-5T35DG	5	8.1	35	95	126.8
HFAIR 70C-6T28DG	6	10.1	28	87.4	100
HFAIR 100C-6T32DG	6	10.1	32	100	127

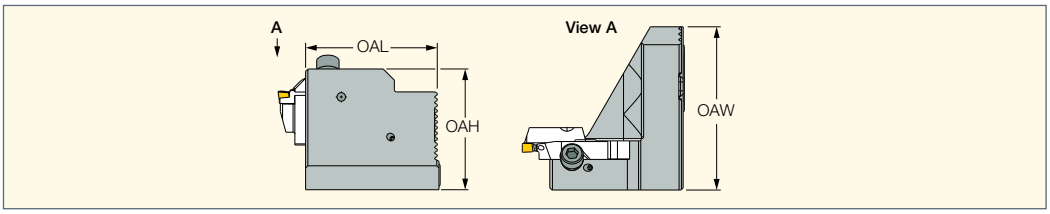
Spare Parts

Designation				
IH-HFAIR	SR 14-519	T-20/3	O-RING 19X2 NBR	SR M6X20-XT



HELIFACE

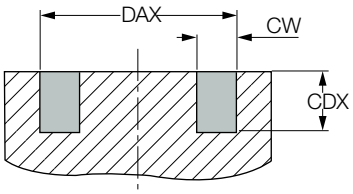
IH-HFPAD
Intermediate Serrated Cartridge
for Standard HFPAD R Adapters

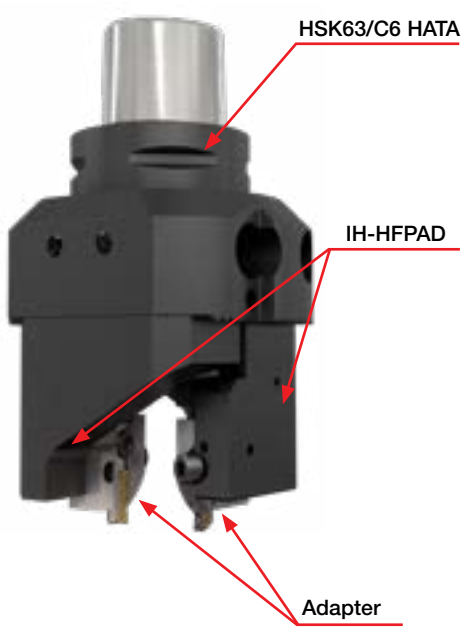


Designation	OAH	OAW	OAL
IH-HFPAD	54.00	73.00	58.90

For tools, see pages: HFPAD-3 (643) • HFPAD-4 (643) • HFPAD-5 (644) • HFPAD-6 (644) • HFPAD-JHP (642)

HSK63 HATA+IH-HFPAD
C6 HATA+IH-HFPAD





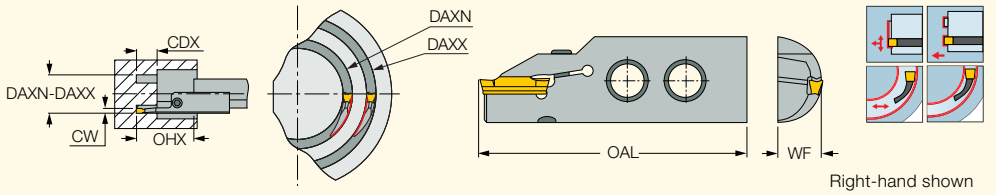
Adapters	CW (min)	CW (max)	CDX	DAX (min)	DAX (max)
HFPAD 3R-40-T10-JHP	3	5.1	10	40	65
HFPAD 3R-40-T10	3	5.1	10	40	65
HFPAD 3R-65-T18-JHP	3	5.1	18	65	102.23
HFPAD 3R-65-T18	3	5.1	18	65	102.23
HFPAD 4R-44-T14-JHP	4	6.9	14	44	58
HFPAD 4R-44-T14	4	6.9	14	44	58
HFPAD 4R-58-T14-JHP	4	6.9	14	58	88
HFPAD 4R-58-T14	4	6.9	14	58	88
HFPAD 4R-88-T14-JHP	4	6.9	14	88	101.5
HFPAD 4R-88-T14	4	6.9	14	88	101.5
HFPAD 5R-40-T14-JHP	5	8.1	14	40	50
HFPAD 5R-40-T14	5	8.1	14	40	50
HFPAD 5R-50-T14-JHP	5	8.1	14	50	75
HFPAD 5R-50-T14	5	8.1	14	50	75
HFPAD 5R-75-T14-JHP	5	8.1	14	75	104.8
HFPAD 5R-75-T14	5	8.1	14	75	104.8
HFPAD 6R-60-T14-JHP	6	10.1	14	60	100
HFPAD 6R-60-T14	6	10.1	14	60	100
HFPAD 6R-100-T20-JHP	6	10.1	20	100	105.8
HFPAD 6R-100-T20	6	10.1	20	100	105.8

Spare Parts

Designation									
IH-HFPAD	SR M6X20-XT	SR M5-04451	SR M6X12DIN6912	HW 5.0	T-20/5	O-RING 19X2 NBR	OR 5X1N	BLD T20/M7	SW6-SD

HELIFACE

HFAIR/L-4
Adapters for Internal Face Grooving and Turning



Designation	CW	CDX	DAXN(1)	DAXX(2)	WF	OHX(3)	OAL	MIID(4)		
HFAIR/L 34-4T18	4.00	18.00	34.0	40.0	15.30	33.0	67.00	HFPR 4004	SR M5X16 DIN912	HW 4.0
HFAIR/L 40-4T20	4.00	20.00	40.0	48.0	15.30	33.0	67.00	HFPR 4004	SR M5X16 DIN912	HW 4.0
HFAIR/L 48-4T20	4.00	20.00	48.0	60.0	15.30	33.0	67.00	HFPR 4004	SR M5X16 DIN912	HW 4.0
HFAIR/L 60-4T25	4.00	25.00	60.0	75.0	15.30	33.0	67.00	HFPR 4004	SR M5X16 DIN912	HW 4.0

• DGN & GRIP inserts can be used only with right-hand adapters, HGPL inserts with left-hand blades. • For information regarding compatibility with the HATA system, please refer to the additional information provided for each of the intermediate serrated cartridges: IH-HFAIR, IH-TNFPAD, IH-HFPAD

• For user guide, see pages 676-688

(1) Minimum penetration diameter

(2) Maximum penetration diameter

(3) Maximum overhang

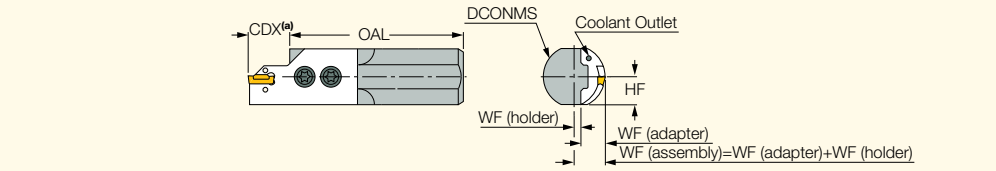
(4) Master insert identification

For inserts, see pages: DGN-MF (541) • GRIP-T (295) • GRIPA (296) • GRIPA (full radius) (296) • HFPR/L (656) • HFPR/L (full radius) (656) • GRIP (294) • GRIP (full radius) (295) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • HGPL (658)

For holders, see pages: C#-HAD (700) • C#-HAPR/L (700) • HAI-C (651) • HAPR/L (645) • HAR/L (645) • IM-HAD (708) • IM-HAPR/L (708)

HELIFACE

HAI-C
Boring Bars with Coolant Holes for Internal Grooving and Turning Adapters



Designation	DCONMS	OAL	HF	WF(1)	CSP(2)			
HAI 20	20.00	130.00	9.0	0.50	0	SR 14-519	T-20/3	
HAI 25C	25.00	150.00	11.5	3.00	1	SR 14-519	T-20/3	PL 25
HAI 32C	32.00	200.00	14.5	6.50	1	SR 14-519	T-20/3	PL 32
HAI 40C	40.00	250.00	18.0	10.50	1	SR 14-519	T-20/3	PL 40

• The HAI boring bars can be used with right and left-hand adapters

• (a) CDX - see corresponding adapters

(1) Holder

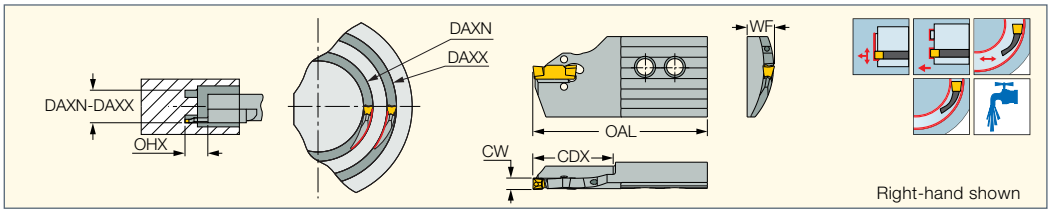
(2) 0 - Without coolant supply, 1 - With coolant supply

For tools, see pages: HFAIR/L-4 (651) • HFAIR/L-DG (652) • HGAIR/L-3 (648)



HELIFACE

HFAIR/L-DG
Adapters for Internal Face Grooving and Turning



Designation	CW	CDX	DAXN(1)	DAXX(2)	WF	OHX(3)	OAL	MIID(4)	
HFAIL 140C-4T30DG	4.00	30.00	140.0	-	10.90	34.5	68.50	DGN 4003C	EDG 33B*
HFAIL 75C-4T30DG	4.00	30.00	75.0	140.0	10.90	34.5	68.50	DGN 4003C	EDG 33B*
HFAIR 140C-4T30DG	4.00	30.00	140.0	-	10.90	34.5	68.50	GRIP 4004Y	
HFAIR 75C-4T30DG	4.00	30.00	75.0	140.0	10.90	34.5	68.50	GRIP 4004Y	
HFAIL 55C-5T25DG	5.00	25.00	55.0	70.0	11.90	32.0	66.00	HFPL 5004	EDG 33B*
HFAIL 70C-5T25DG	5.00	25.00	70.0	95.0	11.90	32.0	66.00	HFPL 5004	EDG 33B*
HFAIR 55C-5T25DG	5.00	25.00	55.0	70.0	11.90	32.0	66.00	GRIP 5005Y	
HFAIR 70C-5T25DG	5.00	25.00	70.0	95.0	11.90	32.0	66.00	GRIP 5005Y	
HFAIL 95C-5T35DG	5.00	35.00	95.0	130.0	11.90	39.5	73.50	HFPL 5004	EDG 33B*
HFAIR 95C-5T35DG	5.00	35.00	95.0	130.0	11.90	39.5	73.50	GRIP 5005Y	
HFAIL 130C-5T38DG	5.00	38.00	130.0	180.0	11.90	42.5	76.50	HFPL 5004	EDG 33B*
HFAIL 180C-5T38DG	5.00	38.00	180.0	-	11.90	42.5	76.50	HFPL 5004	EDG 33B*
HFAIR 130C-5T38DG	5.00	38.00	130.0	180.0	11.90	42.5	76.50	GRIP 5005Y	
HFAIR 180C-5T38DG	5.00	38.00	180.0	-	11.90	42.5	76.50	GRIP 5005Y	
HFAIL 70C-6T28DG	6.00	28.00	70.0	100.0	12.00	35.0	69.00	HFPL 6004	EDG 33B*
HFAIR 70C-6T28DG	6.00	28.00	70.0	100.0	12.00	35.0	69.00	GRIP 6030Y	
HFAIL 100C-6T32DG	6.00	32.00	100.0	180.0	12.00	39.0	73.00	HFPL 6004	EDG 33B*
HFAIR 100C-6T32DG	6.00	32.00	100.0	180.0	12.00	39.0	73.00	GRIP 6030Y	
HFAIL 180C-6T38DG	6.00	38.00	180.0	-	12.40	42.5	76.50	HFPL 6004	EDG 33B*
HFAIR 180C-6T38DG	6.00	38.00	180.0	-	12.40	42.5	76.50	GRIP 6030Y	

- After initial groove, no limitation to widening groove outward or toward center
- DGN & GRIP inserts can be used only on right-hand tools, HFPR/L right-hand inserts on right-hand tools (same for left-hand), and HGPL inserts only on left-hand tools.
- For information regarding compatibility with the HATA system, please refer to the additional information provided for each of the intermediate serrated cartridges: IH-HFAIR
- For user guide, see pages 676-688

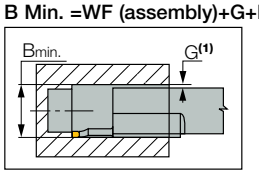
(1) Minimum penetration diameter
(2) Maximum penetration diameter
(3) Maximum overhang
(4) Master insert identification
* Optional, to be ordered separately

For inserts, see pages: DGN-MF (541) • GRIP-T (295) • HFPR/L (656) • HFPR/L (full radius) (656) • GRIP (294) • GRIP (full radius) (295) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGN-W (540) • HGPL (658) • GRIPA (296) • GRIPA (full radius) (296)
For holders, see pages: C#-HAD (700) • C#-HAPR/L (700) • HAI-C (651) • HAPR/L (645) • HAR/L (645) • IH-HFAIR (649) • IM-HAD (708) • IM-HAPR/L (708)

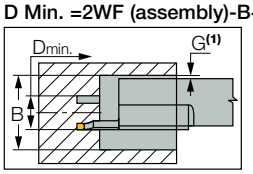
Adapters can be used for internal machining along bore, and can be mounted on standard HAI boring bars for internal machining and HAR/L, HAPR/L holders for external machining.

Boring, Face Grooving and Face Recessing Capacity

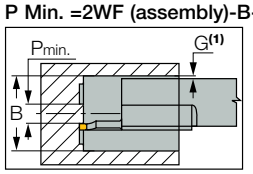
Boring
B Min. =WF (assembly)+G+DCONMS/2



Face Grooving
D Min. =2WF (assembly)-B+2G+DCONMS



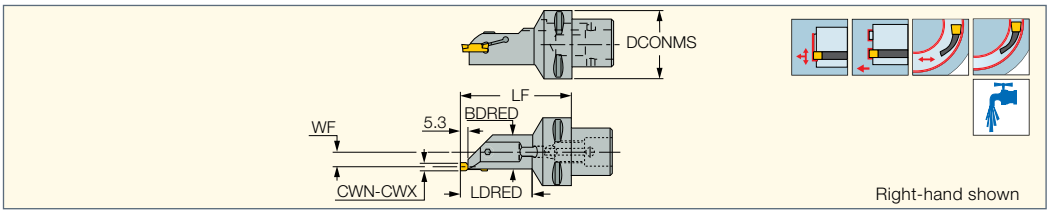
Face Recessing
P Min. =2WF (assembly)-B-2CW+2G+DCONMS



(1) The minimum recommended value for clearance (G) is 0.5 mm
* WF (assembly)=WF(adapter)+WF(holder)

CAMFIX

C#-HFIR/L-MC
Boring Bars for Internal Grooving and Turning with CAMFIX Exchangeable Shanks



Designation	CWN(1)	CWX(2)	DCONMS	WF	LDRED	LF	BDRED	DCP(3)			
C4 HFIR/L-MC	3.00	6.00	40.00	11.30	52.0	80.0	25.00	1	SR M5X16 DIN912	HW 4.0	EZ 83
C5 HFIR-MC	3.00	6.00	50.00	11.30	52.0	80.0	25.00	1	SR M5X16 DIN912	HW 4.0	EZ 83

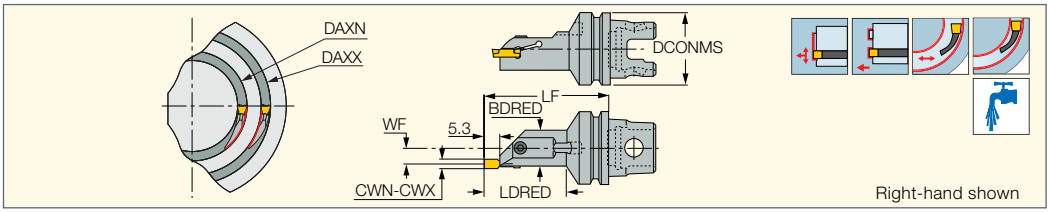
- DGN & GRIP 4.. - 6.. inserts can be used only with right-hand tools, HGPL 4.. - 6.. inserts with left-hand tools
- After initial groove, no limitation to widening groove outward or toward center
- For user guide, see pages 676-688

(1) Minimum cutting width
(2) Maximum cutting width
(3) 1 - Slot for data chip, 0 - Without slot for data chip

For inserts, see pages: DGN-MF (541) • GRIPA (296) • GRIPA (full radius) (296) • HFPR/L (656) • HFPR/L (full radius) (656) • GRIP (294) • GRIP (full radius) (295) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGN-W (540) • HGPL (658)
For holders, see page: HSK-C# (835)

HELIFACE

IM-HFIR-MC
Tools for Internal Grooving and Turning with ISO 26622-1(*) Tapered Shank



Designation	CWN(1)	CWX(2)	WF	LF	BDRED	LDRED	DCONMS	MIID(3)			
IM40 HFIR-MC	3.00	6.00	11.30	80.00	25.00	52.0	40.00	GRIP 4004Y	SR M5X16 DIN912	HW 4.0	EZ 83
IM50 HFIR-MC	3.00	6.00	11.30	80.00	25.00	52.0	50.00	GRIP 4004Y	SR M5X16 DIN912	HW 4.0	EZ 83

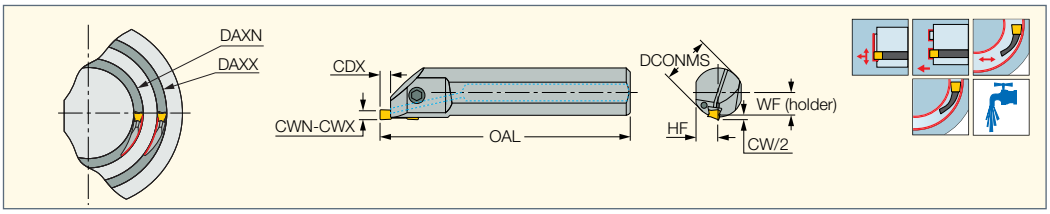
- (*) Tools with orientation holes in the flange groove can be supplied on request
- DGN & GRIP 4.. - 6.. inserts can be used only with right-hand tools, HGPL 4.. - 6.. inserts with left-hand tools
- After initial groove, no limitation to widening groove outward or toward center • For user guide, see pages 676-688

(1) Minimum cutting width
(2) Maximum cutting width
(3) Master insert identification

For inserts, see pages: DGN-MF (541) • GRIPA (296) • GRIPA (full radius) (296) • HFPR/L (656) • HFPR/L (full radius) (656) • GRIP (294) • GRIP (full radius) (295) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGN-W (540)

HELIFACE

HFIR/L-MC
Boring Bars for Internal Grooving and Turning



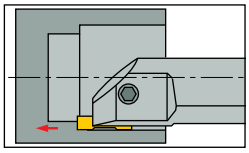
Designation	DCONMS	CWN(1)	CWX(2)	CDX	WF	HF	OAL	MIID(3)			
HFIR/L 16MC	16.00	3.00	6.00	5.00	11.14	7.5	150.00	HFPL 4004	SR M5X16 DIN912	HW 4.0	PL 16
HFIR/L 20MC	20.00	3.00	6.00	5.00	11.14	9.0	170.00	HFPL 4004	SR M5X16 DIN912	HW 4.0	PL 20
HFIR/L 25MC	25.00	3.00	6.00	5.00	11.14	11.5	200.00	HFPL 4004	SR M5X16 DIN912	HW 4.0	PL 25
HFIR/L 32MC	32.00	3.00	6.00	5.00	14.68	14.5	250.00	HFPL 4004	SR M6X20 DIN912	HW 5.0	PL 32
HFIR/L 40MC	40.00	3.00	6.00	5.00	18.70	18.0	300.00	HFPL 4004	SR M6X20 DIN912	HW 5.0	PL 40

- DGN & GRIP 4.. - 6.. inserts can be used only with right-hand tools, HGPL 4.. - 6.. inserts with left-hand tools outward or toward center
- After initial groove, no limitation to widening groove
- For user guide, see pages 676-688

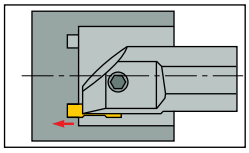
(1) Minimum cutting width
(2) Maximum cutting width
(3) Master insert identification

For inserts, see pages: DGN-MF (541) • DGN-W (540) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • GRIP (294) • GRIP (full radius) (295) • GRIPA (296) • GRIPA (full radius) (296) • HFPR/L (656) • HFPR/L (full radius) (656) • HGPL (658)
For holders, see pages: DT30/2 ##L70WN (860) • DT30/2 ADR-##-20-55 (860) • HSK A63TM ABB (839)

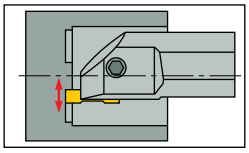
Boring



Internal Face Grooving

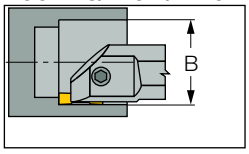


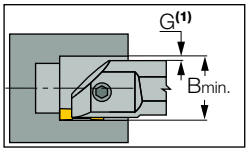
Internal Face Recessing



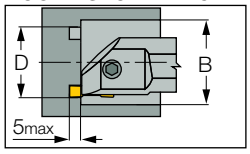
Boring, Face Grooving & Face Recessing Capacity

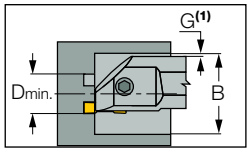
Boring
B Min. =WF(holder)+ DCONMS/2+CW/2+2G



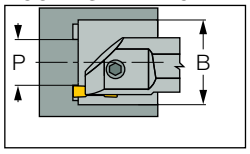


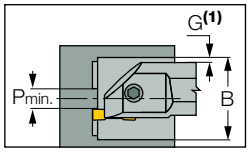
Face Grooving
D Min. =2WF (holder)+ DCONMS+CW-B+2G





Face Recessing
P Min. =2WF (holder)+ DCONMS-W-B+2G





(1) The minimum recommended value for clearance (G) is 0.5 mm

HFIR/L- ☐ MC Integral Boring Bars

For shallow, internal face machining to max. 5 mm depth of groove. One boring bar can be mounted with inserts in 4-6 mm widths.

The initial major diameter groove is limited by the insert's geometry of each size. After the initial groove, face recessing outward or toward center is not limited by the insert's geometry.

Insert Initial Face Grooving Range

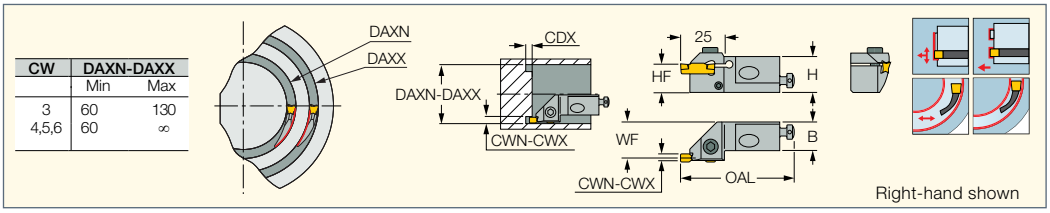
	D	
CW	Min.	Max.
4	23	90
5	21	300
6	20	∞

HELIFACE

CR HFIR-M

Cartridges for Face Grooving and Turning

CW	DAXN-DAXX	
	Min	Max
3	60	130
4,5,6	60	∞



Designation	CWN(1)	CWX(2)	CDX	WF	HF	H	B	OAL	MIID(3)
CR HFIR-16M	3.00	6.00	5.00	20.00	16.0	20.0	16.0	67.00	GRIP 4004Y
CR HFIR-20M	3.00	6.00	5.00	24.00	20.0	24.0	20.0	72.00	GRIP 4004Y

- Used for shallow internal face machining to max. 5 mm depth of groove
- Inserts in 3-6 mm widths can be mounted on the cartridges
- Only DGN & GRIP 4.. - 6.. inserts can be used with the right-hand tools

(1) Minimum cutting width
(2) Maximum cutting width
(3) Master insert identification

For inserts, see pages: DGN-MF (541) • GRIPA (296) • GRIPA (full radius) (296) • HFPR/L (656) • HFPR/L (full radius) (656) • GRIP (294) • GRIP (full radius) (295) • DGN/DGNC/DGNM-C (539) • DGN/DGNM-J/JS/JT (544) • DGN-W (540)

CR-HFIR/L-M

Assembly Dimensions



Designation	E	L1(1)	F(2)	Rmax.	Assembly Screw(3)
CR HFIR/L-16M	25	8	20	6	M8X30
CR HFIR/L-20M	30	10	24	6	M8X30

(1) L adjustment$^{\pm 1}$
(2) F adjustment $^{+0.3}_{-0}$
(3) Assembly screws ISO 7380 are recommended

Spare Parts

Designation					
CR HFIR-16M	SR M5X20DIN912	HW 4.0	SR 76-1401	SR M4X10 DIN916	HW 2.0
CR HFIR-20M	SR M5X20DIN912	HW 4.0	SR 76-1401	SR M4X10 DIN913	HW 2.0

HELIFACE

HFPN

Utility Double-Ended Face Machining Inserts



Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	INSL	IC808	Recommended Machining Data f groove (mm/rev)
HFPN 2002	2.00	0.20	0.040	0.030	19.40	•	0.03-0.10
HFPN 2010	2.00	1.00	0.040	0.030	19.40	•	0.03-0.10

- For cutting speed recommendations and user guide, see pages 676-688

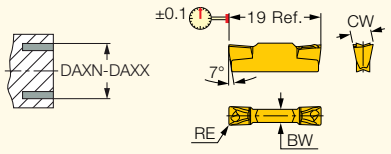
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)

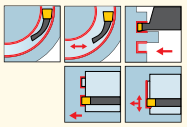
For tools, see pages: HFFA (637) • HFFH (637)

HELIFACE

HFPR/L
Utility Double-Ended Face Machining Inserts







No depth penetration limit

Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	DAXN(2)	DAXX(3)	Tough ↔ Hard IC830	IC354	IC8250	IC808	IC30N	IC9015	IC20	IC5010	IC806	Recommended Machining Data a_p (mm)	f face-groove (mm/rev)	f face-turn (mm/rev)
HFPR/L 3003	3.00	0.30	0.050	0.050	2.10	25.6	51.5	●	●	●	●			●	●	●	0.30-1.50	0.08-0.20	0.10-0.20
HFPL 4004	4.00	0.40	0.050	0.050	2.80	24.1	73.7	●	●	●	●			●	●	●	0.40-2.00	0.10-0.24	0.15-0.25
HFPR 4004	4.00	0.40	0.050	0.050	2.80	24.1	73.7	●	●	●	●	●		●	●	●	0.40-2.50	0.10-0.24	0.15-0.25
HFPR/L 5004	5.00	0.40	0.050	0.050	3.40	22.1	170.0	●	●	●	●		●	●	●	●	0.50-2.50	0.12-0.24	0.15-0.35
HFPR/L 6004	6.00	0.40	0.050	0.050	4.00	20.8	-	●	●	●	●			●	●	●	0.40-3.00	0.12-0.28	0.20-0.40

- For cutting speed recommendations and user guide, see pages 676-688

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

(3) Minimum axial grooving diameter-applies to type M tools only. For other tools, apply the diameter limitations that are recorded on each tool.

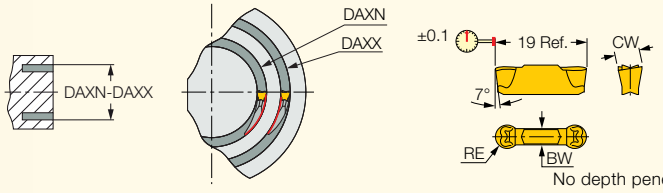
(4) Maximum axial grooving diameter-applies to type M tools only. For other tools, apply the diameter limitations that are recorded on each tool.

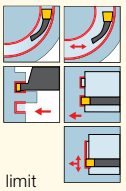
For tools, see pages: C#-HFIR/L-MC (653) • CR HFIR-M (655) • HFAER/L-4 (646) • HFAER/L-5T, 6T (647) • HFAIR/L-4 (651) • HFAIR/L-DG (652) • HFFR/L-T (645) • HFHPR/L-M (648) • HFHR/L-3T (638) • HFHR/L-4T (639) • HFHR/L-5T (640) • HFHR/L-6T (641) • HFHR/L-M (647) • HFIR/L-MC (654) • HFPAD-4 (643) • HFPAD-5 (644) • HFPAD-6 (644) • HFPAD-JHP (642) • IM-HFIR-MC (653)

HELIFACE

HFPR/L (full radius)
Utility Double-Ended Full Radius Face Machining Inserts







No depth penetration limit

Designation	Dimensions CW	CWTOL(1)	RE	BW	DAXN(2)	DAXX(3)	Tough ↔ Hard IC830	IC354	IC8250	IC808	IC9015	IC20	IC5010	IC806	Recommended Machining Data a_p (mm)	f face-groove (mm/rev)	f face-turn (mm/rev)
HFPR/L 3015	3.00	0.050	1.50	2.10	25.6	51.5	●	●	●	●		●	●	●	0.00-1.50	0.08-0.20	0.12-0.20
HFPR/L 4020	4.00	0.050	2.00	2.80	24.1	73.7	●	●	●	●		●	●	●	0.00-2.00	0.10-0.24	0.15-0.25
HFPL 5025	5.00	0.050	2.50	3.40	22.1	170.0	●	●	●	●		●	●	●	0.00-2.50	0.12-0.24	0.15-0.35
HFPR 5025	5.00	0.050	2.50	3.40	22.1	170.0	●	●		●	●	●	●	●	0.00-2.50	0.12-0.24	0.15-0.35
HFPR/L 6030	6.00	0.050	3.00	4.00	20.8	-	●	●	●	●		●	●	●	0.00-3.00	0.12-0.28	0.20-0.40

- For cutting speed recommendations and user guide, see pages 676-688

(1) Cutting width tolerance (+/-)

(2) Minimum axial grooving diameter-applies to type M tools only. For other tools, apply the diameter limitations that are recorded on each tool.

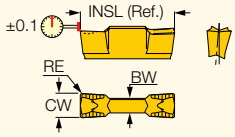
(3) Maximum axial grooving diameter-applies to type M tools only. For other tools, apply the diameter limitations that are recorded on each tool.

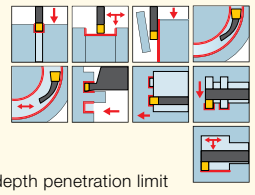
For tools, see pages: C#-HFIR/L-MC (653) • CR HFIR-M (655) • HFAER/L-4 (646) • HFAER/L-5T, 6T (647) • HFAIR/L-4 (651) • HFAIR/L-DG (652) • HFFR/L-T (645) • HFHPR/L-M (648) • HFHR/L-3T (638) • HFHR/L-4T (639) • HFHR/L-5T (640) • HFHR/L-6T (641) • HFHR/L-M (647) • HFIR/L-MC (654) • HFPAD-5 (644) • HFPAD-6 (644) • HFPAD-JHP (642) • IM-HFIR-MC (653)

HELI-GRIP

GRIP
Utility Double-Ended Inserts for External, Internal and Face Machining







No depth penetration limit

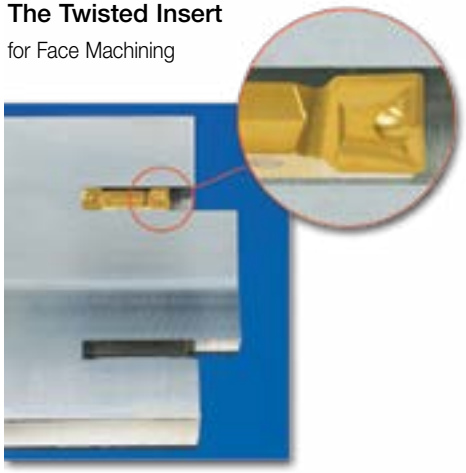
Designation	Dimensions						Tough ↔ Hard										Recommended Machining Data		
	CW	CWTOL[1]	RE	RETOL[2]	INSL	BW	IC830	IC8250	IC08	IC808	IC908	IC418	IC5010	IC806	IC807	IC804	a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GRIP 3002Y	3.00	0.050	0.20	0.050	15.80	2.30	●	●	●	●	●			●	●	●	0.25-1.80	0.14-0.18	0.07-0.11
GRIP 3003Y	3.00	0.050	0.30	0.050	15.80	2.30	●	●	●	●	●	●	●	●			0.40-1.80	0.15-0.19	0.07-0.11
GRIP 318-040Y	3.18	0.050	0.40	0.050	15.80	2.30	●			●	●	●		●			0.50-1.90	0.17-0.22	0.07-0.12
GRIP 4002Y	4.00	0.050	0.20	0.050	19.00	2.80	●	●	●	●	●			●	●		0.25-2.40	0.16-0.21	0.09-0.14
GRIP 4004Y	4.00	0.050	0.40	0.050	19.00	2.80	●	●	●	●	●	●	●	●	●	●	0.50-2.40	0.18-0.24	0.09-0.15
GRIP 476-080Y	4.76	0.050	0.80	0.050	19.00	3.10	●	●		●	●	●		●			1.00-2.80	0.21-0.33	0.10-0.20
GRIP 5005Y	5.00	0.050	0.50	0.050	19.00	3.30	●	●	●	●	●	●	●	●	●	●	0.60-3.00	0.20-0.30	0.11-0.20
GRIP 5008Y	5.00	0.050	0.80	0.050	19.00	3.40	●	●		●	●	●	●	●	●		1.00-3.00	0.23-0.35	0.11-0.21
GRIP 6005Y	6.00	0.050	0.50	0.050	19.00	4.20	●	●		●	●	●	●	●	●		0.60-3.60	0.22-0.36	0.13-0.23
GRIP 6008Y	6.00	0.050	0.80	0.050	19.00	4.20	●	●		●	●	●	●	●	●		1.00-3.60	0.24-0.42	0.13-0.25
GRIP 635-080Y	6.35	0.050	0.80	0.050	19.00	4.20		●		●	●	●		●			1.00-3.80	0.25-0.44	0.14-0.27

• For cutting speed recommendations and user guide, see pages 676-688
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)

For tools, see pages: C#-HELIR/L (289) • C#-HFIR/L-MC (653) • CR HFIR-M (655) • D/HGAD RE/LE-JHP (561) • DGAD/HGAD (537) • DGFH (293) • DGFH-JHP (294) • DGFS (527) • DGTR/L (534) • HELIIR/L (397) • HELIR/L (290) • HFAER/L-4 (646) • HFAER/L-5T, 6T (647) • HFAIR/L-4 (651) • HFAIR/L-DG (652) • HFFR/L-T (645) • HFHR/L-4T (639) • HFHR/L-5T (640) • HFHR/L-6T (641) • HFIR/L-MC (654) • HFPAD-3 (643) • HFPAD-4 (643) • HFPAD-5 (644) • HFPAD-6 (644) • HFPAD-JHP (642) • HGAER/L-3 (646) • HGAIR/L-3 (648) • HGFH (292) • HGHR/L-3 (638) • HGPAD (291) • HGPAD-JHP (291) • IM-HFIR-MC (653)

The Twisted Insert

for Face Machining



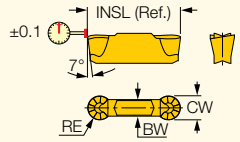
The double-ended, twisted insert body makes it possible to machine deeper than the insert's length.
A unique chipformer for controlled chip flow in axial and radial directions.
The rear angle is slanted in relation to the frontal edge so it does not come into contact with the machined groove surface as the tool penetrates deeply into the workpiece.

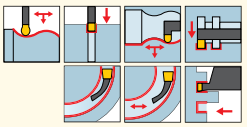


HELIGRIP

GRIP (full radius)
Utility Double-Ended Full Radius Inserts for External, Internal and Face Machining







No depth penetration limit

Designation	Dimensions CW	RE	CWTOL(1)	INSL	BW	Tough ↔ Hard IC830	IC8250	IC08	IC808	IC908	IC418	IC5010	IC806	IC807	IC804	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)	f face-groove (mm/rev)	f face-turn (mm/rev)
GRIP 3015Y	3.00	1.50	0.050	15.80	2.10	●	●	●	●	●	●	●	●	●	●	0.00-1.50	0.18-0.26	0.07-0.13	0.08-0.20	0.10-0.20
GRIP 318-159Y	3.18	1.59	0.050	15.80	2.30				●	●			●			0.00-1.50	0.19-0.28	0.07-0.13	0.08-0.20	0.10-0.20
GRIP 4020Y	4.00	2.00	0.050	19.00	2.80	●	●	●	●	●	●	●	●	●	●	0.00-2.00	0.20-0.34	0.09-0.17	0.10-0.24	0.15-0.30
GRIP 476-238Y	4.76	2.38	0.050	19.00	3.20				●	●	●		●			0.00-2.30	0.21-0.40	0.10-0.20	0.10-0.24	0.15-0.30
GRIP 5025Y	5.00	2.50	0.050	19.00	3.40	●	●		●	●	●		●	●	●	0.00-2.50	0.23-0.42	0.11-0.21	0.12-0.24	0.15-0.35
GRIP 6030Y	6.00	3.00	0.050	19.00	4.20	●	●	●	●	●	●	●	●	●		0.00-3.00	0.24-0.50	0.13-0.25	0.12-0.28	0.15-0.40
GRIP 635-318Y	6.35	3.18	0.050	19.00	4.00				●	●			●			0.00-3.10	0.25-0.53	0.14-0.27	0.12-0.28	0.15-0.40

• For cutting speed recommendations and user guide, see pages 676-688
(1) Cutting width tolerance (+/-)

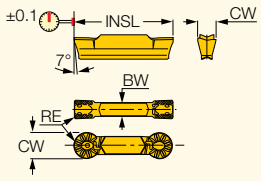
For tools, see pages: C#-HELIR/L (289) • C#-HFIR/L-MC (653) • CR HFIR-M (655) • D/HGAD RE/LE-JHP (561) • DGAD/HGAD (537) • DGFH (293) • DGFH-JHP (294) • DGFS (527) • DGTR/L (534) • HELIIR/L (397) • HELIR/L (290) • HFAER/L-4 (646) • HFAER/L-5T, 6T (647) • HFAIR/L-4 (651) • HFAIR/L-DG (652) • HFFR/L-T (645) • HFHR/L-4T (639) • HFHR/L-5T (640) • HFHR/L-6T (641) • HFIR/L-MC (654) • HFPAD-3 (643) • HFPAD-4 (643) • HFPAD-5 (644) • HFPAD-6 (644) • HFPAD-JHP (642) • HGAER/L-3 (646) • HGAIR/L-3 (648) • HGFH (292) • HGHR/L-3 (638) • HGPAD (291) • HGPAD-JHP (291) • IM-HFIR-MC (653)

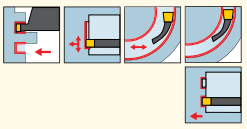
HELIGRIP

HGPL
Utility Double-Ended Inserts for Face Machining









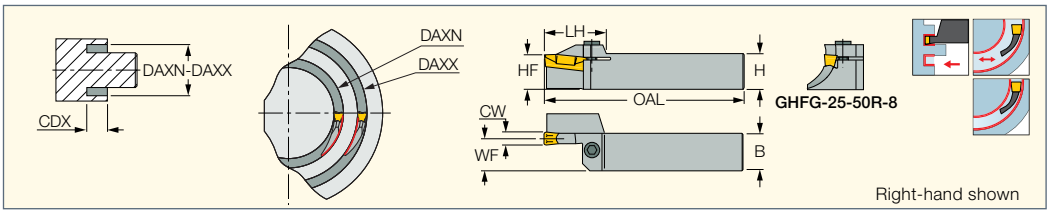
Designation	Dimensions CW	BW	RE	CWTOL(1)	RETOL(2)	INSL	Tough ↔ Hard IC328	IC354	IC08	IC808	IC908	IC806	Recommended Machining Data a_p (mm)	f face-groove (mm/rev)	f face-turn (mm/rev)
HGPL 3015Y	3.00	2.10	1.50	0.030	0.050	16.00				●	●		0.00-1.50	0.08-0.20	0.12-0.23
HGPL 3002Y	3.00	2.30	0.20	0.030	0.050	16.00		●	●	●	●		0.24-1.80	0.08-0.20	0.12-0.23
HGPL 3003Y	3.00	2.30	0.30	0.030	0.050	16.00	●	●	●	●	●		0.36-1.80	0.08-0.20	0.12-0.23
HGPL 4002Y	4.00	2.80	0.20	0.030	0.050	19.00		●	●	●	●		0.24-2.40	0.10-0.24	0.16-0.30
HGPL 4004Y	4.00	2.80	0.40	0.030	0.050	19.00		●	●	●	●		0.48-2.40	0.10-0.24	0.16-0.30
HGPL 4020Y	4.00	2.80	2.00	0.030	0.050	19.00			●	●	●		0.00-2.00	0.10-0.24	0.16-0.30
HGPL 5005Y	5.00	3.30	0.50	0.030	0.050	19.00		●		●	●		0.60-3.00	0.12-0.24	0.20-0.38
HGPL 5025Y	5.00	3.30	2.50	0.030	0.050	19.00			●	●	●		0.00-2.50	0.12-0.24	0.20-0.38
HGPL 6005Y	6.00	4.20	0.50	0.030	0.050	19.00		●		●	●	●	0.60-3.60	0.12-0.28	0.24-0.45
HGPL 6030Y	6.00	4.20	3.00	0.030	0.050	19.00			●	●	●		0.00-3.00	0.12-0.28	0.24-0.45

• No depth penetration limit • For cutting speed recommendations and user guide, see pages 676-688
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)

For tools, see pages: C#-HFIR/L-MC (653) • HFAER/L-4 (646) • HFAER/L-5T, 6T (647) • HFAIR/L-4 (651) • HFAIR/L-DG (652) • HFFR/L-T (645) • HFHR/L-4T (639) • HFHR/L-5T (640) • HFHR/L-6T (641) • HFIR/L-MC (654) • HFPAD-3 (643) • HFPAD-4 (643) • HFPAD-5 (644) • HFPAD-6 (644) • HFPAD-JHP (642) • HGAER/L-3 (646) • HGAIR/L-3 (648) • HGHR/L-3 (638)

CUTGRIP

GHFG-R/L-8
Holders for Face Grooving and Turning Along Shafts



Designation	CW	CDX	DAXN(1)	DAXX(2)	WF	HF	H	B	OAL	LH	MIID(3)		
GHFG 25-50R/L-8	8.00	25.00	50.0	64.0	22.00	25.0	25.0	25.0	150.00	41.0	GDMY 808	SR M6X20 DIN912	HW 5.0
GHFG 25-63R/L-8	8.00	25.00	63.0	82.0	22.00	25.0	25.0	25.0	150.00	41.0	GDMY 808	SR M6X20 DIN912	HW 5.0
GHFG 32-63R-8	8.00	25.00	63.0	82.0	30.00	32.0	32.0	32.0	170.00	41.0	GDMY 808	SR M6X20 DIN912	HW 5.0

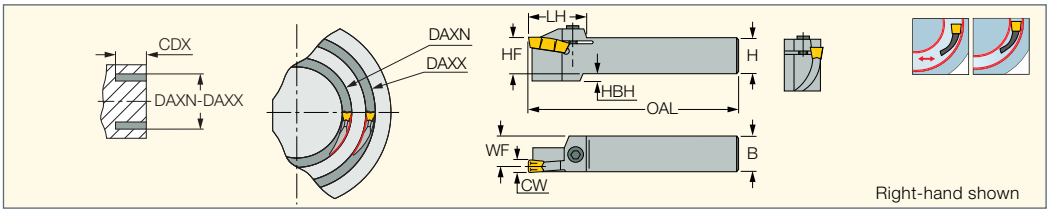
- For user guide, see pages 681-688

(1) Minimum penetration diameter
(2) Maximum penetration diameter
(3) Master insert identification

For inserts, see pages: GDMF (317) • GDMM-CC (664) • GDMN (319) • GDMT (317) • GDMU (319) • GDMY (318) • GDMY (full radius) (320) • GDMY-F (321) • GIA-K (long pocket) (330) • GIF (long pocket) (328) • GIF-E (W=8,10 full radius) (324) • GIF-E (W=8,10) (322) • GIFG-E (W=8) (661)

CUTGRIP

GHFGR/L-8
Holders for Face Grooving and Turning



Designation	CW	CDX	DAXN(1)	DAXX(2)	WF	HF	H	B	OAL	LH	HBH	MIID(3)		
GHFGR/L 25-80-8	8.00	23.00	80.0	115.0	21.30	25.0	25.0	25.0	150.00	43.5	6.0	GIF 8.00E-0.80	SR M6X20 DIN912	HW 5.0
GHFGR/L 32-80-8	8.00	23.00	80.0	115.0	28.30	32.0	32.0	32.0	170.00	43.5	-	GIF 8.00E-0.80	SR M6X20 DIN912	HW 5.0
GHFGR/L 25-105-8	8.00	25.00	105.0	160.0	21.30	25.0	25.0	25.0	150.00	43.5	6.0	GIF 8.00E-0.80	SR M6X20 DIN912	HW 5.0
GHFGR/L 25-155-8	8.00	25.00	155.0	510.0	21.30	25.0	25.0	25.0	150.00	43.5	6.0	GIF 8.00E-0.80	SR M6X20 DIN912	HW 5.0
GHFGR/L 32-105-8	8.00	25.00	105.0	160.0	28.30	32.0	32.0	32.0	170.00	43.5	-	GIF 8.00E-0.80	SR M6X20 DIN912	HW 5.0
GHFGR/L 32-155-8	8.00	25.00	155.0	510.0	28.30	32.0	32.0	32.0	170.00	43.5	-	GIF 8.00E-0.80	SR M6X20 DIN912	HW 5.0

- No limitation to widening the groove either way after initial grooving • CDX depends on the penetration diameter and the insert
- For user guide, see pages 681-688

(1) Minimum penetration diameter
(2) Maximum penetration diameter
(3) Master insert identification

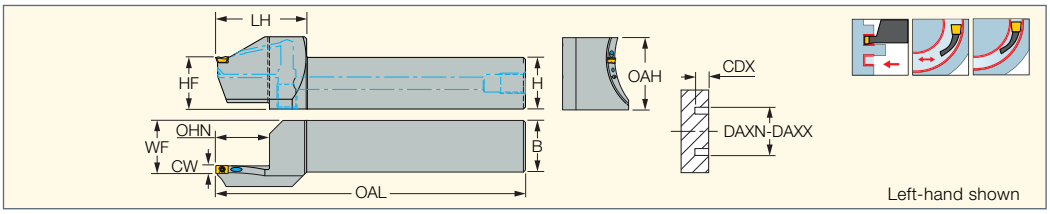
For inserts, see pages: GDMF (317) • GDMM-CC (664) • GDMN (319) • GDMT (317) • GDMU (319) • GDMY (318) • GDMY (full radius) (320) • GDMY-F (321) • GIA-K (long pocket) (330) • GIF (long pocket) (328) • GIF-E (W=8,10 full radius) (324) • GIF-E (W=8,10) (322) • GIFG-E (W=8) (661) • GIPA/GIDA 8 (full radius) (334)

CDX for GHFGR/L (25/32)-80-8							
D	GIF 8...	GIFG 8...	GDMY 8...	GIPA 8...	GIDA 8...	GIA 8...	GDMM 8CC...
80	16	23	23	20	24	16	24
82	17	23	23	20	24	17	24
84	18	23	23	21	24	18	24
86	19	23	23	21	24	19	24
88	20	23	23	22	24	20	24
90	20	23	23	22	24	20	24
96	20	23	23	22	24	20	24
104	20	23	23	22	24	20	24
115	22	23	23	22	24	22	24
CDX for GHFGR/L (25/32)-105-8							
D	GIF 8...	GIFG 8...	GDMY 8...	GIPA 8...	GIDA 8...	GIA 8...	GDMM 8CC...
105	21	23	23	23	24	21	24
114	22	23	23	23	24	22	24
126	23	23	24	23	24	23	24
140-160	24	24	24	23	24	24	24
CDX for GHFGR/L (25/32)-155-8							
D	GIF 8...	GIFG 8...	GDMY 8...	GIPA 8...	GIDA 8...	GIA 8...	GDMM 8CC...
155	24	24	24	23	24	24	24
180	24	24	24	23	24	24	24
210-510	24	24	24	23	24	24	24

NEOFACE FACE GROOVING

GFHR/L-JHP

Integral Holders for Face Grooving with JHP Cooling Holes



Designation	CW	OHN(1)	H	HF	B	OAL	WF	LH	OAH	DAXN(2)	DAXX(3)	CDX	MIID(4)
GFHL 25-60-4T25JHP	4.00	26.0	25.0	25.0	25.0	150.00	25.79	44.0	35.00	60.0	75.0	25.00	GFCG 4...

- For user guide, see pages 681-688

(1) Minimum overhang
(2) Minimum axial grooving diameter
(3) Maximum axial grooving diameter
(4) Master insert identification

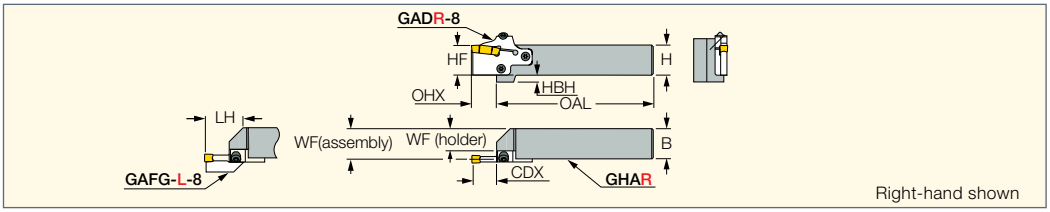
Spare Parts

Designation			
GFHR/L-JHP	SR 34-533	PLG G1/8 TL360	T-6/5

CUTGRIP

GHAR/L-8

External Holders for Grooving and Turning Adapters



Designation	H	HF	B	WF(1)	OAL	LF	LH	OHX(2)	HBH	TGA(3)	CDX(4)	FG(5)				
GHAR/L 25-8	25.0	25.0	25.0	16.0	124.50	109.50	45.0	25.50	14.0	GADR/L 8	25.50	GAFG...R/L-8	SR 14-519	T-20/5	SR M6X25DIN912	HW 5.0
GHAR/L 32-8	32.0	32.0	32.0	23.0	144.50	129.50	45.0	25.50	7.0	GADR/L 8	25.50	GAFG...R/L-8	SR 14-519	T-20/5	SR M6X25DIN912	HW 5.0

- Adapters GADR/L-8 for turning and grooving, GAFG-R/L-8 for face-grooving (to be ordered separately)

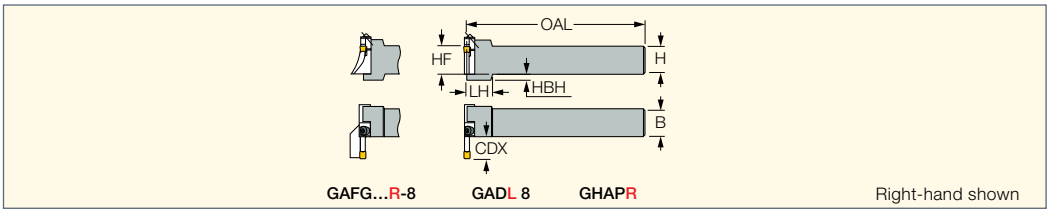
(1) WF(holder)
(2) Maximum overhang
(3) Adapter for Turning & Grooving
(4) See specific adapter dimensions
(5) Adapter for Face Grooving

For tools, see pages: GADR/L-8 (314) • GAFG-R/L-8 (661) • PCADR/L 34N-RE (354)

CUTGRIP

GHAPR/L-8

External Holders for Grooving and Turning With Perpendicularly Oriented Adapters



Designation	H	HF	B	OAL	LH	HBH	TGA(1)	CDX(2)	FG(3)				
GHAPR/L 32-8	32.0	32.0	32.0	155.00	30.0	7.0	GADR/L 8	25.50	GAFG...R/L-8	SR 14-519	T-20/5	SR M6X25DIN912	HW 5.0

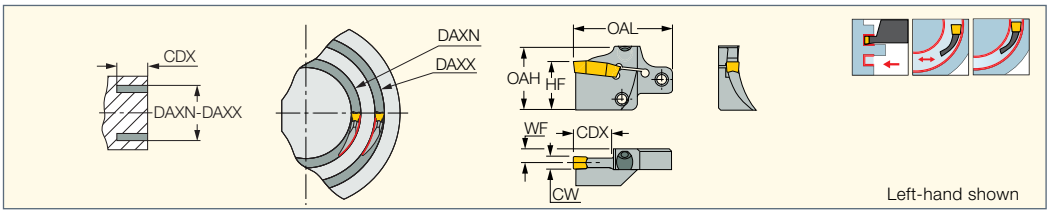
- Adapters GADR/L-8 for turning and grooving, GAFG-R/L-8 for face-grooving (to be ordered separately)

(1) Adapter for Turning & Grooving
(2) See specific adapter dimensions
(3) Adapter for Face Grooving

For tools, see pages: GADR/L-8 (314) • GAFG-R/L-8 (661) • PCADR/L 34N-RE (354)

CUTGRIP

GAFG-R/L-8
Adapters for Face Machining



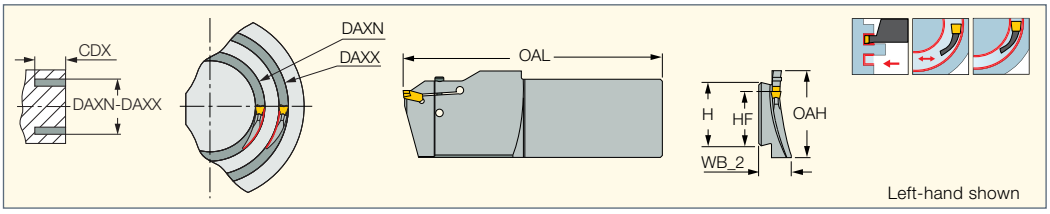
Designation	CW	CDX[1]	DAXN[2]	DAXX[3]	WF	HF	OAH	OAL	MIID[4]
GAFG 80R/L-8	8.00	23.00	80.0	115.0	9.00	32.0	42.00	63.50	GIF 8.00E-0.80
GAFG 105R/L-8	8.00	25.00	105.0	160.0	9.00	32.0	42.00	63.50	GIF 8.00E-0.80
GAFG 155R/L-8	8.00	25.00	155.0	510.0	9.00	32.0	42.00	63.50	GIF 8.00E-0.80

• No limitation for widening the groove either way after initial grooving • For user guide, see pages 681-688
[1] For GIFG-8 & GDMY-8 CDX=25 mm for DAX range
[2] Minimum penetration diameter
[3] Maximum penetration diameter
[4] Master insert identification

For inserts, see pages: GDMA (332) • GDMF (317) • GDMM-CC (664) • GDMN (319) • GDMT (317) • GDMU (319) • GDMY (318) • GDMY (full radius) (320) • GDMY-F (321) • GIA-K (long pocket) (330) • GIF (long pocket) (328) • GIF-E (W=8,10 full radius) (324) • GIF-E (W=8,10) (322) • GIFG-E (W=8) (661) • GIPA/GIDA 8 (full radius) (334)
For holders, see pages: C#-GHAD-8 (699) • C#-GHAPR/L-8 (700) • GHAPR/L-8 (314) • GHAR/L-8 (314) • IM-GHAD-8 (708)

CUTGRIP

CGFG 51-P8
Blades for Face Machining
Carrying 8 mm Inserts



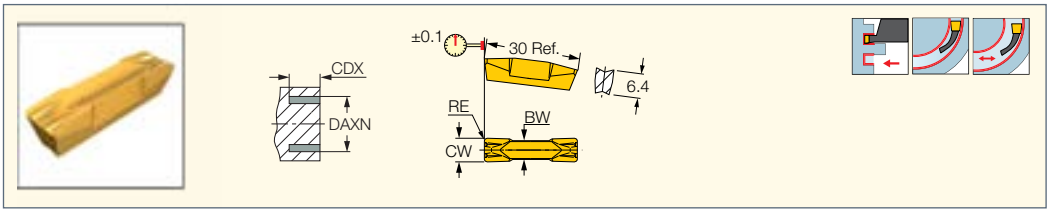
Designation	CW	CDX	DAXN[1]	DAXX[2]	WB_2	HF	H	OAH	OAL	MIID[3]		
CGFG 51-180R/L-P8	8.00	70.00	180.0	240.0	27.5	45.0	52.6	60.00	200.00	GIMY 808	SR M4-2052	HW 3.0
CGFG 51-240R/L-P8	8.00	80.00	240.0	320.0	26.0	45.0	52.6	70.00	210.00	GIMY 808	SR M4-2052	HW 3.0
CGFG 51-320R/L-P8	8.00	90.00	320.0	440.0	24.5	45.0	52.6	80.00	220.00	GIMY 808	SR M4-2052	HW 3.0
CGFG 51-440R/L-P8	8.00	100.00	440.0	700.0	22.5	45.0	52.6	90.00	230.00	GIMY 808	SR M4-2052	HW 3.0
CGFG 51-700R/L-P8	8.00	120.00	700.0	1500.0	20.0	45.0	52.6	100.00	250.00	GIMY 808	SR M4-2052	HW 3.0

• For user guide, see pages 681-688
[1] Minimum penetration diameter
[2] Maximum penetration diameter
[3] Master insert identification

For inserts, see pages: GIMF (317) • GIMM 8CC (664) • GIMT (316) • GIMY (318) • GIMY (full radius) (320) • GIMY-F (321) • GIPY (331)
For holders, see pages: SGTBK (691) • SGTBU/SGTBN (690)

CUTGRIP

GIFG-E (W=8)
Inserts for Deep Face
Grooving and Turning



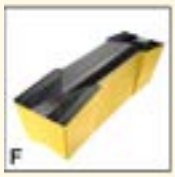
Designation	Dimensions CW	RE	CWTOL[1]	RETOL[2]	DAXN[3]	CDX[4]	BW	Tough ↔ Hard IC635	IC20	Recommended Machining Data f face-groove (mm/rev)
GIFG 8.00E-0.80	8.00	0.80	0.020	0.050	50.0	25.00	6.00	•	•	0.15-0.25
GIFG 8.00E-1.20	8.00	1.20	0.020	0.050	50.0	25.00	6.00	•		0.15-0.25

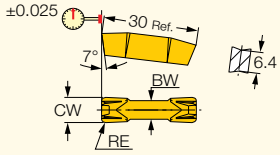
• For cutting speed recommendations, see pages 676-688
[1] Cutting width tolerance (+/-)
[2] Corner radius tolerance (+/-)
[3] Minimum axial grooving diameter
[4] Cutting depth maximum

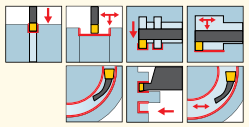
For tools, see pages: GAFG-R/L-8 (661) • GHFG-R/L-8 (659) • GHFGR/L-8 (659)

CUTGRIP

GIF-E (W=8,10)
Precision Double-Ended Inserts for Grooving and Turning







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	CDX(3)	Tough ↔ Hard IC830	IC8250	IC808	IC908	IC20	IC5010	IC428	IC806	IC807	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIF 8.00E-0.40	8.00	0.40	0.020	0.030	6.00	27.00		●	●	●						0.50-4.80	0.29-0.48	0.18-0.31
GIF 8.00E-0.80	8.00	0.80	0.020	0.050	6.00	27.00	●	●	●	●	●	●	●	●	●	1.00-4.80	0.32-0.56	0.18-0.34
GIF 8.00E-1.20	8.00	1.20	0.020	0.050	6.00	27.00	●	●	●	●	●	●	●			1.45-4.80	0.32-0.62	0.18-0.34
GIF 10.00E-0.80	10.00	0.80	0.020	0.050	8.00	27.00	●	●	●	●	●	●	●		●	1.00-6.00	0.35-0.65	0.22-0.40
GIF 10.00E-1.20	10.00	1.20	0.020	0.050	8.00	27.00	●	●	●	●	●			●		1.45-6.00	0.35-0.72	0.22-0.40

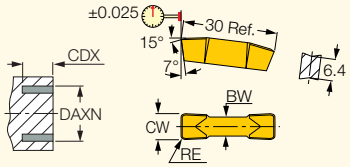
• DMIN for internal machining = 65 mm • For cutting speed recommendations and user guide, see pages 676-688
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

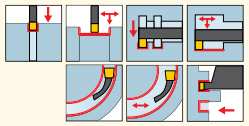
For tools, see pages: C#-GHDR/L (301) • CGHN-8-10D (315) • GADR/L-8 (314) • GADR/L-JHP (315) • GAFG-R/L-8 (661) • GHDR/L (long pocket) (313) • GHDR/L-JHP (long pocket) (313) • GHFG-R/L-8 (659) • GHFGR/L-8 (659) • GHIR/L (W=7.0-8.3) (398)

CUTGRIP

GIA-K (long pocket)
Flat Top Precision Double-Ended Inserts with T-Land for Machining Cast Iron







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	CDX(3)	DAXN(4)	Tough ↔ Hard IC5010	IC428	Recommended Machining Data a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GIA 8.00K-0.80	8.00	0.80	0.020	0.050	6.00	25.00	160.0	●	●	1.00-4.80	0.36-0.64	0.18-0.38
GIA 8.00K-1.20	8.00	1.20	0.020	0.050	6.00	25.00	160.0	●	●	1.45-4.80	0.36-0.70	0.18-0.38

• DMIN for internal machining = 65 mm • For cutting speed recommendations and user guide, see pages 676-688
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum
(4) Minimum axial grooving diameter

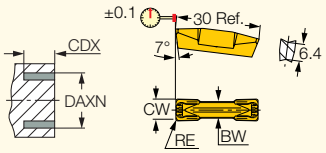
For tools, see pages: C#-GHDR/L (301) • CGHN-8-10D (315) • GADR/L-8 (314) • GADR/L-JHP (315) • GAFG-R/L-8 (661) • GHDR/L (long pocket) (313) • GHDR/L-JHP (long pocket) (313) • GHFG-R/L-8 (659) • GHFGR/L-8 (659) • GHIR/L (W=7.0-8.3) (398)

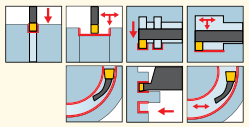
CUTGRIP

GDMY

Utility Double-Ended Inserts
for Grooving and Turning







Designation	Dimensions							Tough ↔ Hard							Recommended Machining Data		
	CW	RE	CWTOL(1)	RETOL(2)	BW	DAXN(3)	CDX(4)	IC830	IC8250	IC808	IC908	IC20	IC5010	IC428	a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GDMY 808	8.00	0.80	0.050	0.050	6.00	50.0	27.00	●	●	●	●	●	●	●	1.00-4.80	0.32-0.56	0.18-0.34

• DMIN for internal machining = 65 mm • For cutting speed recommendations and user guide, see pages 676-688

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

(3) Minimum axial grooving diameter

(4) Cutting depth maximum

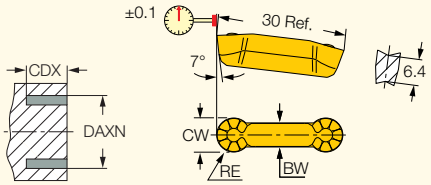
For tools, see pages: C#-GHDR/L (301) • CGHN-8-10D (315) • GADR/L-8 (314) • GADR/L-JHP (315) • GAFG-R/L-8 (661) • GHDR/L (long pocket) (313) • GHDR/L-JHP (long pocket) (313) • GHFG-R/L-8 (659) • GHFGR/L-8 (659) • GHIR/L (W=7.0-8.3) (398)

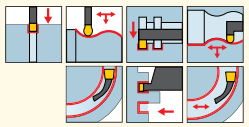
CUTGRIP

GDMY (full radius)

Utility Double-Ended Full Radius
Inserts for Grooving and Profiling







Designation	Dimensions							Tough ↔ Hard								Recommended Machining Data		
	CW	RE	CWTOL(1)	RETOL(2)	BW	DAXN(3)	CDX	IC830	IC8250	IC808	IC908	IC20	IC5010	IC428	IC806	a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GDMY 840	8.00	4.00	0.050	0.050	5.60	50.0	25.00	●	●	●	●	●	●	●	●	0.00-4.00	0.32-0.67	0.18-0.34

• Can cut arcs to 250° • DMIN for internal machining = 65 mm • For cutting speed recommendations and user guide, see pages 676-688

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

(3) Minimum axial grooving diameter

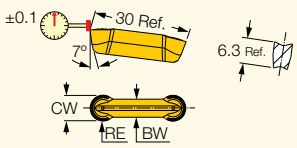
For tools, see pages: C#-GHDR/L (301) • CGHN-8-10D (315) • GADR/L-8 (314) • GADR/L-JHP (315) • GAFG-R/L-8 (661) • GHDKR/L (503) • GHDR/L (long pocket) (313) • GHDR/L-JHP (long pocket) (313) • GHFG-R/L-8 (659) • GHFGR/L-8 (659) • GHIR/L (W=7.0-8.3) (398)

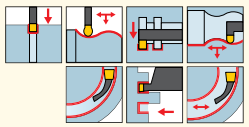
CUTGRIP

GDMY-F

Utility Double-Ended Inserts
for Grooving and Profiling
Ductile Materials







Designation	Dimensions						Tough ↔ Hard		Recommended Machining Data		
	CW	RE	CWTOL(1)	RETOL(2)	BW	CDX(3)	IC808	IC908	a_p (mm)	f turn (mm/rev)	f groove (mm/rev)
GDMY 840F	8.00	4.00	0.050	0.050	5.60	25.00	●	●	0.00-4.00	0.32-0.67	0.18-0.34

• DMIN for internal applications = 65 mm • For cutting speed recommendations and user guide, see pages 676-688

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

(3) Cutting depth maximum

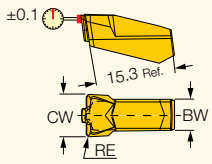
For tools, see pages: C#-GHDR/L (301) • CGHN-8-10D (315) • GADR/L-8 (314) • GADR/L-JHP (315) • GAFG-R/L-8 (661) • GHDR/L (long pocket) (313) • GHDR/L-JHP (long pocket) (313) • GHFG-R/L-8 (659) • GHFGR/L-8 (659) • GHIR/L (W=7.0-8.3) (398)

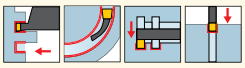
CUTGRIP

GIMM 8CC

Single-Ended Utility Insert with a Front Chip Splitter for External Rough Grooving and Side Turning







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	Tough ↔ Hard IC808	IC908	Recommended Machining Data f face-groove (mm/rev)
GIMM 8CC	8.00	0.80	0.050	0.050	5.80	•	•	0.30-0.45

- For cutting speed recommendations, see pages 676-688

(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

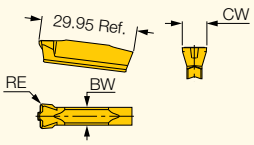
For tools, see pages: Anti-Vibration Blades (312) • CGFG 51-P8 (661) • CGHN-P8 (311) • CGHR/L-P8DG (311) • CGPAD (308) • GHDR/L (short pocket) (302) • GHDR/L-JHP (short pocket) (303) • GHDR/L-JHP-MC (short pocket) (304) • GHGR/L (305)

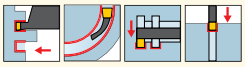
CUTGRIP

GDMM-CC

Single-Ended Utility Insert for External Rough Grooving and Side Turning with a Front Chip Splitter







Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	BW	Tough ↔ Hard IC830	IC354	IC808	IC907	Recommended Machining Data f face-groove (mm/rev)
GDMM 7CC	7.00	0.80	0.050	0.050	6.00		•			0.30-0.45
GDMM 8CC	8.00	0.80	0.050	0.050	5.60	•		•	•	0.30-0.45

- For cutting speed recommendations, see pages 676-688

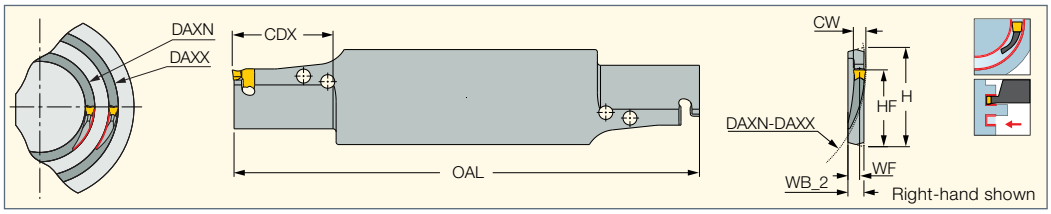
(1) Cutting width tolerance (+/-)

(2) Corner radius tolerance (+/-)

For tools, see pages: C#-GHDR/L (301) • GADR/L-8 (314) • GADR/L-JHP (315) • GAFG-R/L-8 (661) • GHDR/L (long pocket) (313) • GHDR/L-JHP (long pocket) (313) • GHFG-R/L-8 (659) • GHFGR/L-8 (659) • GHIR/L (W=7.0-8.3) (398)

TANG-GRIP FACE MACHINING LINE

TNFFH-IQ
Face Grooving Blades



Designation	CW	CDX	DAXN(1)	DAXX(2)	WF	WB_2	HF	H	OAL	MIID(3)	Insert	
TNFFH 65R/L-3IQ	3.00	18.00	65.0	90.0	4.10	5.2	24.8	32.0	150.00	TNF 3M-IQ	TNF 3...	ETF 3-6*
TNFFH 90R/L-3IQ	3.00	18.00	90.0	120.0	4.10	5.2	24.8	32.0	150.00	TNF 3M-IQ	TNF 3...	ETF 3-6*
TNFFH 120R/L-3IQ	3.00	24.00	120.0	160.0	4.10	5.2	24.8	32.0	150.00	TNF 3M-IQ	TNF 3...	ETF 3-6*
TNFFH 150R/L-4IQ	4.00	32.00	150.0	500.0	3.80	5.2	24.8	32.0	150.00	TNF 4GN-IQ	TNF 4...	ETF 3-6*
TNFFH 80R/L-4IQ	4.00	32.00	80.0	150.0	3.80	5.2	24.8	32.0	150.00	TNF 4GN-IQ	TNF 4...	ETF 3-6*
TNFFH 80R/L-5IQ	5.00	30.00	80.0	150.0	3.50	5.2	24.8	32.0	150.00	TNF 5P-IQ	TNF 5...	ETF 3-6*
TNFFH 150R/L-5IQ	5.00	35.00	150.0	500.0	3.50	5.2	24.8	32.0	150.00	TNF 5P-IQ	TNF 5...	ETF 3-6*
TNFFH 80R/L-6IQ	6.00	30.00	80.0	150.0	3.30	5.2	24.8	32.0	150.00	TNF 6GN-IQ	TNF 6...	ETF 3-6*
TNFFH 150R/L-6IQ	6.00	35.00	150.0	700.0	3.30	5.2	24.8	32.0	150.00	TNF 6GN-IQ	TNF 6...	ETF 3-6*

- H dimension links blades and blocks

(1) Minimum penetration diameter

(2) Maximum penetration diameter

(3) Master insert identification

* Optional, to be ordered separately

For inserts, see pages: TNF GN-IQ (667) • TNF-M-IQ (667) • TNF-P-IQ (666)

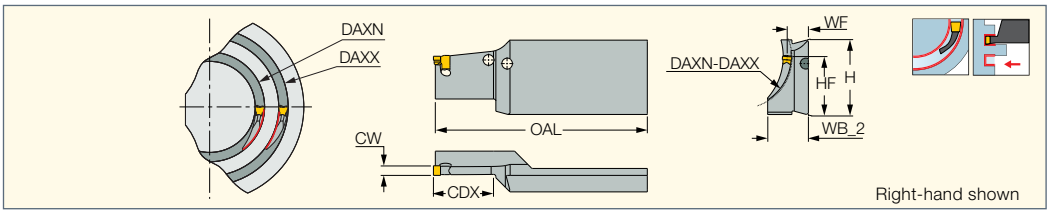


ETF 3-6 extractor (to be ordered separately)



TANG-GRIP FACE MACHINING LINE

TNFFA-IQ
Reinforced Face Grooving Blades



Designation	CW	CDX	DAXN[1]	DAXX[2]	WF	WB_2	HF	H	OAL	Insert	MIID[3]
TNFFA 30R/L-3IQ	3.00	19.00	30.0	35.0	8.85	19.0	24.8	32.0	90.00	TNF 3...	TNF 3M-IQ
TNFFA 35R/L-3IQ	3.00	19.00	35.0	40.0	8.85	19.0	24.8	32.0	90.00	TNF 3...	TNF 3M-IQ
TNFFA 40R/L-3IQ	3.00	23.00	40.0	46.0	8.85	19.0	24.8	32.0	90.00	TNF 3...	TNF 3M-IQ
TNFFA 46R/L-3IQ	3.00	25.00	46.0	54.0	8.85	19.0	24.8	32.0	90.00	TNF 3...	TNF 3M-IQ
TNFFA 54R/L-3IQ	3.00	26.00	54.0	65.0	8.85	19.0	24.8	32.0	90.00	TNF 3...	TNF 3M-IQ
TNFFA 65R/L-3IQ	3.00	27.00	65.0	80.0	8.85	16.7	24.8	32.0	90.00	TNF 3...	TNF 3M-IQ
TNFFA 80R/L-3IQ	3.00	27.00	80.0	100.0	8.85	16.7	24.8	32.0	90.00	TNF 3...	TNF 3M-IQ
TNFFA 35R/L-4IQ	4.00	25.00	35.0	45.0	8.85	18.0	24.8	32.0	90.00	TNF 4...	TNF 4GN-IQ
TNFFA 45R/L-4IQ	4.00	25.00	45.0	60.0	8.85	18.0	24.8	32.0	90.00	TNF 4...	TNF 4GN-IQ
TNFFA 60R/L-4IQ	4.00	27.00	60.0	80.0	8.85	18.0	24.8	32.0	90.00	TNF 4...	TNF 4GN-IQ
TNFFA 80R/L-4IQ	4.00	27.00	80.0	130.0	8.85	14.5	24.8	32.0	90.00	TNF 4...	TNF 4GN-IQ
TNFFA 40R/L-5IQ	5.00	25.00	40.0	50.0	8.85	19.0	24.8	32.0	90.00	TNF 5...	TNF 5P-IQ
TNFFA 50R/L-5IQ	5.00	28.00	50.0	70.0	8.85	18.0	24.8	32.0	90.00	TNF 5...	TNF 5P-IQ
TNFFA 70R/L-5IQ	5.00	30.00	70.0	100.0	8.85	16.7	24.8	32.0	94.00	TNF 5...	TNF 5P-IQ
TNFFA 100R/L-5IQ	5.00	35.00	100.0	180.0	8.85	14.0	24.8	32.0	100.00	TNF 5...	TNF 5P-IQ
TNFFA 45R/L-6IQ	6.00	25.00	45.0	60.0	8.85	19.0	24.8	32.0	90.00	TNF 6...	TNF 6GN-IQ
TNFFA 60R/L-6IQ	6.00	28.00	60.0	80.0	8.85	18.0	24.8	32.0	90.00	TNF 6...	TNF 6GN-IQ
TNFFA 80R/L-6IQ	6.00	30.00	80.0	110.0	8.85	16.7	24.8	32.0	91.00	TNF 6...	TNF 6GN-IQ
TNFFA 110R/L-6IQ	6.00	35.00	110.0	300.0	8.85	13.5	24.8	32.0	97.00	TNF 6...	TNF 6GN-IQ

• For user guide, see pages 676-688
[1] Minimum penetration diameter
[2] Maximum penetration diameter
[3] Master insert identification

For inserts, see pages: TNF GN-IQ (667) • TNF-M-IQ (667) • TNF-P-IQ (666)

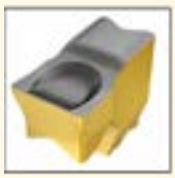
Spare Parts

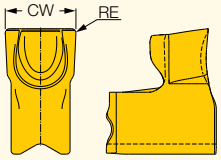
Designation	
TNFFA-IQ	ETF 3-6*

* Optional, to be ordered separately

TANG-GRIP FACE MACHINING LINE

TNF-P-IQ
Face Grooving Single-Ended Inserts for Machining Steel





Designation	Dimensions CW	RE	CWTOL[1]	IC808	Recommended Machining Data f face-groove (mm/rev)
TNF 3P-IQ	3.00	0.30	0.050	●	0.10-0.15
TNF 4P-IQ	4.00	0.25	0.050	●	0.10-0.15
TNF 5P-IQ	5.00	0.35	0.050	●	0.12-0.20
TNF 6P-IQ	6.00	0.35	0.050	●	0.12-0.20

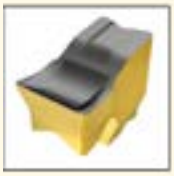
• For user guide, see pages 676-688
[1] Cutting width tolerance (+/-)

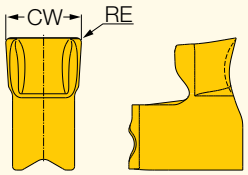
For tools, see pages: TNFFA-IQ (666) • TNFFH-IQ (665) • TNFPAD-XL-JHP (668)

TANG-GRIP FACE MACHINING LINE

TNF-M-IQ

Face Grooving Single-Ended Inserts for Machining Stainless Steel and High Temperature Alloys







Designation	Dimensions CW	RE	CWTOL[1]	IC808	Recommended Machining Data f face-groove (mm/rev)
TNF 3M-IQ	3.00	0.30	0.050	●	0.08-0.10
TNF 4M-IQ	4.00	0.25	0.050	●	0.08-0.12
TNF 5M-IQ	5.00	0.35	0.050	●	0.12-0.20
TNF 6M-IQ	6.00	0.35	0.050	●	0.12-0.20

• For user guide, see pages 676-688

(1) Cutting width tolerance (+/-)

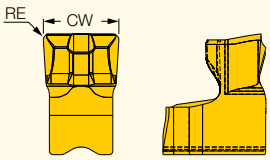
For tools, see pages: TNFFA-IQ (666) • TNFFH-IQ (665) • TNFPAD-XL-JHP (668)

TANG-GRIP FACE MACHINING LINE

TNF GN-IQ

Face Grooving Single-Ended Inserts for Machining Steel







Designation	Dimensions CW	RE	CWTOL[1]	IC808	Recommended Machining Data f face-groove (mm/rev)
TNF 3GN-IQ	3.00	0.30	0.050	●	0.06-0.10
TNF 4GN-IQ	4.00	0.40	0.050	●	0.06-0.12
TNF 5GN-IQ	5.00	0.40	0.050	●	0.08-0.16
TNF 6GN-IQ	6.00	0.40	0.050	●	0.08-0.20

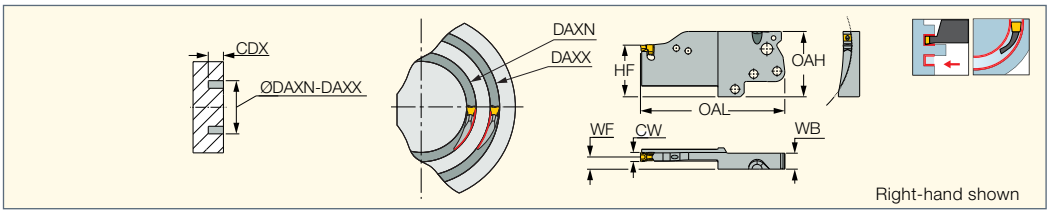
• For user guide, see pages 676-688

(1) Cutting width tolerance (+/-)

For tools, see pages: TNFFA-IQ (666) • TNFFH-IQ (665) • TNFPAD-XL-JHP (668)

MODULAR-GRIP

TNFPAD-XL-JHP
Adapters for Face Machining



Designation	CW	CDX	DAXN(1)	DAXX(2)	WF	HF	OAH	WB	OAL	MIID(3)
TNFPAD-XL 4L-35T20-JHP	4.00	20.00	35.0	53.0	8.00	34.0	43.00	9.50	65.00	TNF 4GN-IQ
TNFPAD-XL 4L-45T20-JHP	4.00	20.00	45.0	68.0	8.00	34.0	43.00	9.50	65.00	TNF 4GN-IQ
TNFPAD-XL 4R/L-35T35-JHP	4.00	35.00	35.0	53.0	8.00	34.0	43.00	9.50	80.00	TNF 4GN-IQ
TNFPAD-XL 4R/L-45T35-JHP	4.00	35.00	45.0	68.0	8.00	34.0	43.00	9.50	80.00	TNF 4GN-IQ
TNFPAD-XL 5L-60T20-JHP	5.00	20.00	60.0	90.0	8.00	34.0	43.00	10.00	65.00	TNF 5P-IQ
TNFPAD-XL 5R/L-60T40-JHP	5.00	40.00	60.0	90.0	8.00	34.0	43.00	10.00	85.00	TNF 5P-IQ
TNFPAD-XL 6L-110T20-JHP	6.00	20.00	110.0	312.0	8.00	34.0	43.00	10.50	65.00	TNF 6GN-IQ
TNFPAD-XL 6L-80T20-JHP	6.00	20.00	80.0	122.0	8.00	34.0	43.00	10.50	65.00	TNF 6GN-IQ
TNFPAD-XL 6L-80T45-JHP	6.00	45.00	80.0	122.0	8.00	34.0	43.00	10.50	90.00	TNF 6GN-IQ
TNFPAD-XL 6R/L-110T50-JHP	6.00	50.00	110.0	312.0	8.00	34.0	43.00	10.50	95.00	TNF 6GN-IQ

• WF(assembly)=WF(shank) + WF(adapter) • TNF 4..5..6 inserts can be used with left and right hand adapters. • For information regarding compatibility with the HATA system, please refer to the additional information provided for each of the intermediate serrated cartridges: IH-TNFPAD

• For user guide, see pages 676-688

(1) Minimum axial grooving diameter

(2) Maximum axial grooving diameter

(3) Master insert identification

For inserts, see pages: TNF GN-IQ (667) • TNF-M-IQ (667) • TNF-P-IQ (666)

For holders, see pages: ABC MAHDR-#-XL-JHP (884) • IH-TNFPAD (669) • MAHPR/L-XL-JHP (642) • MAHR/L-MG-XL-JHP (563) • MAHR/L-MG-XL-JHP-MC (563) • TR TNK36 MAHDL-R-XL-JHP (884) • V## MAHD#-#-XL-##-JHP (880) • V## MAHD-XL-JHP (881)

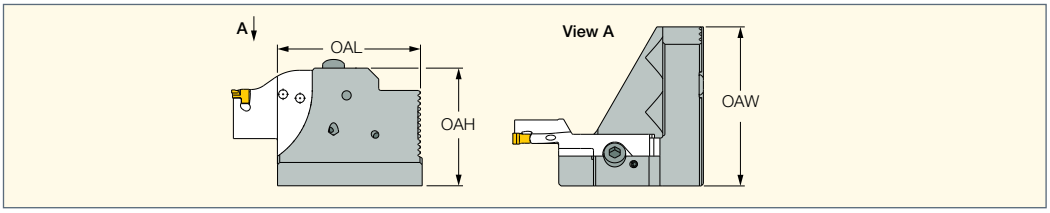
Spare Parts

Designation	
TNFPAD-XL-JHP	ETF 3-6*

* Optional, to be ordered separately

TANG GRIP FACE MACHINING LINE

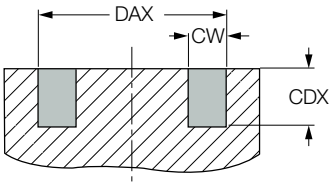
IH-TNFPAD
Intermediate Serrated Cartridge
for Standard TANG FACE
TNFPAD-XL R Adapters

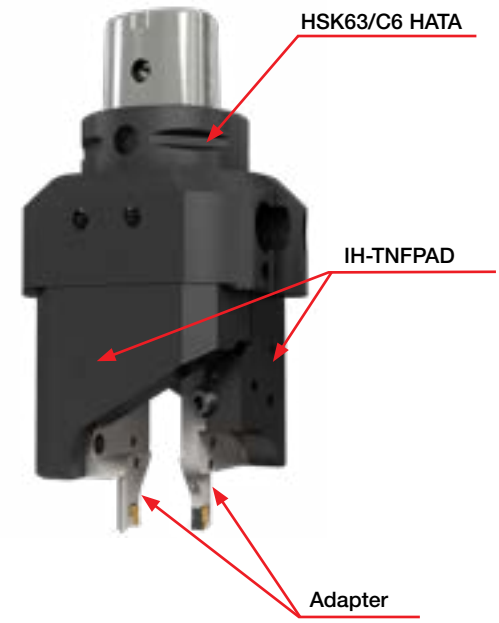


Designation	OAH	OAW	OAL
IH-TNFPAD	54.00	73.00	65.70

For tools, see page: TNFPAD-XL-JHP (668)

HSK63 HATA + IH-TNFPAD
C6 HATA + IH-TNFPAD





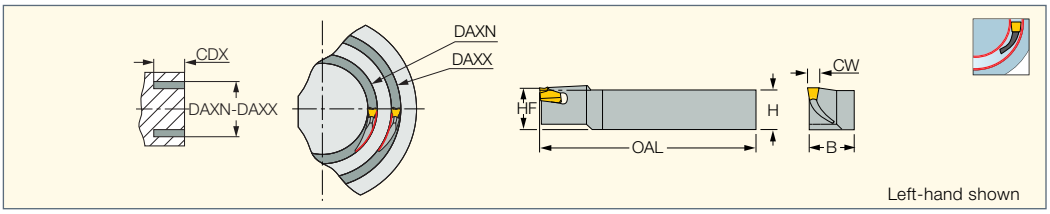
Designation	CW (min)	CW (max)	CDX	DAX (min)	DAX (max)
TNFPAD-XL 4R-35T35-JHP	4.00	6.90	35.00	35.0	53.0
TNFPAD-XL 4R-45T35-JHP	4.00	6.90	35.00	45.0	68.0
TNFPAD-XL 5R-60T40-JHP	5.00	8.90	40.00	60.0	90.0

Spare Parts

Designation								
IH-TNFPAD	SR M6X14-XT DIN 912	BLD T20/M7	SW6-SD	SR M5-04451	O-RING 19X2 NBR	HW 5.0	OR 5X1N	T-20/5

SELFGRIP

SGFFR/L
Face Grooving Integral Shank Tools



Designation	CW	CDX	DAXN(1)	DAXX(2)	HF	H	B	OAL	MIID(3)
SGFFR/L 20-25-2	2.10	13.00	25.0	30.0	20.0	20.0	20.0	120.00	GFF 2R/L
SGFFR 25-25-2	2.10	13.00	25.0	30.0	25.0	25.0	25.0	130.00	GFF 2N
SGFFR/L 20-30-2	2.10	14.00	29.0	36.0	20.0	20.0	20.0	120.00	GFF 2R/L
SGFFR 25-30-2	2.10	14.00	29.0	36.0	25.0	25.0	25.0	130.00	GFF 2N
SGFFR/L 20-35-2	2.10	16.00	35.0	46.0	20.8	20.0	20.0	120.00	GFF 2N
SGFFR/L 25-35-2	2.10	16.00	35.0	46.0	25.8	25.0	25.0	130.00	GFF 2N
SGFFR/L 20-45-2	2.10	20.00	45.0	61.0	20.8	20.0	20.0	120.00	GFF 2N
SGFFR/L 20-60-2	2.10	20.00	60.0	80.0	20.8	20.0	20.0	120.00	GFF 2N
SGFFR/L 25-45-2	2.10	20.00	45.0	61.0	25.8	25.0	25.0	130.00	GFF 2N
SGFFR/L 25-60-2	2.10	20.00	60.0	80.0	25.8	25.0	25.0	130.00	GFF 2N
SGFFR/L 20-30-3	3.00	16.00	30.0	35.0	20.0	20.0	20.0	120.00	GFF 3R/L
SGFFR 25-30-3	3.00	16.00	30.0	35.0	25.0	25.0	25.0	130.00	GFF 3R/L
SGFFR 20-35-3	3.00	18.00	34.4	40.6	20.0	20.0	20.0	120.00	GFF 3R/L
SGFFR 25-35-3	3.00	18.00	34.4	40.6	25.0	25.0	25.0	130.00	GFF 3R/L
SGFFR/L 25-40-3	3.00	20.00	40.0	47.0	25.0	25.0	25.0	130.00	GFF 3R/L
SGFFR 20-40-3	3.00	20.00	40.0	47.0	20.0	20.0	20.0	120.00	GFF 3R/L
SGFFR 20-46-3	3.00	22.00	46.0	55.0	20.0	20.0	20.0	120.00	GFF 3R/L
SGFFR 20-55-3	3.00	22.00	54.0	65.0	21.2	20.0	20.0	120.00	GFF 3N
SGFFR 25-46-3	3.00	22.00	46.0	55.0	25.0	25.0	25.0	130.00	GFF 3R/L
SGFFR 20-65-3	3.00	23.00	64.0	80.0	21.0	20.0	20.0	120.00	GFF 3N
SGFFR/L 25-55-3	3.00	24.00	54.0	65.0	26.2	25.0	25.0	130.00	GFF 3N
SGFFR 20-80-3	3.00	24.00	79.0	100.0	20.7	20.0	20.0	120.00	GFF 3N
SGFFR 25-65-3	3.00	25.00	64.0	80.0	26.0	25.0	25.0	130.00	GFF 3N
SGFFR 25-80-3	3.00	26.00	79.0	100.0	25.7	25.0	25.0	130.00	GFF 3N
SGFFR/L 20-35-4	4.00	20.00	35.0	45.0	20.0	20.0	20.0	120.00	GFF 4N
SGFFR 25-35-4	4.00	20.00	35.0	45.0	25.0	25.0	25.0	150.00	GFF 4N
SGFFR/L 25-45-4	4.00	25.00	44.0	58.0	25.0	25.0	25.0	150.00	GFF 4N
SGFFR 20-45-4	4.00	25.00	44.0	58.0	20.0	20.0	20.0	120.00	GFF 4N
SGFFR 20-60-4	4.00	25.00	57.0	80.0	20.0	20.0	20.0	120.00	GFF 4N
SGFFR 20-80-4	4.00	25.00	79.0	130.0	20.0	20.0	20.0	120.00	GFF 4N
SGFFR/L 25-60-4	4.00	26.00	57.0	80.0	25.0	25.0	25.0	150.00	GFF 4N
SGFFR/L 25-80-4	4.00	26.00	79.0	130.0	25.0	25.0	25.0	150.00	GFF 4N
SGFFR/L 20-50-5	5.00	25.00	50.0	75.0	20.0	20.0	20.0	120.00	GFF 5N
SGFFR 20-75-5	5.00	26.00	74.0	130.0	20.0	20.0	20.0	120.00	GFF 5N
SGFFR 25-50-5	5.00	26.00	50.0	71.0	25.0	25.0	25.0	150.00	GFF 5N
SGFFR 25-70-5	5.00	28.00	69.0	102.0	25.0	25.0	25.0	150.00	GFF 5N
SGFFR/L 25-100-5	5.00	30.00	100.0	180.0	25.0	25.0	25.0	150.00	GFF 5N
SGFFR 20-60-6	6.00	25.00	57.0	60.0	20.0	20.0	20.0	120.00	GFF 6N
SGFFR/L 25-100-6	6.00	30.00	100.0	180.0	25.0	25.0	25.0	150.00	GFF 6N
SGFFR/L 25-60-6	6.00	30.00	57.0	77.0	25.0	25.0	25.0	150.00	GFF 6N
SGFFR/L 25-75-6	6.00	30.00	75.0	102.0	25.0	25.0	25.0	150.00	GFF 6N

- Important: Apply R.H. insert on R.H. tool and L.H. insert on L.H. tool. Neutral insert only as indicated

(1) Minimum penetration diameter

(2) Maximum penetration diameter

(3) Master insert identification

For inserts, see pages: GFF-N (589) • GFF-R/L (589)

* Optional, to be ordered separately

Spare Parts

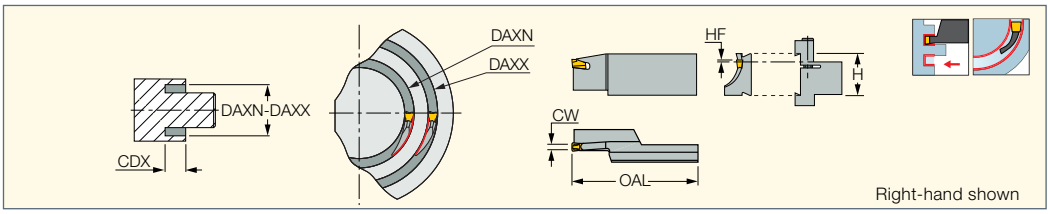
Designation	
SGFFR/L 20-25-2	SET ESG 0.5
SGFFR 25-25-2	SET ESG 0.5
SGFFR/L 20-30-2	SET ESG 0.5
SGFFR 25-30-2	SET ESG 0.5
SGFFL 20-35-2	SET ESG 0.5
SGFFL 25-35-2	SET ESG 0.5
SGFFR 20-35-2	SET ESG 0.5
SGFFR 25-35-2	SET ESG 0.5
SGFFR/L 20-45-2	SET ESG 0.5
SGFFR/L 20-60-2	SET ESG 0.5
SGFFL 25-45-2	SET ESG 0.5
SGFFR/L 25-60-2	SET ESG 0.5
SGFFR 25-45-2	SET ESG 0.5
SGFFR/L 20-30-3	SET ESG 1
SGFFR 25-30-3	SET ESG 1
SGFFR 20-35-3	SET ESG 1
SGFFR 25-35-3	SET ESG 1
SGFFR/L 25-40-3	SET ESG 1
SGFFR 20-40-3	SET ESG 1
SGFFR 20-46-3	SET ESG 1
SGFFR 20-55-3	SET ESG 1
SGFFR 25-46-3	SET ESG 1

Spare Parts

Designation	
SGFFR 20-65-3	SET ESG 1
SGFFR/L 25-55-3	SET ESG 1
SGFFR 20-80-3	SET ESG 1
SGFFR 25-65-3	SET ESG 1
SGFFR 25-80-3	SET ESG 1
SGFFR/L 20-35-4	SET ESG 1
SGFFR 25-35-4	SET ESG 1
SGFFR/L 25-45-4	SET ESG 1
SGFFR 20-45-4	SET ESG 1
SGFFR 20-60-4	SET ESG 1
SGFFR 20-80-4	SET ESG 1
SGFFR/L 25-60-4	SET ESG 1
SGFFR/L 25-80-4	SET ESG 1
SGFFR/L 20-50-5	SET ESG 1
SGFFR 20-75-5	SET ESG 1
SGFFR 25-50-5	SET ESG 1
SGFFR 25-70-5	SET ESG 1
SGFFR/L 25-100-5	SET ESG 1
SGFFR 20-60-6	SET ESG 1
SGFFR/L 25-100-6	SET ESG 1
SGFFR/L 25-60-6	SET ESG 1
SGFFR/L 25-75-6	SET ESG 1

SELF-GRIP

SGFFA
Reinforced Face Grooving Blades
for Standard Tool Blocks



Designation	CW	CDX	DAXN(1)	DAXX(2)	HF	H	OAL	MIID(3)
SGFFA 25-L-2	2.10	13.00	25.0	30.0	0.0	32.0	91.00	GFF 2L
SGFFA 25-R-2	2.10	13.00	25.0	30.0	0.0	32.0	91.00	GFF 2R
SGFFA 30-L-2	2.10	14.00	29.0	36.0	0.0	32.0	91.00	GFF 2L
SGFFA 35-L-2	2.10	16.00	35.0	46.0	0.8	32.0	91.00	GFF 2N
SGFFA 45-L-2	2.10	20.00	45.0	61.0	0.8	32.0	91.00	GFF 2N
SGFFA 60-L-2	2.10	20.00	60.0	80.0	0.8	32.0	91.00	GFF 2N
SGFFA 80-L-2	2.10	20.00	79.0	102.0	0.8	32.0	91.00	GFF 2N
SGFFA 35-L-3	3.00	20.00	34.4	40.6	0.0	32.0	91.00	GFF 3L
SGFFA 40-L-3	3.00	22.00	40.0	47.0	0.0	32.0	91.00	GFF 3L
SGFFA 46-L-3	3.00	24.00	46.0	55.0	0.0	32.0	91.00	GFF 3L
SGFFA 55-L-3	3.00	25.00	54.0	65.0	1.2	32.0	91.00	GFF 3N
SGFFA 65-L-3	3.00	26.00	64.0	80.0	1.0	32.0	91.00	GFF 3N
SGFFA 80-L-3	3.00	28.00	79.0	100.0	0.7	32.0	91.00	GFF 3N
SGFFA 35-L-4	4.00	25.00	35.0	45.0	0.0	32.0	91.00	GFF 4N
SGFFA 45-R-4	4.00	25.00	44.0	58.0	0.0	32.0	91.00	GFF 4N
SGFFA 40-R/L-5	5.00	25.00	40.0	52.0	0.0	32.0	91.00	GFF 5N
SGFFA 50-R/L-5	5.00	28.00	50.0	71.0	0.0	32.0	91.00	GFF 5N
SGFFA 70-L-5	5.00	30.00	69.0	102.0	0.0	32.0	91.00	GFF 5N
SGFFA 45-R/L-6	6.00	25.00	44.0	58.0	0.0	32.0	91.00	GFF 6N
SGFFA 60-L-6	6.00	30.00	57.0	77.0	0.0	32.0	91.00	GFF 6N
SGFFA 75-R/L-6	6.00	35.00	75.0	102.0	0.0	32.0	101.00	GFF 6N

• Important: Apply R.H. insert on R.H. tool and L.H. insert on L.H. tool. Neutral insert only as indicated • H dimension links blades and blocks
(1) Minimum penetration diameter
(2) Maximum penetration diameter
(3) Master insert identification

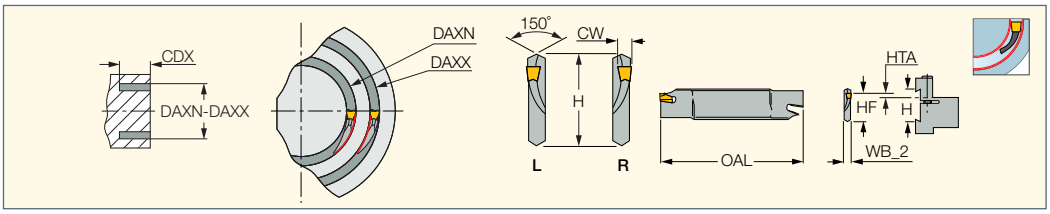
For inserts, see pages: GFF-N (673) • GFF-R/L (673)
For holders, see pages: SGTBF (691) • SGTBU/SGTBN (690) • UBHCR/L (691)

Spare Parts

Designation	
SGFFA 25-L-2	SET ESG 0.5
SGFFA 25-R-2	ESG 0.5
SGFFA 30-L-2	ESG 0.5
SGFFA 35-L-2	ESG 0.5
SGFFA 45-L-2	SET ESG 0.5
SGFFA 60-L-2	SET ESG 0.5
SGFFA 80-L-2	SET ESG 0.5
SGFFA 35-L-3	SET ESG 1
SGFFA 40-L-3	SET ESG 1
SGFFA 46-L-3	SET ESG 1
SGFFA 55-L-3	SET ESG 1
SGFFA 65-L-3	SET ESG 1
SGFFA 80-L-3	SET ESG 1
SGFFA 35-L-4	SET ESG 1
SGFFA 45-R-4	SET ESG 1
SGFFA 40-R/L-5	SET ESG 1
SGFFA 50-R/L-5	SET ESG 1
SGFFA 70-L-5	SET ESG 1
SGFFA 45-R/L-6	SET ESG 1
SGFFA 60-L-6	SET ESG 1
SGFFA 75-R/L-6	SET ESG 1

SELF-GRIP

SGFFH
Face Grooving Blades



Designation	CW	CDX	DAXN(1)	DAXX(2)	HF	HTA	H	WB_2	OAL	MIID(3)
SGFFH 35-R/L-2	2.10	20.00	35.0	46.0	25.6	0.8	32.0	5.2	150.00	GFF 2N
SGFFH 45-R/L-2	2.10	20.00	45.0	61.0	25.6	0.8	32.0	5.2	150.00	GFF 2N
SGFFH 60-R-2	2.10	20.00	60.0	80.0	25.6	0.8	32.0	5.2	150.00	GFF 2N
SGFFH 80-R/L-2	2.10	20.00	79.0	102.0	25.6	0.8	32.0	4.0	150.00	GFF 2N
SGFFH 100-R/L-2	2.10	20.00	101.0	132.0	24.9	0.0	32.0	4.0	150.00	GFF 2N
SGFFH 75-R/L-3	3.00	20.00	65.0	92.0	25.8	1.0	32.0	5.2	150.00	GFF 3N
SGFFH 90-R/L-3	3.00	20.00	90.0	122.0	25.0	0.2	32.0	5.2	150.00	GFF 3N
SGFFH 120-R/L-3	3.00	25.00	120.0	160.0	25.0	0.0	32.0	5.2	150.00	GFF 3N
SGFFH 80-R/L-4	4.00	30.00	80.0	155.0	27.3	2.5	32.0	5.2	150.00	GFF 4N
SGFFH 150-R/L-4	4.00	30.00	150.0	500.0	27.3	2.5	32.0	5.2	150.00	GFF 4N
SGFFH 80-R/L-5	5.00	32.00	80.0	162.0	27.3	0.0	32.0	5.2	150.00	GFF 5N
SGFFH 150-R/L-5	5.00	35.00	150.0	600.0	27.3	0.0	32.0	5.2	150.00	GFF 5N
SGFFH 90-R/L-6	6.00	32.00	90.0	150.0	24.9	0.0	32.0	8.0	150.00	GFF 6N
SGFFH 150-R/L-6	6.00	35.00	148.0	700.0	24.9	0.0	32.0	5.2	150.00	GFF 6N

• Important: Apply R.H. insert on R.H. tool and L.H. insert on L.H. tool. Neutral insert only as indicated • H dimension links blades and blocks

(1) Minimum penetration diameter

(2) Maximum penetration diameter

(3) Master insert identification

For inserts, see page: GFF-N (673)

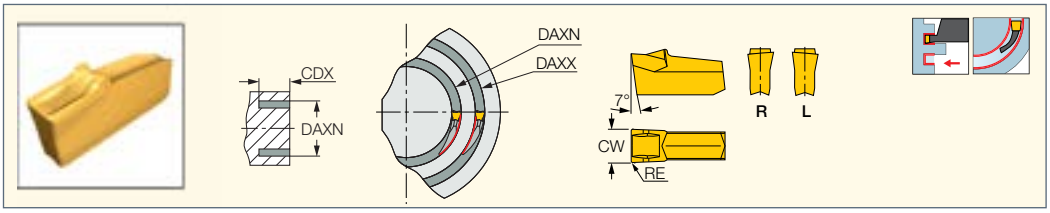
For holders, see pages: SGTBF (691) • SGTBK (691) • SGTBU/SGTBN (690) • UBHCR/L (691)

Spare Parts

Designation	
SGFFH 35-R/L-2	SET ESG 0.5
SGFFH 45-R/L-2	ESG 0.5
SGFFH 60-R-2	ESG 0.5
SGFFH 80-R/L-2	ESG 0.5
SGFFH 100-L-2	SET ESG 0.5
SGFFH 100-R-2	ESG 0.5
SGFFH 75-R/L-3	SET ESG 1
SGFFH 90-R/L-3	SET ESG 1
SGFFH 120-R/L-3	SET ESG 1
SGFFH 80-R/L-4	SET ESG 1
SGFFH 150-R/L-4	SET ESG 1
SGFFH 80-R/L-5	SET ESG 1
SGFFH 150-R/L-5	SET ESG 1
SGFFH 90-R/L-6	SET ESG 1
SGFFH 150-R/L-6	SET ESG 1

SELF-GRIP

GFF-R/L
Face Grooving Inserts



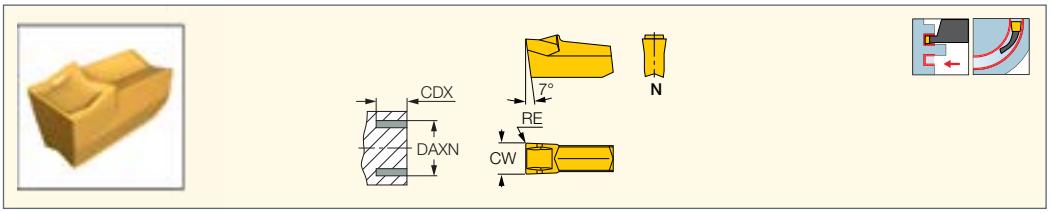
Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	DAXN(3)	DAXX(4)	Tough ↔ Hard IC354	IC20	Recommended Machining Data f face-groove (mm/rev)
GFF 2R	2.10	0.20	0.100	0.050	25.0	36.0	●	●	0.03-0.13
GFF 3L	3.00	0.30	0.100	0.050	30.0	55.0		●	0.03-0.15
GFF 3R	3.00	0.30	0.100	0.050	30.0	55.0	●	●	0.03-0.15

(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Minimum axial grooving diameter
(4) Maximum axial grooving diameter

For tools, see pages: SGFFA (671) • SGFFR/L (670)

SELF-GRIP

GFF-N
Face Grooving Inserts



Designation	Dimensions CW	RE	CWTOL(1)	RETOL(2)	DAXN(3)	Tough ↔ Hard IC354	IC20	Recommended Machining Data f face-groove (mm/rev)
GFF 2N	2.10	0.20	0.100	0.050	35.0	●	●	0.03-0.13
GFF 3N	3.00	0.30	0.100	0.050	54.0	●	●	0.03-0.15
GFF 4N	4.00	0.25	0.100	0.050	35.0	●	●	0.04-0.18
GFF 5N	5.00	0.25	0.100	0.050	40.0	●	●	0.05-0.18
GFF 6N	6.00	0.25	0.100	0.050	44.0	●	●	0.05-0.20

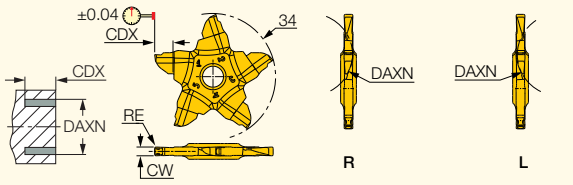
• Grooving depth is limited only by the tool being used
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Minimum axial grooving diameter

For tools, see pages: SGFFA (671) • SGFFH (672) • SGFFR/L (670)

PENTACUT

PENTA 34F-R/L
Pentagonal Inserts for Face Grooving and Recessing





Designation	Dimensions CW	RE	RETOL[1]	CDX	DAXN[2]	IC908	Recommended Machining Data f face-groove (mm/rev)
PENTA 34F239-0.15-22R/L	2.39	0.15	0.020	5.00	22.0	●	0.08-0.12
PENTA 34F247-0.20-22R/L	2.47	0.20	0.020	5.00	22.0	●	0.08-0.12
PENTA 34F300-0.40-22R/L	3.00	0.40	0.020	5.00	22.0	●	0.08-0.15
PENTA 34F400-0.40-22R/L	4.00	0.40	0.020	5.00	22.0	●	0.08-0.15

- For cutting speed recommendations, see pages 676-678

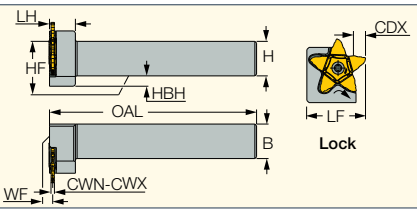
(1) Corner radius tolerance (+/-)

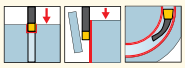
(2) Minimum axial grooving diameter

For tools, see pages: PCADR/L (353) • PCADR/L 34N-RE (354) • PCADR/L-JHP (353) • PCHBR/L (355) • PCHPR/L (352) • PCHR/L-34 (351) • PCHR/L-34-JHP (351) • PCHR/L-34-JHP-MC (352)

PENTACUT

PCHPR/L
Perpendicular Holders Carrying Inserts with 5 Cutting Edges for Facing, Grooving, Parting and Recessing





Right-hand shown

Designation	H	B	CWN[1]	CWX[2]	CDX[3]	HF	WF	LF	OAL	LH	HBH
PCHPR/L 16-24	16.0	16.0	0.50	3.20 [4]	6.50	16.0	1.50 [5]	23.5	120.00	11.5	-
PCHPR/L 20-24	20.0	20.0	0.50	3.20 [4]	6.50	20.0	1.50 [5]	28.0	120.00	11.5	-
PCHPR/L 25-24	25.0	25.0	0.50	3.20 [4]	6.50	25.0	1.50 [5]	33.0	135.00	11.5	-
PCHPR/L 20-34	20.0	20.0	1.40	4.00	10.00	20.0	1.90	34.0	120.00	15.0	6.0
PCHPR/L 25-34	25.0	25.0	1.40	4.00	10.00	25.0	1.90	34.0	135.00	15.0	-

(1) Minimum cutting width

(2) Maximum cutting width

(3) For specific information, refer to insert data

(4) Up to 6.2 mm width may be ordered on request

(5) Valid for inserts with CW<3.2 mm

For inserts, see pages: PENTA 24N-C (359) • PENTA 24N-C (full radius) (360) • PENTA 24N-C-SL (356) • PENTA 24N-J (358) • PENTA 24N-J (full radius) (359) • PENTA 24N-J-SL (356) • PENTA 24N-PF (full radius) (361) • PENTA 24N-PF/P (360) • PENTA 24N-Z (361) • PENTA 24R-C (601) • PENTA 24R-P (602) • PENTA 24R/L-DSL (357) • PENTA 24R/L-J (598) • PENTA 24R/L-Z (600) • PENTA 34F-R/L (674) • PENTA 34N-C (364) • PENTA 34N-J (365) • PENTA 34N-PB (364) • PENTA 34R/L-C (603) • PENTA 34R/L-J (604) • PENTA 34R/L-PB (605)

Spare Parts

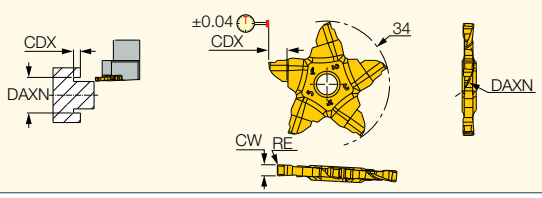
Designation		
PCHPL 16-24	SR 16-212-01397	T-20/5
PCHPR 16-24	SR 16-212-01397L	T-20/5
PCHPL 20-24	SR 16-212-01397	T-20/5
PCHPR 20-24	SR 16-212-01397L	T-20/5
PCHPL 25-24	SR 16-212-01397	T-20/5
PCHPR 25-24	SR 16-212-01397L	T-20/5
PCHPR/L 20-34	SR 16-212-01397	T-20/5
PCHPR/L 25-34	SR 16-212-01397	T-20/5

PENTACUT

PENTA 34F-RS/LS

Pentagonal Inserts for Face Grooving and Recessing Along Shafts up to 5 mm Depth of Cut at a Minimum of 22 mm Diameter





Designation	Dimensions CW	RE	CDX	DAXN(1)	IC908	Recommended Machining Data f face-groove (mm/rev)
PENTA 34F239-0.15-22R/LS	2.39	0.15	5.00	22.0	●	0.08-0.12
PENTA 34F247-0.20-22R/LS	2.47	0.20	5.00	22.0	●	0.08-0.12
PENTA 34F300-0.40-22R/LS	3.00	0.40	5.00	22.0	●	0.08-0.15
PENTA 34F400-0.40-22R/LS	4.00	0.40	5.00	22.0	●	0.08-0.15

- For cutting speed recommendations, see pages 676-678

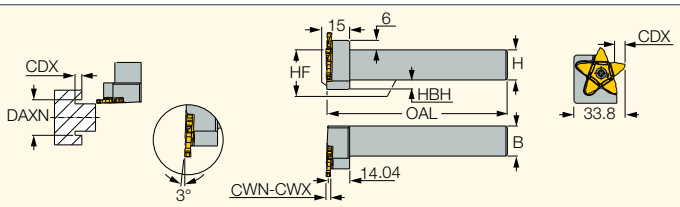
(1) Minimum axial grooving diameter

For tools, see page: PCHPRS/LS (675)

PENTACUT

PCHPRS/LS

Perpendicular Shank Tools that Mount Pentagonal Inserts for Machining Next to Long Central Shafts



Designation	H	B	CWN(1)	CWX(2)	OAL	HBH	CDX(3)	HF		
PCHPR/LS 20-34	20.0	20.0	2.39	4.00	120.00	6.0	5.00	20.0	SR 16-212-01397RS	T-20/5
PCHPLS 25-34	25.0	25.0	2.39	4.00	135.35	-	5.00	25.0	SR 16-212-01397RS	T-20/5
PCHPRS 25-34	25.0	25.0	2.39	4.00	135.00	-	5.00	25.0	SR 16-212-01397RS	T-20/5

(1) Minimum cutting width

(2) Maximum cutting width

(3) Insert limit

For inserts, see page: PENTA 34F-RS/LS (675)



Machining Data for Face Machining

ISO	Material		Condition	Tensile Strength [N/mm²]	Hardness HB	Material Group No.
P	non-alloy steel and cast steel, free cutting steel	<0.25% C	annealed	420	125	1
		≥0.25% C	annealed	650	190	2
		<0.55% C	quenched and tempered	850	250	3
		≥0.55% C	annealed	750	220	4
			quenched and tempered	1000	300	5
	low alloy and cast steel (less than 5% of alloying elements)		annealed	600	200	6
			quenched and tempered	930	275	7
				1000	300	8
				1200	350	9
	high alloyed steel, cast steel and tool steel		annealed	680	200	10
			quenched and tempered	1100	325	11
	stainless steel and cast steel		ferritic / martensitic	680	200	12
			martensitic	820	240	13
M	stainless steel and cast steel		austenitic, duplex	600	180	14
K	gray cast iron (GG)		ferritic / pearlitic		180	15
			pearlitic / martensitic		260	16
	nodular cast iron (GGG)		ferritic		160	17
			pearlitic		250	18
	malleable cast iron		ferritic		130	19
			pearlitic		230	20
N	aluminum-wrought alloys		not hardenable		60	21
			hardenable		100	22
	aluminum-cast alloys	≤12% Si	not hardenable		75	23
			hardenable		90	24
		>12% Si	high temperature		130	25
	copper alloys	>1% Pb	free cutting		110	26
			brass		90	27
			electrolytic copper		100	28
	non metallic		duroplastics, fiber plastics			29
			hard rubber			30
S	high temperature alloys	Fe based	annealed		200	31
			hardened		280	32
		Ni or Co based	annealed		250	33
			hardened		350	34
			cast		320	35
	titanium alloys		pure	RM 400		36
			alpha+beta alloys, hardened	RM 1050		37
H	hardened steel		hardened		55 HRC	38
			hardened		60 HRC	39
	chilled cast iron		cast		400	40
	cast iron		hardened		55 HRC	41

Material No.	IC228/528	IC830	IC354	IC908	IC808	IC8250
1	85 - 125	90 - 135	95 - 145	120 - 180	125 - 190	180 - 270
2	75 - 110	80 - 115	90 - 125	110 - 155	115 - 165	165 - 230
3	60 - 85	65 - 95	70 - 100	85 - 125	90 - 130	125 - 185
4	65 - 100	70 - 110	75 - 115	95 - 145	100 - 150	140 - 215
5	50 - 85	55 - 90	60 - 95	75 - 120	80 - 125	110 - 180
6	65 - 100	70 - 110	75 - 115	95 - 145	100 - 150	140 - 215
7	50 - 85	55 - 95	60 - 100	75 - 125	80 - 130	110 - 185
8	50 - 85	55 - 90	60 - 95	75 - 120	80 - 125	110 - 180
9	50 - 75	50 - 80	55 - 90	70 - 110	75 - 115	105 - 165
10	75 - 110	80 - 115	90 - 125	110 - 155	115 - 165	165 - 230
11	50 - 75	50 - 80	55 - 90	70 - 110	75 - 115	105 - 165

	IC806	IC808	IC354	IC830	IC20	
12	110 - 200	100 - 180	80 - 145	75 - 135	50 - 90	
13	100 - 185	90 - 170	70 - 135	65 - 125	45 - 85	

	IC806	IC808	IC354	IC830	IC20	
14	90 - 170	80 - 155	65 - 125	60 - 115	40 - 75	

	IC5010	IC428	IC8250	IC808	IC20	
15	135 - 255	125 - 230	110 - 205	85 - 160	60 - 115	
16	120 - 180	110 - 160	100 - 145	75 - 110	55 - 80	
17	130 - 215	120 - 195	110 - 175	85 - 135	60 - 95	
18	105 - 170	95 - 155	85 - 140	65 - 110	45 - 75	
19	160 - 265	145 - 240	130 - 215	100 - 170	70 - 120	
20	130 - 215	120 - 195	110 - 175	85 - 135	60 - 95	

	IC808	IC20				
21	330 - 990	300 - 900				
22	250 - 825	225 - 750				
23	250 - 825	225 - 750				
24	165 - 495	150 - 450				
25	165 - 330	150 - 300				
26	165 - 330	150 - 300				
27	120 - 250	110 - 225				
28	80 - 165	75 - 150				
29	40 - 165	35 - 150				
30						

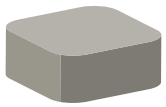
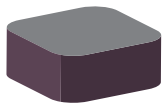
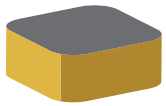
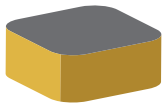
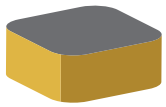
	IC806	IC908	IC808	IC830	IC20	
31	45 - 70	35 - 55	35 - 60	25 - 40	25 - 40	
32	30 - 50	25 - 40	25 - 40	20 - 30	15 - 30	
33	30 - 50	25 - 40	25 - 40	20 - 30	15 - 30	
34	25 - 45	20 - 35	20 - 35	15 - 25	15 - 25	
35	20 - 30	15 - 25	15 - 25	10 - 20	10 - 15	
36	105 - 180	85 - 145	90 - 150	65 - 110	60 - 100	
37	40 - 50	30 - 40	30 - 40	25 - 35	35 - 45	

	IC808	IC20				
38	25-30	20-30				
39	20-30	15-25				
40	30-45	30-40				
41	25-30	25-30				

Machining Data for Face Machining

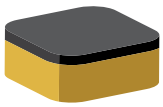
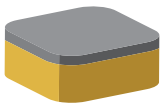
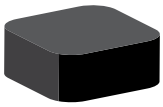
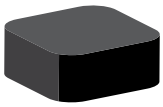
ISO	Material		Condition	Tensile Strength [N/mm²]	Hardness HB	Material No.	Cutting Speed (m/min)	GFQR IC528 Feed (mm/rev)	PICCO IC228 Feed (mm/rev)	MIFR/ MEFL 8 IC908 Feed (mm/rev)	MIFR 10 IC908 Feed (mm/rev)	MIFR 15 IC908 Feed (mm/rev)
P	non-alloy steel and cast steel, free cutting steel	<0.25% C	annealed	420	125	1	80-180	0.02-0.08	0.015-0.05	0.015-0.08	0.03-0.10	0.03-0.08
		≥0.25% C	annealed	650	190	2						
		<0.55% C	quenched and tempered	850	250	3	80-130	0.02-0.06	0.015-0.04			
		≥0.55% C	annealed	750	220	4						
			quenched and tempered	1000	300	5	80-120	0.02-0.06	0.015-0.04			
	low alloy and cast steel (less than 5% of alloying elements)		annealed	600	200	6	80-140	0.02-0.08	0.015-0.04			
			quenched and tempered	930	275	7	80-140	0.02-0.08	0.015-0.04			
				1000	300	8	80-120	0.02-0.06	0.015-0.03			
				1200	350	9	80-120	0.02-0.05	0.015-0.03			
	high alloyed steel, cast steel and tool steel		annealed	680	200	10	80-140	0.02-0.08	0.015-0.04			
			quenched and tempered	1100	325	11	80-120	0.02-0.08	0.015-0.03			
	stainless steel and cast steel		ferritic / martensitic	680	200	12	40-120	0.02-0.08	0.015-0.04	0.015-0.07	0.03-0.08	0.02-0.05
			martensitic	820	240	13	40-120	0.02-0.07	0.015-0.04	0.015-0.07	0.03-0.08	0.02-0.05
M	stainless steel and cast steel		austenitic, duplex	600	180	14	40-100	0.02-0.06	0.015-0.03	0.015-0.07	0.03-0.08	0.02-0.05
K	gray cast iron (GG)		ferritic / pearlitic		180	15	80-140	0.02-0.08	0.015-0.05	0.02-0.10	0.05-0.12	0.04-0.10
			pearlitic / martensitic		260	16	80-120	0.02-0.07	0.015-0.04			
	nodular cast iron (GGG)		ferritic		160	17	80-140	0.02-0.08	0.015-0.04			
			pearlitic		250	18	80-120	0.02-0.07	0.015-0.04			
	malleable cast iron		ferritic		130	19	80-140	0.02-0.06	0.015-0.04			
			pearlitic		230	20	80-120	0.02-0.07	0.015-0.04			
N	aluminum-wrought alloys		not hardenable		60	21	150-320	0.02-0.08	0.015-005	0.02-0.10	0.05-0.15	0.05-0.12
			hardenable		100	22	100-250	0.02-0.08	0.015-005			
	aluminum-cast alloys	≤12% Si	not hardenable		75	23	150-300	0.02-0.08	0.015-005			
			hardenable		90	24	150-300	0.02-0.08	0.015-005			
		>12% Si	high temperature		130	25	100-150	0.02-0.08	0.015-005			
	copper alloys	>1% Pb	free cutting		110	26	80-230	0.02-0.08	0.015-005			
			brass		90	27	70-200	0.02-0.08	0.015-005			
			electrolytic copper		100	28	50-180	0.02-0.08	0.015-005			
	non metallic		duroplastics, fiber plastics			29						
			hard rubber			30						
S	high temperature alloys	Fe based	annealed		200	31	20-40	0.02-0.06	0.015-0.04	0.015-0.7	0.02-0.08	0.02-0.05
			hardened		280	32	15-30	0.02-0.06	0.015-0.04			
		Ni or Co based	annealed		250	33	15-20	0.02-0.06	0.015-0.04			
			hardened		350	34	15-20	0.02-0.06	0.015-0.04			
			cast		320	35	15-20	0.02-0.06	0.015-0.04			
	titanium alloys		pure	RM 400		36	40-120	0.02-0.06	0.015-0.04			
			alpha+beta alloys, hardened	RM 1050		37	20-50	0.02-0.06	0.015-0.04			
H	hardened steel		hardened		55 HRC	38						
			hardened		60 HRC	39						
	chilled cast iron		cast		400	40						
	cast iron		hardened		55 HRC	41						

Face Grooving Materials Grades Chart

	Grade	ISO	Grade Description	Coating Layers	Coating Color*
PVD COATED	IC354	P20-P40 M20-M30	A tough substrate with PVD coating, suitable for general use on a wide range of carbon steels, alloy steels and stainless steel at moderate speeds and feeds.	TiCN Base	
	IC806	M05-M15 S10-S20	A hard submicron grain size substrate with PVD coating and a special SUMOTEC surface treatment. Excellent for machining high temperature alloys and Titanium alloys, at moderate to relatively high cutting speeds. Features high wear resistance and plastic deformation durability.	TiAlN AlTiN Base	
	IC807	P10-P20 M05-M15 K15-K30 S10-S20 H05-H15	A hard submicron grain size substrate with PVD coating and a special SUMOTEC surface treatment. Suitable for machining steels, alloy steels, austenitic stainless steel, high temperature alloys and hard steels at moderate to relatively high cutting speeds under stable conditions. Features high wear resistance and plastic deformation durability.	TiN TiAlN Base	
	IC808	P15-P30 M20-M30 K20-K40 S15-S30 H20-H30	A tough submicron grain size substrate with PVD coating and a special SUMOTEC surface treatment. Recommended for general use for a large variety of applications and materials such as steels, alloy steels, austenitic stainless steel and high temperature alloys at moderate cutting speeds and feeds. Features high wear resistance and chipping durability.	TiN TiAlN Base	
	IC830	P30-P45 M25-M40 S20-S30	A tough substrate with PVD coating and a special SUMOTEC surface treatment. Suitable for machining steel and stainless steel at low to medium cutting speeds and moderate to high feeds. The grade features high toughness and recommended for interrupted cuts and machining under unstable conditions. May be used on high temperature alloys at low cutting speeds.	TiN TiAlN Base	
	IC908	P15-P30 M20-M30 K20-K40 S15-S30 H20-H30	A tough submicron grain size substrate with PVD coating, recommended for general use in a large variety of operations and materials such as steels, alloy steels, austenitic stainless steel and high temperature alloys at moderate cutting speeds. Features high wear resistance and chipping durability.	TiAlN Base	

* For coated grades

Face Gooving Materials Grades Chart

	Grade	ISO	Grade Description	Coating Layers	Coating Color*
CVD COATED	IC5010	K10-K20	A hard substrate with MTCVD coating with a special SUMOTEC surface treatment. Recommended for machining gray and nodular cast iron at moderate to high cutting speeds, provides very good resistance to chipping.	TiN Al_2O_3 TiCN Base	
	IC8250	P15-P35 M15-M25	A tough substrate with a cobalt enriched layer and MTCVD coating with a special SUMOTEC surface treatment. Recommended for general use machining of steels, alloy steels and martensitic stainless steel in a wide range of conditions. Features high toughness and good wear resistance.	TiN Al_2O_3 TiCN Base	
	IC418	K10-K25	A tough substrate with multilayer CVD coating. Recommended for machining gray and nodular cast iron at medium to high cutting speeds. Can be used for interrupted cuts and under heavy machining conditions.	Al_2O_3 Tic Base	
	IC428	K05-K20 H15-H25	A hard substrate with multilayer CVD coating. Recommended for machining gray and nodular cast iron at moderate to high cutting speeds.	Al_2O_3 Tic Base	
	IC9015	P10-P25 K10-K15	A hard substrate with a cobalt enriched layer and MTCVD coating. Recommended for high speed machining of steels, alloy steels and martensitic stainless steel with moderate feeds at stable conditions.	TiN Al_2O_3 TiCN Base	

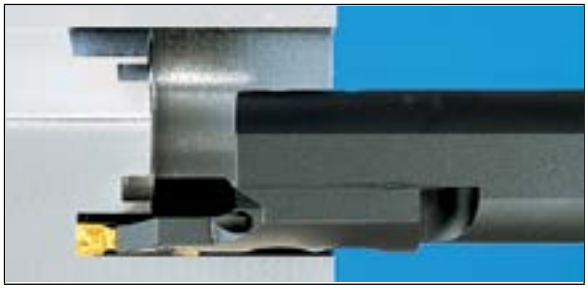
* For coated grades

	Grade	ISO	Grade Description	Coating Layers	Uncoated
UNCOATED	IC08	M15-M30 N10-N25 S20-S30	A tough uncoated submicron carbide grade, suitable for steels, stainless steel and high temperature alloys at low cutting speeds. Good choice for non-ferrous materials.	Base	
	IC20	K10-K20 N05-N25 S10-S20 H10-H20	A hard-uncoated carbide grade for machining aluminum and other non-ferrous materials at medium to high cutting speeds. Can be used for cast iron at low cutting speeds. Suitable also for machining high temperature and Titanium alloys, at low cutting speeds.	Base	

Boring Bars for Adapters

HGAIR/L & HFAIR/L Adapters and HAI Holders

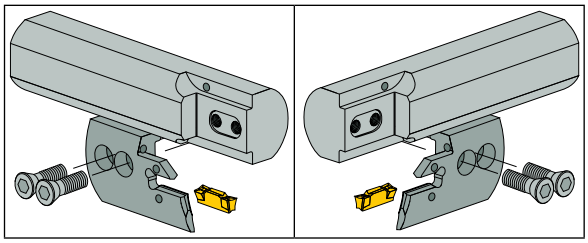
Adapter clamped on HAI round shank holders can machine deep internal boring and grooving applications. The tool can bore down to the bottom, and is supplied with internal coolant for better performance.



HFAIR/L & HGAIR/L	HAI Holders
	
Exchangeable adapters, see pages 568, 572	for adapters, see page 572

HFAIR/L HGAIR/L	- ☐	C	- ☐	T - ☐
HELIFACE Internal adapters right or left	Min. initial groove diameter	Internal coolant	Insert width	Max. depth of groove

HAI Holder System Assembly



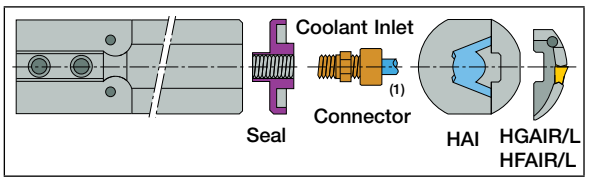
HFAIL & HGAIL
Left-hand Adapters

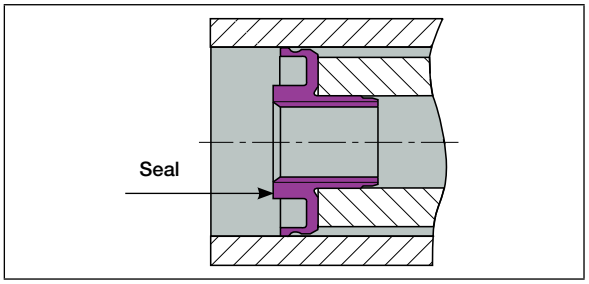
HFAIR & HGAIR
Right-hand Adapters

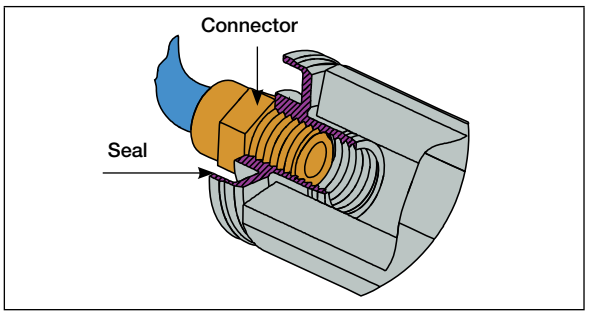
The same HAI boring bar can be used with right- and left-hand adapters in a wide range of face machining applications. The two screws and the central guiding slot on the adapter correspond to the key and holes on the holder ensuring strong, safe, and accurate clamping.



Coolant System







(1) Connector for coolant inlet BSP 1/8 thread. For PL-20, use M6 thread. Connector not supplied with tools.

Clamping the Insert

Clamping an insert correctly into the holder is necessary for stable machining.

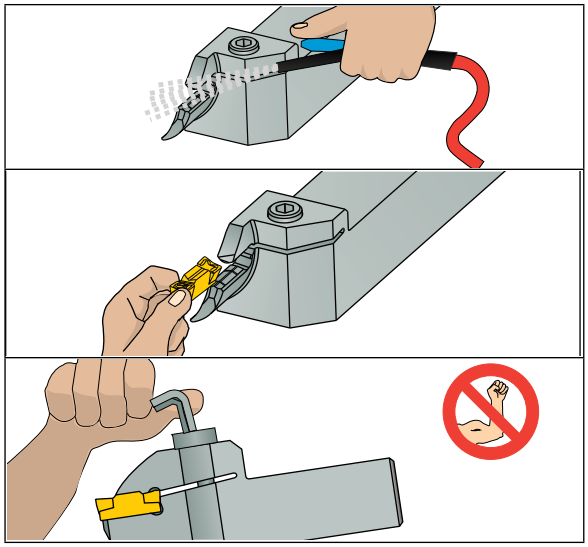
- Be sure that the seat is clean of dirt and swarf.
- In the first stage of clamping, ease the insert gently into place. Make sure that the prismatic surfaces match.

Screw Clamping Torque

Insert Width	Nxm
3	4-5
4	5-6
5	6-7
6/8	7-9
CGFG 51...	4-6



The unique chipformer is designed for deep grooving and face turning both toward and away from the center with excellent chip formation.

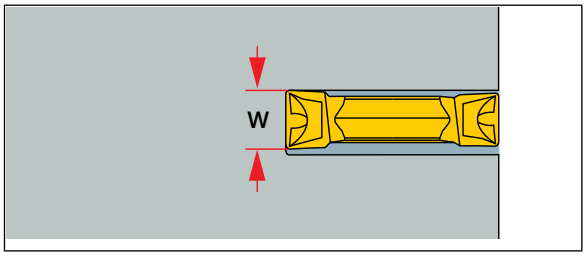


HELI-FACE HFPR/L & HGPL Type	HELI-GRIP GRIP...Y Type
	
For general use in turning & grooving on all types of materials. Use for deep grooving in low-to-medium feeds 0.04-0.15 mm/rev. Min grooving dia. 12 mm.	The "all in one" insert for parting, external grooving and turning, internal grooving and turning, face grooving and turning.

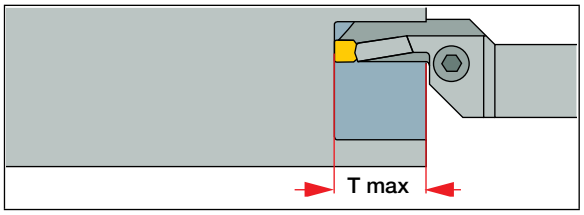
DO-GRIP DGN...C Type	DO-GRIP DGN...J Type
	
For grooving operations only. Strong cutting edge for hard materials and tough applications in feeds 0.1-0.2 mm/rev.	For grooving operations only. Positive rake, for soft materials in low-to-medium feeds 0.05-0.15 mm/rev.

Face Machining Guide

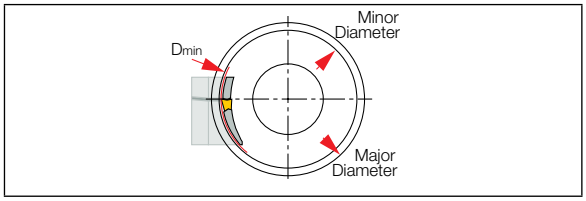
Tool Selection - Follow these recommendations to choose the right tool for high peformance.



Choose the widest possible insert and tool, according to the cutting width and geometry to be machined.



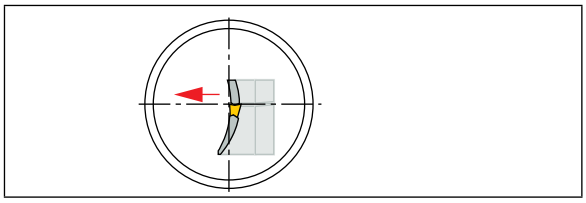
Choose the shortest tool blade overhang, according to the maximum depth required.



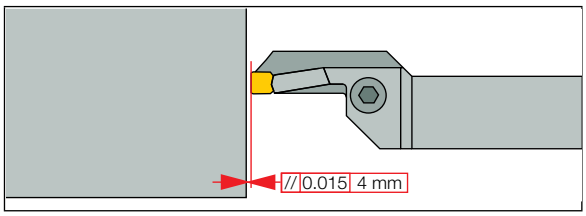
Choose the tool range with the largest diameter, depending on the initial grooving diameter required in the application.

Remark: On integral shank tools the given range refers to the holder capacity.

Tool Adjustment - Prior to machining, check and adjust the following tool positions.



Check the cutting edge height at center line, machine in light turning down to center and check for burr.

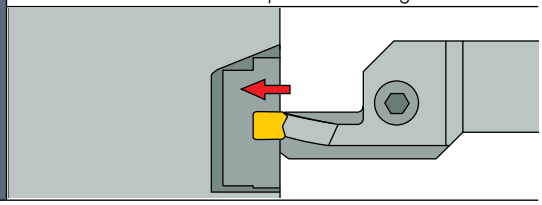


Check parallelism of the cutting edge and machined surface. Correct position can guarantee good surface quality when face turning in both directions.

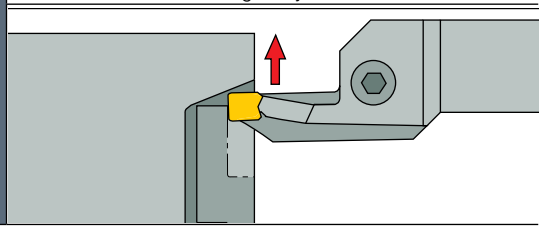
Face Machining Guide

Recommended machining sequence in roughing operation using multifunction HELI-FACE tools.

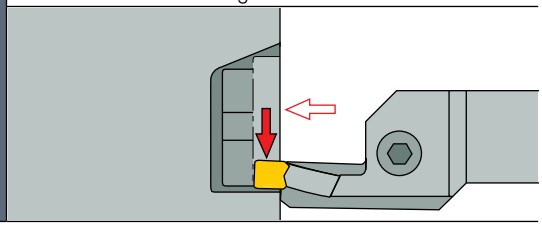
1 Groove at the initial diameter up to the depth of cut selected for the next step in face turning.



2 Continue with face turning away from the center.



3 After rapid positioning back into initial groove, continue with face turning to center.

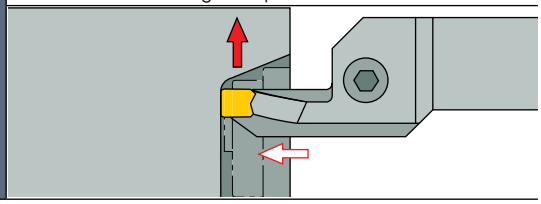


Note: When face grooving, reduce the speed by 40% in relation to that used in face turning.

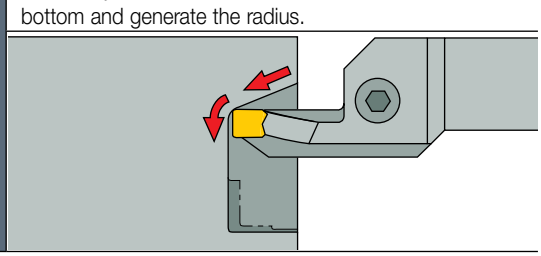
Optimizing the Machining Sequence

Recommended machining sequence using multifunction tools.

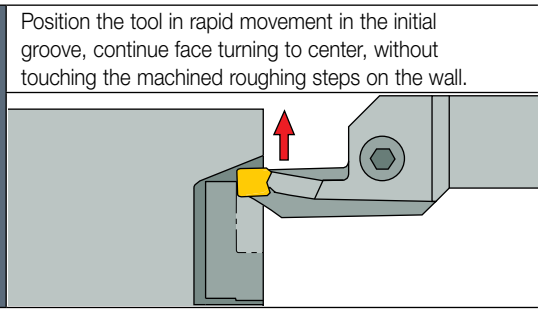
1 Groove at the initial diameter to the final depth of the groove and continue face turning away from the center to the tangential point on the radius.



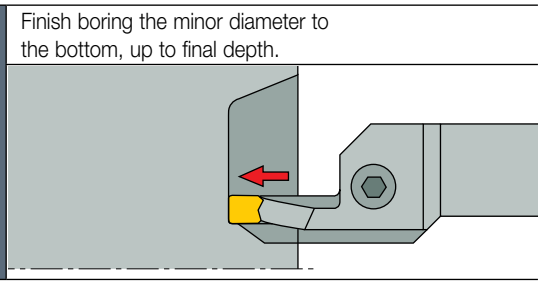
2 Finish major diameter toward the bottom and generate the radius.



3 Position the tool in rapid movement in the initial groove, continue face turning to center, without touching the machined roughing steps on the wall.



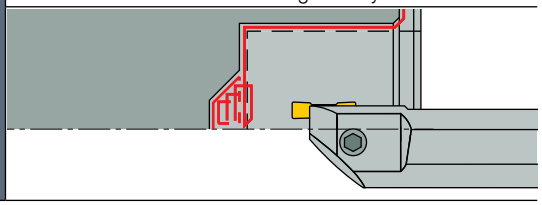
4 Finish boring the minor diameter to the bottom, up to final depth.



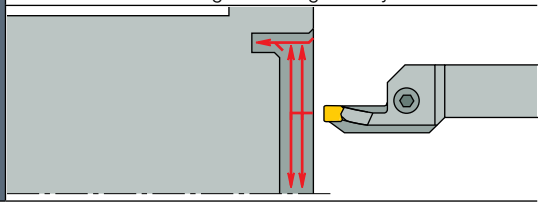
Note: When face grooving, reduce the speed by 40% in relation to that used in face turning.

The Multifunction Advantage

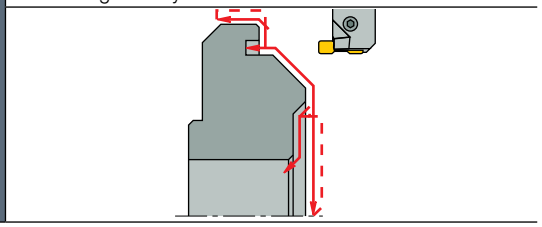
1 The **HELI-FACE** internal boring bar HFIR/L MC typewith internal coolant can replace the three different ISO tools and shorten machining time by 20%.



2 A single multifunction tool machines the whole part: grooving, face turning and chamfering, replacing three ISO tools and reducing machining time by 40%.



3 A single integral **HELI-FACE** tool HFHPL-M replaces three ISO tools and reduces machining time by 50%.

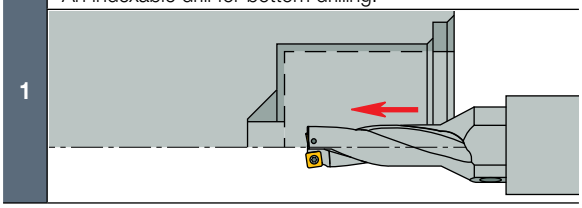


Note: When face grooving, reduce the speed by 40% in relation to that used in face turning.

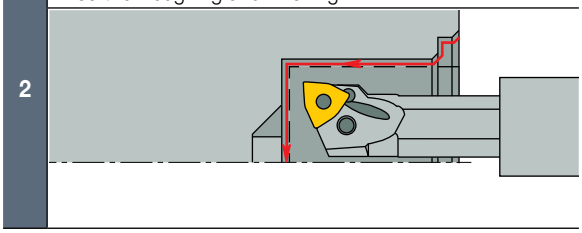
The Multifunction Advantage

This workpiece was machined using three different conventional tools.

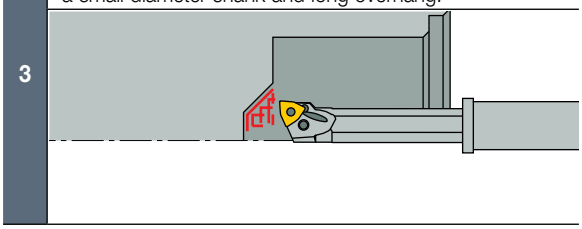
1 An indexable drill for bottom drilling.



2 A standard internal boring bar with a trigon insert for roughing and finishing.

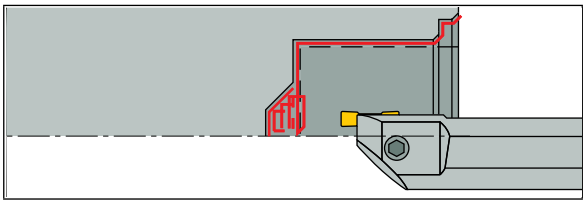


3 A standard internal boring bar with a trigon insert for bottom machining. This operation requires a small diameter shank and long overhang.



The HELI-FACE Solution

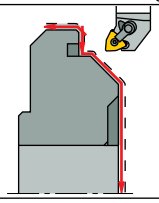
The **HELI-FACE** internal boring bar HFIR/L MC type with internal coolant can replace the three different ISO tools and shorten machining time by 20%.



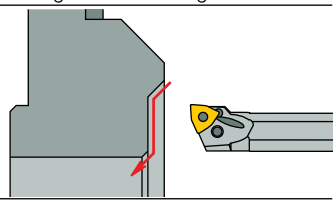
The Multifunction Advantage

This part was machined using three different conventional tools.

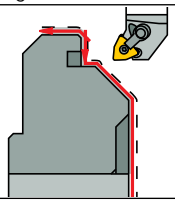
1 A standad ISO tool for external turning.



2 A boring bar for face turning and chamfering.

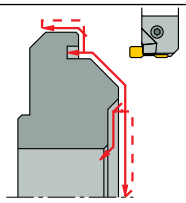


3 A face grooving tool for grooving, recessing and chamfering.



The HELI-FACE Solution

A single integral **HELI-FACE** tool HFHPL-M replaces three ISO tools and reduces machining time by 50%.



Insert Replacement

EDG 33B



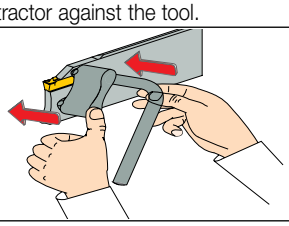
Eccentric Extractor

Simple to operate; controlled rotation requires low force; guarantees limited upper jaw movement and secures maximum load on blade.
Two extractor pins are placed in the two holes in the holder blades.

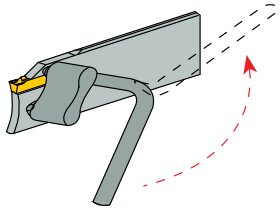
Indexing

Place the EDG extractor in the holes

1 Hold the extractor against the tool.

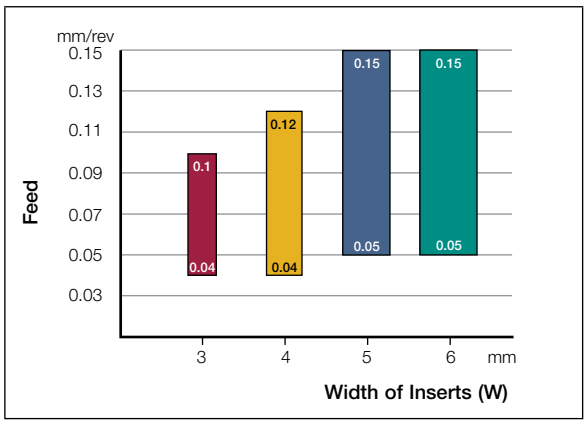


2 Rotate the eccentric handle to lift the upper jaw.

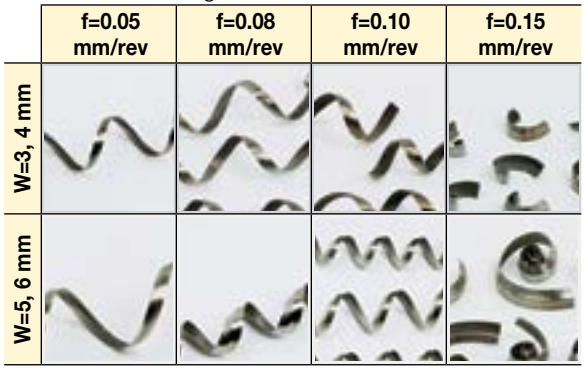


Machining Conditions in Face Grooving

Recommended feed range for grooving with **HFPR/L** inserts in various widths.

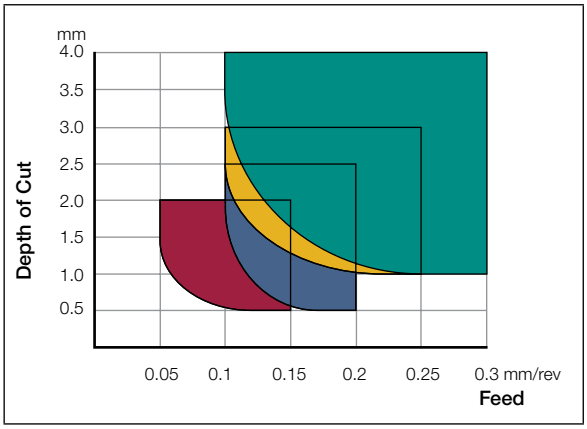


Chip shapes for grooving, according to width of insert and feed, using **HFHR/L** toolholders.

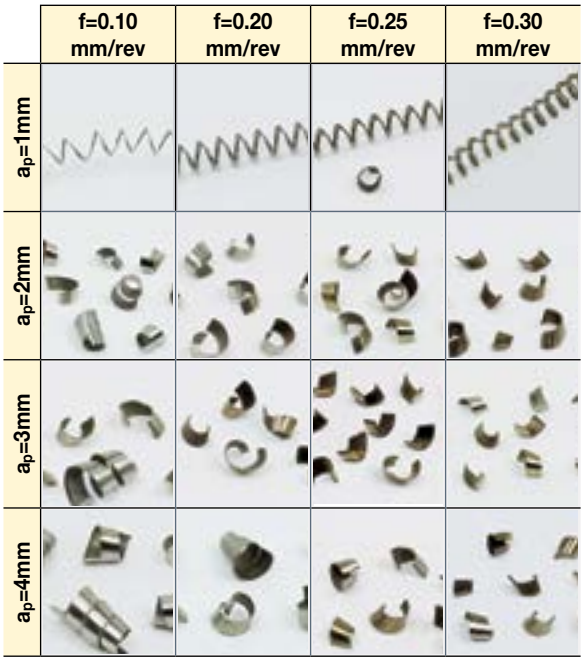


Note: In face grooving, narrowed and deformed chips are preferred. Curled and long chips can flow out more easily from deep grooves.

Recommended depth of cut and feed range for face turning using **HFHR/L** toolholders carrying **HFPR/L** inserts in various widths.



Chip shapes in face turning with inserts **HFPR/L-**5004 & **HFPR/L** 6004 and **HFHR/L** toolholders.



Note: In roughing, increase feed at small depth of cut and reduce feed at large depth of cut.

HFPR/L 3003
GRIP/HGPL 300Y

HFPR/L 4004
GRIP/HGPL 400Y

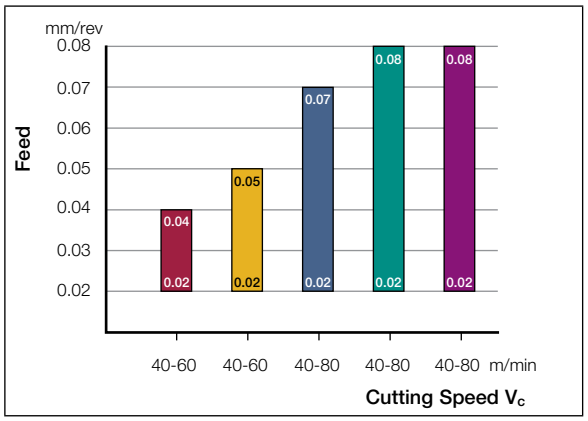
HFPR/L 5004
GRIP/HGPL 500Y

HFPR/L 6004
GRIP/HGPL 600Y

Face Grooving and Turning Recommendations

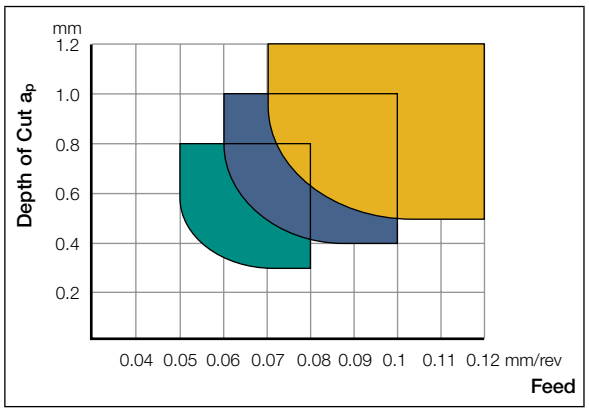
Using Adapters for 3 mm Inserts

Recommended feed range for grooving with Grip 3... and **HGPL 3...** inserts and **HGAIR/L** and **HGAER/L** adapters. Feed range changes according to adapter type.



- **HGAIR/L 12-3T6**
  HGAER/L 12-3T6
- **HGAIR/L 14-3T7**
  HGAER/L 14-3T7
- **HGAIR/L 17-3T8**
  HGAER/L 17-3T8
- **HGAIR/L 21-3T9**
  HGAER/L 21-3T9
- **HGAIR/L 25-3T9**

Recommended depth of cut and feed range for turning with **HGPL 3...** inserts with **HGAIR/L** and **HGAER/L** adapters. Feed range changes according to adapter type.

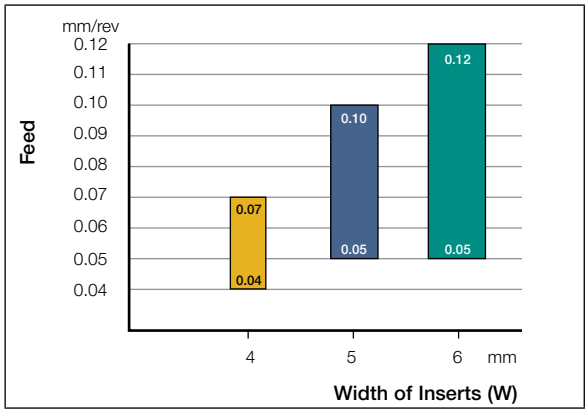


- **HGAIR/L 21-3T9**
  HGAER/L 21-3T9
  HGAIR/L 25-3T9
- **HGAIR/L 14-3T7**
  HGAER/L 14-3T7
  HGAIR/L 17-3T8
  HGAER/L 17-3T8
- **HGAIR/L 12-3T6**
  HGAER/L 12-3T6

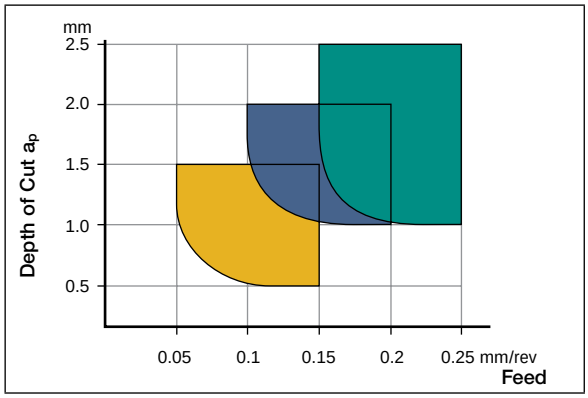
Note: In roughing, increase feed at small depth of cut, and reduce feed at large depth of cut.

Using Adapters for 4-6 mm Inserts

Recommended feed range in grooving with **HFPR/L** inserts and **HFAIR/L** & **HFAER/L** adapters.



Recommended depth of cut and feed range in turning with **HFPR/L** inserts and **HFAIR/L** & **HFAER/L** adapters. Feed range changes according to adapter type.



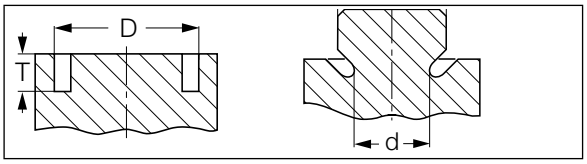
- **HFAIR/L- ...4**
  HFAER/L- ...4
- **HFAIR/L- ...5**
  HFAER/L- ...5
- **HFAIR/L- ...6**
  HFAER/L- ...6

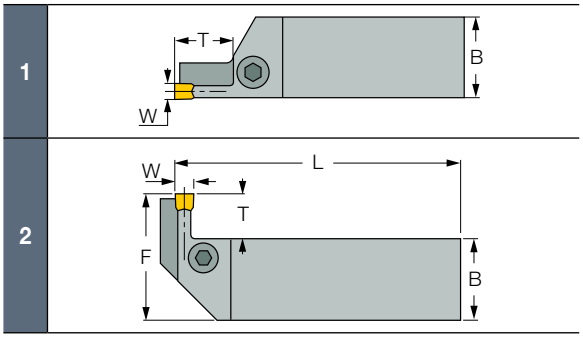
Note: In roughing, reduce feed when depth of cut is increased, ad increase feed at small depth of cut.

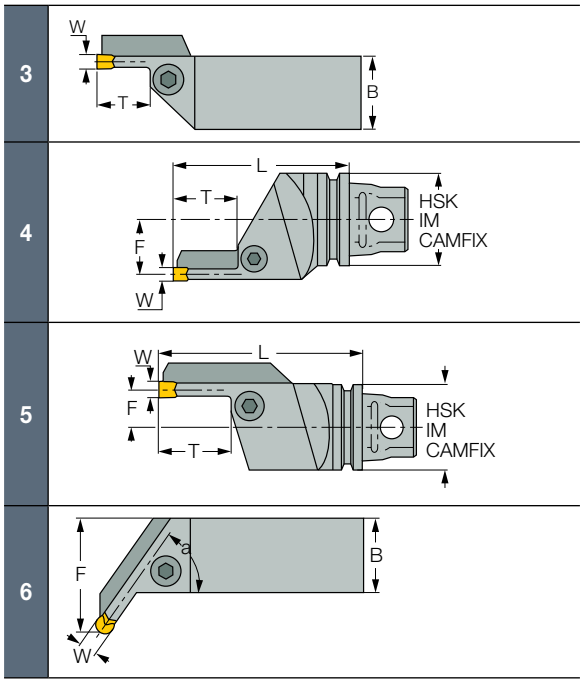
Specially Tailored

Semi-Standard Face Grooving and Undercutting Tools

The following drawings show typical semi-standard face grooving tools that can be ordered. Please specify all relevant dimensions and attach workpiece material geometric details.







Grade Selection for Facing Applications

Material groups		ISO P		ISO M	ISO K	ISO N	ISO S	ISO H
		1-11	12-13	14	15-20	21-28	31-37	38-41
		Steel	Stainless Steel Ferritic & Martensitic	Stainless Steel Austenitic & Duplex (Ferritic-Austenitic)	Cast Iron	Non-ferrous	High Temperature Alloys	Hard Steel & Cast Iron
FACING	Harder	IC808	IC808	IC808	IC5010			IC808
		IC8250	IC8250	IC8250		IC20	IC20	
		IC830	IC830			IC08		IC908
	Tougher				IC428		IC808	

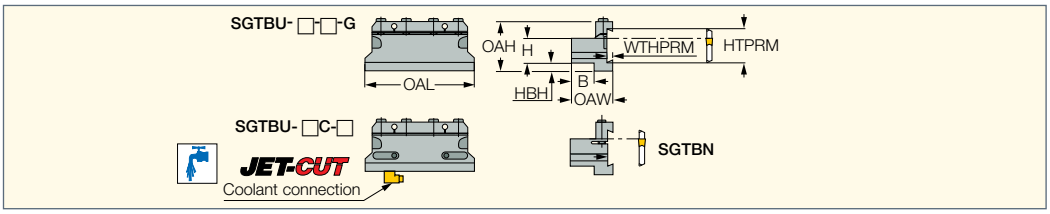
■ First choice

TOOL BLOCKS



TOOL BLOCKS

SGTBU/SGTBN
Blocks for Various Parting and Grooving Blades



Designation	H	B	HTPRM	OAW	OAH	HBH	WTHPRM	OAL
SGTBN 16-2	16.0	16.0	19.00	26.00	30.0	4.0	2.00	76.00
SGTBU 16-5G	16.0	17.0	26.00	34.00	43.0	13.0	4.10	86.00
SGTBU 20-5G	20.0	21.0	26.00	38.00	43.0	9.0	4.10	86.00
SGTBU 20-6G	20.0	19.1	32.00	38.20	50.0	12.9	5.30	100.00
SGTBU 25-5G	25.0	26.1	26.00	43.10	45.0	5.0	4.10	110.00
SGTBU 25-6G	25.0	23.0	32.00	42.20	50.0	7.9	5.30	110.00
SGTBU 25-8M	25.0	23.0	45.00	42.20	70.0	27.0	5.30	110.00
SGTBU 25C-6 (1)	25.0	23.0	32.00	42.20	50.0	7.9	5.30	110.00
SGTBU 32-25-6G	32.0	25.2	32.00	44.15	54.0	4.9	5.30	110.00
SGTBU 32-6G	32.0	29.1	32.00	28.20	54.0	4.9	5.30	110.00
SGTBU 32-8M	32.0	29.0	45.00	48.20	70.0	20.0	5.30	110.00
SGTBU 32C-14 (1)	32.0	28.0	52.60	63.00	99.8	41.7	12.60	140.00
SGTBU 40-6G	40.0	-	32.00	60.00	57.0	-	5.30	114.00
SGTBU 40-9	40.0	41.0	52.60	66.00	81.0	22.0	8.00	130.00
SGTBU 40C-14 (1)	40.0	28.0	52.60	63.00	99.8	33.8	12.60	140.00
SGTBU 50-9	50.0	41.0	52.60	66.00	83.0	14.0	8.00	135.00
SGTBU 100-9-12 (2)	50.0	49.0	100.00	106.00	155.0	73.5	15.00	225.00
SGTBU 150-9-12 (2)	50.0	49.0	150.00	106.00	209.0	127.5	15.00	306.00

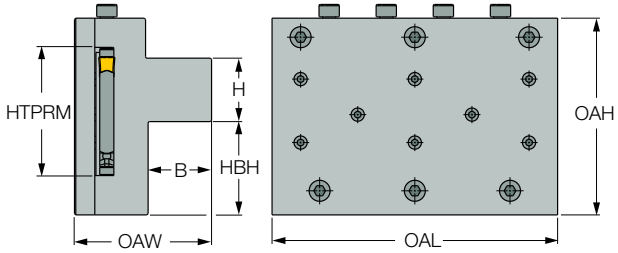
- Choose blade by HTPRM and WTHPRM dimensions

(1) Elbow-style connector unit supplied with each JET-CUT tool block

(2) See more detailed information below

For tools, see pages: Anti-Vibration Blades (312) • CGFG 51-P8 (661) • CGHN-8-10D (315) • CGHN-D (310) • CGHN-DG (310) • CGHN-P8 (311) • CGHR/L-12-14D (375) • CGHR/L-P8DG (311) • DGFH (293) • DGFHR/L (526) • DGFHR/L-B-D..(R/L) (528) • HFFA (637) • HFFH (637) • HFFR/L-T (645) • HGFH (292) • PCHBR/L (355) • SGFFA (671) • SGFFH (672) • TGFH/R/L (374) • TGFHL-TR (567) • TGFHR/L (556) • TGHN-D (298) • TNFFA-IQ (666) • TNFFH-IQ (665)

SGTBU 100/150-9-12





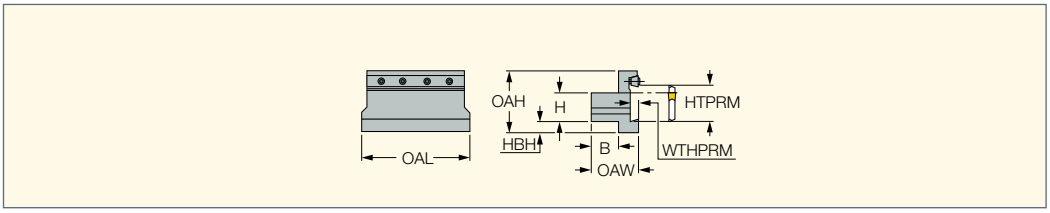
Spare Parts

Designation										
SGTBN 16-2		SR M5X20DIN912		HW 4.0						
SGTBU 16-5G	BKU 86	SR M6X16 DIN912		HW 5.0						
SGTBU 20-5G	BKU 86	SR M6X16 DIN912		HW 5.0						
SGTBU 20-6G	BKU 100	SR M6X16 DIN912		HW 5.0						
SGTBU 25-5G	BKU 105	SR M6X16 DIN912		HW 5.0						
SGTBU 25-6G	BKU 110	SR M6X16 DIN912		HW 5.0						
SGTBU 25-8M	BKU 110	SR M6X16 DIN912		HW 5.0						
SGTBU 25C-6	BKU 110	SR M6X16 DIN912		HW 5.0			SGCU-344*	CF 343*	CGF 343*	CGM 343*
SGTBU 32-25-6G	BKU 110	SR M6X16 DIN912		HW 5.0						
SGTBU 32-6G	BKU 110	SR M6X16 DIN912		HW 5.0						
SGTBU 32-8M	BKU 110	SR M6X16 DIN912		HW 5.0						
SGTBU 32C-14	BKU 32-14	SR M10X30 DIN912		HW 8.0	JHP ELBOW 90-G1/8-7/16UNF	OR 34X2.5N				
SGTBU 40-6G	BKU 110	SR M6X16 DIN912		HW 5.0						
SGTBU 40-9	BK 509	SR M8X25DIN912		HW 6.0						
SGTBU 40C-14	BKU 32-14	SR M10X30 DIN912		HW 8.0	JHP ELBOW 90-G1/8-7/16UNF	OR 34X2.5N				
SGTBU 50-9	BK 509	SR M8X25DIN912		HW 6.0						
SGTBU 100-9-12		SR M10X25 DIN912		HW 8.0						
SGTBU 150-9-12		SR M10X25 DIN912	SR M10X30 DIN912	HW 8.0						

* Optional, to be ordered separately

TOOL BLOCKS

SGTBK
Blocks for Heavy Duty Parting and Grooving Blades



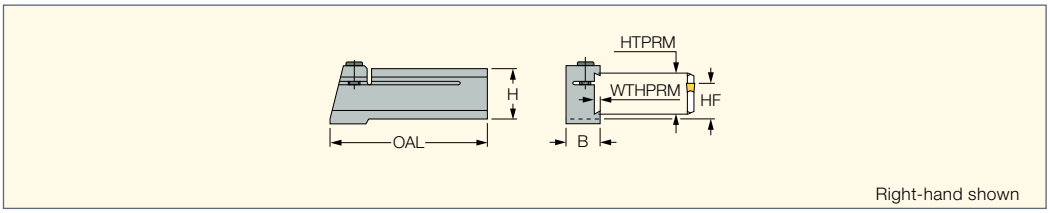
Designation	H	B	WTHPRM	HTPRM	OAW	OAH	HBH	OAL			
SGTBK 32-9	32.0	28.0	8.50	32.00	48.00	62.0	3.0	120.00	BK 32-9 WEDG	SR M6X16 DIN912	HW 5.0
SGTBK 38-9	38.0	35.0	8.50	52.60	60.00	90.0	25.0	135.00	BK 40-9	SR M6X20 DIN912	HW 5.0
SGTBK 40-9	40.0	35.0	8.50	52.60	60.00	90.0	23.0	135.00	BK 40-9	SR M6X20 DIN912	HW 5.0
SGTBK 50-9	50.0	40.0	8.50	52.60	65.00	90.0	15.0	135.00	BK 40-9	SR M6X20 DIN912	HW 5.0

- Choose blade by HTPRM dimension

For tools, see pages: Anti-Vibration Blades (312) • CGFG 51-P8 (661) • CGHN-8-10D (315) • CGHN-P8 (311) • CGHR/L-12-14D (375) • CGHR/L-P8DG (311) • DGFH (293) • HFFH (637) • PCHBR/L (355) • SGFFH (672) • TGFH/R/L (374) • TGFHR/L (556) • TNFFH-IQ (665)

TOOL BLOCKS

SGTBR/L
Blocks for Parting and Grooving Blades for Conventional Lathes



Right-hand shown

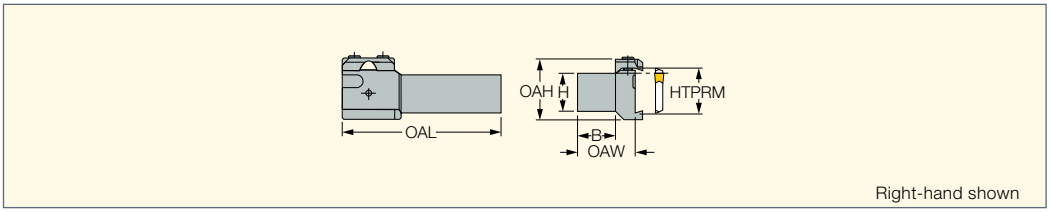
Designation	H	HF	HTPRM	B	OAL	WTHPRM		
SGTBR 19-2	25.0	19.0	19.00	19.0	100.00	2.00	SR M6X25DIN912	HW 5.0
SGTBL 25-6	32.0	25.0	26.00	20.0	121.50	5.00	SR M6X25DIN912	HW 5.0
SGTBR 25-6	32.0	25.0	26.00	20.0	120.00	5.00	SR M6X30 DIN912	HW 5.0

- Choose blade by HTPRM dimension

For tools, see pages: DGFH (293) • DGFHR/L (526) • DGFHR/L-B-D..(R/L) (528) • HGFH (292) • PCHBR/L (355) • TGFH/R/L (374) • TGFHL-TR (567) • TGFHR/L (556)

TOOL BLOCKS

UBHCR/L
Holders for Grooving, Turning and Parting Blades



Right-hand shown

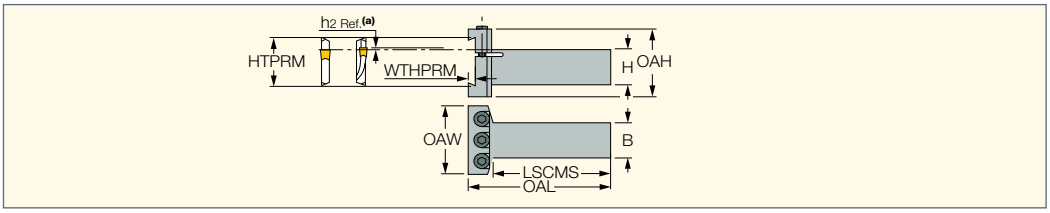
Designation	H	HTPRM	B	OAH	OAW	OAL				
UBHCR/L 20-26	20.0	26.00	20.0	42.0	35.60	100.00	BKU 176 307	SR M6X16 DIN912	HW 5.0	SPRING PLUNGER M6X14X3.5
UBHCR/L 25-32	25.0	32.00	25.0	46.0	40.00	130.00	BKU 176 307	SR M6X16 DIN912	HW 5.0	SPRING PLUNGER M6X14X3.5
UBHCR/L 32-32	32.0	32.00	32.0	46.0	47.00	130.00	BKU 176 307	SR M6X16 DIN912	HW 5.0	SPRING PLUNGER M6X14X3.5

- Choose blade by HTPRM dimension

For tools, see pages: CGHN-D (310) • CGHN-DG (310) • CGHN-S (309) • CGHR/L-P8DG (311) • DGFH (293) • DGFHR/L (526) • DGFHR/L-B-D..(R/L) (528) • HFFA (637) • HFFH (637) • HFFR/L-T (645) • HGFH (292) • SGFFA (671) • SGFFH (672) • TGFH/R/L (374) • TGFHL-TR (567) • TGFHR/L (556) • TGHN-D (298) • TGHN-S (298) • TNFFA-IQ (666) • TNFFH-IQ (665)

TOOL BLOCKS

SGTBF
Perpendicular Blocks for Parting and Grooving Blades



Designation	H	B	HTPRM	OAL	LSCMS	OAW	OAH	WTHPRM		
SGTBF 25-A	25.0	25.0	32.00	102.00	80.00	48.00	48.0	5.50	SR M6X25DIN912	HW 5.0
SGTBF 32-A	32.0	32.0	32.00	116.00	100.00	48.00	48.0	5.50	SR M6X25DIN912	HW 5.0

- (a) h2 Ref. as defined for SELF-GRIP face grooving blades • Choose blade by HTPRM dimension

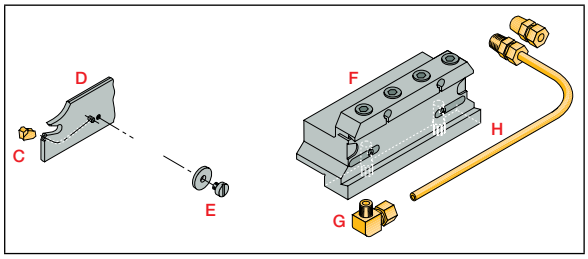
For tools, see pages: DGFH (293) • DGFHR/L (526) • DGFHR/L-B-D..(R/L) (528) • HFFA (637) • HFFH (637) • HFFR/L-T (645) • HGFH (292) • SGFFA (671) • SGFFH (672) • TGFH/R/L (374) • TGFHR/L (556) • TNFFA-IQ (666) • TNFFH-IQ (665)

JETCUT Assembly

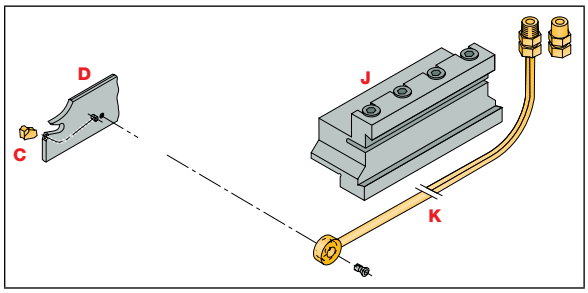
SELF-GRIP

C Insert **GF**☐
D Blade **SGFH**☐**K-**☐
E Cap **SGC 340** supplied with a blade; to be used with Option 1 only.
F Tool block **SGTBU**☐**C-**☐
G Elbow-style connector unit supplied with each tool block
H **SGCU-344 H 3/16”** copper Tube 343 (length 250 mm)
J Standard current tool blocks **SGTBN, SGTBU, SGTBF**
K Coolant connection unit **SGCU**-341
M Integral shank holder **SGTFR/L**☐**K-**☐

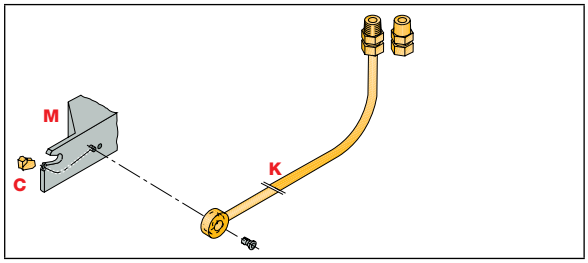
Option 1:
Coolant supplied through the tool block.



Option 2:
Coolant supplied directly to the blade.



Option 3:
Coolant supplied directly to the integral shank tool.



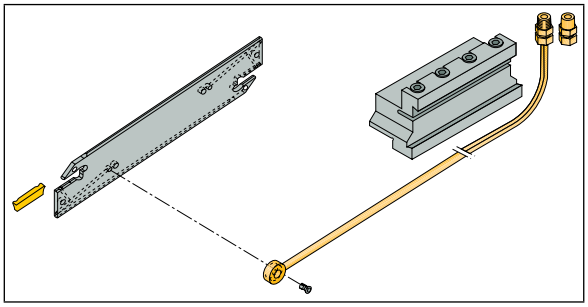
DO-GRIP 500 STRAIGHT LINE

The coolant supply tube can be used with the following options:

- DGTR...C integral tool
- DGFH-C blades used on regular blocks by connecting directly to the blade
- SGTBU-C blocks with coolant passages and connecting ports

The Right Connection for Your Application

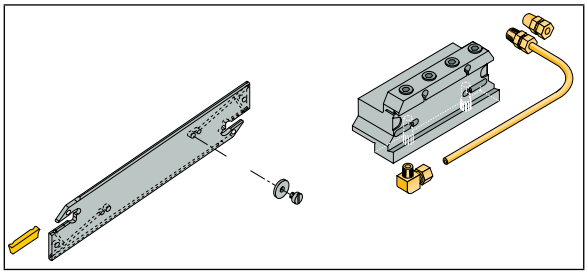
Option 1:
Coolant supplied directly to the blade.



SGCU 341 Coolant connection unit

Connectors:
CGM 343 (G1/8 external thread)
CGF 343 (G1/8 internal thread)
CF 343 (NPT1/8 internal thread)

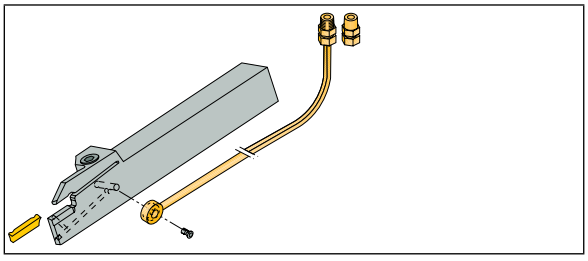
Option 2:
Coolant supplied through the tool block.



SGCU 344 Elbow connector

TUBE 343
3/16” copper tube (length 250 mm)
(G1/8 external thread) (G1/8 internal thread)
(NPT1/8 external thread) (NPT1/8 internal thread)

Option 3:
Coolant supplied directly to the tool.



SGCU 341 Coolant connection unit

Connectors:
CGM 343 (G1/8 external thread)
CGF 343 (G1/8 internal thread)
CF 343 (NPT1/8 internal thread)

EXCHANGEABLE HEAD HOLDERS



CONTENTS

CAMFIX (ISO 26623-1) 695
HSK-T (ISO 12164-3 T Type and ICTM Standard) 705
IM (ISO 26622-1 and Mazak XMZ Standard) 707

ISCAR offers a wide range of tools for three types of Quick Change systems:

1 **CAMFIX** (ISO 26623-1)
2 **HSK**-T (ISO 12164-3 T Type and ICTM Standards)
3 IM (ISO 26622-1 and **Mazak** XMZ Standards)

CAMFIX (ISO 266231)



Quick Change tools are expensive compared to standard shank tools. **ISCAR** offers economical solutions by using adapters, blades or regular tools and boring bars on the Quick Change adaptations.

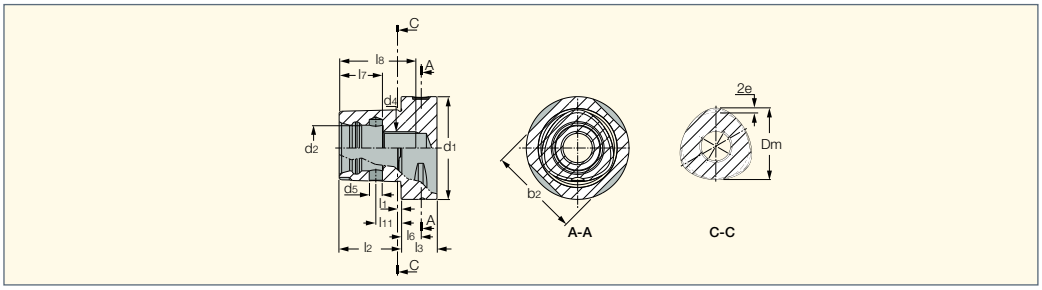
HSK-T (ISO 1264-3 T Type and ICTM Standard)





CAMFIX

CAMFIX ISO 26623-1
Toolholder Standard



CAMFIX	b2	d1 ±0.1	d2	d4	d5 ±0.1	Dm	e	l1	l2 ±0.1	l3 min	l6 ±0.15	l7 ±0.15	l8 min	l11 ±0.1
C3	28,3	32	15	M12x1.5	3,6	22	0,7	2,5	19	15	6	13	25	8
C4	35,3	40	18	M14x1.5	4,6	28	0,9	2,5	24	20	8	15	30	11,5
C5	44,4	50	21	M16x1.5	6,1	35	1,12	3	30	20	10	20	37	14
C6	55,8	63	28	M20x2	8,1	44	1,4	3	38	22	12	27	47	15,5
C8	71,1	80	32	M20x2	9,1	55	2	3	48	30	12	28	48	25
C8X	88,7	100	32	M20x2	9,1	55	2	3	48	32	16	28	48	25
C10	88,3	100	43	M24x2	12	72	2,8	3	60	36	16	40	70	26,5

CAMFIX - ISO 26623-1 Standard Quick Change Shanks

Features

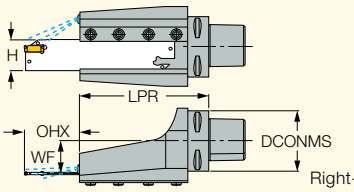
- Symmetrical design: Due to the symmetrical design, the torque load is distributed on the polygon, providing a self-centering effect.
- Rigidity: The **CAMFIX** clamping mechanism is extremely rigid against bending forces.
- Accuracy: The taper and face contact ensure high repeatability within 2 microns when operated with an automatic tool changer.



TOOL BLOCKS

CAMFIX

C#-TBK-R/L
Blocks with CAMFIX Exchangeable Shanks for Parting and Grooving Blades



Right-hand shown • OHX = See specific blade dimensions

Designation	DCONMS	WF	LPR	H(1)	CP(2)	DCP(3)					
C6 TBK-32R/L	63.00	32.0	138.00	32.0	100	1	BK 32-9 WEDG	SR M6X16 DIN912	HW 5.0	EZ 125	SR M8X6 DIN913
C8 TBK-52R	80.00	40.5	161.00	52.0	100	1	BK 40-9	SR M6X16 DIN912	HW 5.0	EZ 125	SR M8X6 DIN913

(1) Blade size H has to fit this dimension
(2) Coolant pressure (Bar)
(3) 1 - Slot for data chip, 0 - Without slot for data chip

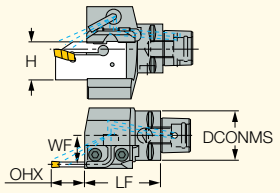
For tools, see pages: CGHN-DG (310) • CGHR/L-P8DG (311) • DGFH (293) • DGFHR/L (526) • DGFHR/L-B-D..(R/L) (528) • HFFH (637) • HGFH (292) • PCHBR/L (355) • TGFH/R/L (374) • TGFHR/L (556) • TNFFH-IQ (665)



TOOL BLOCKS

CAMFIX

C#-TBU
Blocks with CAMFIX Exchangeable Tapered Shanks for Parting and Grooving Blades



Right-hand shown • OHX= See specific blade dimensions

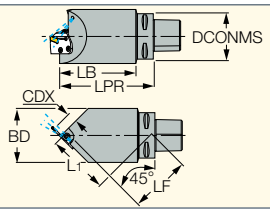
Designation	DCONMS	WF	LF	H	DCP(1)						
C4 TBU-32R/L	40.00	21.0	60.00	32.0	1	BKU 176 307	SR M6X25 DIN912	HW 5.0	SR M6X8 DIN916	EZP 5	EZ 125
C5 TBU-32R	50.00	30.0	64.00	32.0	1	BKU 176 307	SR M6X25DIN912	HW 5.0	SR M6X8 DIN916	EZP 5	EZ 125

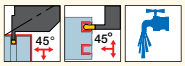
(1) 1 - Slot for data chip, 0 - Without slot for data chip

For tools, see pages: CGHN-S (309) • TGHN-S (298)

MODULAR-GRIP

C#-MAHDR-45
Holders with CAMFIX Exchangeable Shanks for Parting, Grooving, Turning and Facing Adapters





Right-hand shown • CDX = See specific adapter dimensions

Designation	DCONMS	LPR	L1	LB	LF	BD	CP(1)	DCP(2)
C8 MAHDR-45	80.00	130.00	91.9	-	89.0	80.00	100	1
C6 MAHDR-45	63.00	130.00	91.9	105.78	89.0	75.00	100	1

- For mill-turn machines

(1) Coolant pressure (Bar)

(2) 1 - Slot for data chip, 0 - Without slot for data chip

For tools, see pages: CGPAD (308) • DGAD-B-D (538) • DGAD/HGAD (537) • HFPAD-3 (643) • HFPAD-4 (643) • HFPAD-5 (644) • HFPAD-6 (644) • HGPAD (291) • PCADR/L (353) • SCLCR-PAD (71) • SDJCR-PAD (78) • SVJCR-PAD (88) • SWAPR-PAD (96) • TGAD (560) • TGPAD (297)



Spare Parts

Designation								
C8 MAHDR-45	SR M5-04451	T-20/5	SR 14-519(a)	SR M6X20-XT(b)	HW 5.0	SR M6X6DIN551 14H/22H(c)	SR M8X6 DIN913	SATZ-M12X1-M6
C6 MAHDR-45	SR M5-04451	T-20/5	SR 14-519(a)	SR M6X20DIN7984	HW 4.0	SR M6X6DIN551 14H/22H(c)	SR M5X4 DIN913	EZ 83

(a) For DGAD, HGAD and PCADR/L adapters; supplied in the attached plastic bag

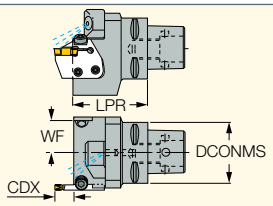
(b) For CGPAD, HGPAD, TGPAD and HFPAD adapters; supplied with the tools

(c) Used to prevent chips from entering the upper locking screw hole

MODULAR-GRIP

C#-MAHD

Holders with CAMFIX Exchangeable Shanks for Parting, Grooving, Turning and Facing Adapters



Right-hand shown
• CDX = See specific adapter dimensions

Designation	DCONMS	LPR	WF	CP(1)	DCP(2)
C3 MAHD	32.00	50.00	18.5	100	0
C4 MAHD	40.00	46.50	22.1	100	1
C5 MAHD	50.00	47.00	23.0	100	1
C6 MAHD	63.00	50.00	29.0	100	1
C8 MAHD	80.00	60.00	37.5	100	1

(1) Coolant pressure (Bar)
(2) 1 - Slot for data chip, 0 - Without slot for data chip

For tools, see pages: CGPAD (308) • DGAD-B-D (538) • DGAD/HGAD (537) • HFPAD-3 (643) • HFPAD-4 (643) • HFPAD-5 (644) • HFPAD-6 (644) • HGPAD (291) • PCADR/L (353) • SCLCR-PAD (71) • SDJCR-PAD (78) • SVJCR-PAD (88) • SWAPR-PAD (96) • TGAD (560) • TGPAD (297)

Spare Parts

Designation									
C#-MAHD	SR M5-04451	T-20/5	SR 14-519(a)	SR M6X20-XT(b)	HW 5.0	SR M6X6DIN551 14H/22H(c)	EZ 125	EZA 125	SR 76-1022

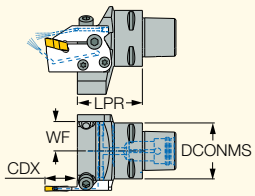
(a) For DGAD, HGAD and PCADR/L adapters; supplied in the attached plastic bag
(b) For CGPAD, HGPAD, TGPAD and HFPAD adapters; supplied with the tools
(c) Used to prevent chips from entering the upper locking screw hole

MODULAR-GRIP

C#-MAHD-JHP

Holders with CAMFIX Exchangeable Shanks and High Pressure Coolant Channels for MODULAR-GRIP Adapters

JET CUT



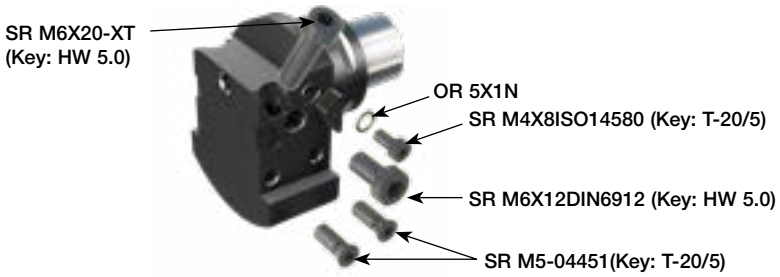
340 Bar Max

Right-hand shown
• CDX = See specific adapter dimensions
• WF=WF(shank)+WF(adapter)

Designation	DCONMS	LPR	WF	DCP(1)							
C3 MAHD-JHP	32.00	45.00	18.5	0	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW 5.0	OR 5X1N	SR M4X8ISO14580 BLACK
C4 MAHD-JHP	40.00	46.50	21.0	1	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW 5.0	OR 5X1N	SR M4X8ISO14580 BLACK
C5 MAHD-JHP	50.00	47.00	26.0	1	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW 5.0	OR 5X1N	SR M4X8ISO14580 BLACK
C6 MAHD-JHP	63.00	50.00	32.5	1	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW 5.0	OR 5X1N	SR M4X8ISO14580 BLACK

• For user guide and accessories, see pages 104-110, 694
(1) 1 - Slot for data chip, 0 - Without slot for data chip

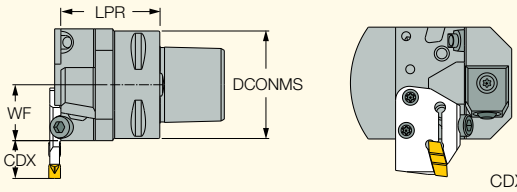
For tools, see pages: CGPAD (308) • CGPAD-JHP (309) • DGAD-B-D (538) • DGAD/HGAD (537) • DGPAD-JHP (538) • HFPAD-3 (643) • HFPAD-4 (643) • HFPAD-5 (644) • HFPAD-6 (644) • HFPAD-JHP (642) • HGPAD (291) • HGPAD-JHP (291) • PCADR/L (353) • PCADR/L-JHP (353) • PCADRS/LS-JHP (354) • PCLNR/L-PAD-JHP (25) • TAGPAD-JHP (562) • TGAD (560) • TGPAD (297) • TGPAD-JHP (298)



MODULAR GRIP

C#-MAHPD

Perpendicular Holders with CAMFIX Exchangeable Shanks Carrying Adapters for Parting, Grooving, Turning and Facing



CDX = See specific adapter dimensions

Designation	DCONMS	LPR	WF	DCP(1)	CP(2)
C4 MAHPD	40.00	46.00	25.00	1	100
C5 MAHPD	50.00	46.00	26.00	1	100
C6 MAHPD	63.00	47.00	33.00	1	100
C8 MAHPD	80.00	56.00	42.00	1	100

(1) 1 - Slot for data chip, 0 - Without slot for data chip

(2) Coolant pressure (Bar)

For tools, see pages: CGPAD (308) • DGAD-B-D (538) • DGAD/HGAD (537) • HFPAD-3 (643) • HFPAD-4 (643) • HFPAD-5 (644) • HFPAD-6 (644) • HGPAD (291) • PCADR/L (353) • SCLCR-PAD (71) • SDJCR-PAD (78) • SVJCR-PAD (88) • SWAPR-PAD (96) • TGAD (560) • TGPAD (297)

Spare Parts

Designation									
C#-MAHPD	SR M5-04451	T-20/5	SR 14-519(a)	SR M6X20-XT(b)	HW 5.0	SR M6X6DIN551 14H/22H(c)	EZ 125	SR 76-1022	EZA-21414

(a) For DGAD, HGAD and PCADR/L adapters; supplied in the attached plastic bag

(b) For CGPAD, HGPAD, TGPAD and HFPAD adapters; supplied with the tools

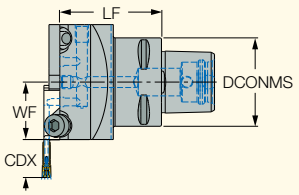
(c) Used to prevent chips from entering the upper locking screw hole

MODULAR GRIP

C#-MAHPD-JHP

Perpendicular Holders with CAMFIX Exchangeable Shanks for Parting, Grooving, Turning and Facing Adapters

JET CUT



340 Bar Max

CDX= See specific adapter dimensions

Designation	DCONMS	LF	WF	DCP(1)							
C3 MAHPD-JHP	32.00	40.00	26.00	0	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW 5.0	OR 5X1N	SR M4X8ISO14580 BLACK
C4 MAHPD-JHP	40.00	46.00	26.00	1	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW 5.0	OR 5X1N	SR M4X8ISO14580 BLACK
C5 MAHPD-JHP	50.00	46.00	26.00	1	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW 5.0	OR 5X1N	SR M4X8ISO14580 BLACK
C6 MAHPD-JHP	63.00	46.00	33.00	1	SR M5-04451	T-20/5	SR M6X12DIN6912	SR M6X20-XT	HW 5.0	OR 5X1N	SR M4X8ISO14580 BLACK

• For user guide and accessories, see pages 104-110, 694

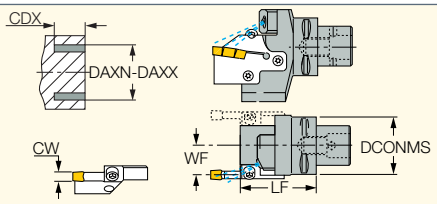
(1) 1 - Slot for data chip, 0 - Without slot for data chip

For tools, see pages: CGPAD (313) • CGPAD-JHP (314) • DGAD-B-D (548) • DGAD/HGAD (547) • DGPAD-JHP (548) • HFPAD-3 (653) • HFPAD-4 (653) • HFPAD-5 (654) • HFPAD-6 (654) • HFPAD-JHP (652) • HGPAD (295) • HGPAD-JHP (295) • PCADR/L (358) • PCADR/L-JHP (358) • PCADRS/LS-JHP (359) • PCLNR/L-PAD-JHP (25) • PDJNR/L-PAD-JHP (38) • SCLCR-PAD (71) • SCLCR/L-PAD-JHP (71) • SDJCR-PAD (78) • SDJCR-SL-PAD-JHP (74) • SDJCR/L-PAD-JHP (78) • SVJCR-PAD (88) • SVJCR/L-PAD-JHP (88) • SWAPR-PAD (96) • TAGPAD-JHP (572) • TGAD (570) • TGPAD (302) • TGPAD-JHP (303)

CUTGRIP

C#-GHAD-8

Holders with CAMFIX Exchangeable Shanks for Grooving, Turning and Facing Adapters



CDX - See specific adapter dimensions

Designation	DCONMS	LF	WF	CW	DAXN(1)	DAXX(2)	CP(3)	DCP(4)
C5 GHAD-8	50.00	65.00	26.00	8.00	80.0	510.0	100	1
C6 GHAD-8	63.00	65.00	32.50	8.00	80.0	510.0	100	1

- For user guide and accessories see page 694

(1) Minimum axial grooving diameter

(2) Maximum axial grooving diameter

(3) Coolant pressure (Bar)

(4) 1 - Slot for data chip, 0 - Without slot for data chip

For tools, see pages: GADR/L-8 (314) • GAFG-R/L-8 (661) • PCADR/L 34N-RE (354)

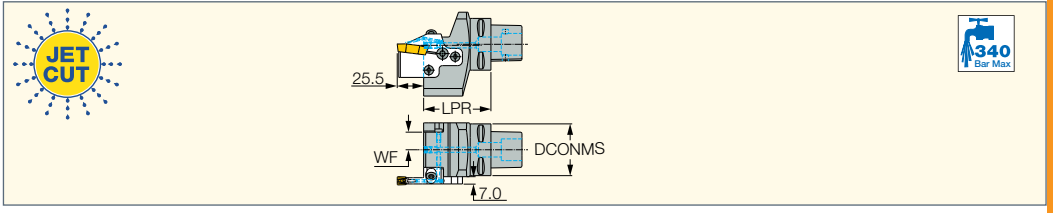
Spare Parts

Designation							
C#-GHAD-8	SR 14-519	T-20/5	SR M6X25DIN912	HW 5.0	SR 76-1022	EZA 125	EZ 125

CUTGRIP

C#-GHAD-JHP

Holders with High Pressure Coolant Channels and CAMFIX Exchangeable Shanks for Grooving and Turning

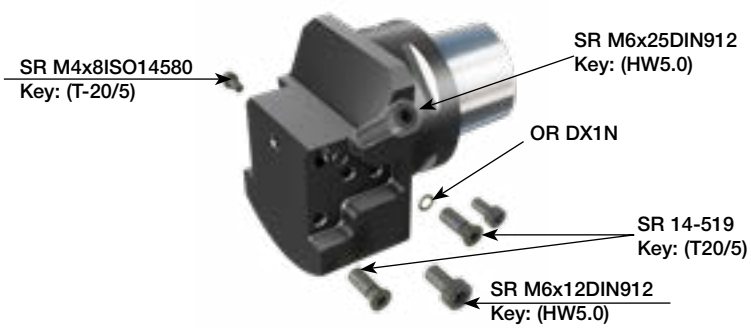


Designation	DCONMS	LPR	WF	DCP(1)
C4 GHAD-8 JHP	40.00	62.00	13.00	1
C5 GHAD-8-JHP	50.00	65.00	17.00	1
C6 GHAD-8-JHP	63.00	65.00	23.50	1
C8 GHAD-8-JHP	80.00	74.00	38.50	1

- For user guide and accessories see page 694

(1) 1 - Slot for data chip, 0 - Without slot for data chip

For tools, see pages: GADR/L-JHP (320)



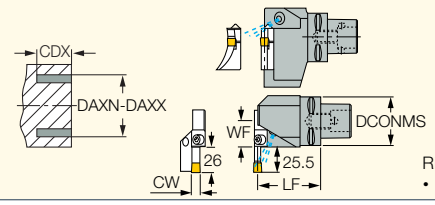
Spare Parts

Designation							
C4 GHAD-8 JHP	SR 14-519	T-20/5	SR M6X20 DIN912	HW 5.0X120 MM	SR M6X12DIN6912	OR 5X1N	SR M4X8ISO14580 BLACK
C5 GHAD-8-JHP	SR 14-519	T-20/5	SR M6X25DIN912	HW 5.0X120 MM	SR M6X12DIN6912	OR 5X1N	SR M4X8ISO14580 BLACK
C6 GHAD-8-JHP	SR 14-519	T-20/5	SR M6X25DIN912	HW 5.0X120 MM	SR M6X12DIN6912	OR 5X1N	SR M4X8ISO14580 BLACK
C8 GHAD-8-JHP	SR 14-519	T-20/5	SR M6X25 DIN912	HW 5.0X120 MM	SR M6X12DIN6912	OR 5X1N	SR M4X8ISO14580 BLACK

CAMFIX

C#-GHAPR/L-8

Perpendicular Holders with CAMFIX Exchangeable Shanks for Grooving, Turning, and Facing Adapters



Right-hand shown
• CDX - See specific adapter dimensions

Designation	DCONMS	LF	WF	CW	DAXN(1)	DAXX(2)	CP(3)	DCP(4)
C5 GHAPR/L-8	50.00	64.00	26.00	8.00	80.0	510.0	100	1
C6 GHAPR/L-8	63.00	75.00	33.00	8.00	80.0	510.0	100	1

• For user guide and accessories see page 694
(1) Minimum axial grooving diameter
(2) Maximum axial grooving diameter
(3) Coolant pressure (Bar)
(4) 1 - Slot for data chip, 0 - Without slot for data chip

For tools, see pages: GADR/L-8 (314) • GAFG-R/L-8 (661) • PCADR/L 34N-RE (354)

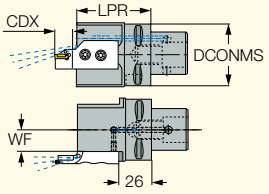
Spare Parts

Designation					
C5 GHAPR/L-8	SR 14-519	T-20/5	SR M6X25 DIN912	HW 5.0	EZ 125
C6 GHAPR/L-8	SR 14-519	T-20/5	SR M6X25 DIN912	HW 5.0	

CAMFIX

C#-HAD

Holders with CAMFIX Exchangeable Tapered Shanks for Internal Facing Adapters



CDX - See specific adapter dimensions

Designation	DCONMS	LPR	WF	DCP(1)				
C4 HAD	40.00	60.00	18.0	1	SR 14-519	T-20/3	SR M4X6DIN912	HW 3.0
C5 HAD	50.00	60.00	18.0	1	SR 14-519	T-20/3	SR M4X6DIN912	HW 3.0
C6 HAD	63.00	60.00	22.0	1	SR 14-519	T-20/3	SR M4X6DIN912	HW 3.0

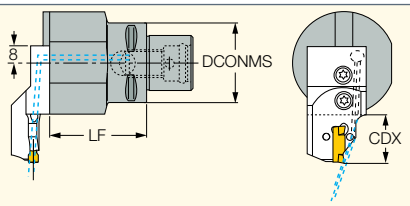
• For user guide and accessories see page 694
(1) 1 - Slot for data chip, 0 - Without slot for data chip

For tools, see pages: HFAER/L-4 (646) • HFAER/L-5T, 6T (647) • HFAIR/L-4 (651) • HFAIR/L-DG (652) • HGAER/L-3 (646) • HGAIR/L-3 (648)

CAMFIX

C#-HAPR/L

Perpendicular Holders with CAMFIX Exchangeable Shanks for Internal Facing Adapters



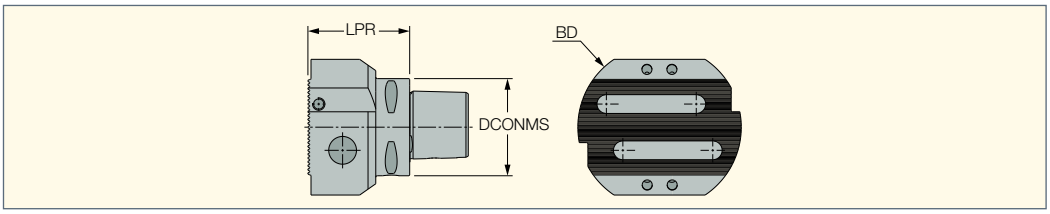
Right-hand shown
• CDX - See specific adapter dimensions

Designation	DCONMS	LF	DCP(1)		
C4 HAPR/L	40.00	50.00	1	SR 14-519	T-20/3
C6 HAPR/L	63.00	50.00	1	SR 14-519	T-20/3

• For user guide and accessories see page 694
(1) 1 - Slot for data chip, 0 - Without slot for data chip

For tools, see pages: HFAER/L-4 (646) • HFAER/L-5T, 6T (647) • HFAIR/L-4 (651) • HFAIR/L-DG (652) • HGAER/L-3 (646) • HGAIR/L-3 (648)

C#-HATA
CAMFIX Toolholder with a Serrated Connection Adaptation



Designation	DCONMS	BD	LPR	DCP(1)
C6 HATA	63.00	106.00	66.00	1

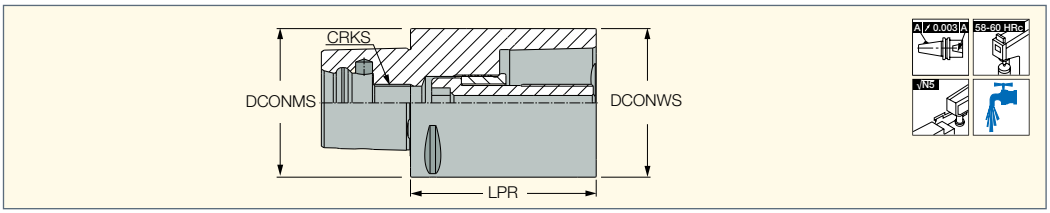
(1) 1 - Slot for data chip, 0 - Without slot for data chip

Spare Parts

Designation								
C6 HATA	SR M8X45 DIN 913	SR M8X25 DIN913	HW 4.0	SR M6X6 DIN913 TL360	HW 3.0	BH NUT BHR MB80	SR M12X35DIN912	HW 10.0

CAMFIX

EX C# (CAMFIX extension)
CAMFIX Extension Adapters



Designation	DCONMS	DCONWS	LPR	CRKS	DCP(1)	kg
C3 EX C3X080	32.00	32.00	80.00	M12	0	0.50
C4 EX C4X060	40.00	40.00	60.00	M14	0	0.50
C4 EX C4X080	40.00	40.00	80.00	M14	0	0.70
C5 EX C5X080	50.00	50.00	80.00	M16	0	1.13
C5 EX C5X100	50.00	50.00	100.00	M16	0	1.42
C6 EX C6X100	63.00	63.00	100.00	M20	0	2.23
C6 EX C6X140	63.00	63.00	140.00	M20	0	3.13
C8 EX C8X100	80.00	80.00	100.00	M20	0	3.65
C8 EX C8X125	80.00	80.00	125.00	M20	0	4.60

(1) 1 - Slot for data chip, 0 - Without slot for data chip

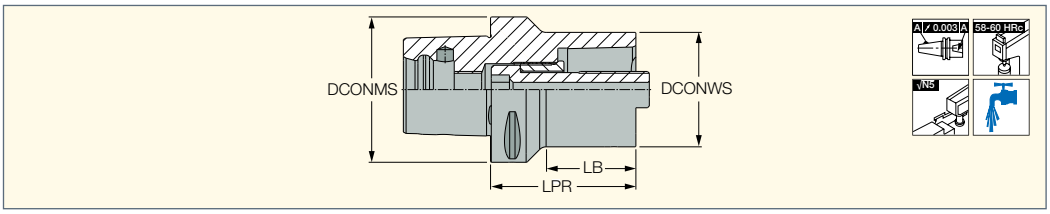
Spare Parts

Designation						
C3 EX C3X080	SR M12X50 C3	HW 7.0*	MT RING M18X15XC3	COOLING TUBE C3*	WRENCH COOL TUBE C3*	WRENCH C3 DRW NUT*
C4 EX C4X060	SR M14X58 C4	HW 8.0*	MT RING M22X17XC4	COOLING TUBE C4*	WRENCH COOL TUBE C4*	WRENCH C4 DRW NUT*
C4 EX C4X080	SR M14X58 C4	HW 8.0*	MT RING M22X17XC4	COOLING TUBE C4*	WRENCH COOL TUBE C4*	WRENCH C4 DRW NUT*
C5 EX C5X080	SR M16X70 C5	HW 10.0*	MT RING M25X20XC5	COOLING TUBE C5*	WRENCH COOL TUBE C5*	WRENCH C5 DRW NUT*
C5 EX C5X100	SR M16X70 C5	HW 10.0*	MT RING M25X20XC5	COOLING TUBE C5*	WRENCH COOL TUBE C5*	WRENCH C5 DRW NUT*
C6 EX C6X100	SR M20X87 C6/8	HW 14.0*	MT RING M30X24XC6/8	COOLING TUBE C6*	WRENCH COOL TUBE C6*	WRENCH C6-8 DRW NUT*
C6 EX C6X140	SR M20X87 C6/8	HW 14.0*	MT RING M30X24XC6/8	COOLING TUBE C6*	WRENCH COOL TUBE C6*	WRENCH C6-8 DRW NUT*
C8 EX C8X100	SR M20X87 C6/8	HW 14.0*	MT RING M30X24XC6/8	COOLING TUBE C8*	WRENCH COOL TUBE C8*	WRENCH C6-8 DRW NUT*
C8 EX C8X125	SR M20X87 C6/8	HW 14.0*	MT RING M30X24XC6/8	COOLING TUBE C8*	WRENCH COOL TUBE C8*	WRENCH C6-8 DRW NUT*

* Optional, to be ordered separately

CAMFIX

RE-C#
CAMFIX Reduction Adapters



Designation	DCONMS	DCONWS	LPR	LB	DCP(1)	kg
C6 RE C3X070	63.00	32.00	70.00	39.00	0	1.10
C8 RE C3X060	80.00	32.00	60.00	29.30	0	1.70
C6 RE C4X080	63.00	40.00	80.00	51.40	0	1.20
C8 RE C4X070	80.00	40.00	70.00	36.50	0	1.90
C6 RE C5X080	63.00	50.00	80.00	51.50	0	1.50
C8 RE C5X080	80.00	50.00	80.00	49.30	0	2.20
C8 RE C6X080	80.00	63.00	80.00	53.10	0	2.50

(1) 1 - Slot for data chip, 0 - Without slot for data chip

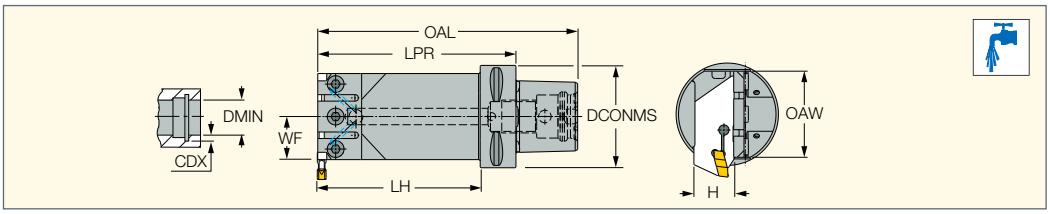
Spare Parts

Designation						
C6 RE C3X070	SR M12X50 C3	HW 7.0*	MT RING M18X15XC3	COOLING TUBE C6*	WRENCH COOL TUBE C6*	WRENCH C3 DRW NUT*
C8 RE C3X060	SR M12X50 C3	HW 7.0*	MT RING M18X15XC3	COOLING TUBE C8*	WRENCH COOL TUBE C8*	WRENCH C3 DRW NUT*
C6 RE C4X080	SR M14X58 C4	HW 8.0*	MT RING M22X17XC4	COOLING TUBE C6*	WRENCH COOL TUBE C6*	WRENCH C4 DRW NUT*
C8 RE C4X070	SR M14X58 C4	HW 8.0*	MT RING M22X17XC4	COOLING TUBE C8*	WRENCH COOL TUBE C8*	WRENCH C4 DRW NUT*
C6 RE C5X080	SR M16X70 C5	HW 10.0*	MT RING M25X20XC5	COOLING TUBE C6*	WRENCH COOL TUBE C6*	WRENCH C5 DRW NUT*
C8 RE C5X080	SR M16X70 C5	HW 10.0*	MT RING M25X20XC5	COOLING TUBE C8*	WRENCH COOL TUBE C8*	WRENCH C5 DRW NUT*
C8 RE C6X080	SR M20X87 C6/8	HW 14.0*	MT RING M30X24XC6/8	COOLING TUBE C8*	WRENCH COOL TUBE C8*	WRENCH C6-8 DRW NUT*

* Optional, to be ordered separately

MODULAR GRIP

C#-GHIC
CUT-GRIP holders with CAMFIX Exchangeable Shanks for Internal Grooving and Turning Blades



Designation	DCONMS	LPR	H	OAW	WF	OAL	LH	DCP(1)			
C5 GHIC-70	50.00	120.00	26.0	53.00	26.50	150.00	100.0	1	SR M8X6 DIN913	SR M6X16 DIN912	SR M3X4 DIN913
C6 GHIC-70	63.00	122.00	26.0	53.00	26.50	160.00	100.0	1	SR M8X6 DIN913	SR M6X16 DIN912	SR M3X4 DIN913

- Data for DMIN and CDX parameters presents in CGHN 26-M, SGFH 26-M, TGHN 26-M adapters

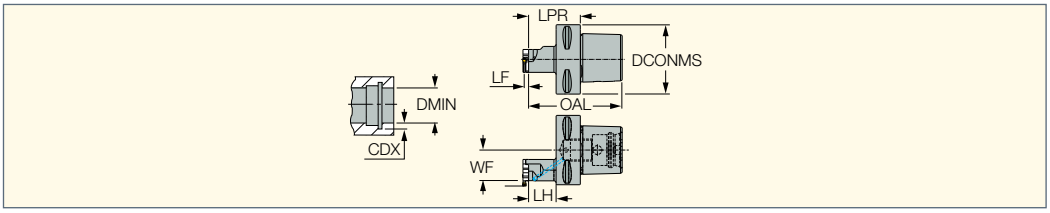
(1) 1 - Slot for data chip, 0 - Without slot for data chip

For tools, see pages: CGHN 26-M (399) • TGHN 26-M (397)

MODULAR-GRIP

C#-GHAIR/L

Boring Bars with CAMFIX Exchangeable Shanks for Internal Grooving and Turning



Designation	DCONMS	LH	LPR	WF	Adapter	OAL	DCP[1]
C3 GHAIL-20	32.00	20.0	35.00	16.00	GEAIL-20	54.00	0
C3 GHAIR-20	32.00	20.0	35.00	16.00	GEAIR-20	54.00	0
C4 GHAIR-20	40.00	20.0	40.00	20.00	GEAIR-20	64.00	1
C4 GHAIR-25	40.00	25.0	45.00	20.00	GEAIR-25	71.40	1
C4 GHAIL-32	40.00	32.0	52.00	20.00	GAIL-32	76.00	1
C4 GHAIR-32	40.00	32.0	52.00	20.00	GAIR-32	76.00	1
C5 GHAIL-20	50.00	20.0	40.00	25.00	GEAIL-20	70.00	1
C5 GHAIR-20	50.00	20.0	40.00	25.00	GEAIR-20	70.00	1
C5 GHAIL-25	50.00	25.0	45.00	25.00	GEAIL-25	75.00	1
C5 GHAIR-25	50.00	25.0	45.00	25.00	GEAIR-25	75.00	1
C5 GHAIL-40	50.00	40.0	60.00	25.00	GEAIL-40	90.00	1
C5 GHAIR-40	50.00	40.0	60.00	25.00	GEAIR-40	90.00	1
C6 GHAIL-25	63.00	25.0	47.00	31.50	GEAIL-25	85.00	1
C6 GHAIR-25	63.00	25.0	47.00	31.50	GEAIR-25	85.00	1
C6 GHAIL-40	63.00	40.0	62.00	31.50	GAIL-40	100.00	1
C6 GHAIR-40	63.00	40.0	62.00	31.50	GAIR-40	100.00	1

• DMIN, CDX, LF data present in GAIR, GEAIR adapters

[1] 1 - Slot for data chip, 0 - Without slot for data chip

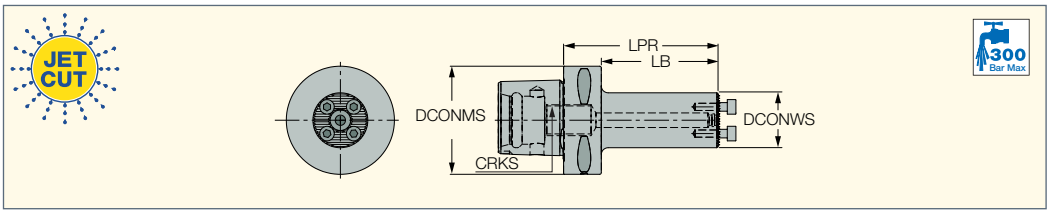
For tools, see pages: GAIR/L (389) • GEAIR/L (383)

Spare Parts

Designation			
C3 GHAIR-20	SR 76-2057	T-8/5	
C4 GHAIR-20	SR 76-2057	T-8/5	
C4 GHAIR-25	SR 16-236 P	T-15/5	
C4 GHAIR/L-32	SR 16-236 P	T-15/5	
C5 GHAIR-20	SR 76-2057	T-8/5	
C5 GHAIR-25	SR 16-236 P	T-15/5	
C5 GHAIR/L-40	SR 16-212	T-20/5	SR 14-519
C6 GHAIR-25	SR 16-236 P	T-15/5	
C6 GHAIR/L-40	SR 16-212	T-20/5	SR 14-519

CAMFIX

C#-SH-JHP
Serrated Connection Shanks with a CAMFIX Exchangeable Adaptation



Designation	DCONMS	DCONWS	LPR	LB	CRKS	kg	DCP(1)
C4-SH-D16-2.5D-JHP	40.00	16.00	40.00	20.00	M14	0.31	1
C4-SH-D20-2.5D-JHP	40.00	20.00	50.00	30.00	M14	0.35	1
C4-SH-D25-2.5D-JHP	40.00	25.00	55.00	35.00	M14	0.41	1
C4-SH-D32-2.5D-JHP	40.00	32.00	75.00	55.00	M14	0.63	1
C4-SH-D40-3D-JHP	40.00	40.00	80.00	80.00	M14	0.88	1
C5-SH-D16-2.5D-JHP	50.00	16.00	40.00	20.00	M16	0.50	1
C5-SH-D20-2.5D-JHP	50.00	20.00	50.00	30.00	M16	0.54	1
C5-SH-D25-2.5D-JHP	50.00	25.00	55.00	35.00	M16	0.61	1
C5-SH-D32-2.5D-JHP	50.00	32.00	75.00	55.00	M16	0.00	1
C5-SH-D40-3D-JHP	50.00	40.00	100.00	80.00	M16	1.26	1
C6-SH-D16-2.5D-JHP	63.00	16.00	40.00	18.00	M20	0.83	1
C6-SH-D20-2.5D-JHP	63.00	20.00	50.00	28.00	M20	0.87	1
C6-SH-D25-2.5D-JHP	63.00	25.00	65.00	43.00	M20	0.00	1
C6-SH-D32-3D-JHP	63.00	32.00	90.00	68.00	M20	1.26	1
C6-SH-D32-4D-JHP	63.00	32.00	125.00	103.00	M20	0.00	1
C6-SH-D40-3D-JHP	63.00	40.00	100.00	78.00	M20	1.61	1
C6-SH-D40-4D-JHP	63.00	40.00	140.00	118.00	M20	1.99	1

- Suitable for MULTI-TASKING machines only

(1) 1 - Slot for data chip, 0 - Without slot for data chip

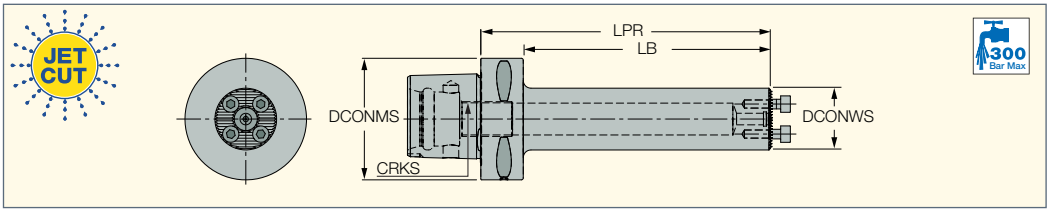
For tools, see pages: AVC-D-SIR/L (805) • AVC-DDMNR/L (126) • AVC-DDUNR/L (126) • AVC-DVUNR/L (127) • AVC-GAIR/L (390) • AVC-GEAIR/L (389) • AVC-PCLNR/L (124) • AVC-PCLXR/L (124) • AVC-PTLNR/L (125) • AVC-PXJNR/L (125) • AVC-SCLCR/L (121) • AVC-SCLXR/L-06X (121) • AVC-SDJCN-Y (101) • AVC-SDUCR/L (122) • AVC-SRDCN-Y (103) • AVC-SVLCR/L (123) • AVC-SVMCR/L (124) • AVC-SVPCR/L (123) • AVC-SVQCR/L (123) • AVC-SVUCR/L (122)

Spare Parts

Designation		
C4-SH-D16-2.5D-JHP	SR M3X10DIN912	HW 2.5
C4-SH-D20-2.5D-JHP	SR M3.5XL10-D5.5	HW 2.5
C5-SH-D16-2.5D-JHP	SR M3X10DIN912	HW 2.5
C5-SH-D20-2.5D-JHP	SR M3.5XL10-D5.5	HW 2.5
C5-SH-D32-2.5D-JHP	SR M3X10DIN912	HW 2.5
C6-SH-D16-2.5D-JHP	SR M3X10DIN912	HW 2.5
C6-SH-D20-2.5D-JHP	SR M3.5XL10-D5.5	HW 2.5

CAMFIX

C#-SH-E-JHP
Serrated Connection Shanks with Carbide Core and a CAMFIX Exchangeable Adaptation



Designation	DCONMS	DCONWS	LPR	LB	CRKS	kg	DCP(1)
C6-SH-D16-5D-E-JHP	63.00	16.00	80.00	58.00	M20	0.93	1
C6-SH-D20-5D-E-JHP	63.00	20.00	100.00	78.00	M20	1.06	1
C6-SH-D25-5D-E-JHP	63.00	25.00	115.00	93.00	M20	1.29	1
C6-SH-D32-5D-E-JHP	63.00	32.00	150.00	128.00	M20	0.00	1
C6-SH-D40-5D-E-JHP	63.00	40.00	185.00	163.00	M20	2.68	1

- Suitable for MULTI-TASKING machines only

(1) 1 - Slot for data chip, 0 - Without slot for data chip

For tools, see pages: AVC-D-SIR/L (805) • AVC-DDMNR/L (126) • AVC-DDUNR/L (126) • AVC-DVUNR/L (127) • AVC-GAIR/L (390) • AVC-GEAIR/L (389) • AVC-PCLNR/L (124) • AVC-PCLXR/L (124) • AVC-PTLNR/L (125) • AVC-PXJNR/L (125) • AVC-SCLCR/L (121) • AVC-SCLXR/L-06X (121) • AVC-SDJCN-Y (101) • AVC-SDUCR/L (122) • AVC-SRDCN-Y (103) • AVC-SVLCR/L (123) • AVC-SVMCR/L (124) • AVC-SVPCR/L (123) • AVC-SVQCR/L (123) • AVC-SVUCR/L (122)

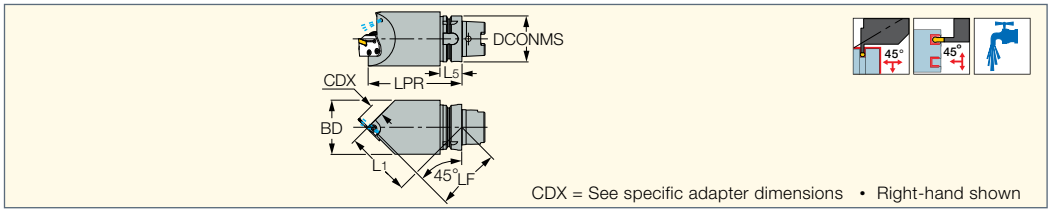
Spare Parts

Designation		
C6-SH-D16-5D-E-JHP	HW 2.5	SR M3X10DIN912
C6-SH-D20-5D-E-JHP	HW 2.5	SR M3.5XL10-D5.5

MODULAR-GRIP

HSK A63WH-MAHDR-45

Holders with HSK Tapered Shanks for MODULAR-GRIP, Parting, Grooving and Facing Adapters



CDX = See specific adapter dimensions • Right-hand shown

Designation	DCONMS	LPR	L1	L5	LF	BD	CP(1)	DCP(2)
HSK A63WH MAHDR 45	63.00	130.00	91.9	30.00	89.0	75.00	100	1

• A cooling tube must be used with all coolant through HSK spindles (should be ordered separately) • Complies with ICTM standard (ISO 12164-3)

(1) Coolant pressure (Bar)

(2) 1 - Slot for data chip, 0 - Without slot for data chip

For tools, see pages: CGPAD (308) • DGAD-B-D (538) • DGAD/HGAD (537) • HFPAD-3 (643) • HFPAD-4 (643) • HFPAD-5 (644) • HFPAD-6 (644) • HGPAD (291) • PCADR/L (353) • SCLCR-PAD (71) • SDJCR-PAD (78) • SVJCR-PAD (88) • SWAPR-PAD (96) • TGAD (560) • TGPAD (297)



Spare Parts

Designation							
HSK A63WH MAHDR 45	SR M5-04451	T-20/5	SR 14-519(a)	SR M6X20-XT	HW 5.0	SR M6X6DIN551 14H/22H(b)	SATZ-M8X1-M3

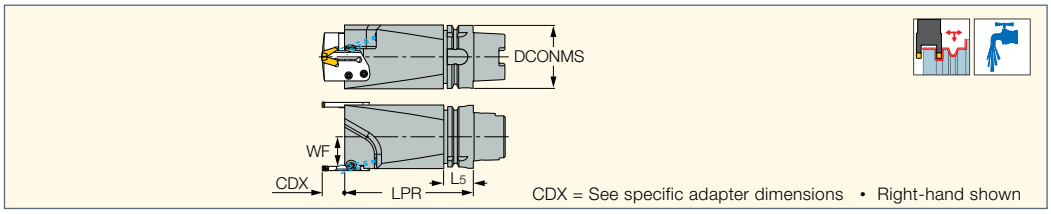
(a) For DGAD, HGAD and PCADR/L adapters; supplied in the attached plastic bag

(b) Used to prevent chips from entering the upper locking screw hole when it is not used for the adaptation; supplied in the attached plastic bag

MODULAR-GRIP

HSK A63WH-MAHDOR

Holders with HSK Exchangeable Shanks for Parting, Grooving, Turning and Facing Adapters



CDX = See specific adapter dimensions • Right-hand shown

Designation	DCONMS	WF	LPR	L5	DCP(1)							
HSK A63WH MAHDOR	63.00	29.0	130.00	30.00	1	SR M5-04451	T-20/5	SR 14-519(a)	SR M6X20-XT(b)	HW 5.0	SR M6X6DIN551 14H/22H(c)	EZ 125

• A cooling tube must be used with all coolant through HSK spindles (should be ordered separately) • Complies with ICTM standard (ISO 12164-3)

(1) 1 - Slot for data chip, 0 - Without slot for data chip

(a) For DGAD, HGAD and PCADR/L adapters; supplied in the attached plastic bag

(b) For CGPAD, HGPAD, TGPAD and HFPAD adapters; supplied with the tools

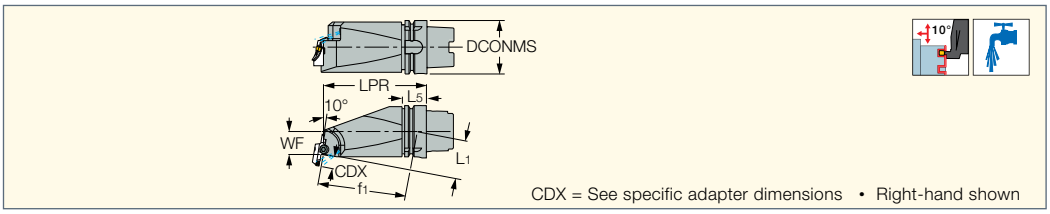
(c) Used to prevent chips from entering the upper locking screw hole when it is not used for the adaptation; supplied in the attached plastic bag

For tools, see pages: CGPAD (308) • DGAD-B-D (538) • DGAD/HGAD (537) • HFPAD-3 (643) • HFPAD-4 (643) • HFPAD-5 (644) • HFPAD-6 (644) • HGPAD (291) • PCADR/L (353) • SCLCR-PAD (71) • SDJCR-PAD (78) • SVJCR-PAD (88) • SWAPR-PAD (96) • TGAD (560) • TGPAD (297)

MODULAR GRIP

HSK A63WH-MAHUR/L

Holders with HSK-T Shanks for 10° Mounting on Mill-Turn Machines for Parting, Grooving, Turning and Facing Adapters



Designation	DCONMS	f1	WF	LPR	L1	L5	CP(1)	DCP(2)
HSK A63WH MAHUR/L 10	63.00	113.1	29.00	130.00	49.4	30.00	100	1

• A cooling tube must be used with all coolant through HSK spindles (should be ordered separately) • Complies with ICTM standard (ISO 12164-3)

(1) Coolant pressure (Bar)

(2) 1 - Slot for data chip, 0 - Without slot for data chip

For tools, see pages: CGPAD (308) • DGAD-B-D (538) • DGAD/HGAD (537) • HFPAD-3 (643) • HFPAD-4 (643) • HFPAD-5 (644) • HFPAD-6 (644) • HGPAD (291) • PCADR/L (353) • SCLCR-PAD (71) • SDJCR-PAD (78) • SVJCR-PAD (88) • SWAPR-PAD (96) • TGAD (560) • TGPAD (297)

Spare Parts

Designation							
HSK A63WH MAHUR/L 10	SR M5-04451	T-20/5	SR 14-519(a)	SR M6X20-XT(b)	HW 5.0	SR M6X6DIN551 14H/22H(c)	EZ 125

(a) For DGAD, HGAD and PCADR/L adapters; supplied in the attached plastic bag

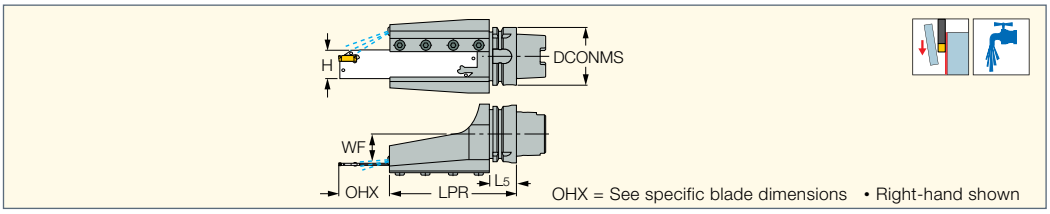
(b) For CGPAD, HGPAD, TGPAD and HFPAD adapters; supplied with the tools

(c) Used to prevent chips from entering the upper locking screw hole when it is not used for the adaptation; supplied in a plastic bag

TOOL BLOCKS

HSK A-WH-TBK-R/L

Blocks with HSK Exchangeable Tapered Shanks for Parting and Grooving Blades



Designation	DCONMS	LPR	L5	WF	H(1)	CP(2)	DCP(3)				
HSK A63WH TBK 32R/L	63.00	138.00	30.00	32.0	32.0	100	1	BK 32-9 WEDG	SR M6X16 DIN912	HW 5.0	EZ 125

• Complies with ICTM standard (ISO 12164-3) • Not suitable for ATC for some Multi-Tasking Machine models, please consult your MTB

• A cooling tube must be used with all coolant through HSK spindles (should be ordered separately)

(1) Blade size H has to fit this dimension

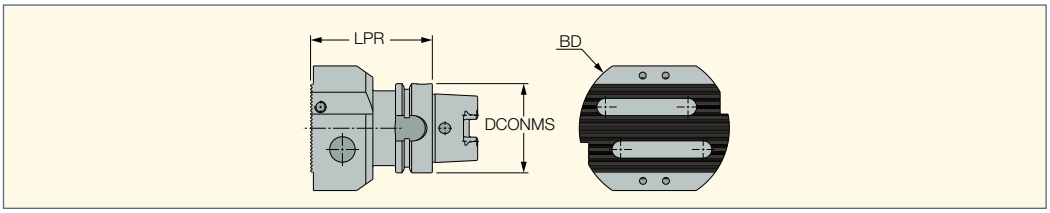
(2) Coolant pressure (Bar)

(3) 1 - Slot for data chip, 0 - Without slot for data chip

For tools, see pages: CGHN-DG (310) • CGHR/L-P8DG (311) • DGFH (293) • DGFHR/L (526) • DGFHR/L-B-D..(R/L) (528) • HFFH (637) • HGFH (292) • PCHBR/L (355) • TGFHR/L (556) • TNFFH-IQ (665)

HSK 63 HATA

HSK Toolholder with a Serrated Connection Adaptation



Designation	DCONMS	BD	LPR
HSK63 HATA	63.00	106.00	86.00

Spare Parts

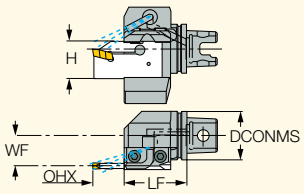
Designation									
HSK63 HATA	SR M6X6 DIN913*	SR M8X25 DIN913	HW 4.0	SR M6X6 DIN913 TL360	HW 3.0	BH NUT BHR MB80	SR M12X35DIN912	HW 10.0	SR M8X45 DIN 913

* Optional, to be ordered separately

ISCAR GRIP

IM-TBU

Blocks with an ISO 26622-1(*) Tapered Shank for Parting and Grooving Blades



OHX - See specific blade dimensions • Right-hand shown

Designation	DCONMS	H(1)	LF	WF	DCP(2)						
IM40 TBU-32R	40.00	32.0	51.00	23.0	0	BKU 176 307	SR M6X25DIN912	HW 5.0	SR M6X6 DIN913	EZP 5	EZ 125
IM50 TBU-32R	50.00	32.0	61.00	30.0	0	BKU 176 307	SR M6X25DIN912	HW 5.0	SR M6X6 DIN913	EZP 5	EZ 125
IM63 TBU-32L	63.00	32.0	63.00	38.0	0	BKU 176 307	SR M6X25DIN912	HW 5.0	SR M6X6 DIN913	EZP 5	EZ 125

• (*) Tools with orientation holes in the flange groove can be supplied on request

(1) Blade size H has to fit this dimension

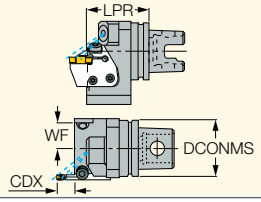
(2) 1 - Slot for data chip, 0 - Without slot for data chip

For tools, see pages: CGHN-S (309) • TGHN-S (298)

MODULAR GRIP

IM-MAHD

Holders with an ISO 26622-1(*) Tapered Shank for Parting, Grooving, Turning and Facing Adapters



CDX = See specific adapter dimensions • Right-handshown

Designation	DCONMS	LPR	WF	DCP(1)
IM40 MAHD	40.00	43.00	18.0	0
IM50 MAHD	50.00	47.00	23.0	0
IM63 MAHD	63.00	52.00	29.0	0

• (*) Tools with orientation holes in the flange groove can be supplied on request

(1) 1 - Slot for data chip, 0 - Without slot for data chip

For tools, see pages: CGPAD (308) • DGAD-B-D (538) • DGAD/HGAD (537) • HFPAD-3 (643) • HFPAD-4 (643) • HFPAD-5 (644) • HFPAD-6 (644) • HGPAD (291) • PCADR/L (353) • TGAD (560) • TGPAD (297)

Spare Parts

Designation									
IM-MAHD	SR M5-04451	T-20/5	SR 14-519(a)	SR M6X20-XT(b)	HW 5.0	SR M6X6DIN551 14H/22H(d)	SR 76-1022	EZA 125	EZ 125

(a) For DGAD, HGAD and PCADR/L adapters; supplied in the attached plastic bag

(b) For CGPAD, HGPAD, TGPAD and HFPAD adapters; supplied with the tools

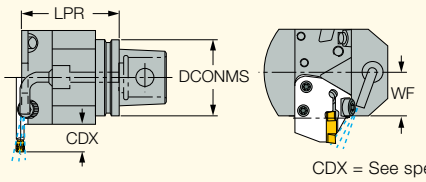
(c) For CGPAD, HGPAD, TGPAD and HFPAD adapters; supplied with the tools

(d) Used to prevent chips from entering the upper locking screw hole when it is not used for the adaptation; supplied in a plastic bag

MODULAR GRIP

IM-MAHPD

Perpendicular Holders with an ISO 26622-1(*) Tapered Shank for Parting, Grooving, Turning and Facing Adapters



CDX = See specific adapter dimensions • Right-hand shown

Designation	DCONMS	LPR	WF	DCP(1)
IM40 MAHPD	40.00	44.00	25.00	0
IM50 MAHPD	50.00	45.00	26.00	0
IM63 MAHPD	63.00	45.00	33.00	0

• (*) Tools with orientation holes in the flange groove can be supplied on request

(1) 1 - Slot for data chip, 0 - Without slot for data chip

For tools, see pages: CGPAD (308) • DGAD-B-D (538) • DGAD/HGAD (537) • HFPAD-3 (643) • HFPAD-4 (643) • HFPAD-5 (644) • HFPAD-6 (644) • HGPAD (291) | • PCADR/L (353) • SCLCR-PAD (71) • SDJCR-PAD (78) • SVJCR-PAD (88) • SWAPR-PAD (96) • TGAD (560) • TGPAD (297)

Spare Parts

Designation								
IM-MAHPD	SR M5-04451	T-20/5	SR 14-519(a)	SR M6X20-XT(b)	HW 5.0	SR M6X6DIN551 14H/22H(c)	EZP 5	EZ 125

(a) For DGAD, HGAD and PCADR/L adapters; supplied in the attached plastic bag

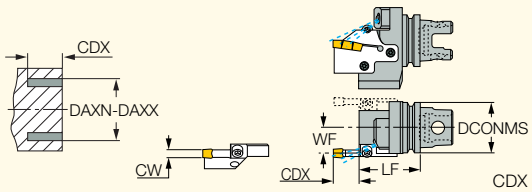
(b) For CGPAD, HGPAD, TGPAD and HFPAD adapters; supplied with the tools

(c) Used to prevent chips from entering the upper locking screw hole when it is not used for the adaptation; supplied in a plastic bag

ISCAR GRIP

IM-GHAD-8

Holders with an ISO 26622-1(*) Tapered Shank for Grooving, Turning and Facing Adapters



CDX - See specific adapter dimensions

Designation	DCONMS	CW	LF	WF	DAXN(1)	DAXX(2)	DCP(3)
IM50 GHAD-8	50.00	8.00	60.00	26.00	80.0	510.0	0
IM63 GHAD-8	63.00	8.00	65.00	32.50	80.0	510.0	0

- (*) Tools with orientation holes in the flange groove can be supplied on request

(1) Minimum axial grooving diameter

(2) Maximum axial grooving diameter

(3) 1 - Slot for data chip, 0 - Without slot for data chip

For tools, see pages: GADR/L-8 (314) • GAFG-R/L-8 (661) • PCADR/L 34N-RE (354)

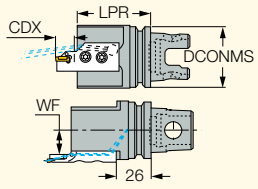
Spare Parts

Designation							
IM-GHAD-8	SR 14-519	T-20/5	SR M6X25DIN912	HW 5.0	SR 76-1022	EZA 125	EZ 125

ISCAR GRIP

IM-HAD

Holders with an ISO 26622-1(*) Tapered Shank for Internal Facing Adapters



CDX - See specific adapter dimensions

Designation	DCONMS	LPR	WF	DCP(1)				
IM40 HAD	40.00	60.00	18.0	0	SR 14-519	T-20/3	HW 3.0	SR M4X6DIN912
IM50 HAD	50.00	60.00	18.0	0	SR 14-519	T-20/3	HW 3.0	SR M4X6DIN912

- (*) Tools with orientation holes in the flange groove can be supplied on request

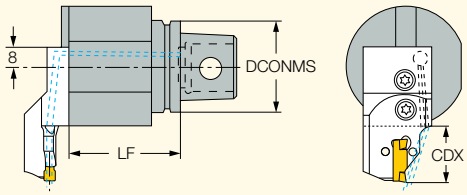
(1) 1 - Slot for data chip, 0 - Without slot for data chip

For tools, see pages: HFAER/L-4 (646) • HFAER/L-5T, 6T (647) • HFAIR/L-4 (651) • HFAIR/L-DG (652) • HGAER/L-3 (646) • HGAIR/L-3 (648)

ISCAR GRIP

IM-HAPR/L

Perpendicular Holders with an ISO 26622-1 (*) Tapered Shank for Internal Facing Adapters



CDX - See specific adapter dimensions
- Right-hand shown

Designation	DCONMS	LF	DCP(1)		
IM40 HAPR/L	40.00	50.00	0	SR 14-519	T-20/3
IM50 HAPR	50.00	50.00	0	SR 14-519	T-20/3

- (*) Tools with orientation holes in the flange groove can be supplied on request

(1) 1 - Slot for data chip, 0 - Without slot for data chip

For tools, see pages: HFAER/L-4 (646) • HFAER/L-5T, 6T (647) • HFAIR/L-4 (651) • HFAIR/L-DG (652) • HGAER/L-3 (646) • HGAIR/L-3 (648)