

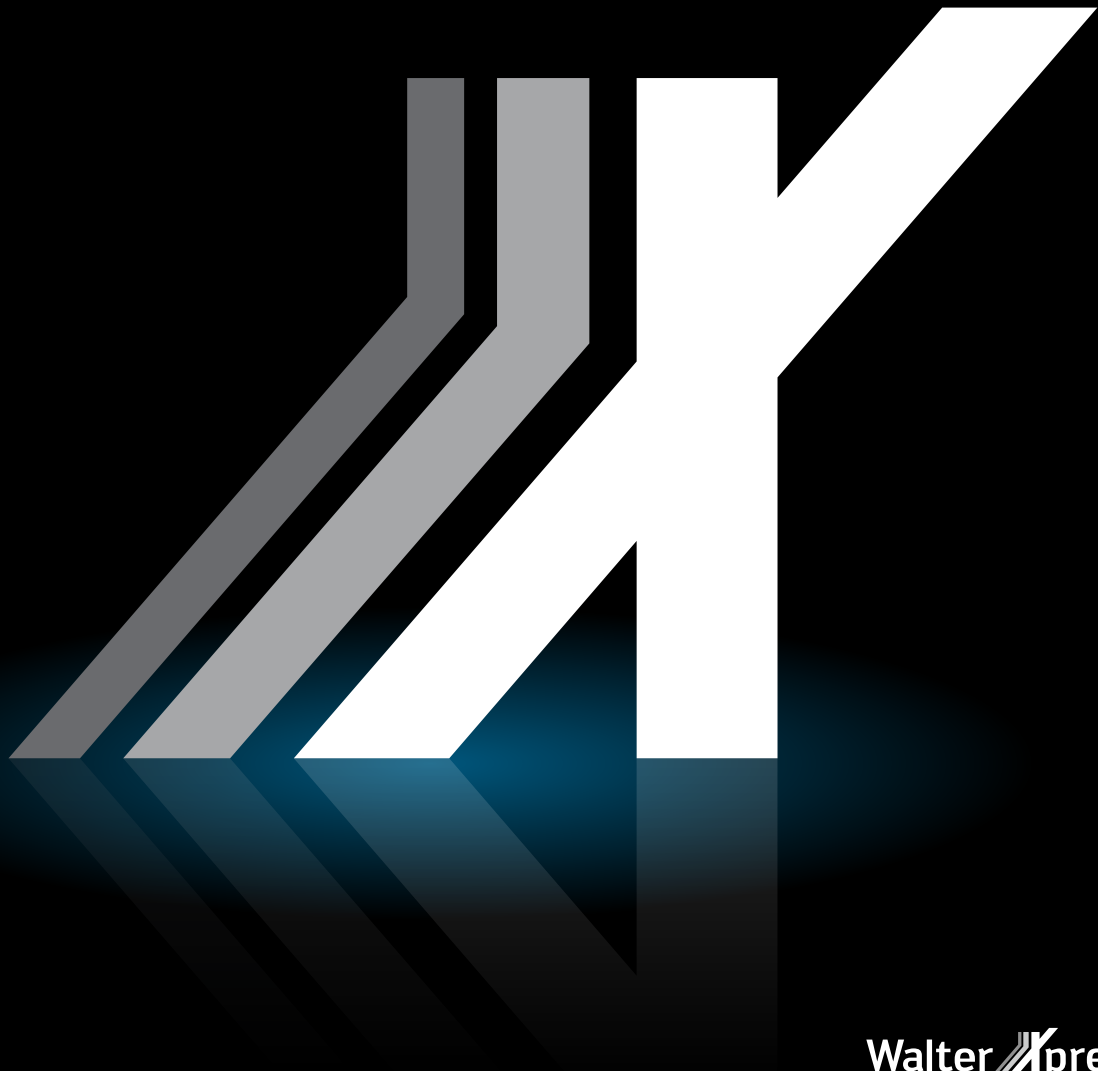
New!
EXTENDED
RANGE

Walter Xpress

Edition 2026

_FULL SPEED AHEAD WITH WALTER XPRESS

Invest in savings.



Walter press™

Walter GPS




Your navigation system for the best machining solution.

Find the right tool with a click of the mouse.

In just four clicks, Walter GPS takes you from the definition of your target to the most cost-efficient tool and machining solution. Walter GPS is surprisingly comprehensive. Be it holemaking, threading, turning or milling: Full information on all tools from Walter, Walter Titex and Walter Prototyp can be displayed in an instant. Access essential usage data, such as accurate cutting data or precise cost-efficiency calculations, on your screen.

Walter GPS is now also available for smartphones and tablet PCs. This means that you are able to access all the required tool information at any time, wherever you are, even without a PC: In the workshop, at the machine or on the move.

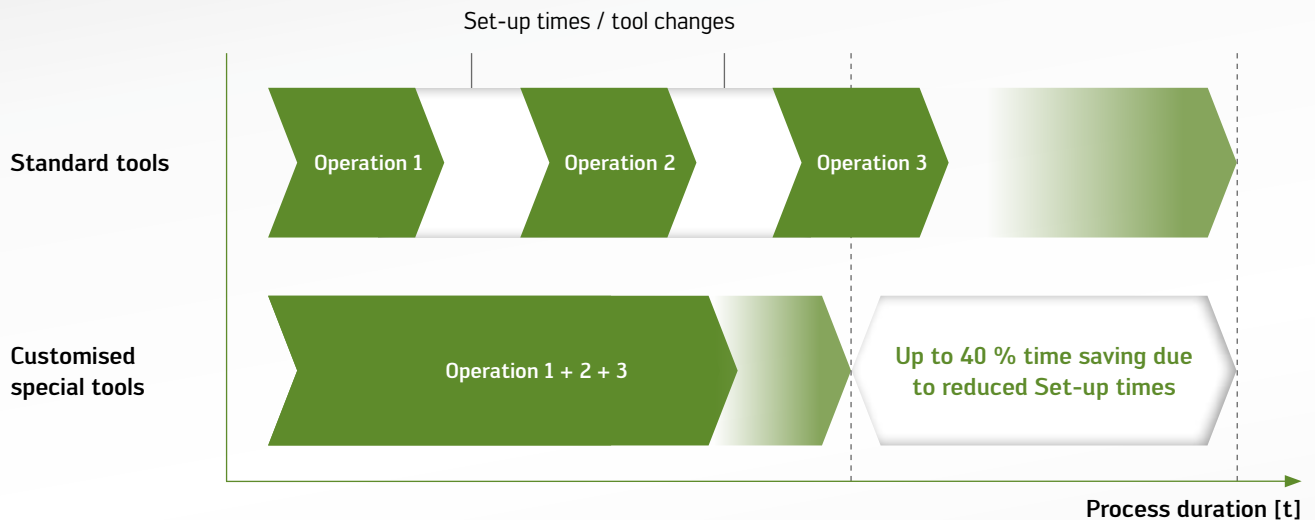
walter-tools.com

 **WALTER**
Engineering Kompetenz

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BRING TOGETHER WHAT BELONGS TOGETHER: EFFICIENCY AND ECONOMY.

Customised special tools let you perform multiple operations with a single tool. This enables you to avoid unproductive tool changes and streamline your entire machining process.



OPTIMISE YOUR PROCESS PRECISELY IN THE AREA WHERE PRODUCTIVITY IS LACKING: DURING SET-UP TIMES

Special tools let you perform multiple machining operations with a single tool

Let's assume you have a particular machining task. Even before you start work, Walter will determine an approach to the solution that will optimise your process. Whereas previously, for example, you needed a solid drill and chamfering tool, you can now work much more efficiently by carrying out both operations using a single tool. This is because both machining operations are combined within the tool. The advantage for you? Your process becomes significantly more streamlined.

More integrated operations means more efficiency

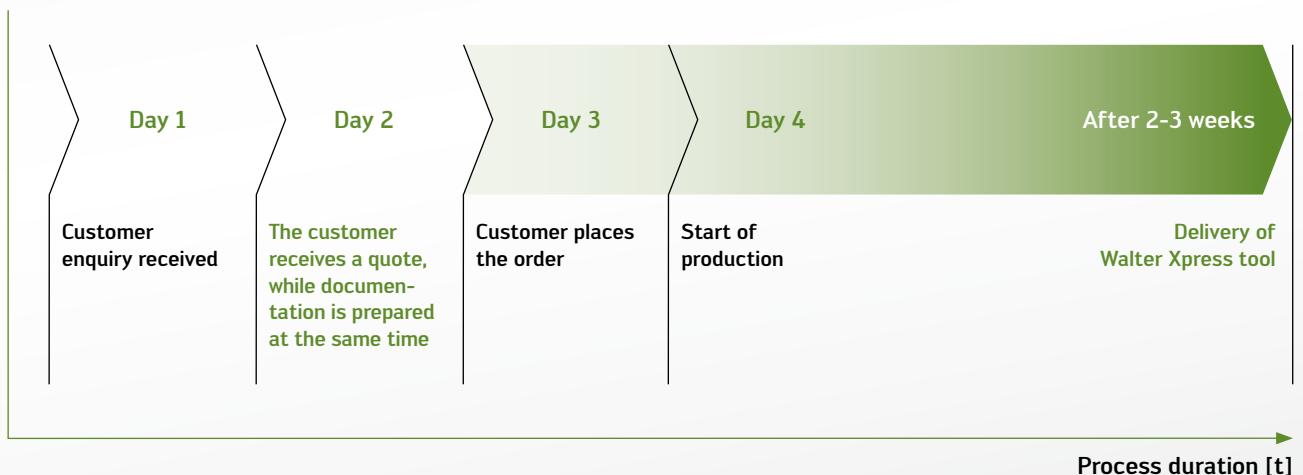
Performing more than one operation with one tool – that is the logical conclusion of our all-encompassing understanding of how processes work. Our objective is to organise your processes in a way that is demonstrably more efficient.

Minimise set-up times and downtime

You too can reduce non-productive time during machining operations. Combining individual steps reduces the number of tool changes and enables simultaneous machining operations. The result: Your productivity increases.

Walter Xpress™

If you place an enquiry concerning a Walter Xpress tool today, you will have all the essential data on your desk by tomorrow.



MAXIMUM DELIVERY TIME OF FOUR WEEKS: FULL SPEED AHEAD WITH WALTER XPRESS

Reduce the number of tools you have in circulation

The name itself says it all. Walter Xpress stands out thanks to extremely short delivery times. For you, this means: Four weeks after placing your order – usually much sooner – you will receive custom-designed tools from the Walter Xpress tool range. This helps keep your tool inventories low and reduces the amount of capital you have tied up.

Reap the benefits even before delivery

With Walter Xpress, you benefit from an extremely high degree of certainty when planning – right from the very start. That's because the simulation is available as soon as the quote is provided.

Save cash with Walter Xpress

Walter Xpress is fast, efficient and individually designed. These are qualities through which – depending on the number of machining operations – you can make enormous savings in comparison to conventional machining strategies.

Make use of the time for your core area of expertise

Increasing your productivity with Walter Xpress gives you a remarkable degree of freedom. The time you gain can be used to obtain considerable leverage, if you decide to use it for your core areas of expertise, for example.

Drilling from solid with Indexable insert tools

		Tolerances		Max. Number of different Indexable insert seating
D4140 / D5142		Core drilling: Sintered: ± 0.15 mm Ground: ± 0.10 mm Under optimum conditions, a hole tolerance of IT8 of the Solid drill diameter can be achieved.*		5
D4120 / D3120		Sintered: ± 0.15 mm Ground: ± 0.10 mm		6
Operation Max. two indexable insert seats per step possible		D _{min, max}	L _c mm	l ₄ mm
Drilling from solid		D5 . 42 D _c = 12.00-31.99 mm D _c = 0.472-1.259 in <hr/> D4 . 40 D _c = 12.00-37.99 mm D _c = 0.472-1.496 in <hr/> D4 . 20 D _c = 13.50-59.00 mm D _c = 0.531-2.25 in <hr/> D3 . 20 D _c = 16.00-58.00 mm D _c = 0.630-2.25 in <hr/> D4170 D _c = 59.00-120.00 mm D _c = 2.32-4.72 in	8 × D _c <hr/> 8 × D _c <hr/> 5 × D _c <hr/> 4 × D _c <hr/> 4.5 × D _c	≤ 300 <hr/> ≤ 300 <hr/> ≤ 300 <hr/> ≤ 300 <hr/> ≤ 270
1st step: Drilling from solid + chamfering		D _{2 max} = D _c + 15	Symmetrical drill 5 × D _c <hr/> Asymmetrical drill 5 × D _c	7 × D _c <hr/> ≤ 300
1st step: Drilling from solid + boring		D _{2 max} = D _c + 22	Symmetrical drill 5 × D _c <hr/> Asymmetrical drill 5 × D _c	7 × D _c <hr/> ≤ 300
1st step: Drilling from solid + boring and chamfering		D _{2.1 max} = D _c + 15 D _{2.2 max} = D _{2.1} + 22	Symmetrical drill 5 × D _c <hr/> Asymmetrical drill 5 × D _c	7 × D _c <hr/> ≤ 300
2nd step: ... + Chamfering		D _{3 max} = D ₂ + 15	Symmetrical drill 5 × D _c <hr/> Asymmetrical drill 5 × D _c	7 × D _c <hr/> ≤ 300
2nd step: ... + boring		D _{3 max} = D ₂ + 22	Symmetrical drill 5 × D _c <hr/> Asymmetrical drill 5 × D _c	7 × D _c <hr/> ≤ 300
2nd step: ... + boring and chamfering		D _{3.1 max} = D ₂ + 15 D _{3.2 max} = D _{3.1} + 22	Symmetrical drill 5 × D _c <hr/> Asymmetrical drill 5 × D _c	7 × D _c <hr/> ≤ 300

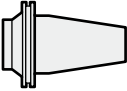
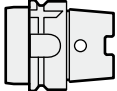


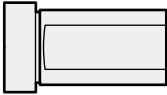
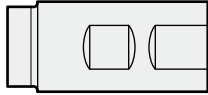


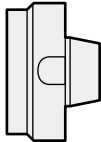
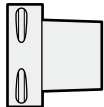


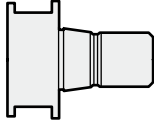
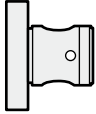

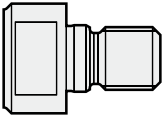
* The resulting workpiece diameter may differ due to the drilling depth, workpiece material, feed rate and chip removal conditions, etc.

Example tools



Possible adaptors

Possible Indexable inserts - Boring

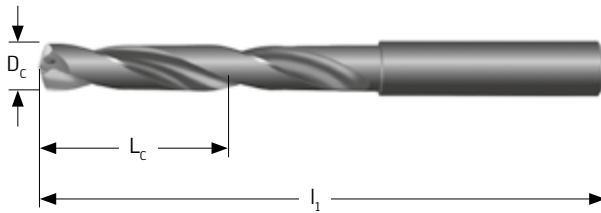
 <p>SK DIN 69871 ANSI/CAT JIS (MAS-BT)</p>	 <p>HSK DIN 69893, Form A</p>	 <p>Form CC.. / CP..</p>	 <p>Form DC.. / DP..</p>
 <p>Cylindrical shank ISO 9766</p>	 <p>Cylindrical shank DIN 1835</p>	 <p>Form SC.. / SP..</p>	 <p>Form TC.. / TP..</p>
 <p>NCT</p>	 <p>WalterCapto™</p>	 <p>Form MP..</p>	 <p>Form P484..</p>
 <p>ScrewFit</p>	 <p>AC</p>	 <p>Form P284..</p>	
 <p>TC</p>			

Drilling from solid with solid carbide/HSS-E tools

Tolerances

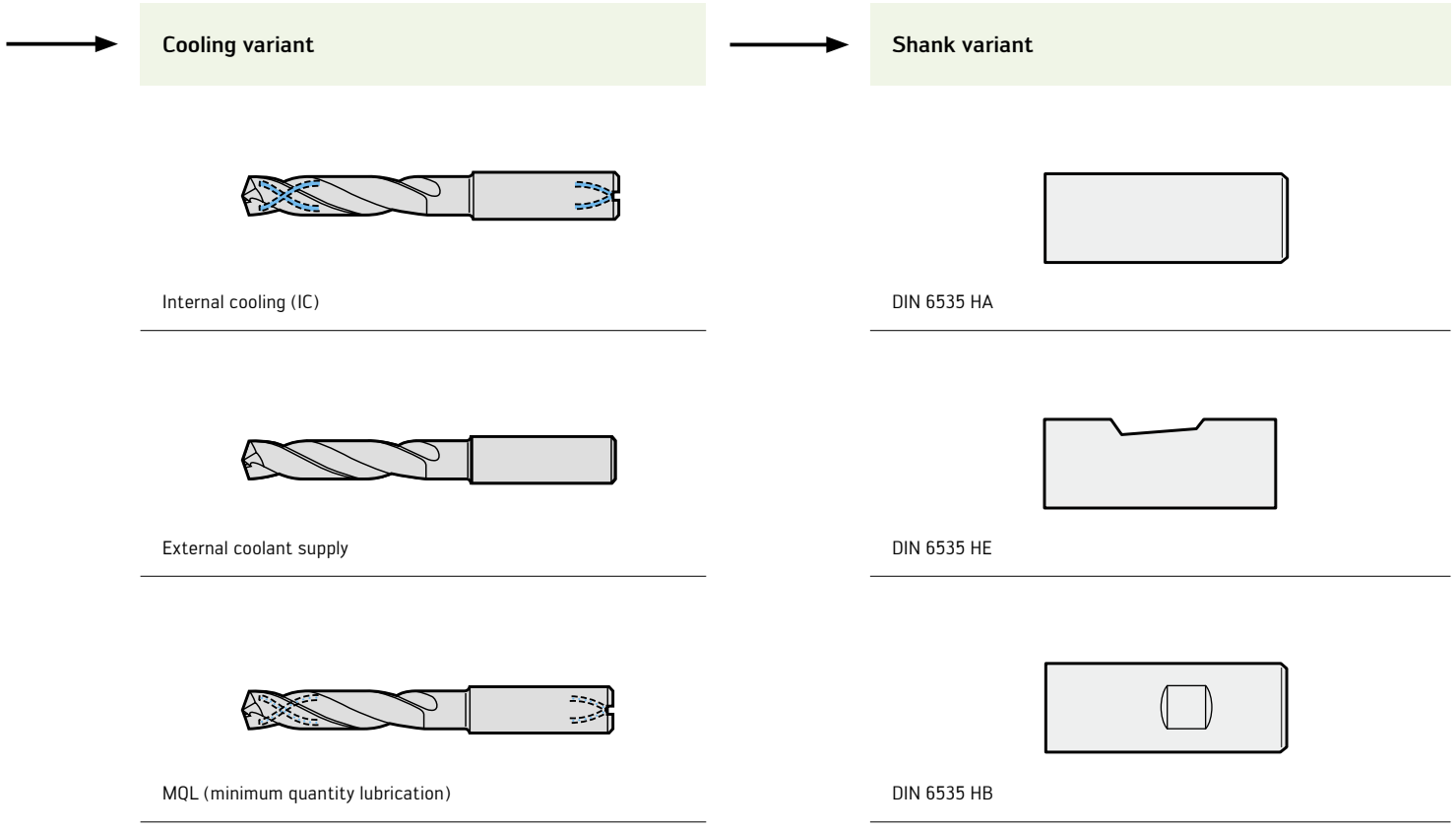
$D_{\min, \max} \geq IT6$

l_3 -Step length ± 0.05



Operation	$D_{\min, \max}$ mm	L_c mm	l_3 -Step length mm	l_1 mm	Point angle min, max	Countersink step min, max
Drilling from solid	Solid carbide: $D_c = 3.00-20.00$ HSS / HSS-E: $D_c = 3.00-16.00$	$35 \times D_c$		≤ 430	$90^\circ-150^\circ$	
1st step: Drilling from solid + chamfering	Solid carbide: $D_{2 \max} = D_c \times \sim 1.5$	$10 \times D_c$	$10 \times D_c$	≤ 330	$90^\circ-150^\circ$	$60^\circ-180^\circ$
1st step: Drilling from solid + boring	Solid carbide: $D_{2 \max} = D_c \times \sim 1.5$	$12 \times D_c$	$10 \times D_c$	≤ 330	$90^\circ-150^\circ$	$60^\circ-180^\circ$
2nd step: ... + Chamfering	Solid carbide: $D_{3 \max} = D_c \times \sim 1.5$	$12 \times D_c$	$10 \times D_c$	≤ 330	$90^\circ-150^\circ$	$60^\circ-180^\circ$
2nd step: ... + boring	Solid carbide: $D_{3 \max} = D_c \times \sim 1.5$	$12 \times D_c$	$10 \times D_c$	≤ 330	$90^\circ-150^\circ$	$60^\circ-180^\circ$

Example tools



Drilling from solid with high-performance indexable inserts



Example tools

WMP35



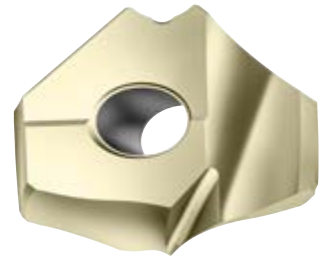
WNN25



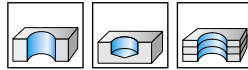
WKK45C



WPP25



Application



Material groups

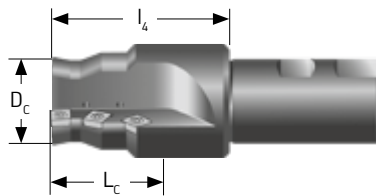


Operation	Diameter D_c mm	Corner radius r mm	Facet L mm	Point angle
Drilling from solid with specific intermediate diameter 	$D_{c\ min} = 12.00$ $D_{c\ max} = 37.99$			140°
Drilling from solid with special corner radius 	$D_{c\ min} = 12.00$ $D_{c\ max} = 37.99$	$r_{\ min} = 0.3$ $r_{\ max} = 0.15 \times D_c$		140°
Drilling from solid with specific facet 	$D_{c\ min} = 12.00$ $D_{c\ max} = 37.99$		$L_{c\ min} = 0.3$ $L_{c\ max} = 1.0$ $\alpha_{c\ min} = 30^\circ$ $\alpha_{c\ max} = 60^\circ$	140°



Boring

with indexable insert tools



Possible Number of teeth per step

Diameter 0-25: Z = 1
 Diameter 25-50: Z = 2
 Diameter 50-75: Z = 3
 Diameter > 75: Z = 4

Max. step jump in relation to D_c

1. Chamfering: $D_c + 15$ mm
2. Boring: $D_c + 22$ mm
3. Chamfering + boring $D_c + 37$ mm

Operation		$D_{\min, \max}$ mm	Angle	$a_{p \max}$ mm	L_c mm	l_4 mm
1st step: Chamfering		$D_c = 16-250$	$90^\circ-3^\circ$	7.5	$\leq 5 \times D_c$	≤ 300
1st step: Boring		$D_c = 16-250$	$90^\circ-3^\circ$	11	$\leq 5 \times D_c$	≤ 300
1st step: Boring + Chamfering		$D_c = 16-250$	$90^\circ-3^\circ$	18.5	$\leq 5 \times D_c$	≤ 300
2nd step: ... + Chamfering		$D_{2 \max} = D_c + 15$	$90^\circ-3^\circ$		$\leq 5 \times D_c$	≤ 300
2nd step: ... + core drills		$D_{2 \max} = D_c + 22$	$90^\circ-3^\circ$		$\leq 5 \times D_c$	≤ 300
2nd step: ... + boring and cham- fering		$D_{21 \max} = D_c + 15$ $D_{22 \max} = D_{21} + 22$	$90^\circ-3^\circ$		$\leq 5 \times D_c$	≤ 300
3rd step: ... + Chamfering		$D_{3 \max} = D_2 + 15$			$\leq 5 \times D_c$	≤ 300
3rd step: ...+Boring		$D_{3 \max} = D_2 + 22$			$\leq 5 \times D_c$	≤ 300
3rd step: ...+ Boring and cham- fering		$D_{3rd1 \max} = D_2 + 15$ $D_{3rd2 \max} = D_{3rd1} + 22$	$90^\circ-3^\circ$		$\leq 5 \times D_c$	≤ 300

Example tools

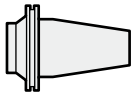
Three steps boring tool with fixed insert seats



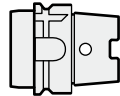
Boring tool with ISO cartridges



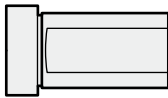
Possible adaptors



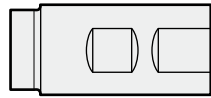
SK DIN 69871
ANSI/CAT JIS (MAS-BT)



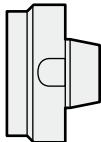
HSK
DIN 69893, Form A



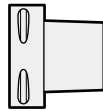
Cylindrical shank
ISO 9766



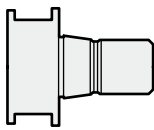
Cylindrical shank
DIN 1835



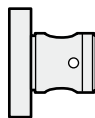
NCT



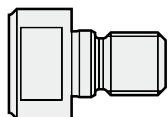
WalterCapto™



ScrewFit



AC



TC

Possible Indexable inserts - boring



Form CC.



Form DC.



Form SC..



Form TC.



Form MP..

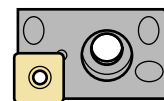


Form P484..

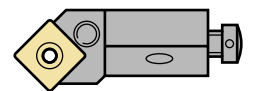


Form P284..

Possible cartridges



κ : 95°, 90°, 75°, 60°, 45°, 30°, 15°
Walter Mini toolholder:
 $D_{C\ min} = 40\ mm$



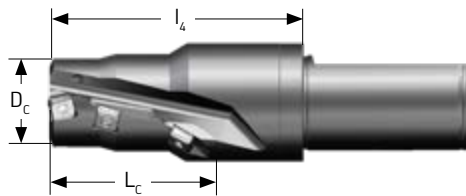
κ : 95°, 90°, 75°, 60°, 45°, 30°, 15°
ISO cartridges:
 $D_{C\ min} = 40\ mm$



κ : 95°, 90°, 75°, 60°, 45°, 30°, 15°
Mini cartridges:
 $D_{C\ min} = 20\ mm$

Boring

with tangential indexable insert tools



Operation

Max. eight indexable inserts per step possible

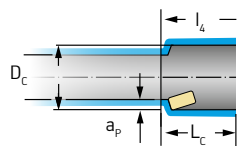
D_c
mm

Angle

a_p max
mm

Z_{eff} D_{min}

1. Boring with tangential arrangement



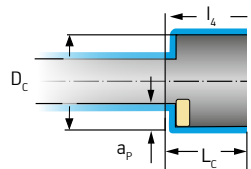
$D_c = 24-250$

71.3°

2.4

3

2. Boring with lateral arrangement



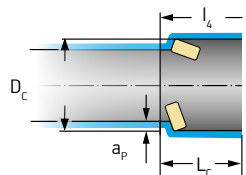
$D_c = 30-250$

$0^\circ-90^\circ$

7.6

3

3. Boring with lateral and tangential arrangement



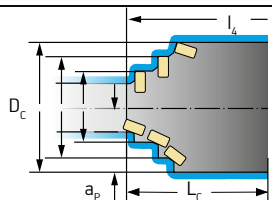
$D_c = 30-250$

71.3°

2.4

2

4. ... up to three steps and six indexable insert positions possible



$D_c = 24-250$

$0^\circ-90^\circ$

37.5

3

Example tools

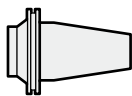
Tangential boring tool with bore adaption



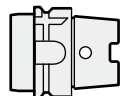
Tangential boring tool with HSK adaptor



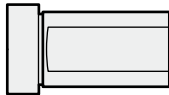
Possible adaptors



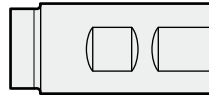
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ANSI/CAT JIS (MAS-BT)



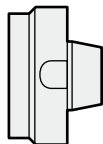
HSK
DIN 69893, Form A



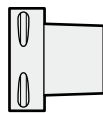
Cylindrical shank
ISO 9766



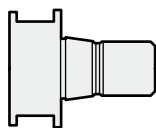
Cylindrical shank
DIN 1835



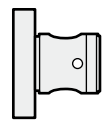
NCT



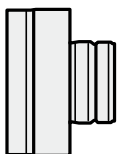
WalterCapto™



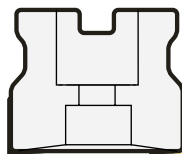
ScrewFit



AC

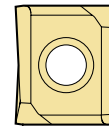


Varilock

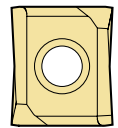


Transverse keyway
cylindrical bore DIN 138-A

Possible indexable inserts - boring

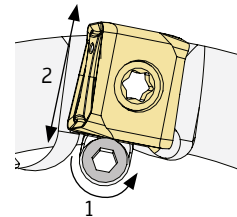


P4160-E47...



P4460-G88..

Additional function



Adjustable screw
k: 90°
D_{c min} = 33 mm

Hint

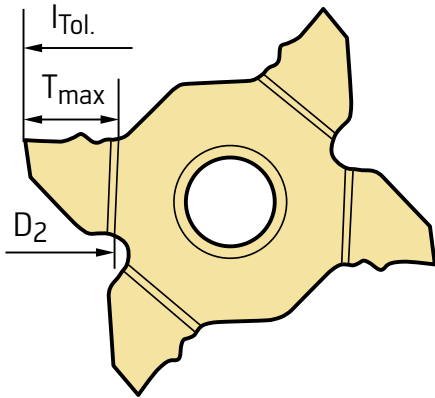
- Only for rotating tools
- Bore adaptation only possible with one step

Grooving

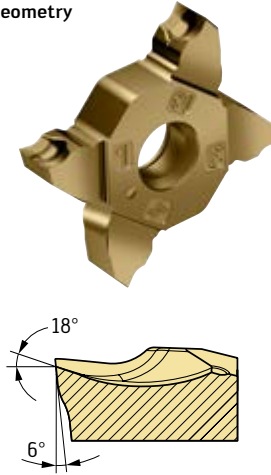
with Walter Cut MX multi-edge grooving system



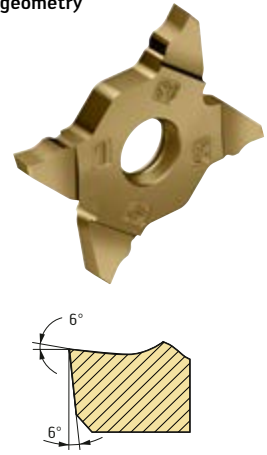
Example tools



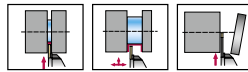
CF5 geometry



GD8 geometry



Application



Material groups



Operation	Insert width S mm	Cutting depth T mm	Corner radius r mm	Approach angle	Chamfer angle
Grooving	$S_{min} = 0.5$ $S_{max} = 5.5$	$T_{min} = 1$ $T_{max} = 6$	$r_{min} = 0.05$ $r_{max} = (r1+r2=S)$		
Grooving with full radius	$S_{min} = 0.5$ $S_{max} = 5.5$	$T_{min} = 1$ $T_{max} = 6$	$r = S/2$		
Parting-off	$S_{min} = 0.5$ $S_{max} = 5.5$	$T_{min} = 1$ $T_{max} = 6$	$r_{min} = 0.05$ $r_{max} = (r1+r2=S)$	$K_{min} = 3^\circ$ $K_{max} = 20^\circ$	
Grooving and chamfering	$S_{min} = 1$ $S_{max} = 5.5$	$T_{min} = 1$ $T_{max} = 5.5$	$r_{min} = 0.05$ $r_{max} = 0.50$		$B1_{min} = 30^\circ$ $B1_{max} = 60^\circ$

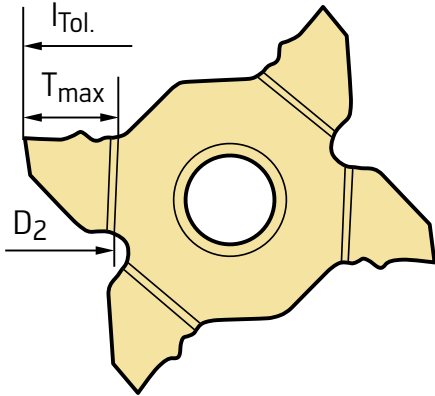
Cutting width tolerances: ± 0.02 mm.

Grooving

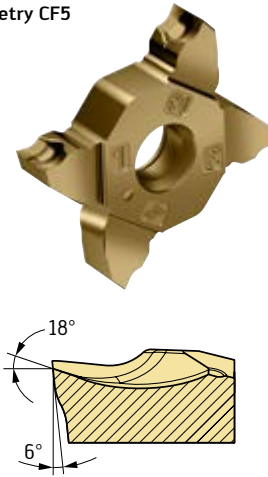
with multiple cutting edges Grooving system Walter Cut MX



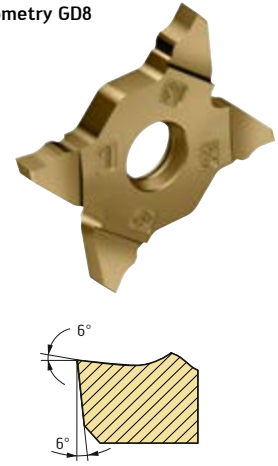
Example tools



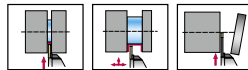
Geometry CF5



Geometry GD8



Application

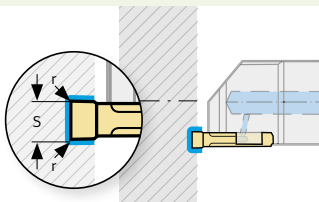


Material groups



Operation	Insert width S mm	Cutting depth T mm	Corner radius r mm
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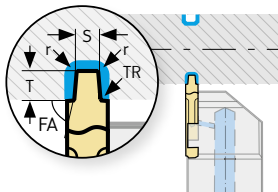
Axial grooving



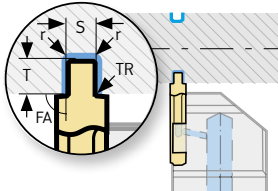
$S_{min} = 1.5$	$T_{min} = 1.0$	$r_{min} = 0.05$
$S_{max} = 5.15$	$T_{max} = 5.0$	$r_{max} = (r1+r2=S)$

Operation	Insert width S mm	Cutting depth T mm	Corner radius r mm	Transition radius TR	Flank angle FA
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Grooving and Chamfering with transition radius



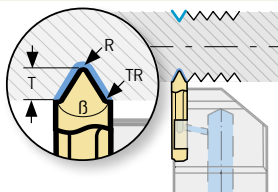
$S_{min} = 1.0$	$T_{min} = 1.0$	$r_{min} = 0.05$	$T_{R min} = 0.2$	$F_{a max} = 0^\circ$
$S_{max} = 3.5$	$T_{max} = 4.9$	$r_{max} = 0.50$	$T_{R max} = 0.4$	$F_{a max} = 5^\circ$



$S_{min} = 1.0$	$T_{min} = 1.0$	$r_{min} = 0.05$	$T_{R min} = 0.2$	$F_{a max} = 0^\circ$
$S_{max} = 3.5$	$T_{max} = 4.9$	$r_{max} = 0.50$	$T_{R max} = 0.4$	$F_{a max} = 0^\circ$

Operation	Thread depth T mm	Tip radius R mm	Transition radius TR	Flank angle β
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Thread turning



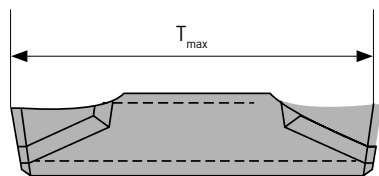
$T_{min} = 0.5$	$R_{min} = 0.05$	$T_{R min} = 0.15$	$\beta_{min} = 55^\circ$
$T_{max} = 4.0$	$R_{max} = 0.50$	$T_{R max} = 0.50$	$\beta_{max} = 60^\circ$

Grooving

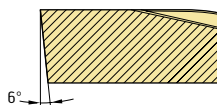
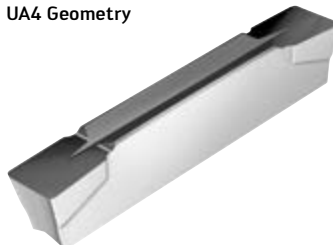
with Walter Cut GX multi-edge grooving system



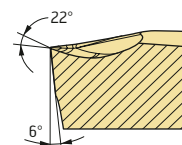
Example tools



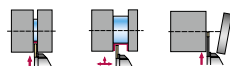
UA4 Geometry



UF8 Geometry



Application



Material groups



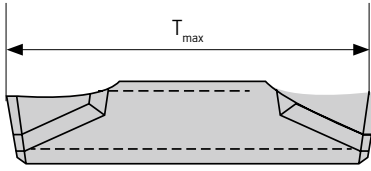
Operation	Cutting edge length L mm	Insert width S mm	Cutting depth T mm	Corner radius r mm	Chamfer angle	
Grooving		GX09	$S_{min} = 1.50$		$r_{min} = 0.05$	
			$S_{max} = 2.99$		$r_{max} = (S/2)$	
		GX16	$S_{min} = 1.60$		$r_{min} = 0.05$	
			$S_{max} = 8.00$		$r_{max} = (S/2)$	
		GX24	$S_{min} = 2.30$		$r_{min} = 0.05$	
			$S_{max} = 10.0$		$r_{max} = (S/2)$	
Grooving with full radius		GX09	$S_{min} = 1.50$		$r = (S/2)$	
			$S_{max} = 2.99$			
		GX16	$S_{min} = 1.60$		$r = (S/2)$	
			$S_{max} = 8.00$			
		GX24	$S_{min} = 2.30$		$r = (S/2)$	
			$S_{max} = 10.0$			
Grooving and chamfering		GX09	$S_{min} = 1.50$	$T_{min} = 0.5$	$r_{min} = 0.05$	$B_{1rpm} = 30^\circ$
			$S_{max} = 2.99$	$T_{max} = 1.3$	$r_{max} = 0.5$	$B_{1max} = 60^\circ$
		GX16	$S_{min} = 1.5$	$T_{min} = 0.5$	$r_{min} = 0.05$	$B_{1rpm} = 30^\circ$
			$S_{max} = 4.59$	$T_{max} = 1.9$	$r_{max} = 0.5$	$B_{1max} = 60^\circ$
		GX24	$S_{min} = 3.00$	$T_{min} = 0.5$	$r_{min} = 0.05$	$B_{1rpm} = 30^\circ$
			$S_{max} = 6.50$	$T_{max} = 4.5$	$r_{max} = 0.5$	$B_{1max} = 60^\circ$

Grooving

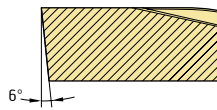
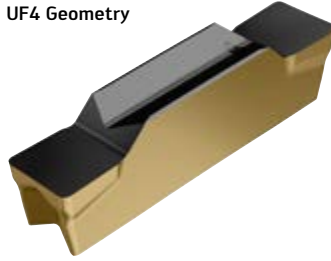
with Walter Cut DX multi-edge grooving system



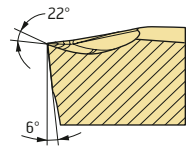
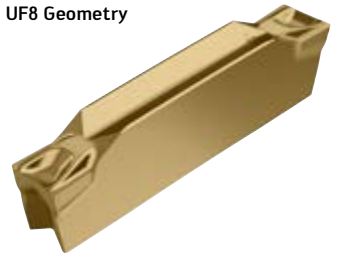
Example tools



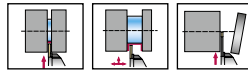
UF4 Geometry



UF8 Geometry



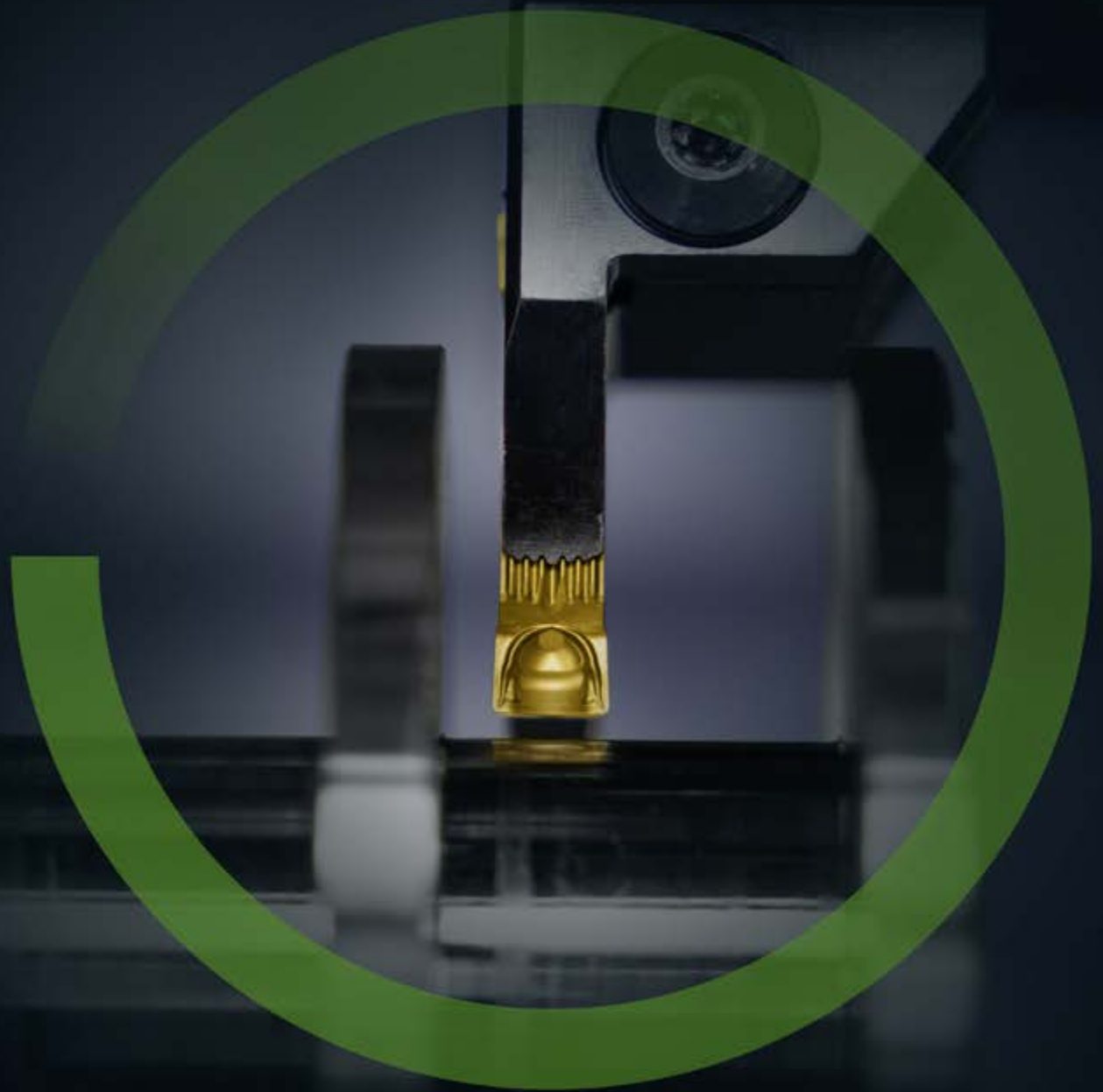
Application



Material groups



Operation	Cutting edge length L mm	Insert width S mm	Cutting depth T mm	Corner radius r mm	Chamfer angle
Grooving 	DX18	$S_{min} = 2.00$ $S_{max} = 7.99$		$r_{min} = 0.05$ $r_{max} = (S/2)$	
Grooving with full radius 	DX18	$S_{min} = 2.00$ $S_{max} = 7.99$		$r_{min} = 0.05$ $r_{max} = (S/2)$	
Grooving and chamfering 	DX18	$S_{min} = 2.00$ $S_{max} = 4.59$	$T_{min} = 0.5$ $T_{max} = 3.5$	$r_{min} = 0.05$ $r_{max} = 0.50$	$B_{1rpm} = 30^\circ$ $B_{1max} = 60^\circ$



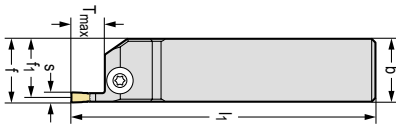
Groov-tec[®]

Tool holder for external machining

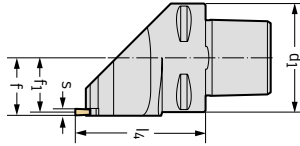


Example tools

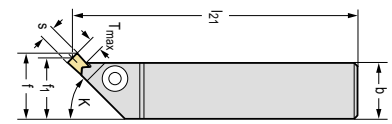
Shank tools



Capto lancing holder



Shank tools - Universal 45°



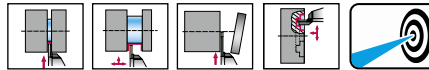
Indexable inserts



GD

Groov-tec® GD

Application



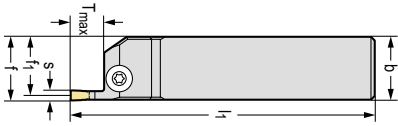
Operation	Insert width S mm	Cutting depth T mm	Dmin mm	Approach angle	Shank/Capto size mm	Total length mm
External machining Radial GD:	$S_{min} = 2.50$	$T_{min} = 3$		$K_{min} = 0^\circ$	Capto: C3-C8	≤ 120
	$S_{max} = 6.00$	$T_{max} = 33$		$K_{max} = 90^\circ$	Square Shank: 10 - 50	≤ 250
External machining Axial GD:	$S_{min} = 2.50$	$T_{min} = 5$	Dmin: 34mm	$K_{min} = 0^\circ$	Capto: C3-C8	≤ 120
	$S_{max} = 6.00$	$T_{max} = 33$	Dmin max: 2500mm	$K_{max} = 90^\circ$	Square Shank: 10 - 50	≤ 250

Tool holder for external machining

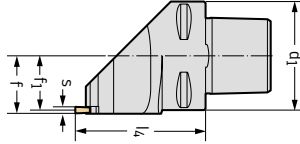


Example tools

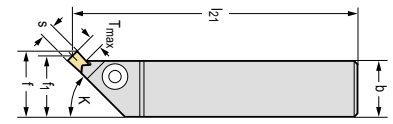
Shank tools



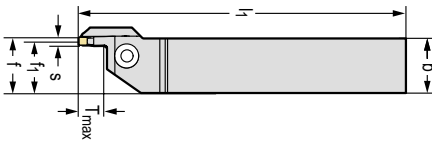
Capto holder



Shank tools - Universal 45°



Shank tools - axial grooving



Indexable inserts

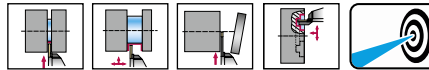


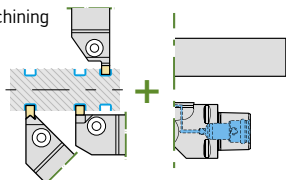
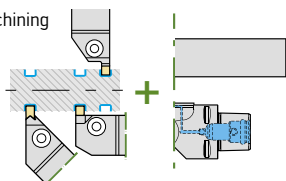
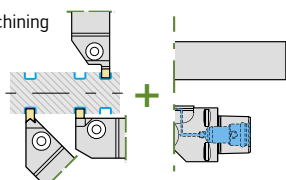
MX

DX

GX

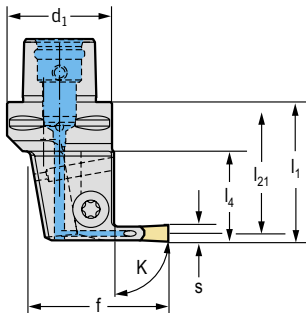
Application



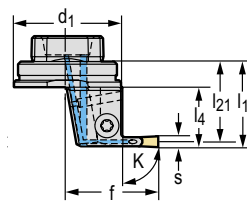
Operation	Insert width S mm	Cutting depth T mm	Dmin mm	Approach angle	Shank/Capto size mm	Total length mm
External machining Radial MX:	 $S_{min} = 0.50$	$T_{min} = 1$		$K_{min} = 0^\circ$	Capto: C3-C8	≤ 120
	$S_{max} = 5.56$	$T_{max} = 6$		$K_{max} = 90^\circ$	Square Shank: 10 - 50	≤ 250
External machining Radial DX:	 $S_{min} = 1.00$	$T_{min} = 5$		$K_{min} = 0^\circ$	Capto: C3-C8	≤ 120
	$S_{max} = 4.25$	$T_{max} = 17$		$K_{max} = 90^\circ$	Square Shank: 10 - 50	≤ 250
External machining Radial GX:	 $S_{min} = 2.00$	$T_{min} = 5$		$K_{min} = 0^\circ$	Capto: C3-C8	≤ 120
	$S_{max} = 8.00$	$T_{max} = 33$		$K_{max} = 90^\circ$	Square Shank: 10 - 50	≤ 250
External machining Axial GX:	 $S_{min} = 2.00$	$T_{min} = 5$	Dmin: 34mm	$K_{min} = 0^\circ$	Capto: C3-C8	≤ 120
	$S_{max} = 8.00$	$T_{max} = 33$	Dmin max: 2500mm	$K_{max} = 90^\circ$	Square Shank: 10 - 50	≤ 250

Example tools

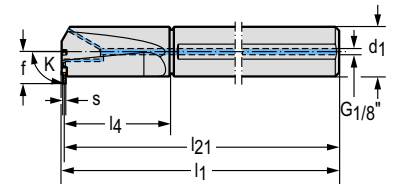
Capto holder - Internal grooving



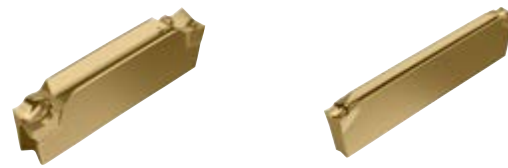
QuadFit head - Internal grooving



Boring bar for internal grooving



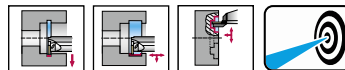
Indexable inserts

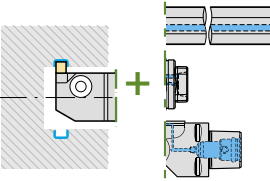
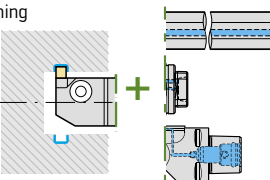
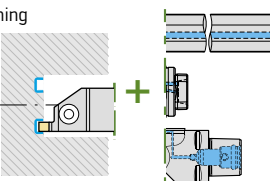


DX

GX

Application



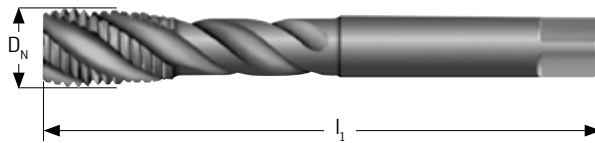
Operation	Insert width Smm	Cutting depth T mm	Dmin mm	Approach angle	Shank/Capto size mm	Total length mm
Internal machining Radial DX: 	$S_{min} = 1.00$ $S_{max} = 4.25$	$T_{min} = 5$ $T_{max} = 17$	Dmin: 27mm Dmin max: 2500mm	$K_{min} = 85^\circ$ $K_{max} = 95^\circ$	Capto: C3-C8 Square Shank: 10 - 50 QuadFit Q25-Q50	≤ 120 ≤ 250
Internal machining Radial /Axial GX: 	$S_{min} = 2.00$ $S_{max} = 8.00$	$T_{min} = 5$ $T_{max} = 33$	Dmin: 25mm Dmin max: 2500mm	$K_{min} = 0^\circ$ $K_{max} = 90^\circ$	Capto: C3-C8 Square Shank: 10 - 50 QuadFit Q25-Q50	≤ 120 ≤ 250
Internal machining Axial GX: 	$S_{min} = 2.00$ $S_{max} = 8.00$	$T_{min} = 5$ $T_{max} = 33$	Dmin: 34mm Dmin max: 2500mm	$K_{min} = 0^\circ$ $K_{max} = 90^\circ$	Capto: C3-C8 Square Shank: 10 - 50 QuadFit Q25-Q50	≤ 120 ≤ 250

Threading

with HSS-E/HSS-E-PM tools

Variants

Right- and left-hand cutting version



Standard/Operation	Thread types	D_N min, max mm	Chamfer form*
<p>Metric</p> <p>Thread cutting and Thread forming: blind and through hole</p>	<p>M MF EGM EG MF</p>	<p>3-20mm</p>	<p>Form A (6-7 threads) Form B (4-5 threads) Spiral point Form C (2-3 threads) Form D (4-5 threads) Form E (1.5-2 threads) Form F (1-1.5 threads)</p>
<p>UTS</p> <p>Thread cutting and Thread forming: blind and through hole</p>	<p>UN UNC UNF UNEF STIUN STIUNC STIUNF STIUNEF</p>	<p>No. 5-15/16" (3.175mm - 20.995mm)</p>	<p>Form A (6-7 threads) Form B (4-5 threads) Spiral point Form C (2-3 threads) Form D (4-5 threads) Form E (1.5-2 threads) Form F (1-1.5 threads)</p>
<p>G</p> <p>Thread cutting and Thread forming: blind and through hole</p>	<p>G</p>	<p>1/8- 1/2 (9.728mm- 20.995mm)</p>	<p>Form A (6-7 threads) Form B (4-5 threads) Spiral point Form C (2-3 threads) Form D (4-5 threads) Form E (1.5-2 threads) Form F (1-1.5 threads)</p>

* Depending on the models

Example tools

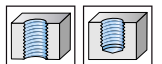
TC130 tap for blind-hole machining



Prototex® tap for through-hole machining



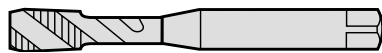
TC420 Thread former



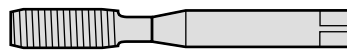
Tap coolant variant

Thread former coolant variant

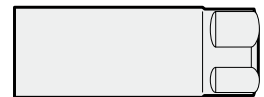
Shank variant



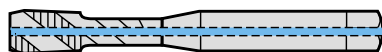
External



External without Lubrication grooves



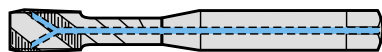
With square



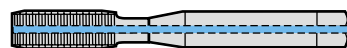
Axial outlet



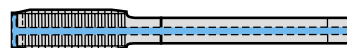
External with Lubrication grooves



Radial exit



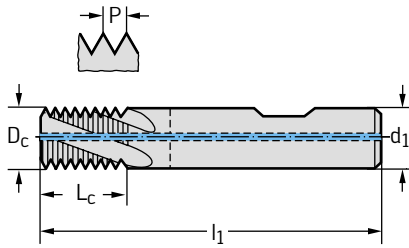
Axial exit



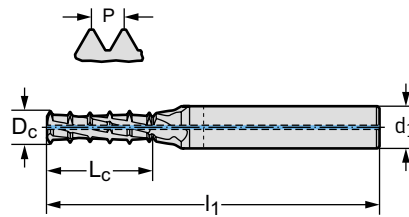
Radial exit

Thread milling with Solid carbide tools

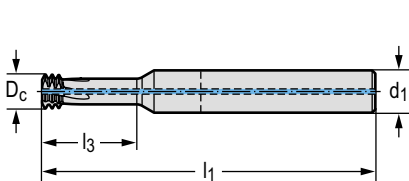
TC610



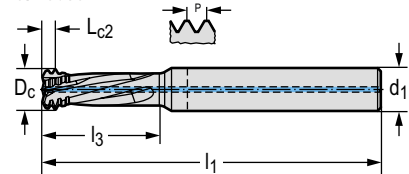
TC620



TC630



TC645/TC685



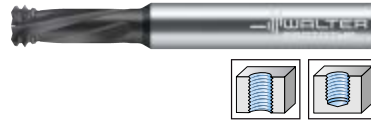
Thread types

M	STIM
MF	STIMF
UN	STIUN
UNC	STIUNC
UNF	STIUNF
UNEF	
UNS	

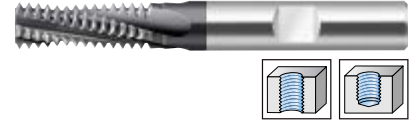
Standard/Operation	D_N min, max mm	P mm	Number of teeth	LC / L3 mm
TC610/TC611	M4-M16 UNC8-UNC5/8 UNF10-UNF5/8	0,7-2,5	4-6	max. $2 \times D_N$
TC620	M4-M16 UNC8-UNC5/8 UNF10-UNF5/8	0,7-2,5	3-6	max. $3 \times D_N$
TC630	M4-M16 UNC8-UNC5/8 UNF10-UNF5/8	0,5-2,5	4-6	max. $4 \times D_N$
TC645/TC685	M4-M16 UNC8-UNC5/8 UNF10-UNF5/8	0,7-2,5	4-5	max. $3 \times D_N$

Example tools

TC645/TC685



TC610



TC620



TC630



Variant Cooling Thread milling cutter:

Modifications:

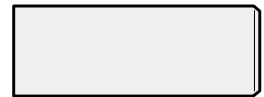
Shank variant



External



Countersinking and levelling stage



DIN 6535 HA



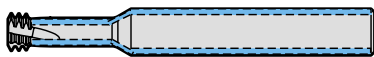
Axial outlet



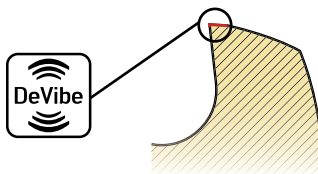
Deburring cutting edge



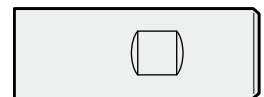
DIN 6535 HE



Externally via the shaft



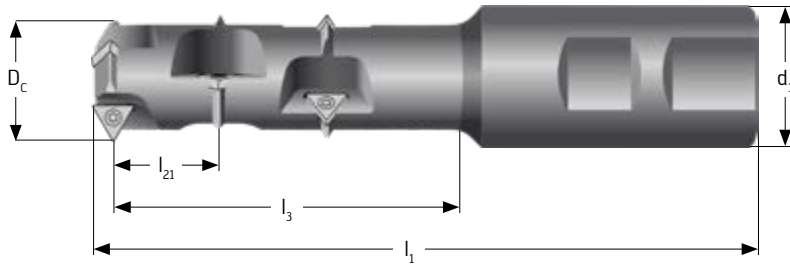
DeVibe



DIN 6535 HB

Thread milling

with indexable insert tools

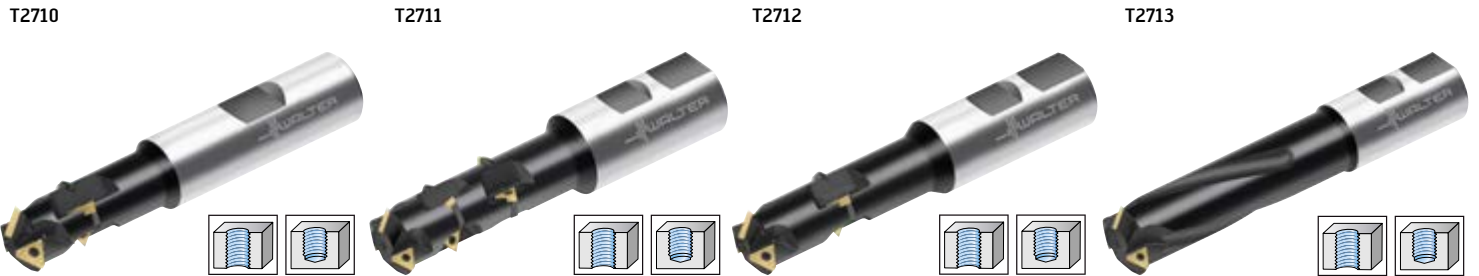


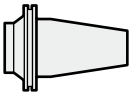
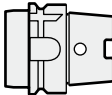
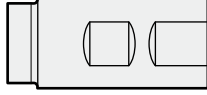

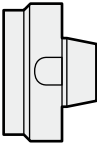
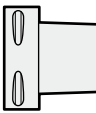
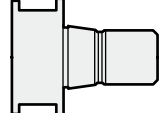
Thread types

M	STIM	G
MF	STIMF	
UN	STIUN	
UNC	STIUNC	
UNF	STIUNF	
UNEF		
UNS		

Operation	D_N mm	P mm	l_3 mm	Number of teeth	Indexable inserts
Thread milling 	From M 16/UNC 3/4 From G1"	0.9-10 mm 24-3 TPI 14-11 TPI	$3 \times D_N$ (max. 250 mm)	3-9	P26300-06 P26300-09 P26300-11 P26300-14 P26300-22 P26310-09 P26310-14 P26310-22

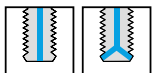
Example tools



Possible adaptors			Possible indexable inserts
 SK DIN 69871 ANSI/CAT JIS (MAS-BT)	 HSK DIN 69893, Form A	 Cylindrical shank DIN 1835	 Form P26300, P26310
 NCT	 WalterCapto™	 ScrewFit	Walter geometry index D67 easy-cutting, maximum life quantity D61 vibration damped, best operational smoothness

D_c-Area:
 19-62 mm for cylindrical shank and ScrewFit
 19-100 mm for HSK, SK and NCT

Adjustable Coolant supply



Milling

with M4000 indexable insert tools

Tolerances

Diameter

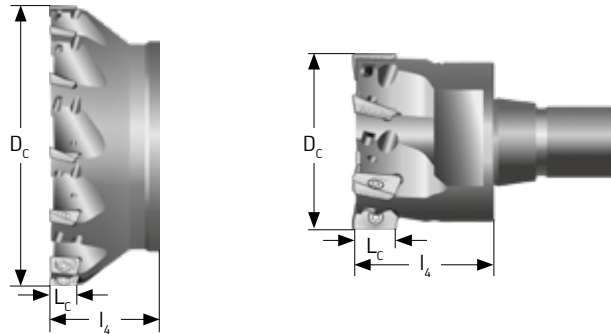
Using sintered indexable insert

± 0.15 mm

Using ground indexable insert:

± 0.1 mm

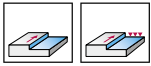
Shoulder milling cutter



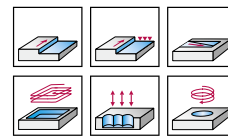
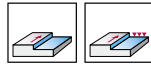
Operation	D_C min, max mm	L_C min, max mm	l_4 min, max mm	Approach angle [κ]	Indexable inserts
Shoulder milling (M4132)	15-250	0.1-11	≤ 125	89.5°	SD..06 SD..09 SD..12
Shoulder milling (M4130)	16-250	0.1-16	≤ 125	90°	LD..08 LD..14 LD..17
Face milling (M4000)	15-250	0.1-11	≤ 125	10°-89.5°	SD..06 SD..09 SD..12
Chamfering (M4000)	8-240	0.1-10	≤ 125	15°-75°	SD..06 SD..09 SD..12

Example tools

Shoulder milling cutter



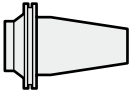
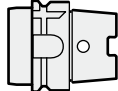
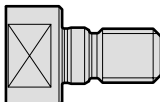
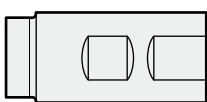
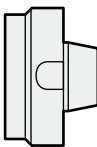
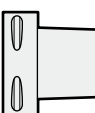
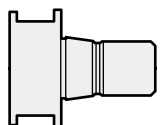
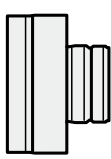
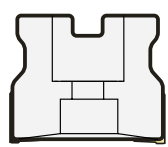
Face milling cutter



Chamfer milling cutter



→ Possible adaptors

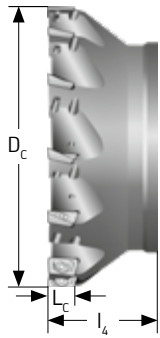
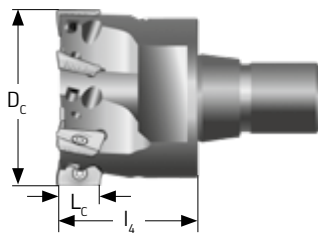
 SK DIN 69871 ANSI/CAT JIS (MAS-BT)	 HSK DIN 69893, Form A	 TC
 Cylindrical shank DIN 1835	 NCT	
 WalterCapto™	 ScrewFit	
 Varilock	 Cylinder bore Transverse keyway DIN 138-A	

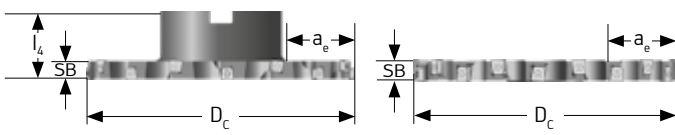
D_c-Area:

15-62 mm for cylindrical shank and ScrewFit
 15-84 mm for HSK, SK and NCT
 40-250 mm for bore adaptions

Milling

with indexable insert tools

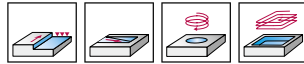
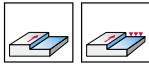
		Tolerances	Diameter	Cutting widths
Shoulder milling cutter		Using sintered indexable insert:	± 0.20 mm	
		Using ground indexable insert:	± 0.12 mm	
		Using restricted tolerance:	± 0.07 mm	

Slotting cutter		Using Sintered WSP	± 0.30 mm	± 0.34 mm
		Using Ground WSP:	± 0.23 mm	± 0.16 mm
		Using restricted tolerance:	± 0.09 mm	± 0.11 mm

Operation	D_c min, max mm	L_c min, max mm	l_4 min, max mm	a_e max mm	SB mm	Approach angle [κ]	Indexable inserts
Shoulder milling Xtra-tec® XT		10.00-250.00	0.1-16.0	≤ 125		82° 85°	AC...0602 BC...0903 BC...1204 BC...1605
Shoulder milling Walter BLAXX		21.90-250.00	0.1-15.0	≤ 125		90°	LN..0904 LN..1306 LN..1607
Slot milling		80.00-350.00	11.0-31.0	≤ 100	$0.3 \times D_c$	11-30	CN..0805 CN..1206 CN..1608
Slot milling Xtra-tec®		80.00-350.00	11.0-30.0	≤ 100	$0.3 \times D_c$	11-30	LN..0804 LN..1005 LN..1206 LN..1608
Face milling for heavy-duty machining		125.00-315.00	0.1-16.0	≤ 125		15° 45° 60° 75° 90°	LN..2010

Example tools

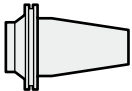
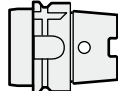

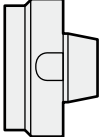
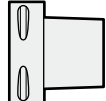
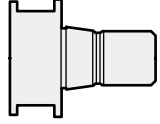
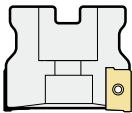
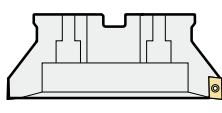
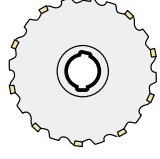
Shoulder milling cutter



Slotting cutter



→ Possible adaptors

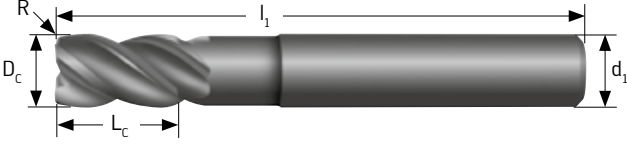
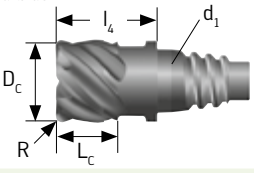










 <p>SK DIN 69871 ANSI/CAT JIS (MAS-BT)</p>	 <p>HSK DIN 69893, Form A</p>	 <p>Cylindrical shank DIN 1835</p>
 <p>NCT</p>	 <p>WalterCapto™</p>	 <p>ScrewFit</p>
 <p>Transverse keyway cylindrical bore DIN 138-A</p>	 <p>Transverse keyway cylindrical bore DIN 138-A</p>	 <p>Cylindrical bore with DIN 138-L longitudinal keyway</p>

D_c-Area:

10-62 mm for cylindrical shank and ScrewFit
10-84 mm for HSK, SK and NCT
40-350 mm for bore adaptions

Milling

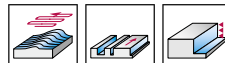
with solid carbide tools

				Helix angle	Number of teeth	Tolerances	
Solid carbide end milling cutter				Depending on the product range	2-10*	IT8 - IT11	
Modular solid carbide cutter ConeFit				Depending on the product range	2-10*	IT8 - IT11	
Solid carbide end milling cutter Operation	$D_{C, \text{min, max}}$ mm	L_C mm	l_1, max mm	Cutting edge type	End-face geometry		
Shoulder milling	2.00-25.00	$3 \times D_C$	125 [$D_C \leq 6$ mm] 160 [$D_C \leq 16$ mm] 225 [$D_C > 16$ mm]		$R_{\text{max}} = 0.3 \times D_C$ $R_{\text{min}} = 0.1$ mm [$D_C \leq 12$ mm] $R_{\text{min}} = 0.2$ mm [$D_C > 12$ mm]	 with centre cut  without centre cut	
Slot milling							45° Chamfer angle Chamfer width _{max} = $0.25 \times D_C$
Copy milling							$R_{\text{max}} = 0.3 \times D_C$ $R_{\text{min}} = 0.1$ mm [$D_C \leq 12$ mm] $R_{\text{min}} = 0.2$ mm [$D_C > 12$ mm]
ConeFit solid carbide milling cutter Operation	$D_{C, \text{min, max}}$ mm	$L_{C, \text{min, max}}$ mm	$l_4, \text{min, max}$ mm	Cutting edge type	End-face geometry		
Shoulder milling	6.00-25.40	$0.4 \times D_1 - 1.5 \times D_1$	10.9-49.6		$R_{\text{max}} = 0.3 \times D_C$ $R_{\text{min}} = 0.1$ mm [$D_C \leq 12$ mm] $R_{\text{min}} = 0.2$ mm [$D_C > 12$ mm]	 With centre cut  Without centre cut	
Slot milling							Chamfer angle 45° Chamfer width _{max} = $0.25 \times D_C$
Copy milling							$R_{\text{max}} = 0.3 \times D_C$ $R_{\text{min}} = 0.1$ mm [$D_C \leq 12$ mm] $R_{\text{min}} = 0.2$ mm [$D_C > 12$ mm]

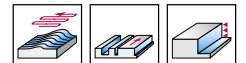
* Depending on type and diameter

Example tools

Solid carbide end milling cutter

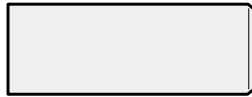


ConeFit modular solid carbide milling cutter

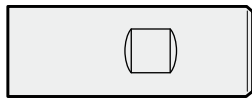


Shank sizes d_1 h6: 6, 8, 10, 12, 14, 16, 18, 20, 25

HA



HB



HE



Safelock™
(from D_c 12 mm)



Variant - Cooling

Cooling grooves on the shaft



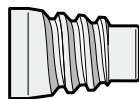
Axial exit



Two or three helical cooling openings
with front outlets



ConeFit sizes d_1 : E10, E12, E16, E20, E25



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Walter Xpress saves time and money



- If you enquire about a tool via Walter Xpress today, you'll receive all the relevant information the next day – and have the tool in hand after a maximum of three weeks
- Send your enquiry to the relevant sales organisation by e-mail
- You will receive a quote from us within 24 hours which includes drawing, price and delivery time
- You can also configure Walter Xpress special tools for holmaking in Walter GPS and order them directly – whether with indexable inserts or solid carbide

It's even faster in person

With a simple click, our local field service employees will help you by, for example, directly compiling a quote for you including comprehensive customer documentation. Ordering your special tool could not be faster. Please contact us for more information.



HOW TO FIND AND ORDER YOUR STANDARD TOOL



Personal - worldwide

You can contact us by phone, fax or e-mail. The contact details for your local contact can be found on our website at: walter-tools.com



The Walter general catalogue

Contains the entire standard range of our competence brands Walter, Walter Titex and Walter Prototyp. It is supplemented regularly with the latest Product Innovations catalogue.

At walter-tools.com, you can access and order your Walter products quickly and conveniently online – via smartphone, tablet or PC. The benefit for you: Direct access from any device, displayed in an optimised form, at any time.

Walter online catalogue



Tool-specific search

You can find products in the Walter online catalogue using the familiar structure of our product catalogue as well as filter and search functions. Other features: A shopping function and links to drawings and models.

Walter GPS



Application-based search

With Walter GPS, it takes just a few steps for you to find the best machining solution for your component, online and offline – and the solution can be transferred directly to the Walter TOOLSHOP if required! This also applies to Walter Xpress tools for holemaking.

Walter e-Library



Document-based search

The Walter e-Library app provides you with all the information you need on your mobile devices within a matter of seconds: E.g. brochures and catalogues – online and offline, in 17 languages.

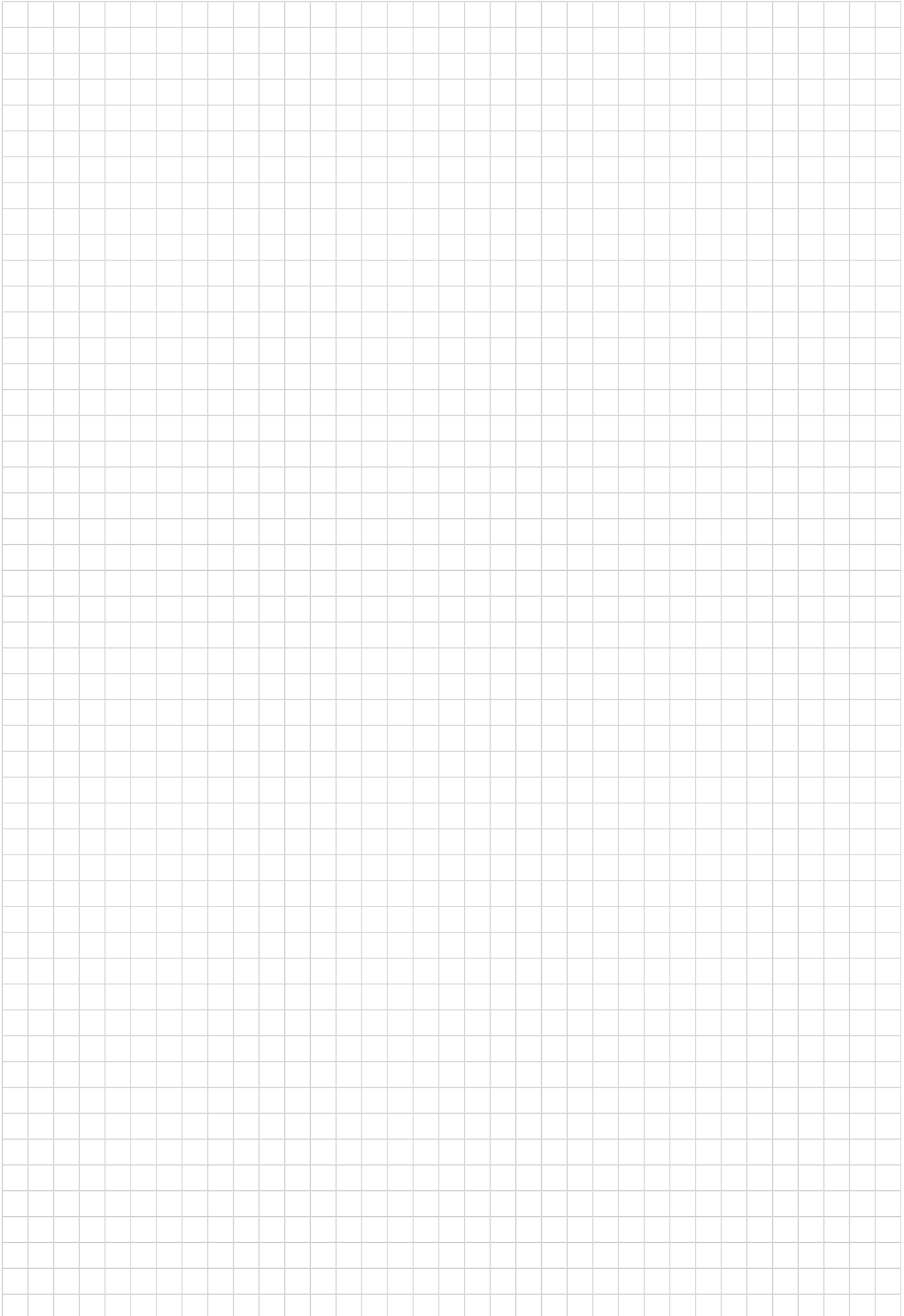
Digital ordering methods

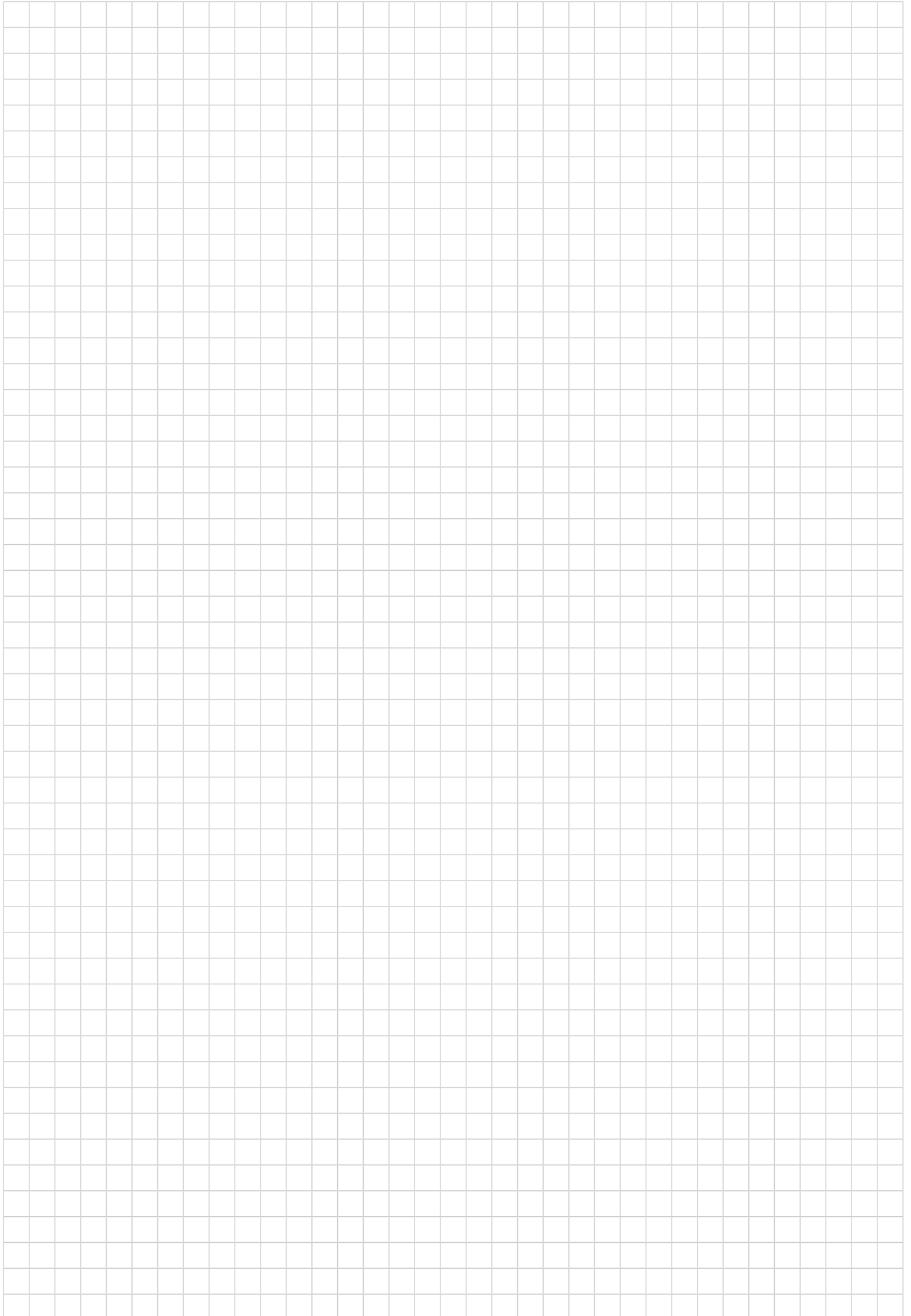


Walter TOOLSHOP & EDI

The Walter TOOLSHOP offers customers opportunities to find information and place orders quickly.

EDI (electronic data interchange) also makes it possible to exchange documents (e.g. orders) – even special tools can be ordered.

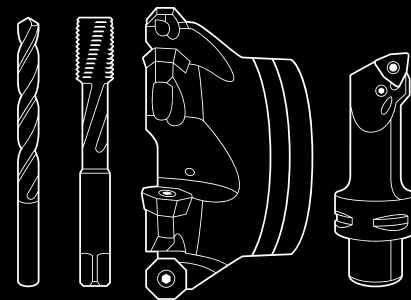




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