WALTER
Engineering Kompetenz

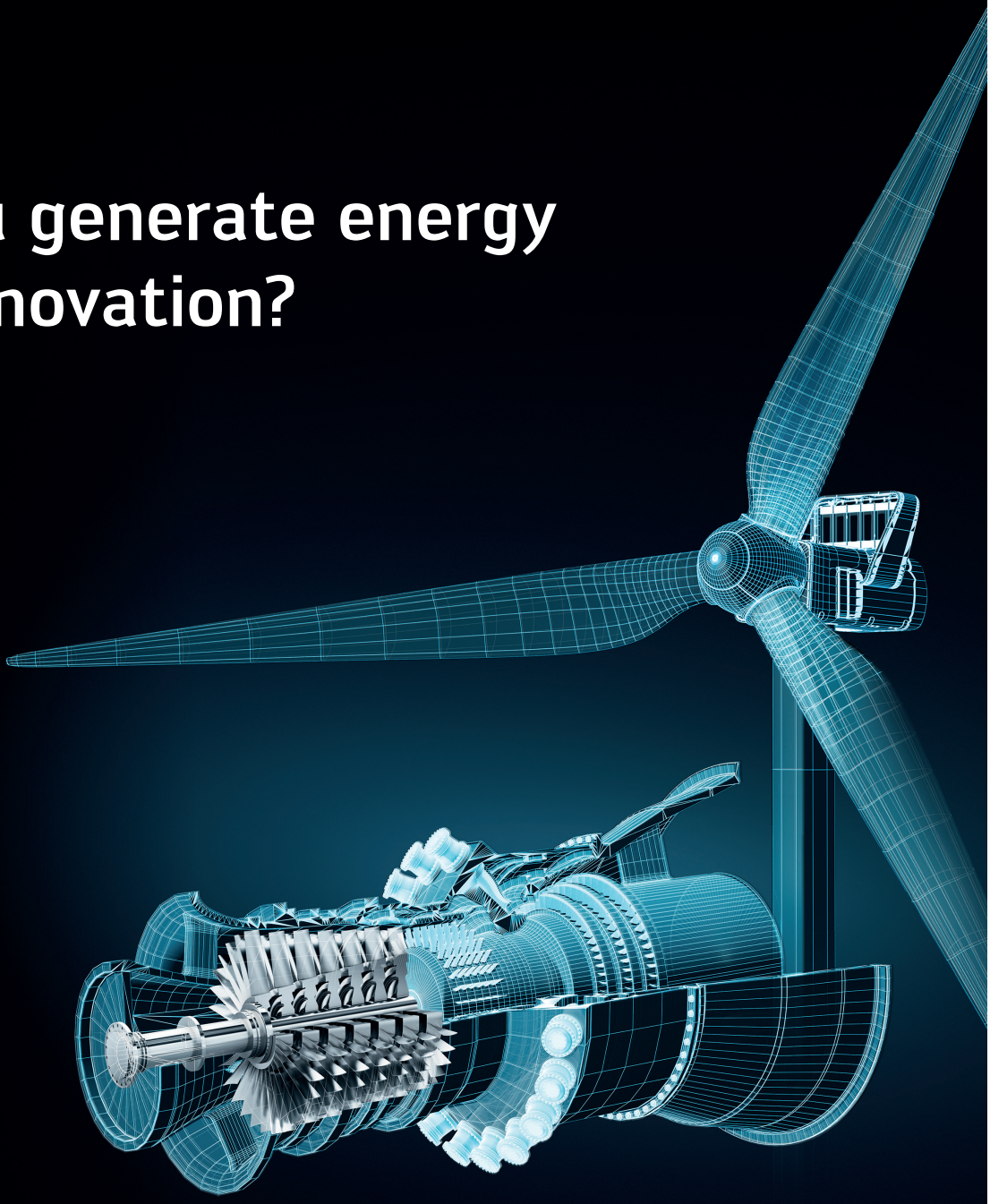
Turning, holemaking,
threading, milling

Product highlights
Edition 2019-1

_PRODUCT HIGHLIGHTS

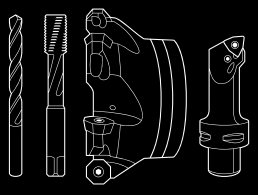
Added value for your production.

Can you generate energy from innovation?



The world's population will reach over 8 billion by 2025, leading to the energy demand rising accordingly. Achieving optimum efficiency in energy generation has therefore never been more important. Components for the energy industry need to be optimised to fulfil their maximum potential, which requires the use of new machining techniques and technologies. Having a partner that provides reliable tool solutions and a dependable service is therefore crucial.

Harnessing energy for the future: Engineering Kompetenz from Walter.



walter-tools.com

WALTER
Engineering Kompetenz

Walter highlight flyer

Table of contents

A – Turning


LTER
MX22-2-P

Accure·tec – the best results for long components.

NEW

NEW 19-1

NEW ADDITION TO THE PRODUCT RANGE

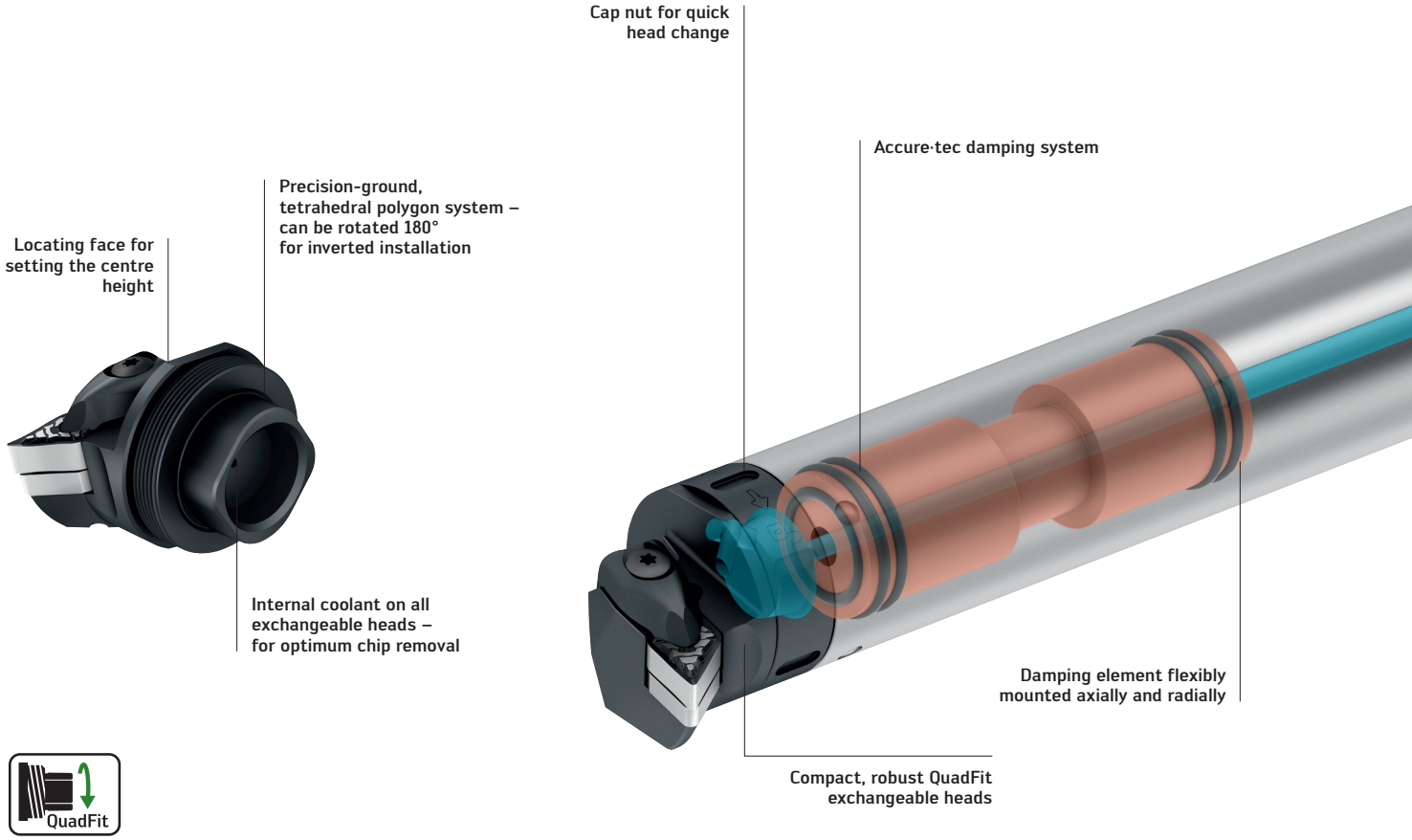
– Accure·tec A3000 boring bars with patented vibration-damping technology for maximum precision

THE INTERFACE

– QuadFit quick-change heads; 0.002 mm (80 millionths inch) changeover precision
– Only one cap nut for clamping the exchangeable head
– No loose "assembly parts" (e.g. screws)
– Available for:
  • Negative indexable inserts:
    CNMG4, CNMG5, DNMG4, WNMG4
    (CNMG12, CNMG16, DNMG15, WNMG08)
  • Positive indexable inserts:
    CCMT3, CCMT4, DCMT3, TCMT3, VBMT3
    (CCMT09, CCMT12, DCMT11, TCMT16, VBMT16)

THE TOOL

– Vibration-damped, preset boring bar adaptor
– Lengths: 6 × D, 8 × D, 10 × D
– Boring bar diameters:
  • 32, 40, 50 mm
  • 1.25", 1.5", 1.75", 2.0"
  • Additional sizes and lengths available on request
– Interface to the machine:
  • Cylindrical shank
  • Walter Capto™ C6, C8
  • HSK-T 100

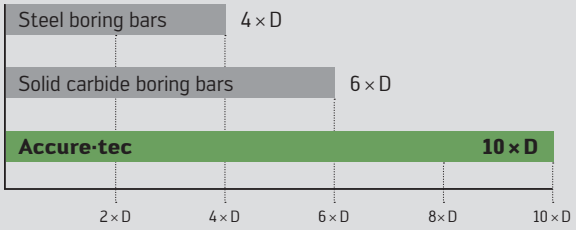


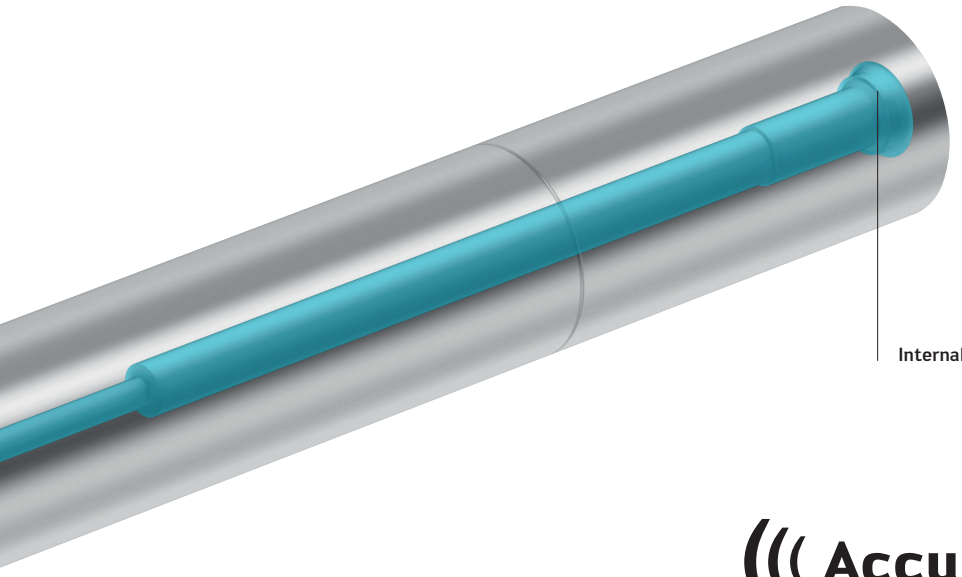
QuadFit quick-change head **Fig.:** Q40-DDUNR-27032-15

THE APPLICATION

- Can be used from 6 × D to 10 × D
- Counterboring and internal profiling deep bores with high productivity for the best surface quality
- Areas of use: Aerospace industry (e.g. engines), oil and gas industries (e.g. pumps, fittings) and general mechanical engineering

Comparison – projection length/dia.





For more Accure·tec adaptors, see the Adaptors section

Accure·tec

Vibration-damped boring bars from 6 × D to 10 × D

Fig.: A3000-40-Q40-208

BENEFITS FOR YOU

Accure·tec boring bars

- Broad scope of applications for machining expensive components safely and quickly
- Bore machining without vibration – for optimal surface quality
- Maximum damping thanks to damping element flexibly mounted axially and radially
- Vibration damping "preset" at the factory – ready for immediate use (no time lost for tuning)

QuadFit exchangeable heads

- Quick and precise head change (±0.002 mm, ±80 millionths inch)
- Quick head change results in less non-productive time
- Broad range of products with different machine interfaces allow for versatility

Peak performance on steel and stainless materials.

NEW

NEW 19–1

THE INDEXABLE INSERT

– Double-sided MU5 universal geometry

Basic shapes:

– CNMG, DNMG, TNMG, WNMG
– Corner radii: 0.031", 0.047" (0.8, 1.2 mm)

Grades:

– WPP05S, WPP10S, WPP20S
– WSM20S, WMP20S

THE APPLICATION

– Medium machining of steels and stainless materials
– Alternative to MP5/MM5 geometry with soft cutting characteristics
– Machining parameters f: 0.006"-0.024" (0.15–0.60 mm), a_p: 0.020"-0.236" (0.5–6.0 mm)

Primary application:

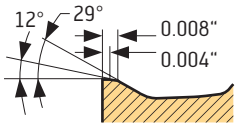
– ISO P: Steel
– ISO M: Stainless steels

Secondary application:

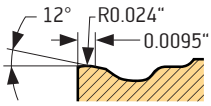
– ISO K: Cast iron materials

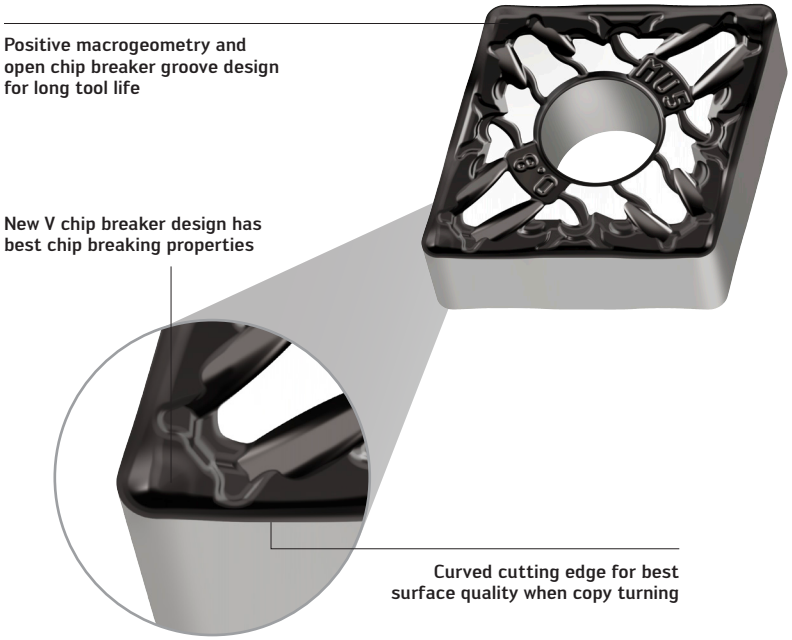
THE GEOMETRY

Corner radius



Main cutting edge

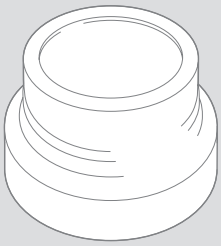




Indexable insert **Fig.:** CNMG432-MU5 WMP20S

APPLICATION EXAMPLE

Bearing ring



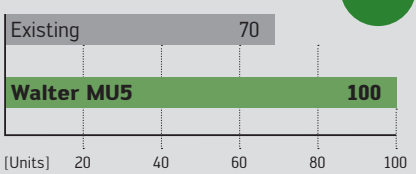
Material:	AISI 5200 (100Cr6)
Tool:	DWLNR2525M08
Indexable insert:	WNMG433
Grade:	WPP10S

Cutting data:

	Existing WNMG433 P10	**NEW WNMG433-MU5 WPP10S**
v_c (sfm)	984	984
f (in)	0.010"-0.020"	0.012"-0.022"
a_p (in)	0.039"-0.080"	0.039"-0.080"

Comparison: Tool life quantity

+40 %



BENEFITS FOR YOU

– Can be used universally in a wide range of applications
– Soft cutting action and maximum resistance to crater wear in the medium machining range, leads to reduced tooling costs
– Maximum process reliability thanks to controlled chip removal and chip breaking

Maximum metal removal rate for stainless steel and high-temperature alloys.

NEW

THE INDEXABLE INSERT

- Single-sided indexable insert for maximum stability
- Basic shapes:
  - CNMM4, CNMM5, CNMM 6 (CNMM12, CNMM16, CNMM19)
  - DNMM4 (DNMM15)
  - SNMM4, SNMM5, SNMM6, SNMM8 (SNMM12, SNMM15, SNMM19, SNMM25)
- Corner radii: 0.031", 0.047", 0.062", 0.093" (0.8, 1.2, 1.6 and 2.4 mm)

THE GRADES

- WPP10S, WPP20S
- WSM20S, WSM30S, WMP20S

THE APPLICATION

- Roughing operations for high volume production
- Where a soft-cutting geometry with low cutting pressure is needed

Primary application:

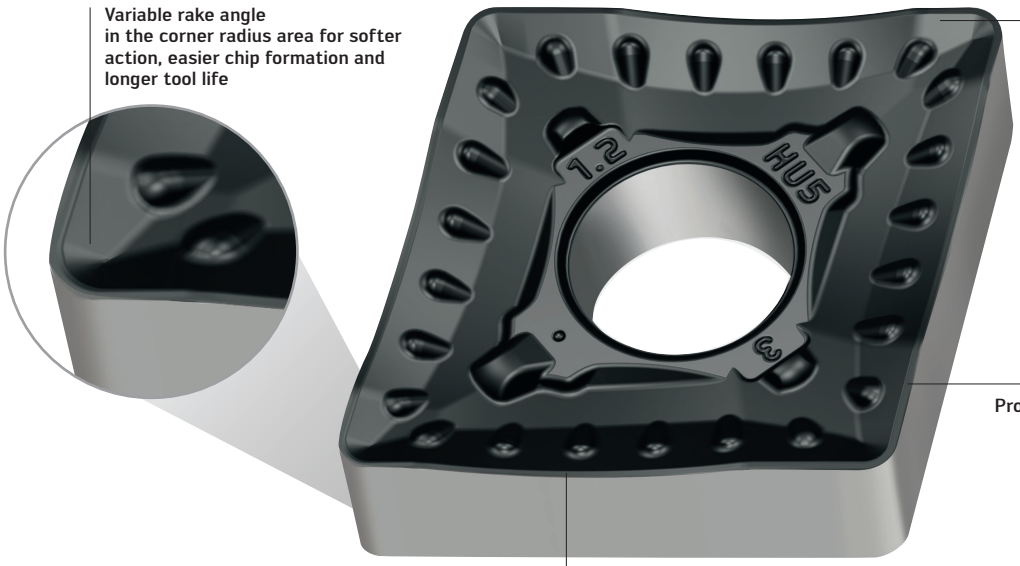
- ISO M: Stainless steels, e.g. austenitic steel 1.4301 (304L), duplex steel 1.4462 (ASTM A240)
- ISO S: High-temperature alloys, e.g. Inconel 625

Other applications:

- ISO P: Long-chipping steel materials, e.g. S355J0 (St52)
- ISO K: Low cutting pressure

Machining parameters:

- f: 0.012"-0.039" (0.30–1.00 mm)
- a_p: 0.098"-0.393" (2.5–10.0 mm)

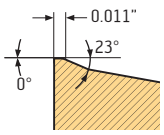


Single-sided roughing indexable insert **Fig.:** CNMM543-HU WSM20S

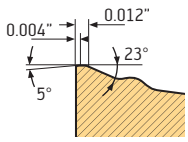
THE GEOMETRIES – HU5

- Specially developed for tough roughing operations
- Extremely soft cutting action for low machining temperatures
- Main cutting edge protected by negative chamfer (0.004" × -5°) (enables machining of skins and hard surface zones)

Corner radius – HU5



Main cutting edge – HU5



The latest CBN generation – hard machining at the highest level.

NEW

THE INDEXABLE INSERTS

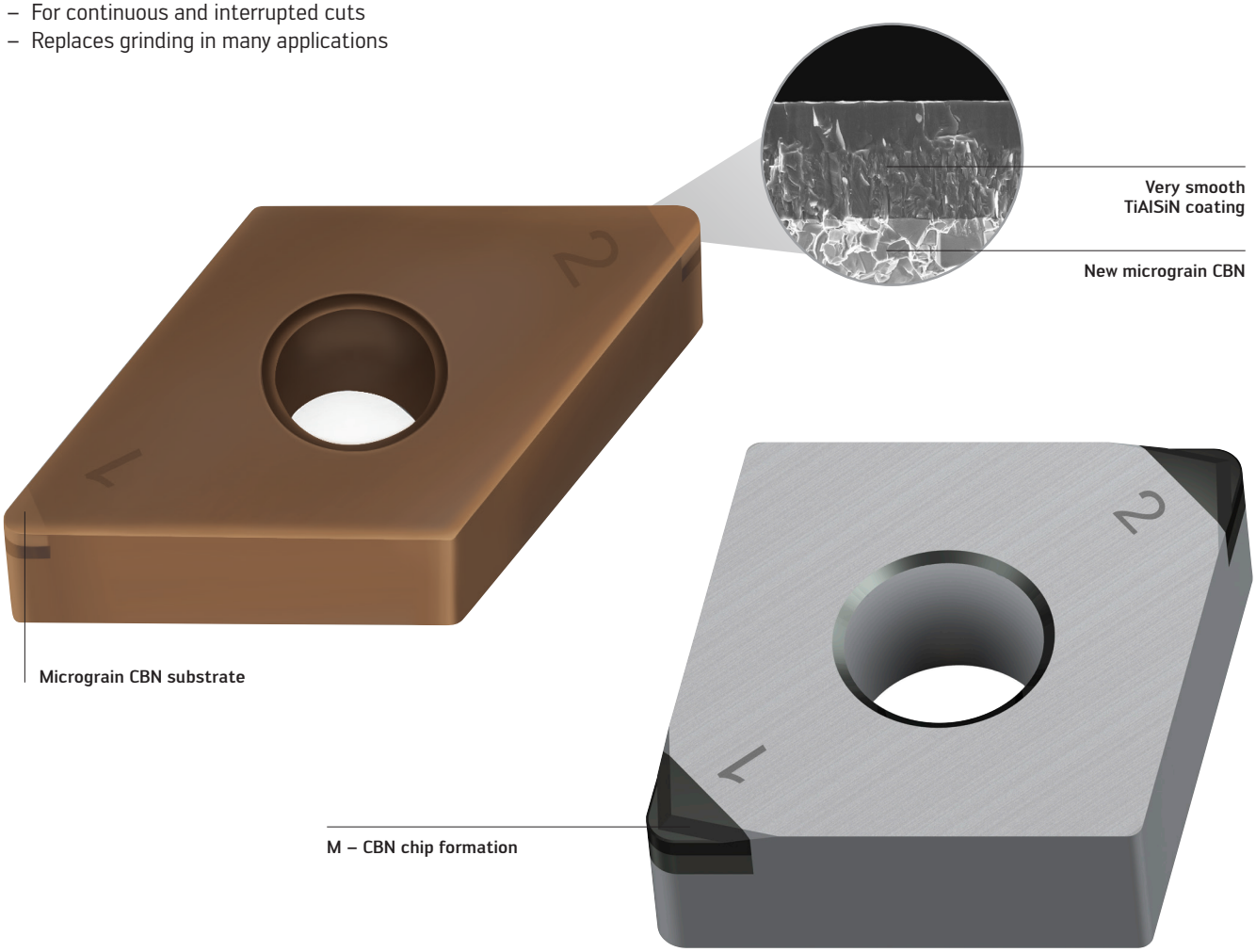
- New CBN grades for hard machining
- Technology update for chip formation and wiper geometry

THE APPLICATION

- Hard materials up to 65 HRC
- ISO H materials
- For continuous and interrupted cuts
- Replaces grinding in many applications

THE COATING TECHNOLOGY

- New TiAlSiN coating technology
- Finest surface structure and layer smoothness
- Defect free coating and superb layer adhesion
- Very high thermal stability and oxidation resistance



ISO H CBN indexable inserts **Fig.:** DNGA442TM-2 WBH10C, CNGA442TM-M2 WBH10

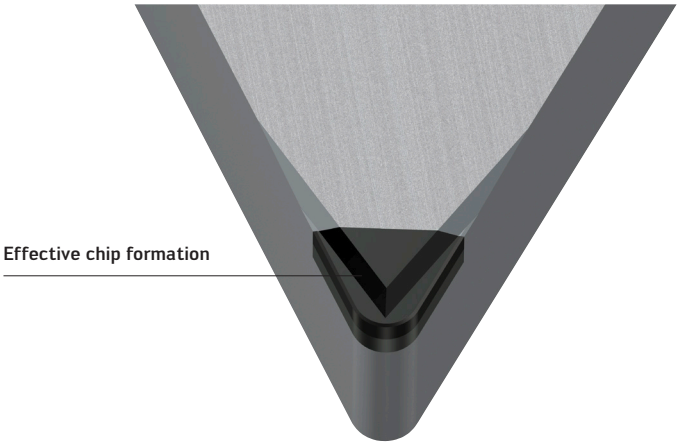
Watch the product video:
www.youtube.com/waltertools

BENEFITS FOR YOU

- Optimum component surface finish due to the latest wiper technology
- High process reliability with the latest production technology
- Long tool life because of the TiAlSiN coating technology with extremely fine surface structure

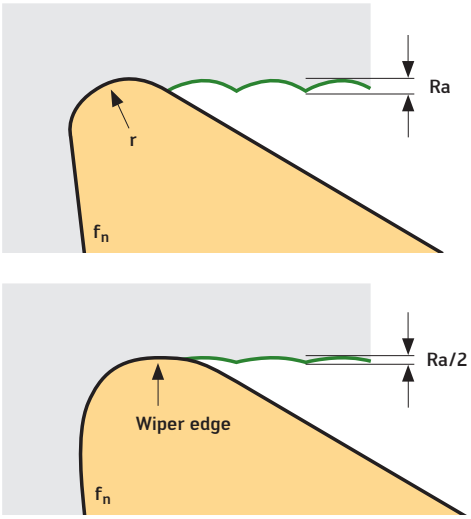
THE CHIP FORMATION

- M CBN chip formation
- Controlled chip removal
- Continuous cut without interruptions



THE WIPER GEOMETRY

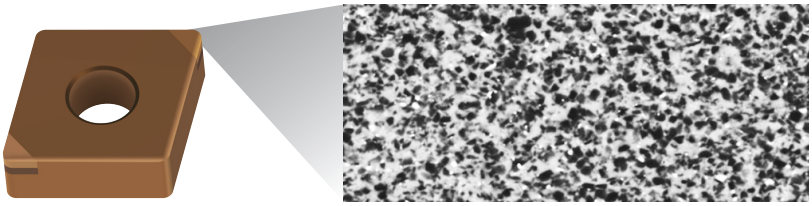
- MW wiper geometry
- Higher feed
- Better surface quality



THE CBN GRADES*

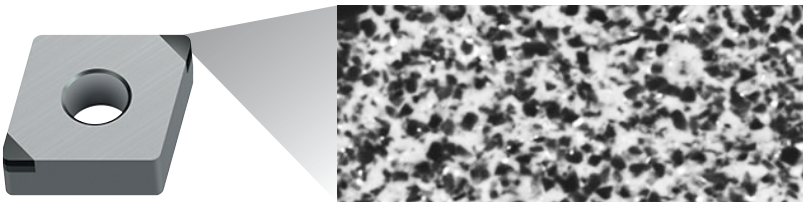
WBH10C (ISO H10)

- CBN substrate (grain size dia. 1.5 µm)
- Coated with new TiAlSiN coating technology
- Wear-resistant at highest cutting speeds (v_c)



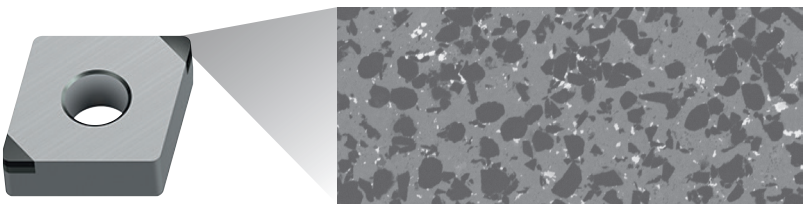
WBH10 (ISO H10)

- CBN substrate (grain size dia. 1.5 µm)
- Wear-resistant at high cutting speeds (v_c)



WBH20 (ISO H20)

- CBN substrate (grain size dia. 2.0 µm)
- Wear-resistant with interrupted cuts and medium cutting speeds (v_c)



* Substrate grain sizes: Micrograin – 1.5 µm | Fine grain – 2.0 µm

The new CBN generation for cast iron and sintered metals.

NEW

NEW 19-1

THE INDEXABLE INSERT

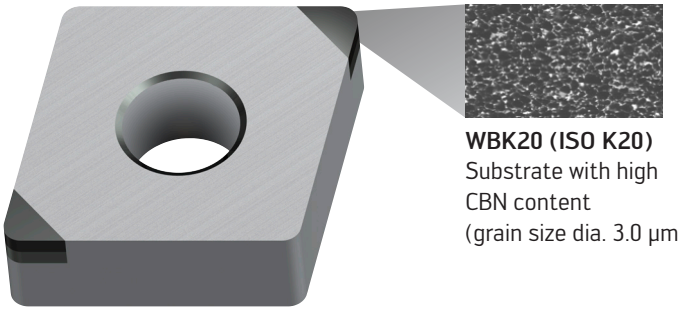
- New CBN grades for ISO K and H materials
- Optimised microgeometry design for the relevant application

THE APPLICATION

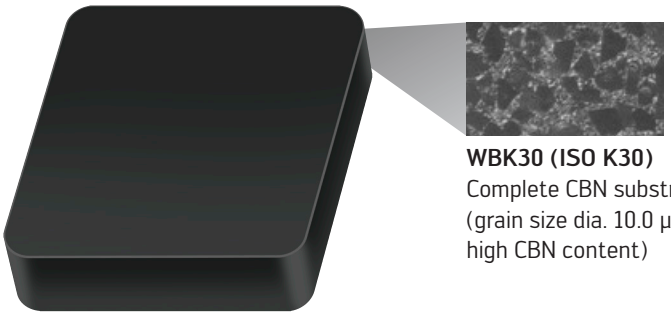
WBK20
- ISO K materials: Finishing

WBK30
- ISO K materials: Roughing
- ISO H materials: Machining with large depths of cut

WBK20 + WBK30
- Sintered materials: Roughing and finishing
- ISO H materials: Finishing with heavily interrupted cuts
- Areas of use: Automotive industry, general mechanical engineering, etc



WBK20 (ISO K20)
Substrate with high CBN content
(grain size dia. 3.0 µm (0.0001"))



WBK30 (ISO K30)
Complete CBN substrate
(grain size dia. 10.0 µm (0.0004"), high CBN content)

CBN indexable inserts **Fig.:** CNGA120408TS-2 WBK20/CNGN120412TM-S WBK30

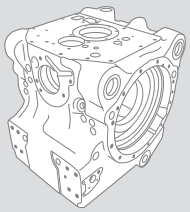
BENEFITS FOR YOU

- Maximum tool life in ISO K and ISO H thanks to new CBN grades
- Highly productive and reliable due to high-precision manufacturing
- Wear-resistant in cast iron and sintered steel (WBK20) and at high depth of cut in hardened steel (WBK30)

APPLICATION EXAMPLE

WBK20 – spindle boring the casing

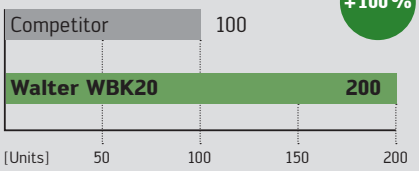
Material:
GG25 - EN-GJL-250
Tool:
B3230.C8.135-178.Z1.CC06
Indexable insert:
CCWG2(1.5)1TS-2
CCGW060204TS-2
Grade: WBK20



Cutting data:	Competitor	Walter WBK20
v_c (sfm)	623	820
f (in)	0.003	0.003
a_p (in)	0.020	0.020

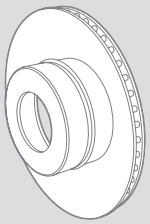
Comparison: Tool life quantity [units]

+100 %



WBK30 – brake disc

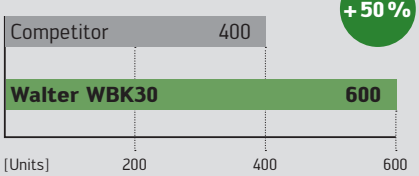
Material:
GG25 - EN-GJL-250
Tool:
DCLNL2525M12
Indexable insert:
CNGN433TS-2
CNGN120412TS-2
Grade: WBK30



Cutting data:	Competitor	Walter WBK30
v_c (sfm)	3280	3937
f (in)	0.020	0.020
a_p (in)	0.098	0.098

Comparison: Tool life quantity [units]

+50 %



Efficient, reliable, highest quality.

NEW

NEW ADDITION TO THE PRODUCT RANGE

– Walter Perform line: Indexable inserts for turning applications in ISO P and ISO K

THE GRADES

– Versatile cutting tool materials
  - WPV10 (ISO P)
  - WPV20 (ISO P)
  - WKV10 (ISO K)
  - WKV20 (ISO K)

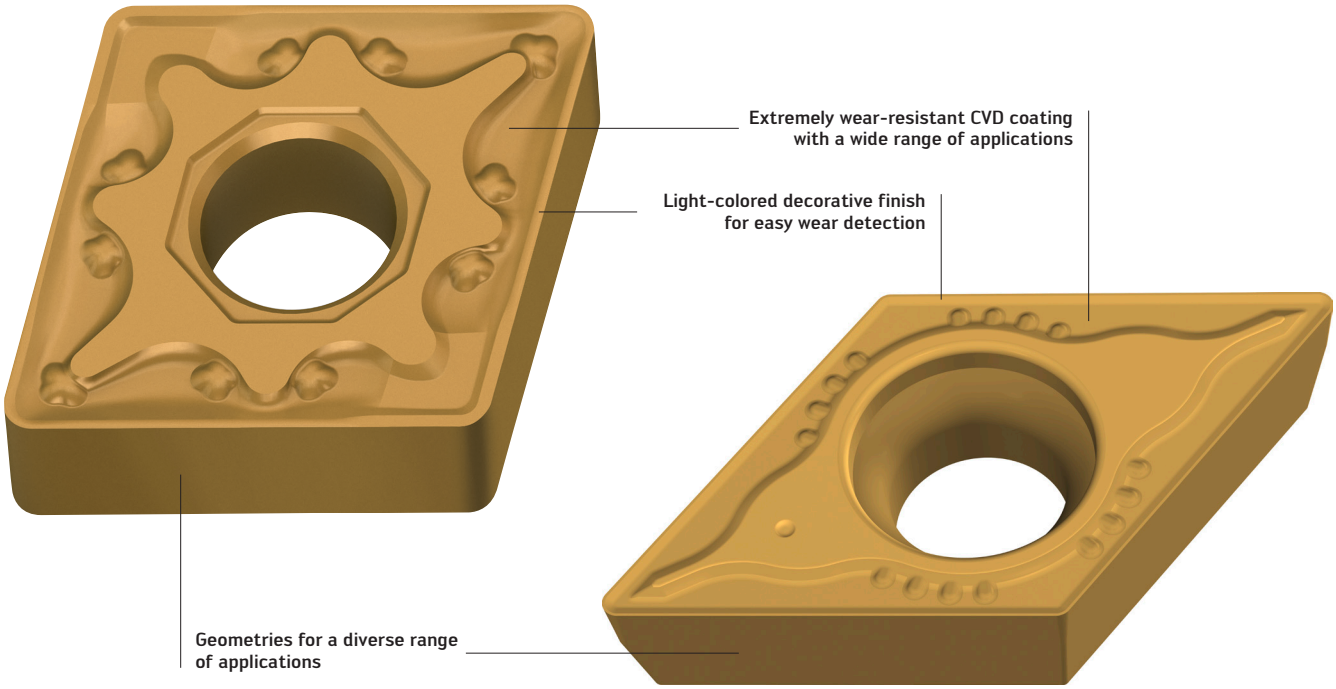
THE GEOMETRIES

Negative basic shape:
ISO P
– FV5: Finishing operation
– MV5: Medium machining
– RV5: Roughing operation
ISO K
– MV7: Medium machining
– RV7: Roughing operation

Positive basic shape:
ISO P
– FV4: Finishing operation
– MV4: Medium machining

THE APPLICATION

– Versatile use for an extremely wide range of materials and applications
– Areas of application: General mechanical engineering, single-part production and other industries



Perform line ISO indexable inserts **Fig.:** CNMG432-MV5 WPV20, DCMT11T304-MV4 WPV20

BENEFITS FOR YOU

– Efficient machining with tried-and-tested technology
– Extremely reliable and wear-resistant
– Simple geometry selection and wear detection
– Flexible use in a wide range of applications
– Highest product quality – made by Walter

Patented parting-off system with SmartLock.

NEW

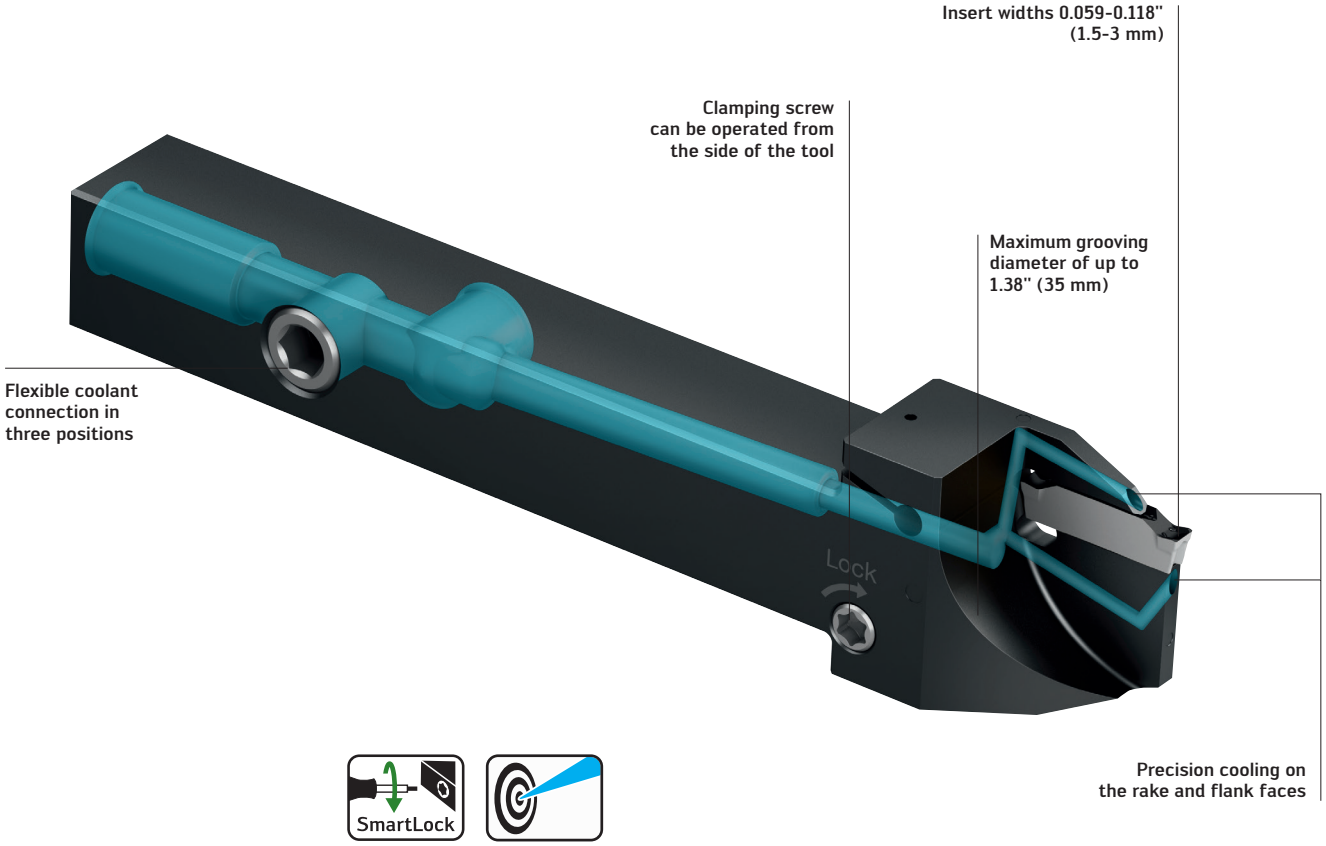
NEW 19-1

THE TOOL

- Patented G4014-P/DX18 grooving and parting-off tool with precision cooling
- Screw clamping on the side for easy insert changeover
- New clamping method: 30% higher clamping forces compared to conventional tools on the market
- Patented positive engagement at the insert locating surface
- Shank sizes: 0.5", 0.625" and 10 × 10, 12 × 12, 16 × 16, 20 × 20 mm

THE INDEXABLE INSERT

- Double-edged DX18 cutting inserts with patented positive engagement with prismatic seating surface
- Insert widths: 0.059", 0.079", 0.098", 0.118" (1.5, 2.0, 2.5, 3.0 mm)
- Chip breaker geometries: CE4, CF5, CF6 and GD6
- Grades: WSM23S, WSM33S, WSM43S, WKP23S



Powered by Tiger·tec® Silver

Walter G4014-P/DX18 parting-off system **Fig.:** G4014-1616R-3T17DX18-P

BENEFITS FOR YOU

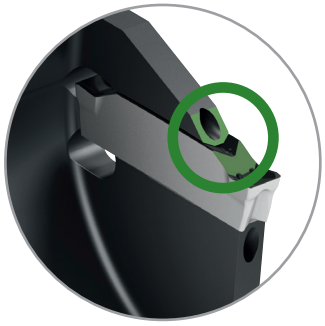
- Reliable thanks to patented positive engagement design (no incorrect seating of the insert, particularly for small insert widths)
- Tool change time reduced by 70% because of simple insert changeover in the machine
- Increased cutting parameters and tool life because of new insert clamping
- Maximum productivity and tool life thanks to new generation Tiger·tec® Silver PVD grade

THE APPLICATION

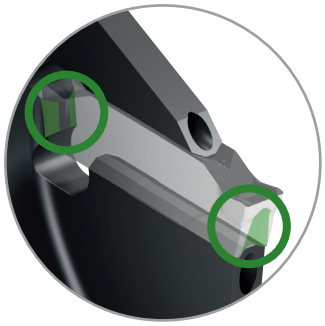
- Automatic lathe and multi-spindle machines having up to 2175 psi of coolant pressure
- Parting off with low burr and pip formation (by 6°, 7° and 15° inclined lead parting-off inserts)
- Grooving and parting off along the main or counter spindle up to dia. 1.38" (35 mm) for flexible use
- For replaceable components (as tool operation can be modified)

THE TECHNOLOGY

Raised insert design protects the top clamp and produces short chips

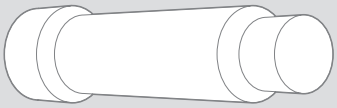


The patented positive engagement with prismatic insert seat prevents the inserts from being incorrectly seated



APPLICATION EXAMPLE

Axis dia. 0.393" (10 mm) – parting off

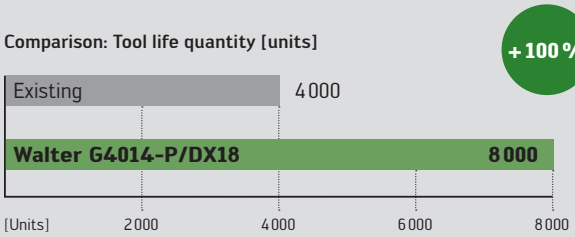


Material:	AISI 303 (X8CrNiS18-9)
Tool:	G4014.1616R-2T17DX18-P
Indexable insert:	DX18-1E200N02-CF5
Grade:	WSM33S

Cutting data:

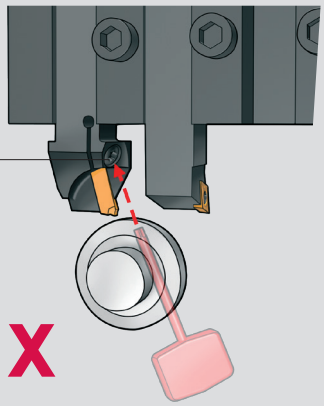
	Existing G1011.1616R- 2T15GX16-P GX16-1E200N02-CF5 WSM33S	**NEW** **G4014.1616R-** **2T17DX18-P** **DX18-1E200N02-CF5** **WSM33S**
v_c (sfm)	262	262
f (in)	0.005	0.005
Insert width (in)	0.079	0.079
Cutting depth (in)	0.197	0.197

Comparison: Tool life quantity [units]



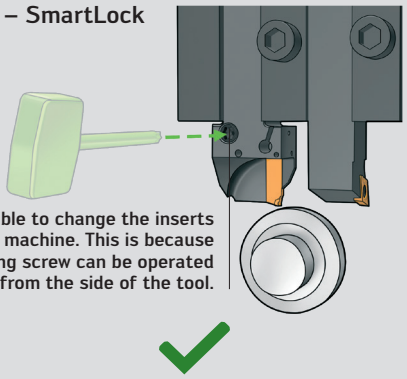
INDEXABLE INSERT CHANGEOVER

Competitors



No insert changeover possible in the machine. The holder has to be removed for access to the clamping screw.

Walter – SmartLock



It is possible to change the inserts while in the machine. This is because the clamping screw can be operated from the side of the tool.

Grooving shoulders in a systematic way.

NEW TO THE RANGE

NEW ADDITION TO THE PRODUCT RANGE

- G3051-P with MX22-L/R….-GD8 indexable inserts for shoulder machining
- New shank sizes: 0.625", 0.75", 1" (12 × 12, 16 × 16, 20 × 20, 25 × 25 mm)

THE INDEXABLE INSERTS

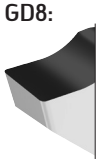
- Four precision-ground cutting edges ±0.0008" (±0.02 mm)
- 3° installation position in the groove turning holder
- MX22-2L/R; insert widths from 0.059-0.118" (1.50–3.00 mm); GD8 geometry
- MX22-2L/R; insert width 0.110" (2.80 mm); VG8 geometry

THE APPLICATION

- Grooving and parting off shoulders and large diameters without the need for wasted clearance width; small dia. with high accuracy
- Can be used on CNC lathes and multi-spindle machines, automatic lathes

THE GEOMETRIES

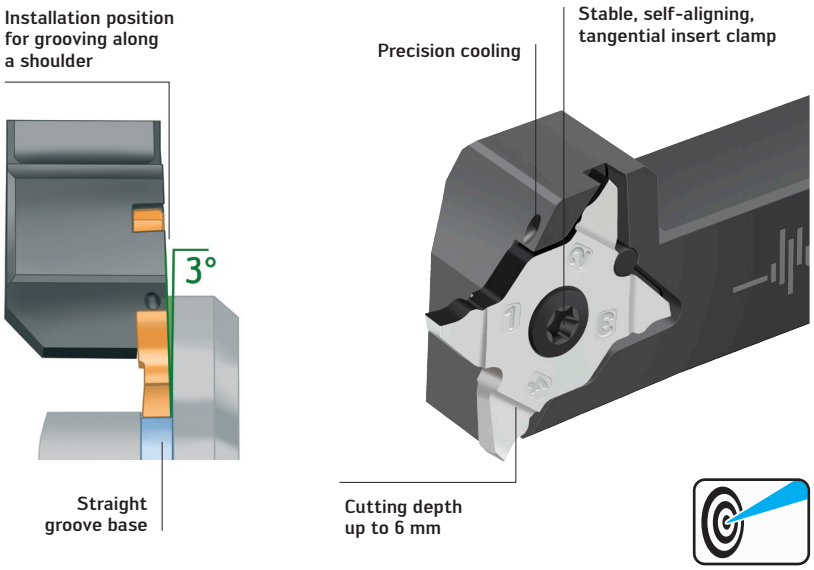
GD8:



- For precision grooving
- Extremely soft cutting action
- Light to moderate feeds

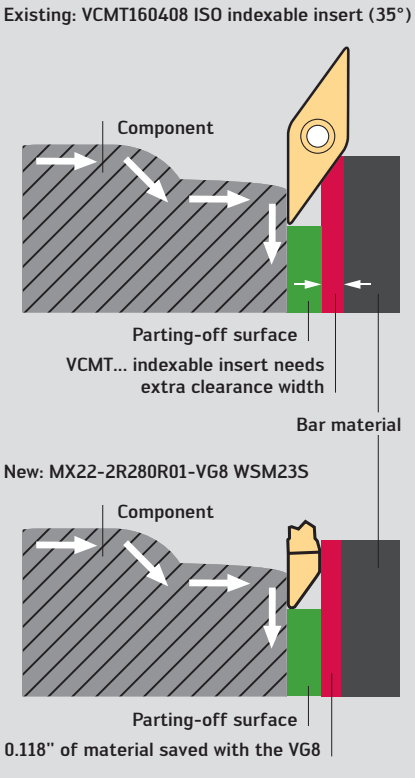
VG8:

- For finishing operations on the rear face of a component
- Enormous savings on material compared to standard ISO indexable inserts



Walter Cut MX 3° – for shoulder machining **Fig.:** G3051-2525R-MX22-2-P

Material saved due to smaller space requirements



BENEFITS FOR YOU

- Tangential arrangement for outstanding flatness and surface quality
- User-friendly thanks to self-aligning screw clamping
- Enormous savings on material in mass production thanks to VG8 geometry
- Maximum tool life thanks to the latest Tiger·tec® Silver PVD cutting tool materials

Enormous potential savings when machining rear faces.

NEW ADDITION TO THE PRODUCT RANGE

– VG7 geometry for Walter Cut GX grooving tools

THE INDEXABLE INSERT

– Two precision-sintered GX24 cutting edges
– For use in standard tools
– Indexable insert width of 0.110" (2.8 mm) (designed for 0.118" (3 mm) parting off)
– Corner radii of 0.008" and 0.016" (0.2 and 0.4 mm)

THE APPLICATION

– For finishing operations on the rear face of a component
– Machining parameters: f: 0.002-0.010" (0.05–0.25 mm); a_p: 0.008-0.08" (0.2–2.0 mm)
– Machining operations on bar feeder machines and multi-spindle machines

Primary application:
– ISO P – steel

Secondary application:
– ISO M – stainless steels
– ISO N – non-ferrous metals

THE GRADE

– PVD-Al_2O_3 grades: WSM23S, WSM33S

Walter Cut GX grooving tools **Fig.:** GX24

BENEFITS FOR YOU

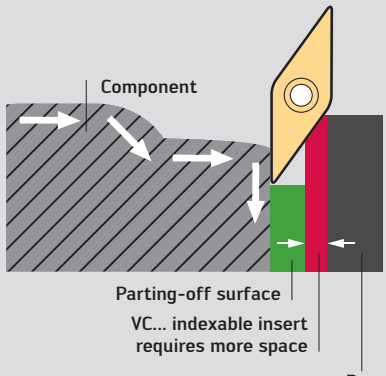
– Huge savings on material in mass production compared to standard ISO indexable inserts
– High level of efficiency for continuous operations in bar feeders and multi-spindle machines
– Optimum chip control during finishing operations because of VG7 geometry
– Can be used with standard tools

MACHINING EXAMPLE

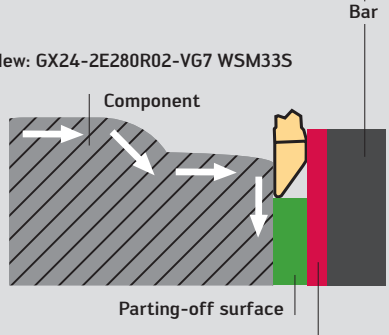
Machining the back end of bar stock

Components:	4,000,000 parts
Saving per component by using GX...VG7:	0.118" (3 mm)
Material Savings:	125 tons of steel

Previously: VCMT160408 ISO indexable insert (35°)



New: GX24-2E280R02-VG7 WSM33S



0.118" (3 mm) of material saved with the VG7

WBS10 and WBH20 – the new CBN generation.

NEW

NEW 19–1

THE GRADES

WBS10
- New WBS10 grooving inserts for ISO S materials
- Optimized microgeometry for longer tool life

WBH20
- New CBN grade WBH20 for hard material machining
- Stable edge preparation with negative chamfer

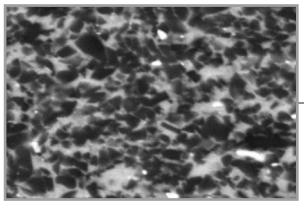
THE APPLICATION

- Grooving on smooth cuts and interrupted cuts

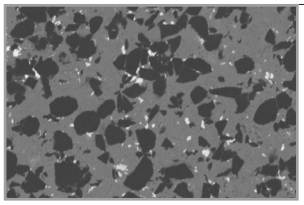
WBS10
- ISO S materials
- Areas of use: Aerospace (e.g. Inconel on engine components), oil, gas and energy industries, general mechanical engineering

WBH20
- ISO H materials (e.g. 16MnCr5, AISI 4140, etc.) up to 65 HRC
- Areas of use: Automotive industry, general mechanical engineering

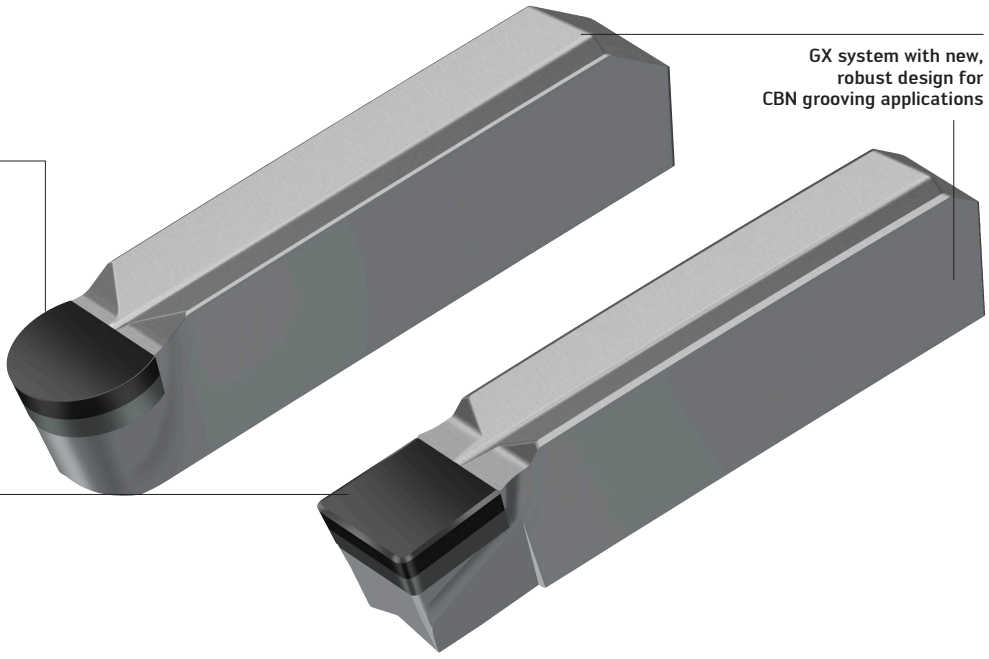
THE CBN GRADES



WBS10 (ISO S10)
- CBN substrate (grain size dia. < 1.0 µm or 40 millionths of an inch)
- Wear-resistant at highest v_c



WBH20 (ISO H20)
- CBN substrate (grain size dia. 2.0 µm or 80 millionths of an inch)
- Wear-resistant at medium v_c



GX system with new, robust design for CBN grooving applications

Full-radius and straight cutting inserts

Fig.: GX24-3F400N20EM-1 WBS10/GX24-3F400N02TM-1 WBH20

BENEFITS FOR YOU

WBS10
- Higher machining speeds with CBN (compared to carbide)
- Increased production capacity for the same machine
- Highly cost-effective due to low unit costs

WBH20
- Reliable process thanks to stable design of inserts and geometry
- Maximum tool life with the new CBN grade
- High productivity due to higher process parameters

Robust and reliable heavy-duty cutting.

NEW 19-1

NEW

THE INDEXABLE INSERT

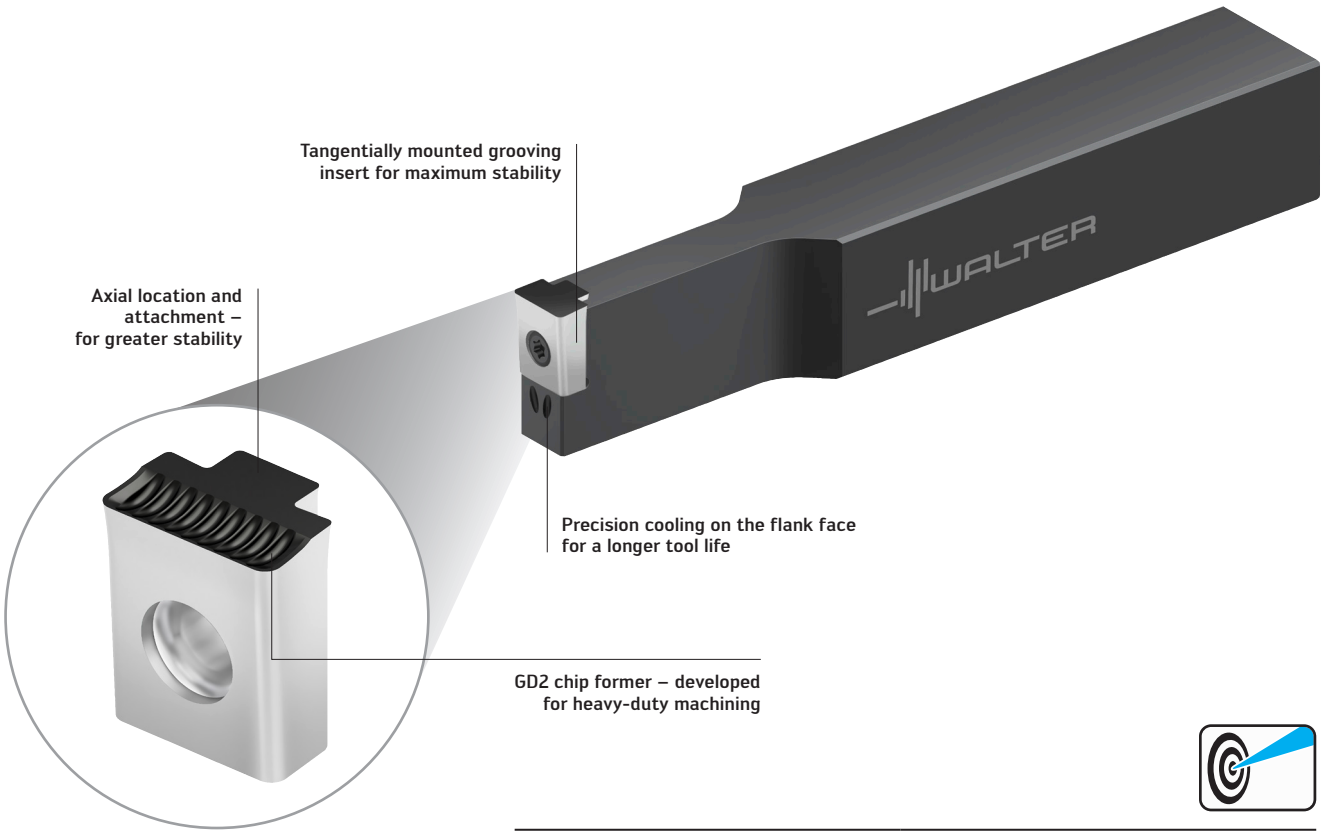
- Tangentially mounted cutting inserts for grooving and widening, with precision cooling
- Stable, tangential clamping
- Insert widths: 0.472" and 0.748" (12 and 19 mm)
- Shank sizes: 25 × 25 and 32 × 32 mm

THE GEOMETRY

- Universal GD2 chip formation geometry
- Very short chips when cutting to the maximum depth and when widening
- Feed rate f: 0.008-0.024" (0.2–0.6 mm)

THE APPLICATION

- Ideal for machining generator and turbine shafts
- Grooves into solid material to the required groove depth
- Widens grooves with small lateral depths of cut
- Areas of use: Energy industry, wind power, roller manufacturers, shipbuilding, general mechanical engineering



Walter Cut UX system for grooving **Fig.:** G2016-2525N-12T40UX-P

BENEFITS FOR YOU

- Reliable and with excellent chip control
- Cutting forces are optimally absorbed due to the tangential arrangement
- Widen grooves without "tipping" the cutting insert in the insert seat

Multiply your success – with four cutting edges.

NEW

THE INDEXABLE INSERTS

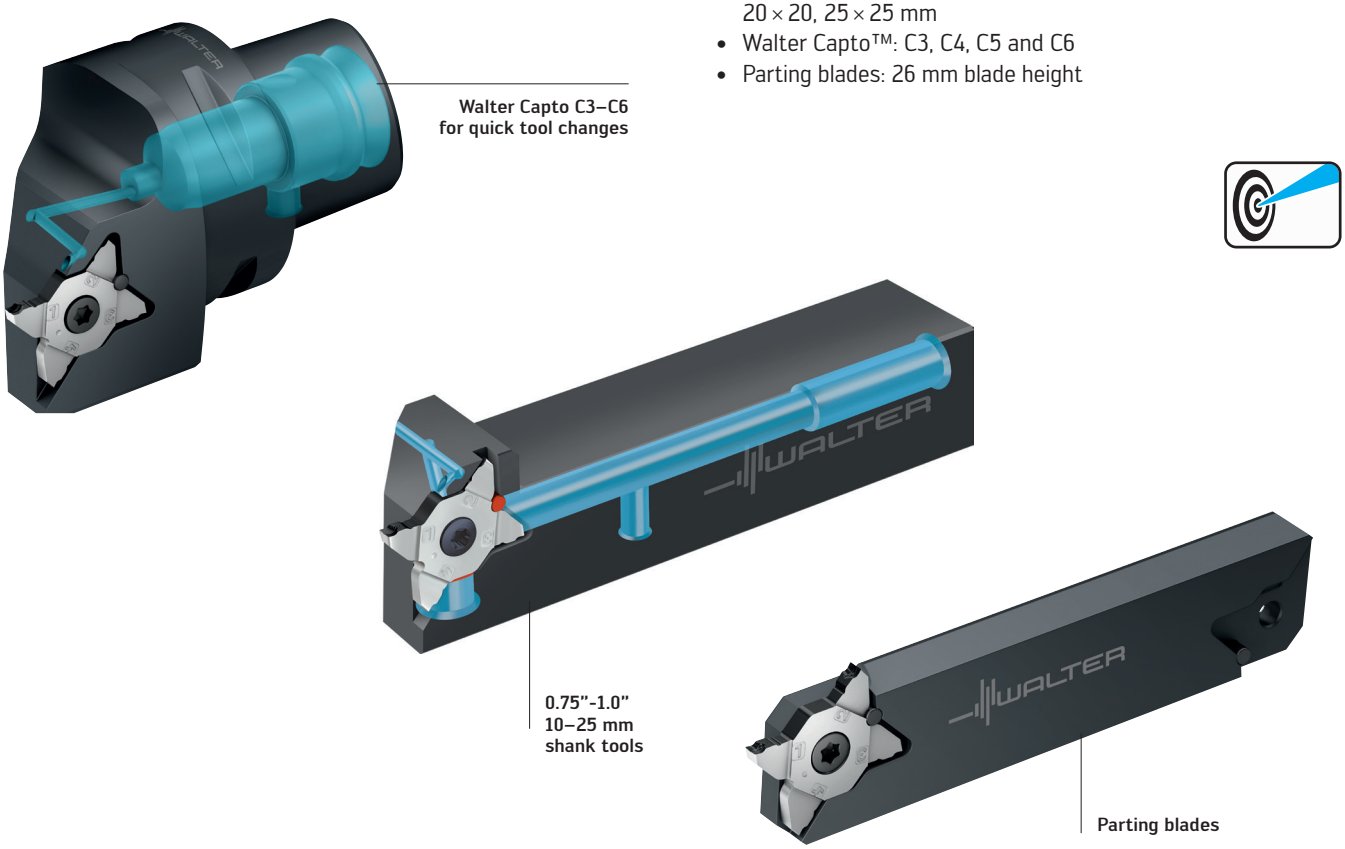
- Four precision-ground cutting edges ±0.0008" (±0.02 mm)
- Insert widths from 0.031"-0.222" (0.80–5.65 mm)
- Cutting depth up to 0.236" (6 mm)
- Four chip formation geometries: GD8, CF5, RF5 and AG
- One insert for left and right tool holders

THE APPLICATION

- Grooving, parting off, profiling, recessing and thread turning
- Where a high degree of precision and small diameters matter
- Areas of use: Swiss type lathes and multi-spindle machines, automatic lathes (bar feeders), machines with Walter Capto™ interface

THE TOOLS

- Grooving and parting off tool with precision cooling
- Stable, self-aligning, tangential insert mount
- Available tools:
  - Shank sizes: 0.75"x0.75", 1.0"x1.0", 10 × 10, 12 × 12, 16 × 16, 20 × 20, 25 × 25 mm
  - Walter Capto™: C3, C4, C5 and C6
  - Parting blades: 26 mm blade height



Walter Cut MX system **Fig.:** G3011-C-P, G3011-P, G3041

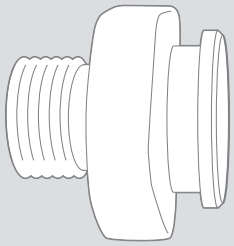
Watch the product video:
www.youtube.com/waltertools

BENEFITS FOR YOU

- Very user friendly due to self-aligning tangential screw clamping
- High level of flexibility: All cutting edge variants can be used in the same toolholder
- Maximum tool life because of the latest Tiger·tec® Silver PVD cutting tool materials

APPLICATION EXAMPLE

Grooving in stainless steel – connector

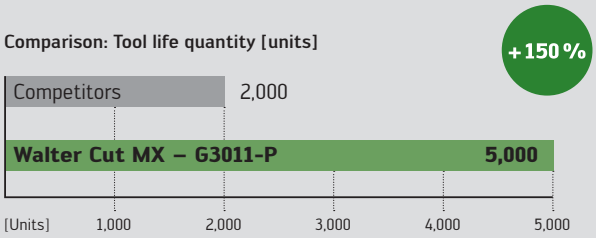


Material:	AISI TP316LN Austenitic Stainless X2CrNiMo17-12-2
Tool:	G3011-C3R-MX22-2-P
Indexable insert:	MX22-2E200N02-CF5
Grade:	WSM23S

Cutting data:

	Competitors Five-edged grooving insert	**Walter Four-edged grooving insert**
v_c (sfm)	475	475
f (in)	0.002	0.002
Cutting depth (in)	0.060	0.060
Tool life (units)	2,000	5,000

Comparison: Tool life quantity [units]



THE GEOMETRIES

Grooving and parting off

GD8:

– Grooving operations
– Straight cutting edge for flat groove base

CF5:

– Grooving and parting off operations
– Excellent chip control

Profiling and thread turning

RF5:

– Full-radius grooving operations
– Contour turning with small machining allowances

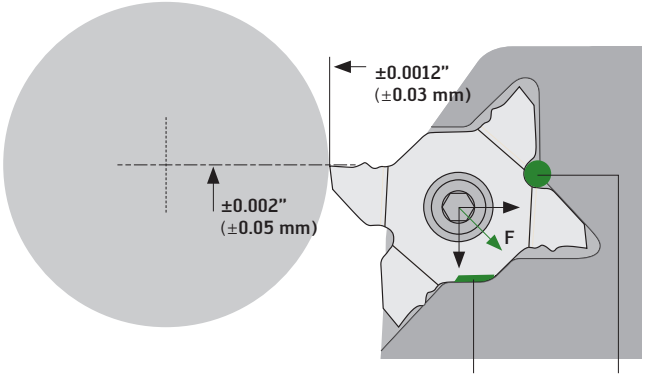
A60/ AG60..:

– Thread turning operations where space is limited
– Thread turning inserts held in the same holder that holds other MX geometries

Other special profiles available from: Walter Xpress

THE TECHNOLOGY

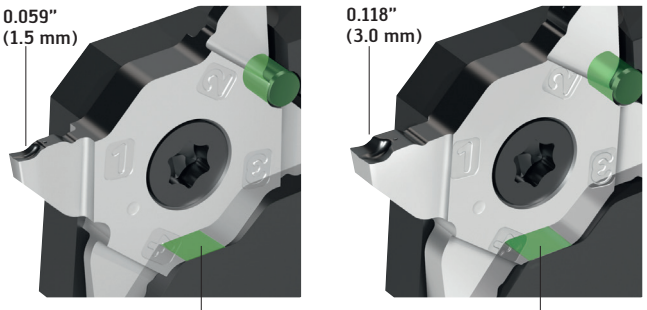
Maximum change accuracy and user-friendliness



Tightening the screw pulls the insert against the contact surfaces and dowel pin

Maximum stability and precision

Stable, wide contact surface in the toolholder, regardless of cutting width



Stable contact surface

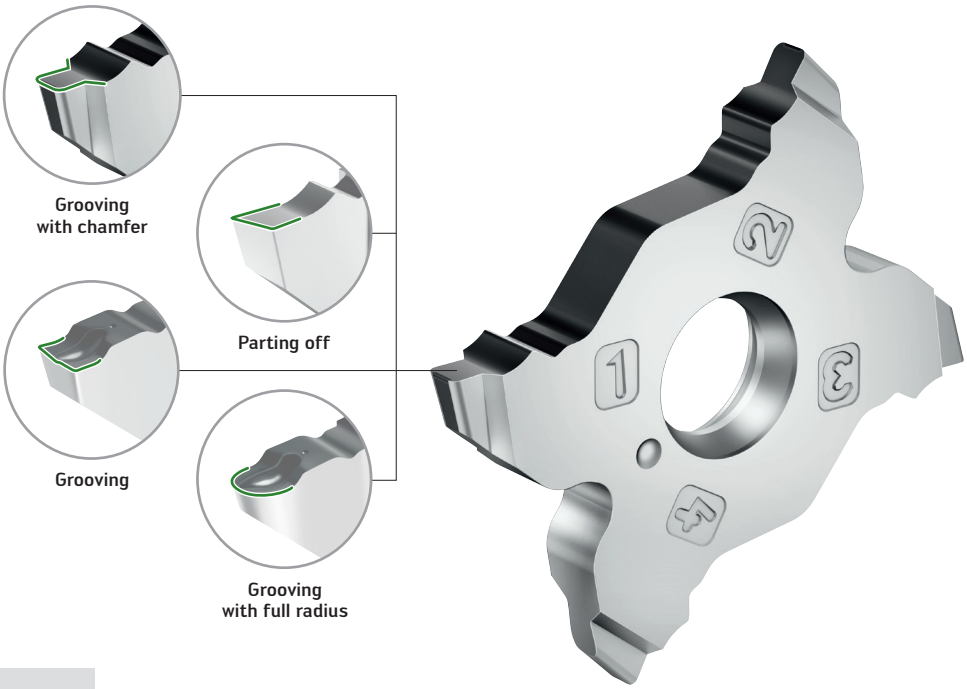
_FOR WALTER CUT MX

Walter Xpress – special profiles delivered within four weeks.

NEW

THE INDEXABLE INSERT

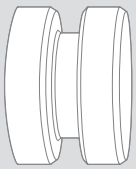
- Insert widths from 0.020"-0.216" (0.5–5.5 mm)
- Cutting depths up to 0.236" (6 mm)
- Radii from 0.002"-0.213" (0.05–5.4 mm)
- Parting off approach angles from 3–20°
- Chamfer angles from 30–60°



Walter Xpress

APPLICATION EXAMPLE

Grooving with chamfer – shaft



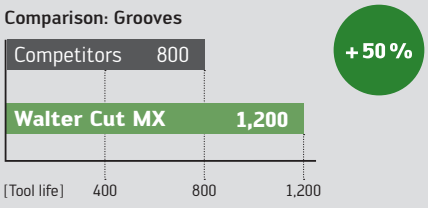
Material: AISI4140 (42CrMo4)

Tool: G3011-C4R-MX22-2-P

Cutting insert: Xpress 0.087" with 0.008" x 45° chamfer (2.2 mm with 0.2 × 45° chamfer)

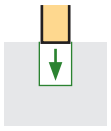
	Competitors Three-edged grooving insert	**Walter Four-edged grooving insert**
v_c (sfm)	460	460
f (in)	0.005	0.005
T (in)	0.043	0.043
Tool life (grooves)	800	1,200
Increase in productivity		+40%

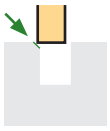
Comparison: Grooves

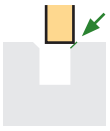


THE APPLICATION

Standard Solution:







Chamfering and grooving with corner radii

Disadvantages: Longer runtime and higher peripheral cutting edge wear

New with Xpress special insert:

Grooving and chamfering in a single step

Chamfering and grooving with Xpress special insert: Shorter runtime, lower peripheral cutting edge wear (distributed across the entire cutting edge) and higher tool life quantity

BENEFITS FOR YOU

- Same-day grooving insert calculation including creation of drawing
- Grooving inserts in a four-week delivery time
- Special widths and radii with CF5/GD8 chip formation geometry
- Reduction of cost per part by reducing tool path distances and simultaneaous operations such as groove-chamfering

Efficient grooving in aluminum and titanium alloys.

NEW

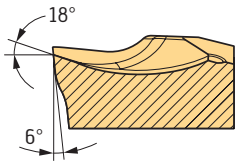
THE INDEXABLE INSERT

- Straight and full-radius grooving inserts, PCD tipped (WDN10)
- Efficient, laser-generated chip formation for reliable grooving
- Insert widths from 0.079"-0.315" (2–8 mm)

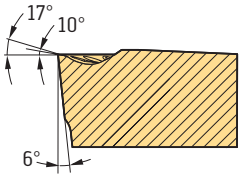
THE APPLICATION

- Parting off, grooving and recessing
- Areas of use: Aerospace industry, medical engineering, automotive industry
- Threaded aluminum joints, parting off, rim-base machining on aluminium wheels
- Parting off Titanium bone screws

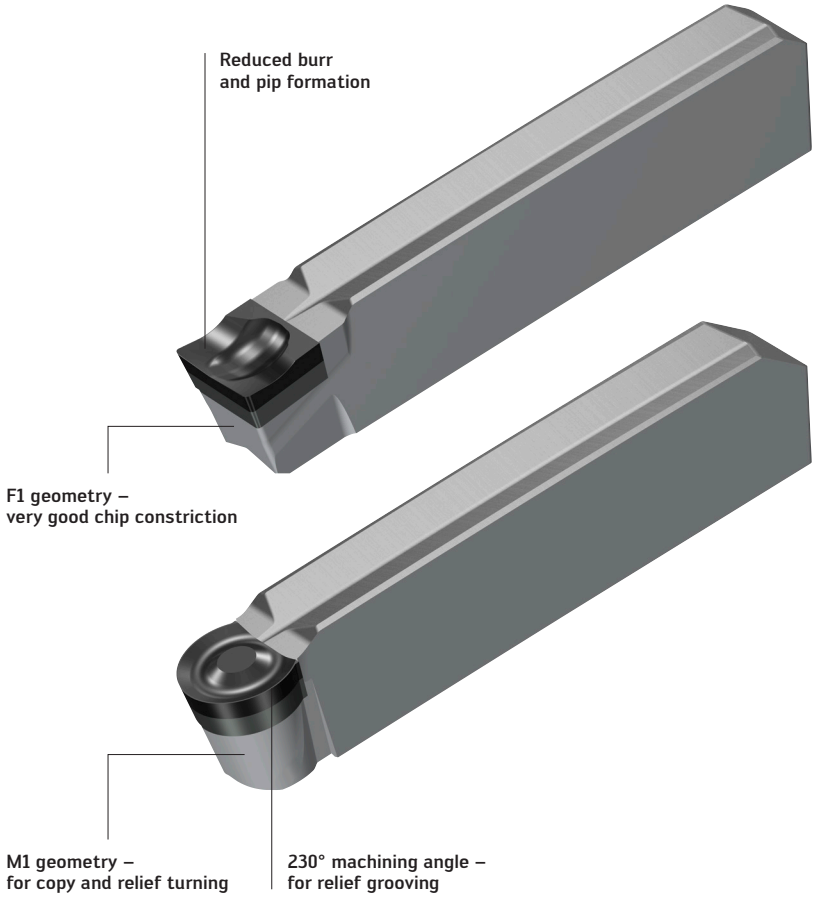
THE LASER-GENERATED PCD GEOMETRIES



– F1 geometry for grooving and parting off



– M1 geometry for grooving and copy turning



GX grooving inserts **Fig.:** GX24-3F400N02FS-F1 WDN10, GX24-3F400N20FS-M1 WDN10

BENEFITS FOR YOU

- High cutting speeds and long tool life
- Maximum process reliability through laser-generated chip formation geometry
- Highest surface quality and grade integrity

Internal grooving and recessing with cool precision.

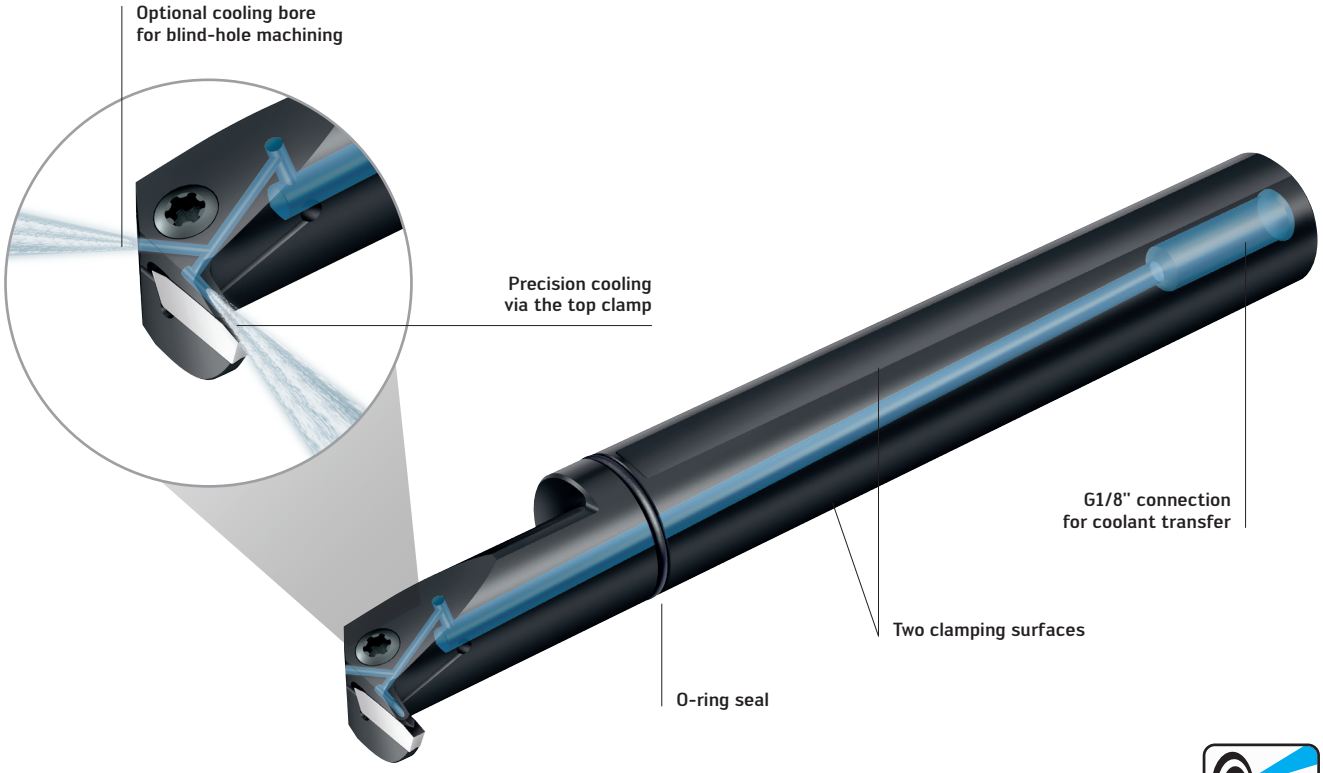
NEW

THE APPLICATION

- First choice for internal grooving and recessing
- Internal grooves with a diameter starting from D_{min} = 0.630 (16 mm)
- Grooving to a depth of T_{max} = 0.472" (12 mm)
- Insert widths of 0.079, 0.118, 0.157, 0.197 in (2, 3, 4, 5 and 6 mm)
- Can be used up to a coolant pressure of 1,160 psi
- Shank dia. 0.630"-1.575" (16–40 mm)

THE TOOL

- Precision cooling thru the top clamp
- Sealable axial coolant bore for blind-hole machining
- Connection using K601 coolant hose set (G1/8" thread on shank) or Installation, e.g. using a Weldon base adaptor
- Flexible O-ring seal for leak-free coolant transfer
- Two clamping surfaces



Grooving bar with precision cooling

Fig.: G1221-P

BENEFITS FOR YOU

- Interface between basic adaptor and tool free from pressure loss because of the O-ring seal
- Unique chip flushing effect due to the axial cooling bore for blind-hole machining
- Excellent surface quality, process reliability and chip evacuation
- Maximum clamping force because of sophisticated clamping system

Watch the product video:
www.youtube.com/waltertools

Precision cooling for ceramic inserts: Direct, efficient – straight to the point.

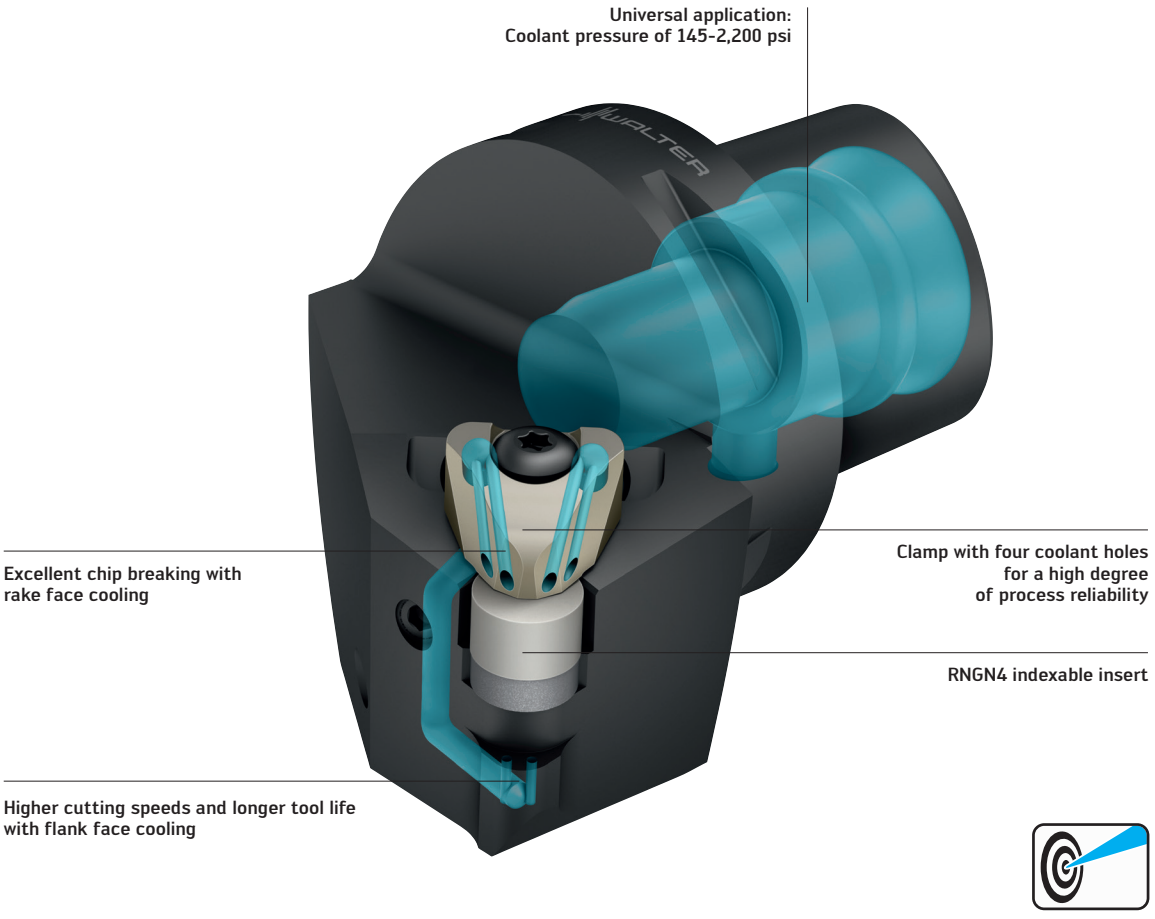
NEW

THE TOOL

- Coolant supplied directly through the clamp and along the flank face
- Tool variants:
  - Square shank 25 × 25 mm
  - Walter Capto™ C6
- RNGN45 (RNGN120700) indexable insert
- Other sizes and special tool versions are possible
- Clamp with four coolant exits for maximum cooling

THE APPLICATION

- High-temperature alloys (ISO S), e.g. engine components made from Inconel 718 in conjunction with WIS10 SiAlON ceramic or WWS20 whisker ceramic
- Can be used starting from 145 psi up to a maximum coolant pressure of 2,200 psi; pressures up to 5,000 psi also possible following technical clarification
- Excellent chip breaking, easy chip removal



Walter Capto™ tool with precision cooling for RNGN4 **Fig.:** C6-CRSNR-45065-12-P

BENEFITS FOR YOU

- Short chips with precision cooling – no adhesion to component
- Higher machine utilization and satisfied machine operators
- Tool life increased by 30–150%

Watch the product video:
www.youtube.com/waltertools

B – Holemaking

Drilling from solid

Boring and precision boring

X·treme Evo – the next generation of holemaking up to 30 × D_C

NEW TO THE RANGE

NEW ADDITION TO THE PRODUCT RANGE

With internal coolant:
- 16 × D_C
- 20 × D_C
- 25 × D_C
- 30 × D_C

Additional dimensions – with internal coolant:
- 3 × D_C in accordance with DIN 6537 short
- 5 × D_C in accordance with DIN 6537 long
- 8 × D_C
- 12 × D_C

Additional dimensions – without internal coolant:
- 3 × D_C in accordance with DIN 6537 short
- 5 × D_C in accordance with DIN 6537 long

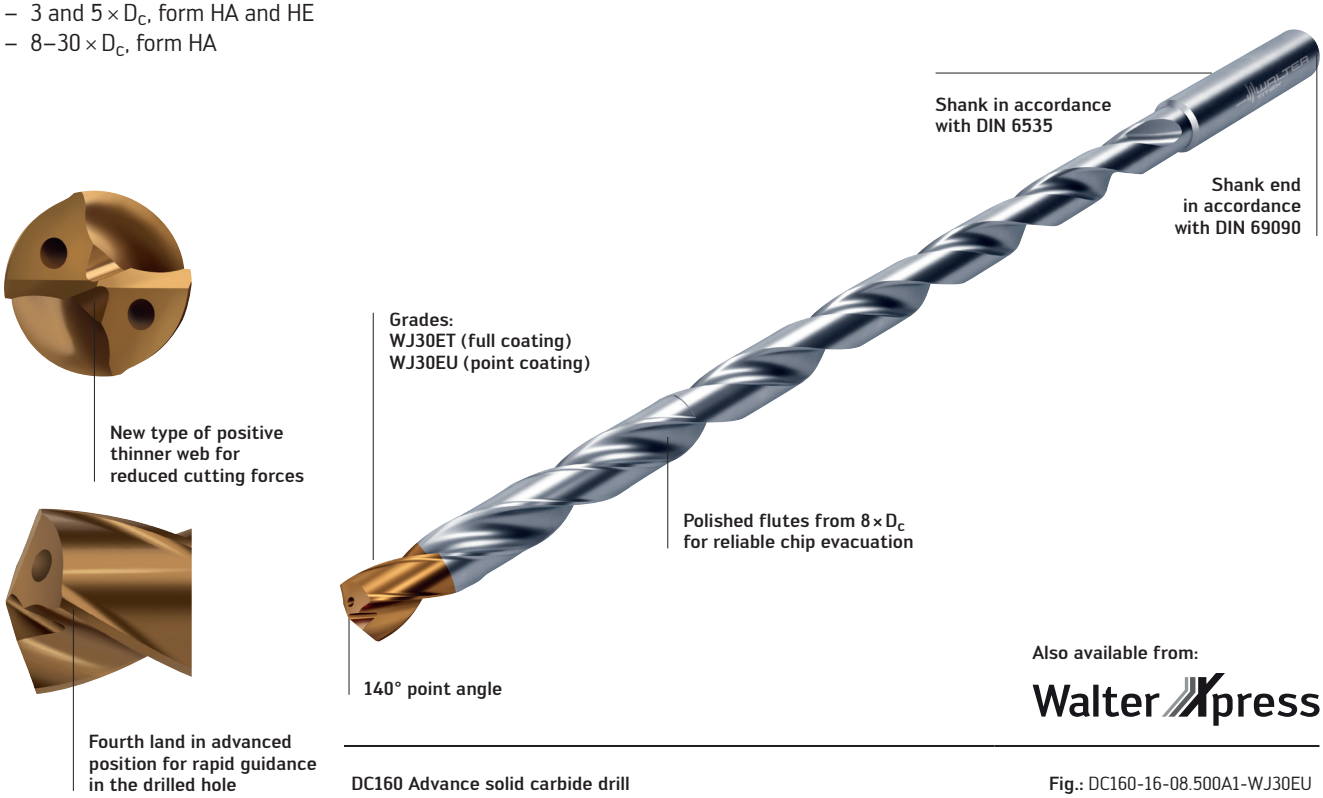
Shank in accordance with DIN 6535:
- 3 and 5 × D_C, form HA and HE
- 8–30 × D_C, form HA

THE TOOL

- DC160 Advance solid carbide drill with and without internal coolant
- Dia. 0.125 – 0.75" and 3–25 mm
- Dimensions from ~3 × D_C (in accordance with DIN 6537 short) up to 30 × D_C
- Grades:
  - WJ30ET, K30F TiSiAlCrN/AlTiN (full coating)
  - WJ30EU, K30F TiSiAlCrN/AlTiN (point coating)

THE APPLICATION

- ISO material groups P, M, K, N, S, H, O
- Can be used with emulsion, oil and MQL
- Areas of use: General mechanical engineering, mold and die making, energy and automotive industries



Also available from: Walter Xpress

DC160 Advance solid carbide drill

Fig.: DC160-16-08.500A1-WJ30EU

BENEFITS FOR YOU

- XD Technology: Deep-hole drilling up to 30 × D_C without pecking
- High productivity in many different materials
- Lands located in advanced position to ensure rapid guidance in the hole
- Remarkable positioning accuracy thanks to the innovative new thinner web
- Universal application on all material types

Watch the product video:
www.youtube.com/waltertools

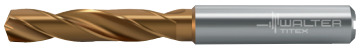
THE RANGE

DC160 ADVANCE – without internal coolant:

3 × D_c – shank shapes HA and HE

5 × D_c – shank shapes HA and HE

DC160 ADVANCE – with internal coolant:



3 × D_c – shank shapes HA and HE

5 × D_c – shank shapes HA and HE

8 × D_c – shank shape HA

12 × D_c – shank shape HA

16 × D_c – shank shape HA

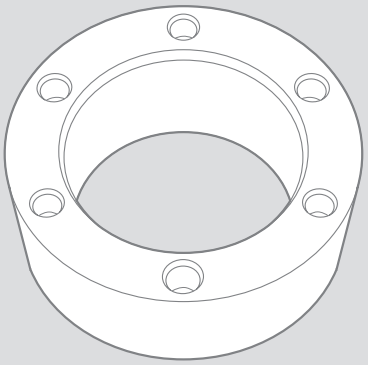
20 × D_c – shank shape HA

25 × D_c – shank shape HA

30 × D_c – shank shape HA

APPLICATION EXAMPLE

Cylinder

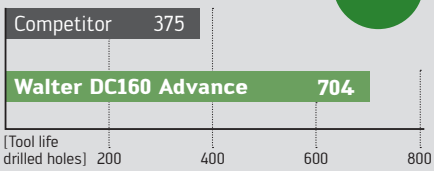


Material:	St 52 (1.0570)
Tensile strength:	80 ksi
Tool:	DC160-05-16.900F1-WJ30ET
Drilling depth:	1.732 in
Cooling:	Emulsion

	Competitor	**DC160 Advance**
v_c (sfm)	460	460
n (rpm)	2640	2640
f (in)	0.0138	0.0138
v_f (in/min)	36.2	36.2

Comparison: Number of drilled holes

+90 %



Very even wear on the DC160 Advance

_DC260 ADVANCE SOLID CARBIDE DRILL

Universal use, strong performance.

NEW

THE TOOL

- DC260 Advance solid carbide chamfering drill with and without internal coolant
- Dia. 3.3–14.5 mm
- For drilling thread core holes M4–M16, MF8 × 1–16 × 1.5
- Step length in accordance with DIN 8378
- Grade: WJ30ET, K30F TiSiAlCrN/AlTiN
- Dimensions: Walter standard with and without internal coolant

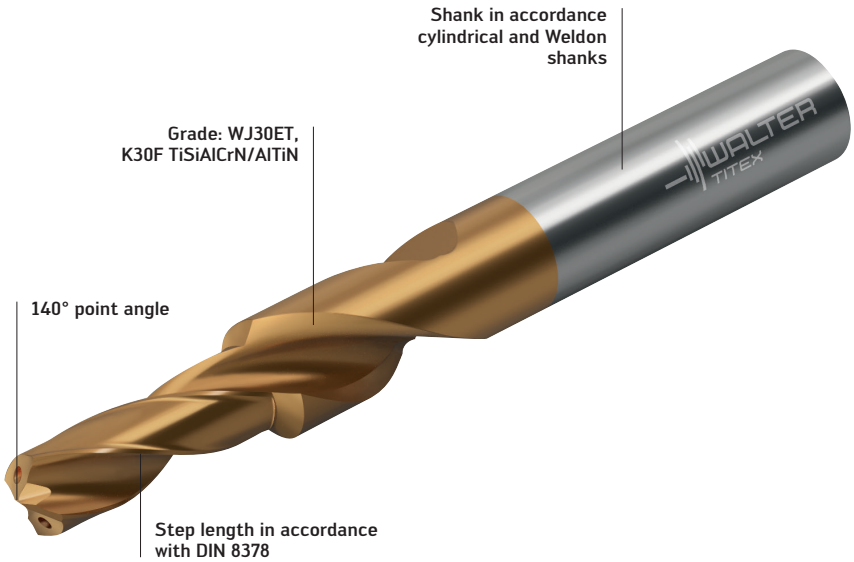
THE APPLICATION

- For drilling thread core holes
- ISO material groups P, M, K, N, S, H, O
- Can be used with emulsion, oil and MQL
- Areas of use: General mechanical engineering, mold and die making, energy and automotive industries

THE RANGE

Solid carbide chamfering drills with internal coolant:

Solid carbide chamfering drills without internal coolant:



DC260 Advance solid carbide chamfering drill **Fig.:** DC260-03-08.500A1-WJ30ET

BENEFITS FOR YOU

- High productivity in many different materials
- Lands located in advanced position to ensure rapid guidance in the hole
- Remarkable positioning accuracy thanks to the innovative new thinner web
- Universal application

Also available from:

Walter Xpress

Superior productivity in all types of aluminium alloys.

SPECIAL TOOL

THE TOOL

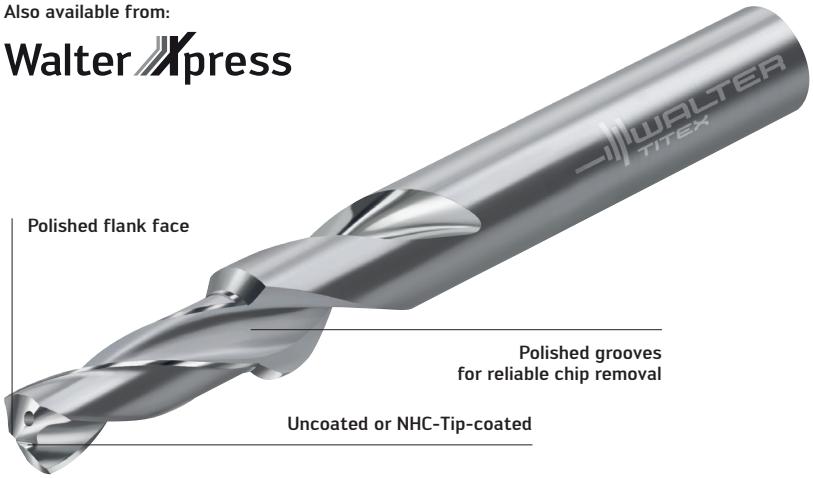
- DC166 solid carbide high-performance drill with internal coolant
- Dia. 0.157-0.787" (4–20 mm) drilling depth up to 30 × D_C
- Step drill with up to three steps
- Uncoated or NHC-Tip-coated, polished flutes and face
- Special tools in line with customer's requirements

THE APPLICATION

- ISO material group N
- Cast aluminium and wrought alloys
- Can be used with emulsion or MQL
- Areas of use: Automotive industry, general mechanical engineering, components with large batch sizes
- Deep-hole drilling up to 30 × D_C

Also available from:

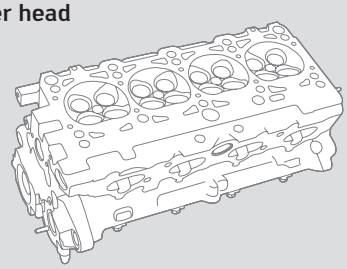
Walter Xpress



DC166 solid carbide step drill **Fig.:** Ø 9/16 in

APPLICATION EXAMPLE

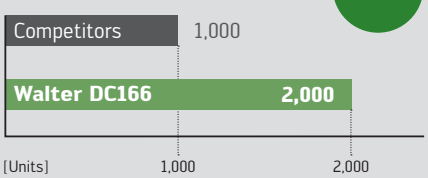
Cylinder head



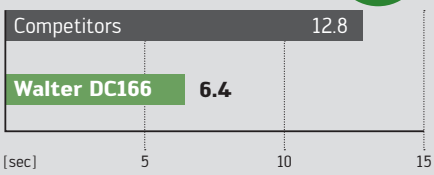
Material:	AlSi10MgCu/A360.2
Tool:	DC166 step drill, dia. 9/16 in
Drilling depth:	2.362 in
Drilled holes per workpiece:	16

	Competitors	Walter DC166
v_c (sfm)	2470	2470
n (rpm)	15,000	15,000
f_u (in/rev)	0.012	0.024
v_f (in/min)	177.2	354.4

Comparison: Number of workpieces **+100 %**



Comparison: Machining time **-50 %**



BENEFITS FOR YOU

- Customer-specific version adapted to the application
- Up to 30% higher feed rate for maximum productivity
- High process reliability thanks to reliable chip removal
- For cast aluminium and wrought alloys

Precision down to the smallest detail.

NEW

NEW 19-1

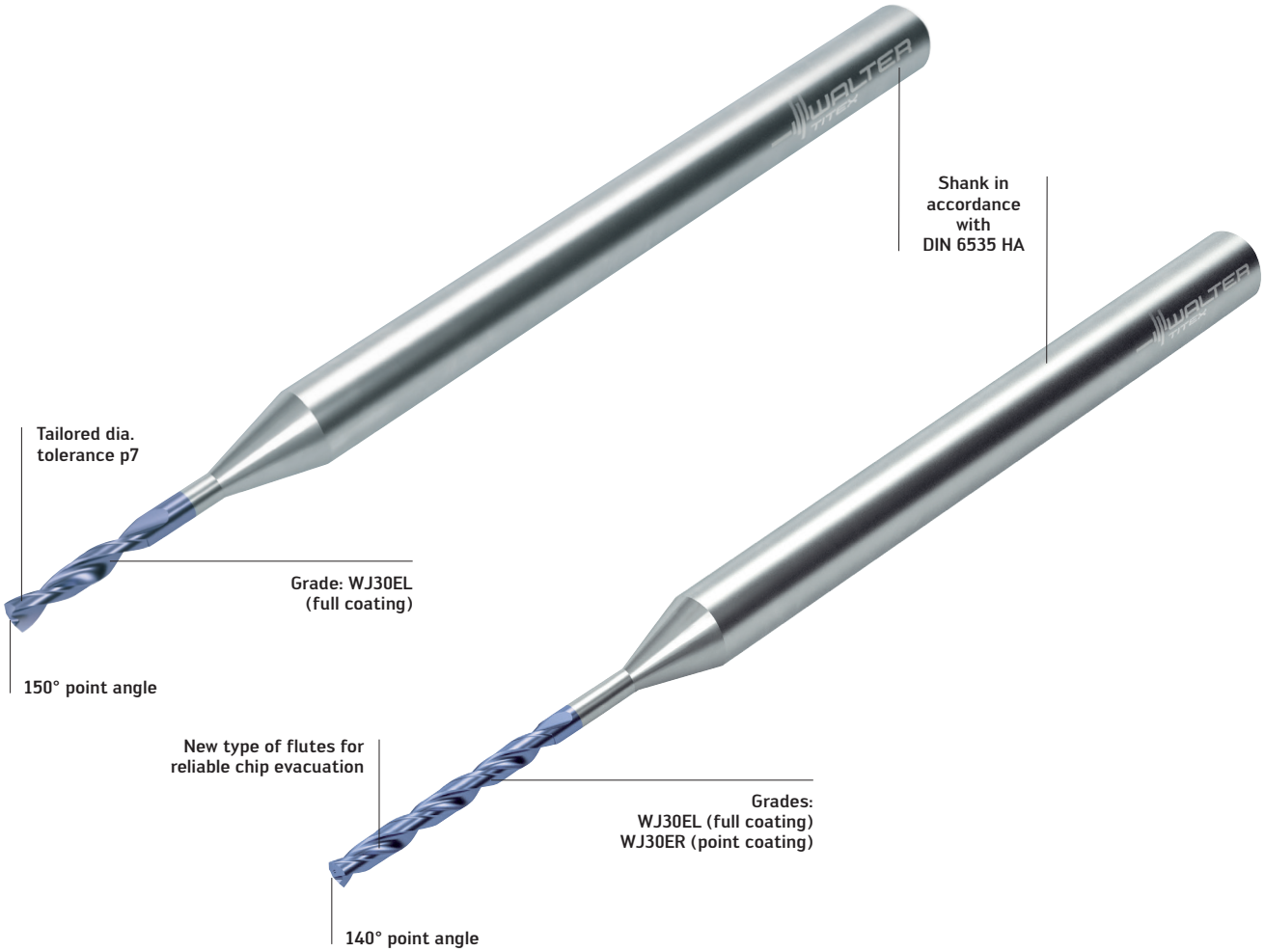
THE TOOLS

DB131 solid carbide micro pilot drill without internal coolant

- Dimensions in accordance with Walter standard: $2 \times D_C$
- Diameter range: 0.5–1.984 mm and 1/32" - 5/64"(0.0313"-0.0781")
- Shank in accordance with DIN 6535 HA
- Grade: WJ30EL, K30F, AlCrN (full coating)

DB133 solid carbide micro drill with internal coolant

- Dimensions in accordance with Walter standard: $5 \times D_C$, $8 \times D_C$, $12 \times D_C$
- Diameter range: 1/32"-5/64" (0.0313" - 0.0781")
- Shank in accordance with DIN 6535 HA
- Grades:
  - WJ30EL, K30F, AlCrN (full coating)
  - WJ30ER, K30F, AlCrN (point coating)



DB131/DB133 Supreme solid carbide micro drill **Fig.:** DB131-02-01.000A0-WJ30EL/DB133-05-01.000A1-WJ30EL

Watch the product video:
www.youtube.com/waltertools

THE APPLICATION

- ISO material groups P, M, K, N, S, H, O
- Can be used with emulsion or oil
- Areas of use: Medical technology, watchmaking industry, general mechanical engineering, mold and die making, energy and automotive industries

THE RANGE

DB131 Supreme solid carbide micro pilot drill – grade: WJ30EL
$2 \times D_C$ – shank shape HA

DB133 Supreme solid carbide micro drill – grade: WJ30EL
$5 \times D_C$ – shank shape HA

DB133 Supreme solid carbide micro drill – grade: WJ30ER
$8 \times D_C$ – shank shape HA

DB133 Supreme solid carbide micro drill – grade: WJ30ER
$12 \times D_C$ – shank shape HA

BENEFITS FOR YOU

- Maximum process reliability combined with tight tolerances
- Optimised dimensions for maximum stability
- Pilot drill with adjusted dia. tolerance and 150° point angle
- Excellent surface quality on the component thanks to the customised edge preparations on the drill

_DC150 PERFORM SOLID CARBIDE DRILL

New dimensions – now even more flexible.

NEW TO THE RANGE

NEW ADDITION TO THE PRODUCT RANGE

- DC150 Perform solid carbide twist drill
- WJ30RE grade
- Dia. 1.5–2.9 mm and 1/16"-7/64" (0.0625"-0.1094")

Without internal coolant:

- $3 \times D_C$; dia. 1.5–1.9 mm in accordance with DIN 1897 > dia. 1.9 mm in accordance with DIN 6539

Additional dimensions – with internal coolant:

- $3 \times D_C$ in accordance with DIN 6537 short; HA shank and double shank (HE/HB)
- $5 \times D_C$ in accordance with DIN 6537 long; HA shank and double shank (HE/HB)
- $8 \times D_C$ in accordance with Walter standard; HA shank
- $12 \times D_C$ in accordance with Walter standard; HA shank

Additional dimensions – without internal coolant:

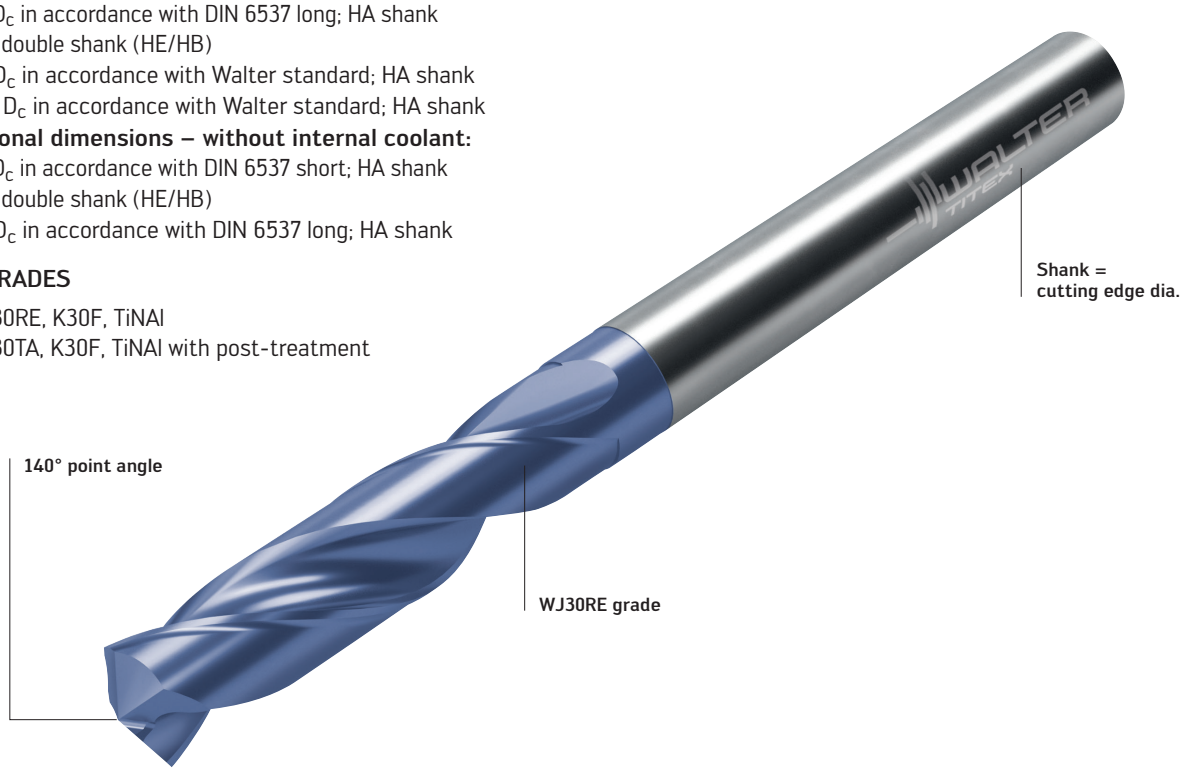
- $3 \times D_C$ in accordance with DIN 6537 short; HA shank and double shank (HE/HB)
- $5 \times D_C$ in accordance with DIN 6537 long; HA shank

THE GRADES

- WJ30RE, K30F, TiNAl
- WJ30TA, K30F, TiNAl with post-treatment

THE APPLICATION

- ISO material groups P, M, K, N, S, H, O
- Can be used with emulsion, oil and MQL
- Areas of use: General mechanical engineering, mold and die making, energy and automotive industries



DC150 Perform solid carbide drill

Fig.: DC150-03-02.000U0-WJ30RE

BENEFITS FOR YOU

- Cost-efficient machining of small and medium batch sizes
- Can be used universally with all materials
- Now even more flexible thanks to extended range of drills
- Shank variants for all adaptors typically used when holemaking: Weldon, whistle notch, hydraulic expansion chuck, collet chuck, shrink-fit chuck, power chuck
- Optimum protection against wear due to WJ30RE and WJ30TA grades

Watch the product video:
www.youtube.com/waltertools

_D3120 INDEXABLE INSERT DRILL

Strong performance with four cutting edges.

NEW TO THE RANGE

NEW ADDITION TO THE PRODUCT RANGE

- Solid drills
- Dimensions (inches):
  D3120.03 ($3 \times D_C$) 0.75–1.5 in.
  D3120.04 ($4 \times D_C$) 0.75–1.5 in.

THE TOOL

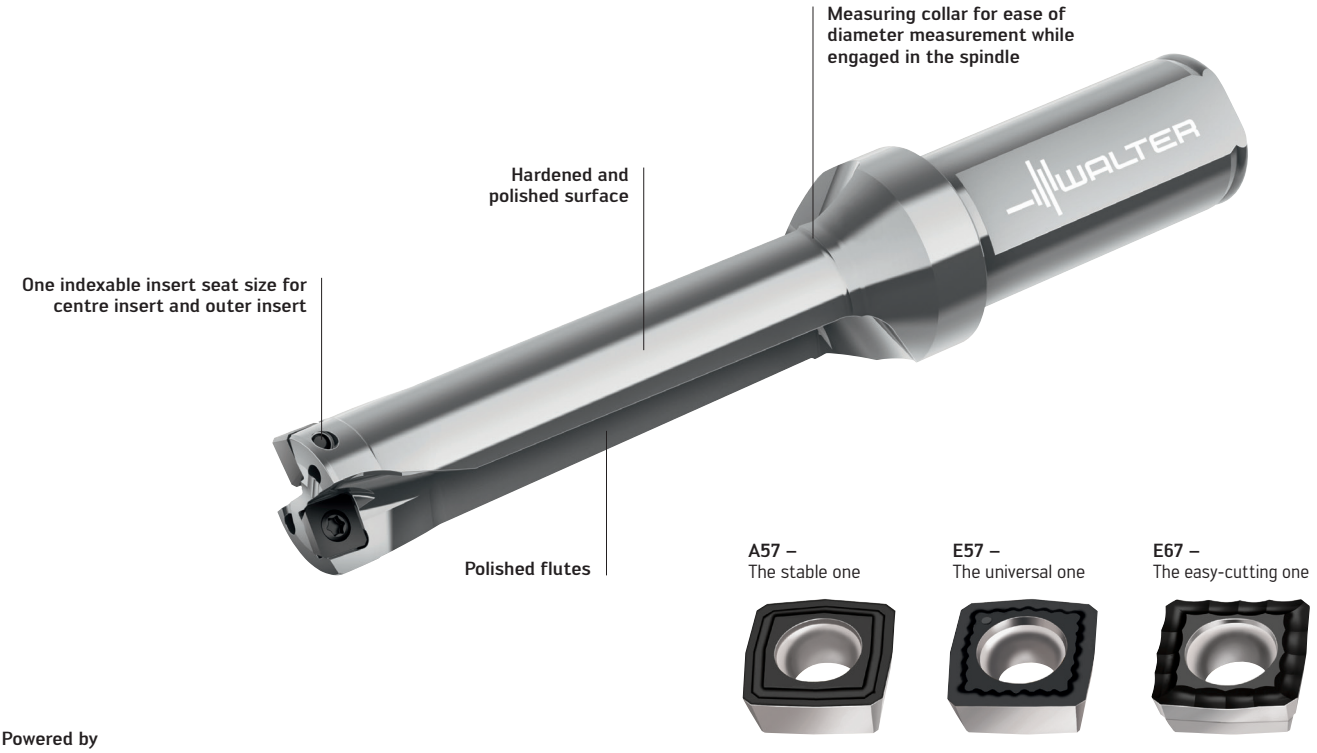
- Dia. 0.63–1.65 in. (16–42 mm)
- 2, 3 and $4 \times D_C$
- Robust design for lathes and machining centres

THE INDEXABLE INSERTS

- Four-edged, positive indexable insert
- Three geometries:
  A57 – The stable one
  E57 – The universal one
  E67 – The easy-cutting one
- Four grades: WKP25S, WKP35S, WSP45S, WXP40
- For special drills, can also be used as a left-hand cutting indexable insert

THE APPLICATION

- Drilling from solid
- Difficult machining operations, such as cross holes, chain drilling, inclined entry and exit
- Suitable for drilling with X offset
- ISO materials P, M, K, N, S
- Areas of use:
  General mechanical engineering, mold and die making, energy and automotive industries



Powered by
Tiger·tec®Silver

Walter D3120 indexable insert drill **Fig.:** D3120-04

BENEFITS FOR YOU

- Maximum process reliability thanks to easy chip removal
- Best protection against friction due to hardened and polished surfaces
- High stability in all working conditions
- Low tooling costs due to four cutting edges
- Easy to operate (identical indexable insert seat size for outer and inner insert)

Also available from:
Walter Xpress

Perfect performance and precision.

NEW TO THE RANGE

NEW ADDITION TO THE PRODUCT RANGE

- Solid drills
- Dimensions (inches):
  D4120.03 (3 × D_C) 0.562–1.375 in.
  D4120.04 (4 × D_C) 0.812–1.375 in.
- Dimensions (metric):
  D4120-02 (2 × D_C) dia. 13.5–29.5 mm and 43–59 mm
  D4120-03 (3 × D_C) dia. 13.5–29.5 mm and 43–59 mm
  D4120-04 (4 × D_C) dia. 43–59 mm
  D4120-05 (5 × D_C) dia. 43–59 mm

THE TOOL

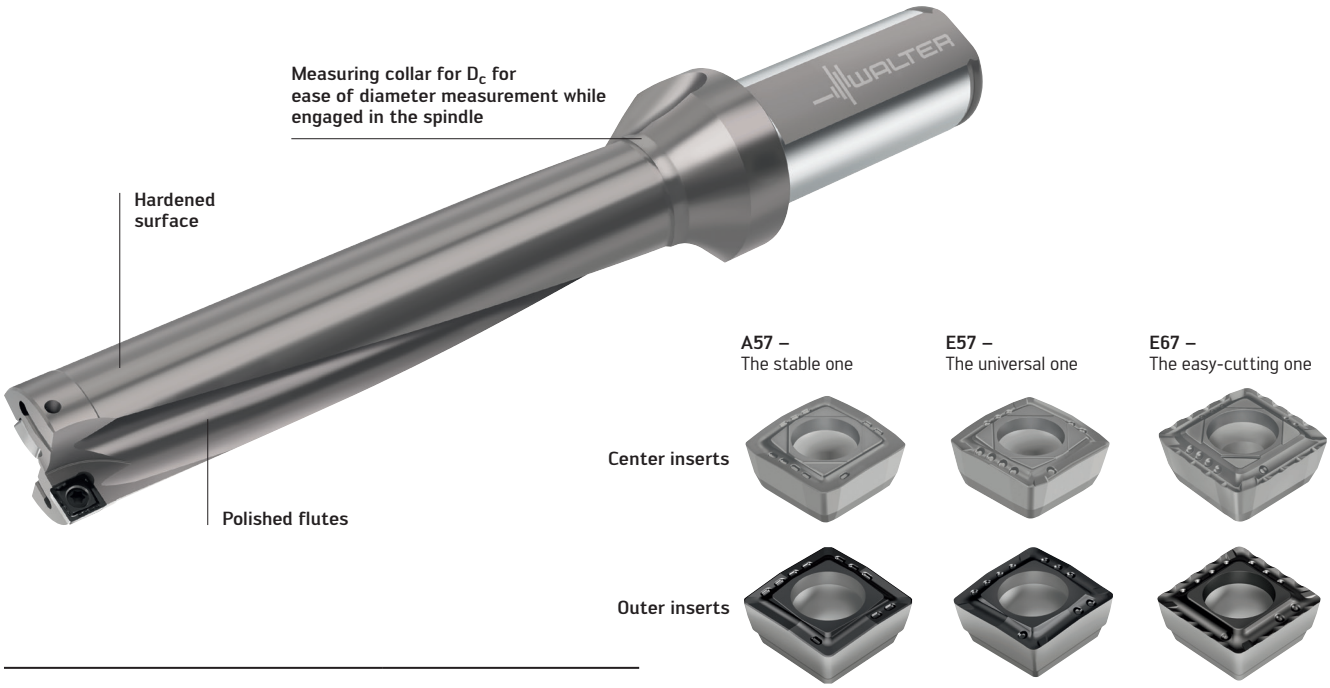
- For 2 and 3 × D_C – Dia. 0.53–2.32 in. (13.5–59 mm)
- For 4 and 5 × D_C – Dia. 0.67–2.32 in. (17–59 mm)
- Two optimised coolant-exits

THE INDEXABLE INSERTS

- Four-edged, positive indexable insert
- Four grades: WKP25S, WKP35S, WSP45, WXP40
- Wiper cutting edge for P4840 design with fully ground circumference

THE APPLICATION

- Drilling from solid with precision and consistent hole diameter
- Drilling from solid in difficult machining operations such as cross holes, chain drilling, inclined inlet and exit
- ISO materials P, M, K, N, S
- Areas of use: General mechanical engineering, mold and die making, energy and automotive industries



Walter D4120 indexable insert drill **Fig.:** D4120-04-21.00F25-P43

Powered by
Tiger·tec® Silver

Also available from:
Walter Xpress

BENEFITS FOR YOU

- High precision in hole diameter thanks to precise balancing of the cutting forces between the centre and outer insert
- Excellent surface quality due to wiper cutting edge
- Maximum process reliability thanks to easy chip removal
- Hardened and polished surfaces offer protection against friction
- Low tooling costs due to four cutting edges

Incomparably tough under all working conditions.

NEW TO THE RANGE

NEW ADDITIONS TO THE PRODUCT RANGE

- D4240-02 (chamfering drill 2.5 × D_C)
- D4140-01 (1.3 × D_C)

Extension (diameter and shank versions)

- D4140-03 (3 × D_C)
- D4140-05 (5 × D_C)
- D4140-07 (7 × D_C)

THE TOOL

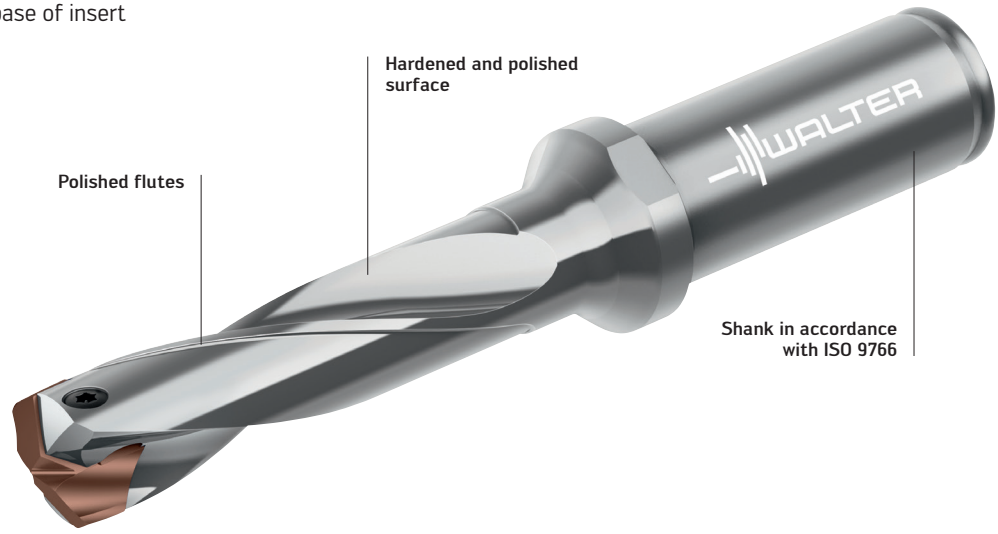
- Dia. 0.472 – 1.496 in. for 3 × D_C, 5 × D_C and 7 × D_C
- Dia. 12 – 37.99 mm for 3 × D_C, 5 × D_C and 7 × D_C
- Dia. 0.707 – 0.971 in. (18–24.7 mm) for 10 × D_C
- Optimized coolant exit at the base of insert

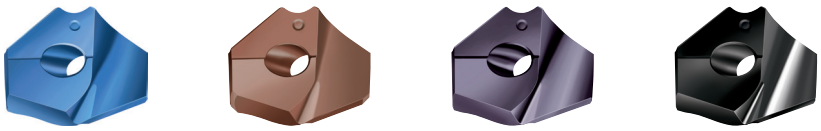
THE APPLICATION

- Drilling from solid, suitable for stack(laminate) drilling, inclined entry and exit up to approx. 5°
- ISO materials P, M, K, N, S
- Areas of use: General mechanical engineering, mold and die making, energy and automotive industries

THE INDEXABLE INSERT

- Exact positioning due to 100° prism at insert seat
- Four geometries and grades





P6001	P6005	P6003	P6004
WPP45C specialist for ISO P	WKK45C specialist for ISO K	WMP35 specialist for ISO M and ISO S	WNN25 specialist for ISO N

Walter D4140 indexable insert drill

Fig.: P600x – indexable insert range

BENEFITS FOR YOU

- Maximum process reliability and tool life with coolant applied directly at the cutting edge
- Effiecient and reliable chip evacuation due to polished flutes
- Long tool life for the drill body due to reduced friction at the hardened and polished flute surface
- Simple indexable insert selection with Color Select

Also available from:

Walter Xpress

Wide range for your boring needs.

NEW 19-1

NEW

THE INDEXABLE INSERTS

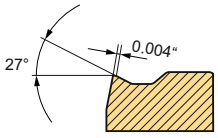
Insert types:

- P4160-2R04-E47 in WKK20S, WKP30S, WSM20S
- P4160-2R08-E47 in WKK20S, WKP30S, WSM20S
- P4160-2L08-E47 in WKK20S, WKP30S, WSM20S
- P4130-4R12-E47 in WKK10S, WKK20S, WKP30S

THE GEOMETRY

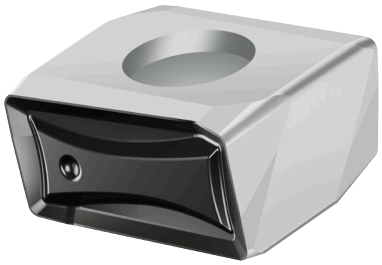
E47 – The universal one

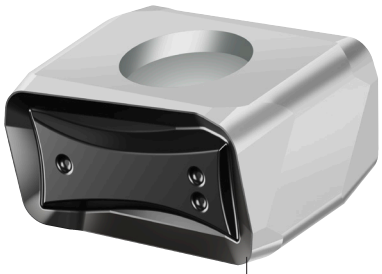
- Flexible, can be used universally for variable depths of cut
- Suitable for all boring operations with and without interrupted cut



THE APPLICATION

- ISO materials P, K, M
- Flexible use for customer-specific special tools





Stable indexable insert with a negative basic shape and a highly positive chip breaker groove

For both tangential and lateral positioning of indexable inserts

Four + four cutting edges

Powered by Tiger·tec® Silver

P4160-2R04-E47/P4130-4R12-E47

Fig.: B2074-7016678

BENEFITS FOR YOU

- Flexible tool solutions for variable depths of cut
- Higher number of teeth for small tool diameters
- Increased productivity and shorter machining times due to higher feeds for each tooth
- High process reliability thanks to excellent chip breaking at all depths of cut
- Longer tool life thanks to optimum geometry design

Also available from: Walter Xpress

Efficient and highly precise – with three cutting edges.

NEW

NEW ADDITION TO THE PRODUCT RANGE

- Boring bars and cartridges for precision boring with TC.. indexable inserts

THE TOOL

- Single-edged precision boring tool with convenient analog indicator
- 0.00008 in. (0.002 mm) adjustment accuracy
- Dia. 0.079–7.977 in. (2–203 mm) using boring bars and cartridges
- Dia. 5.895–25.152 in. (150–640 mm) with aluminum bridge design
- Thru coolant supply very close to the cutting edge
- Adaptors and extensions matched to the system
- Walter Capto™ and ScrewFit adaptor; B3230.C with cartridges can also be delivered as a set
- The B4030 system is self-balancing

THE APPLICATION

- Suitable for all material groups
- For precision production
- Finish machining of precise drilled holes (IT6)
- B3230.C... can be easily used for reverse machining
- Areas of use: General mechanical engineering, automotive and aerospace industries
- Finishing operations ($a_{p\ max}$ 0.5 mm)
- ISO materials P, M, K, N, S, H, O

THE INDEXABLE INSERTS

- TC..06, TC..11, CC..06 and CP..05
- Indexable insert range adapted for precision boring

Walter[Precision] **precision boring tools** **Fig.:** B3230. EB512, EB518.CS, EB347.TC06

BENEFITS FOR YOU

- Highly precise with backlash-free, 2 µm precise setting
- No change in length when the diameter is adjusted
- High surface quality due to balanced tools
- High level of flexibility with an extensive range of modular components: Adaptors, extensions, etc.
- Comprehensive indexable insert range

Proven, flexible – and highly productive.

NEW

THE TOOL

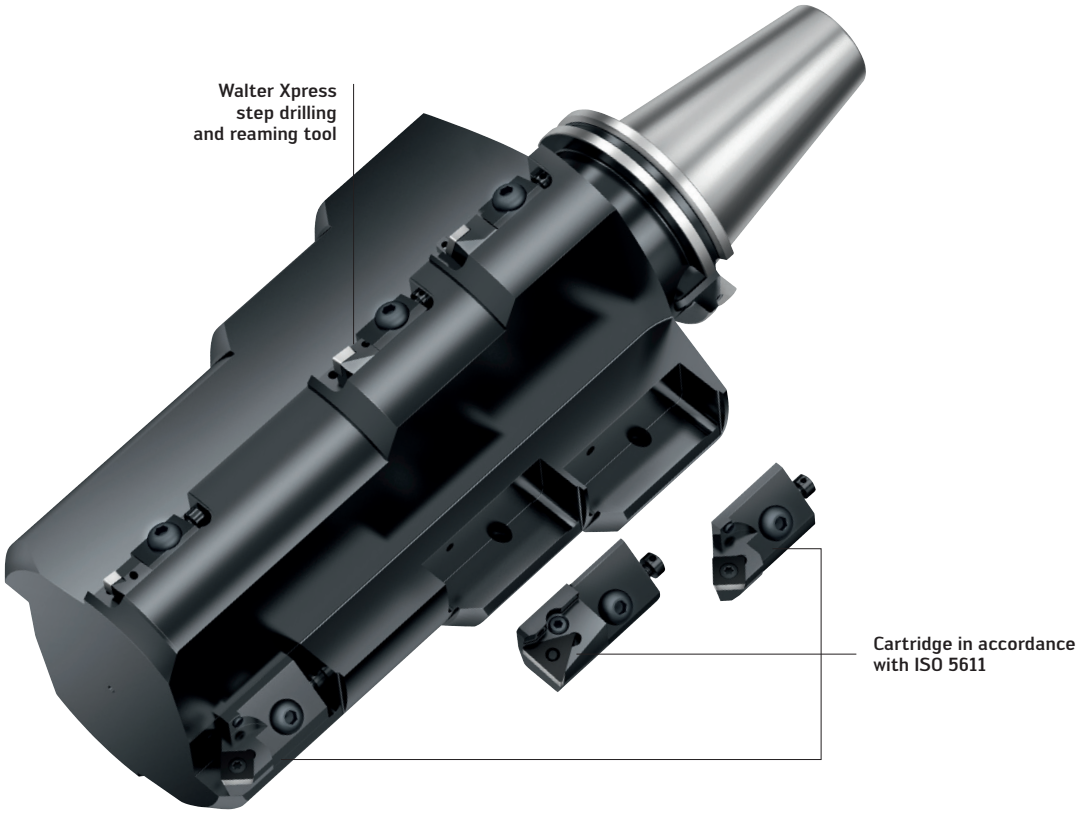
- Cartridges in accordance with ISO 5611 for special solutions

Variants:

PCFNR12CA-12, PCLNR25CA-19, PSKNR25CA-19, PSKNR10CA-09, PSSNR12CA-12, PTFNR20CA-22, STFCL08CA-09, STFCR08CA-09

THE APPLICATION

- Flexible uses for customer-specific special solutions
- Highly efficient tool solutions in combination with precision boring and mini cartridges



Step tool

Fig.: Cartridge in accordance with ISO 5611

BENEFITS FOR YOU

- Extremely flexible, efficient and highly productive
- Reduction in tool costs
- Reduced machining time
- Creates spare machine capacity

Also available from:

Walter Xpress

B – Threading

The high-tech threading tool for a wide range of applications.

NEW TO THE RANGE

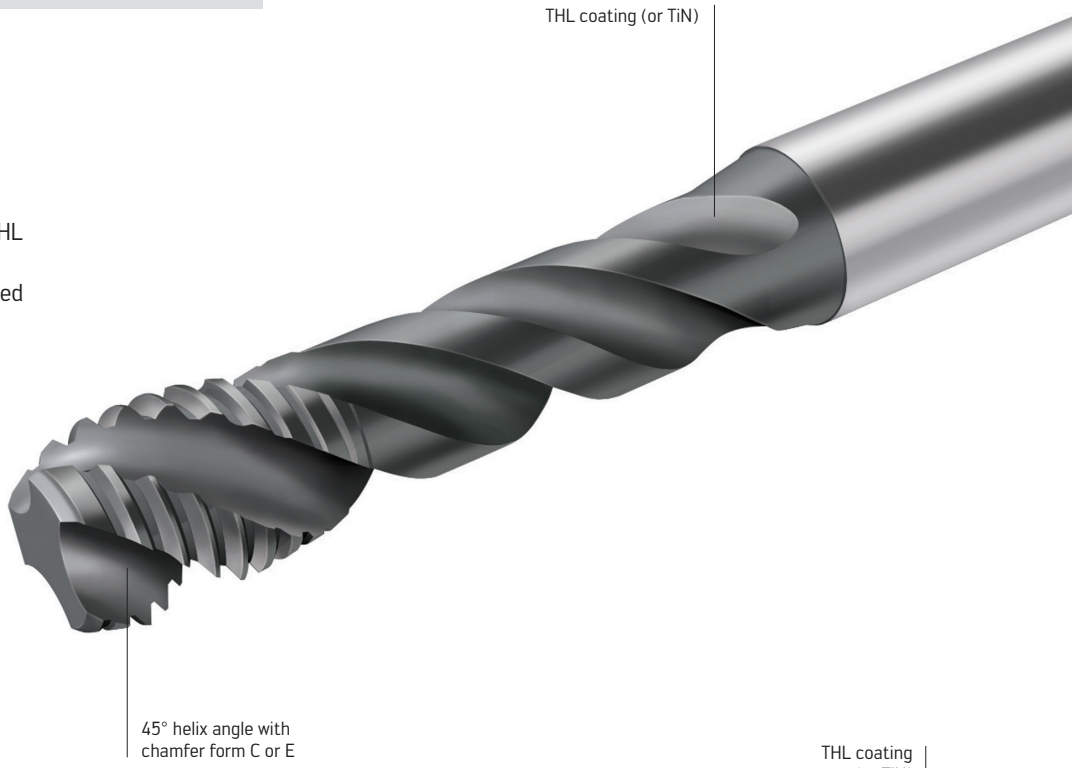
DIMENSION RANGE

DIN/ANSI
UNC 4-40 - UNC 3/4-10
UNF 6-40 - UNF 3/4 - 16

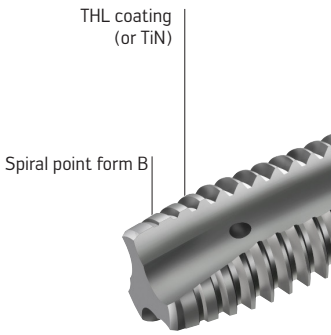
DIN
UNC 2-56 - UNC 3/4-10
UNF 4-48 - UNF 5/8 - 18
M2 - M64
MF 6x0.75 - MF 22x1.5
G 1/8-28 - G1-11

THE TOOLS

- Universal high-performance cut taps, made from HSS-E-PM
- Outstanding chip control due to optimized surface finish and specialized THL coating
- Low risk of fractures thanks to improved micro geometry
- Wear resistant but tough substrate
- Variants: with axial or radial coolant channel

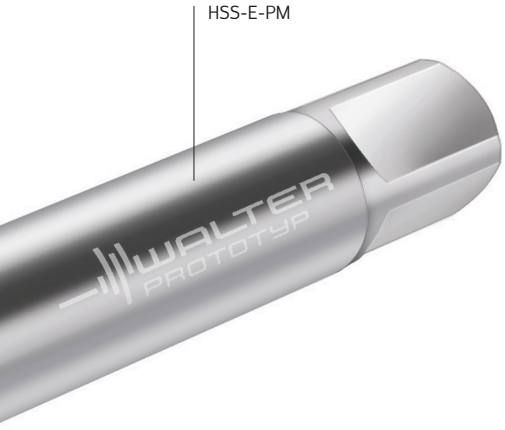


Paradur® Eco Plus **Type:** EP2051302



BENEFITS FOR YOU

- Highest productivity in a wide range of materials and applications
- Excellent process reliability due to outstanding chip control and tough substrate
- Very good wear resistance because of HSS-E-PM substrate
- Reliable machining of deep threads

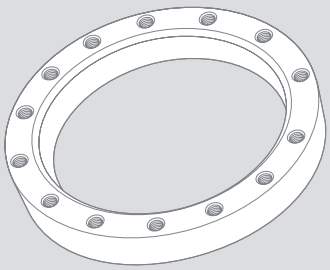


THE APPLICATION

– Paradur® Eco Plus: blind hole threads up to 3 x D_N
– Prototex® Eco Plus: through hole threads up to 3.5 x D_N
– Can be used universally for steels, stainless steels, cast iron and non-ferrous materials from 150 up to 370 HB
  · unalloyed and alloyed steels
  · stainless steels (austenitic, duplex, ferritic/martensitic)
  · GJS as main application, GJL/CGI as secondary application
  · Al wrought alloys, AlSi alloys up to 12 % Si content
  · Copper and copper alloys as secondary application

Prototex® Eco Plus **Type:** EP2021342

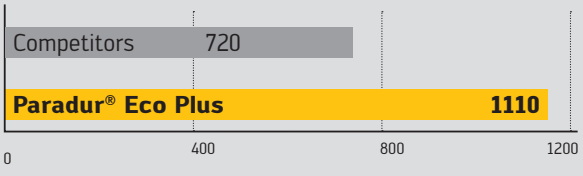
Lock ring
Paradur® Eco Plus
M6 blind hole



Workpiece material: 17-4 PH
Tool: **Paradur® Eco Plus** EP2051302-M6
Coating: THL
Hole type: Blind hole
Thread depth: 16 mm (2.5 x D_N)
Cooling lubricant: Emulsion 7%

Cutting data	Competitors	Paradur® Eco Plus
n	159 rpm	265 rpm
Cutting speed v_c	10 SFM	16 SFM

Comparison of tool life (number of threads)



Excellent reliability, advanced performance

NEW

DIMENSION RANGE: TC117/TC217 Advance

DIN/ANSI

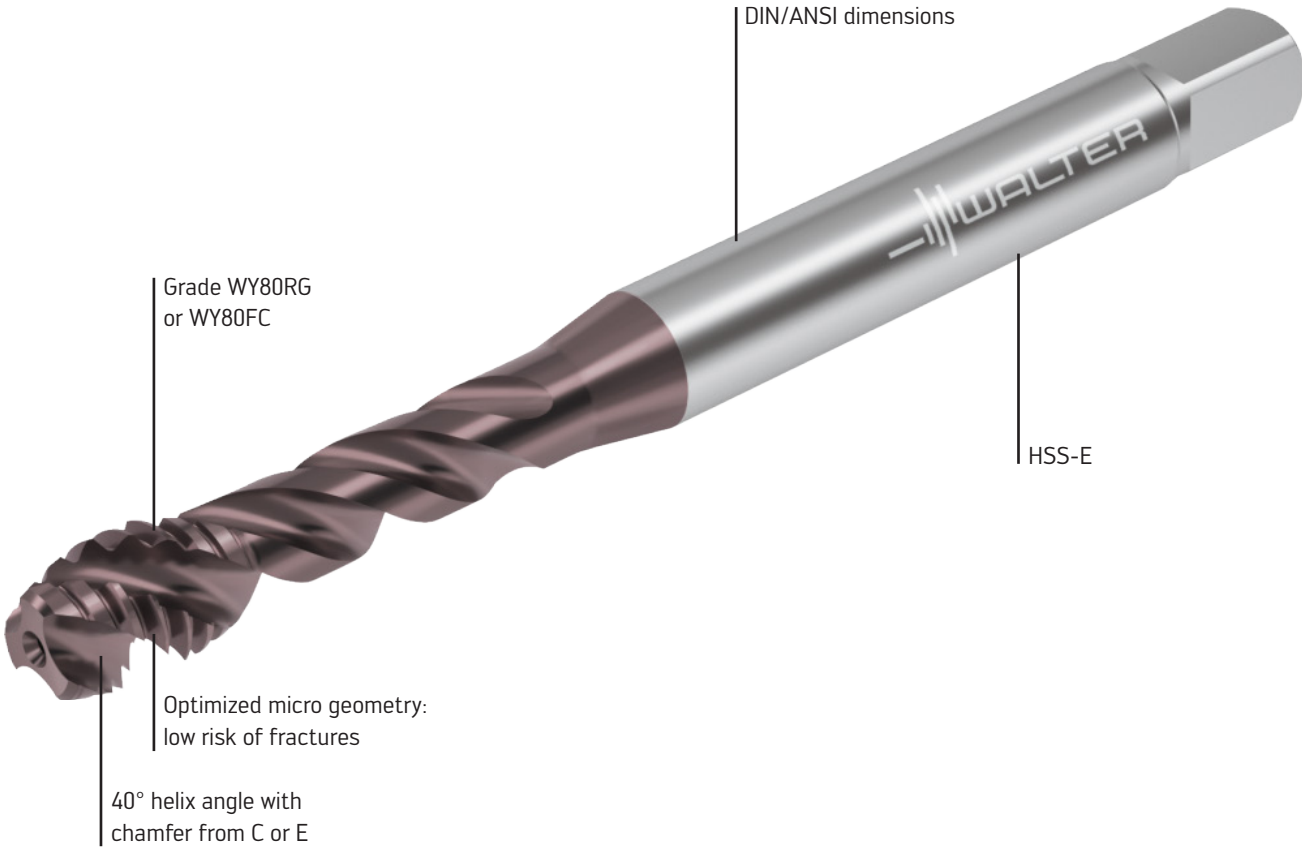
UNC 1-64 - UNC 1 1/2-6
UNF 0-80 - UNF 1 1/4-12
UN 1 1/8-8 - UN 1 5/8-8
UNS 1-14
STIUNC 2-56 - STIUNC 3/8-16
STIUNF 10-32 - STIUNF 3/8-24
M3 - M20

THE TOOLS

- Universal HSS-E cut taps
- Outstanding chip control due to optimized surface finish and specialized coating / surface treatment
- TC117: Stable and wear resistant cutting edges thanks to 40° helix angle
- TC217: HSS-E with increased hardness for higher tool life
- One single tap for 2B and 3B tolerances
- DIN/ANSI dimensions (DIN length, ANSI shank)

THE APPLICATION

- TC117: blind hole threads up to 2,5 x D_N
- TC217: through hole threads up to 3,0 x D_N
- Can be used universally for steel, stainless steels, cast iron and non-ferrous materials up to 370 HB
  · unalloyed and alloyed steels
  · stainless steels (austenitic, duplex, ferritic/martensitic)
  · GJS as main application, GJL/CGI as secondary application
  · Al wrought alloys, AlSi alloys up to 12 % Si content
  · Copper and copper alloys as secondary application



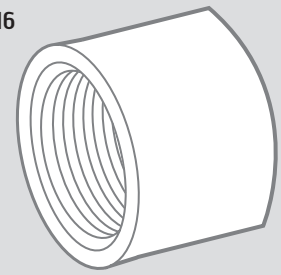
TC117 Advance cut tap **Fig.: TC117**

THE GRADES: TC117/TC217

- WY80RG (HSS-E + THL): good chip control, good wear resistance and higher cutting speed
- WY80FC (HSS-E + vap): best chip control, lesser wear resistance and lower cutting speed

APPLICATION EXAMPLE

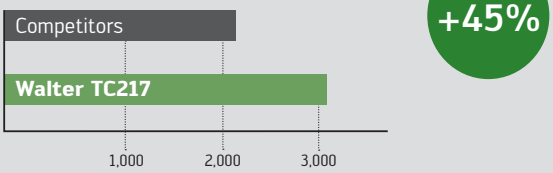
Tapping - Through hole M6

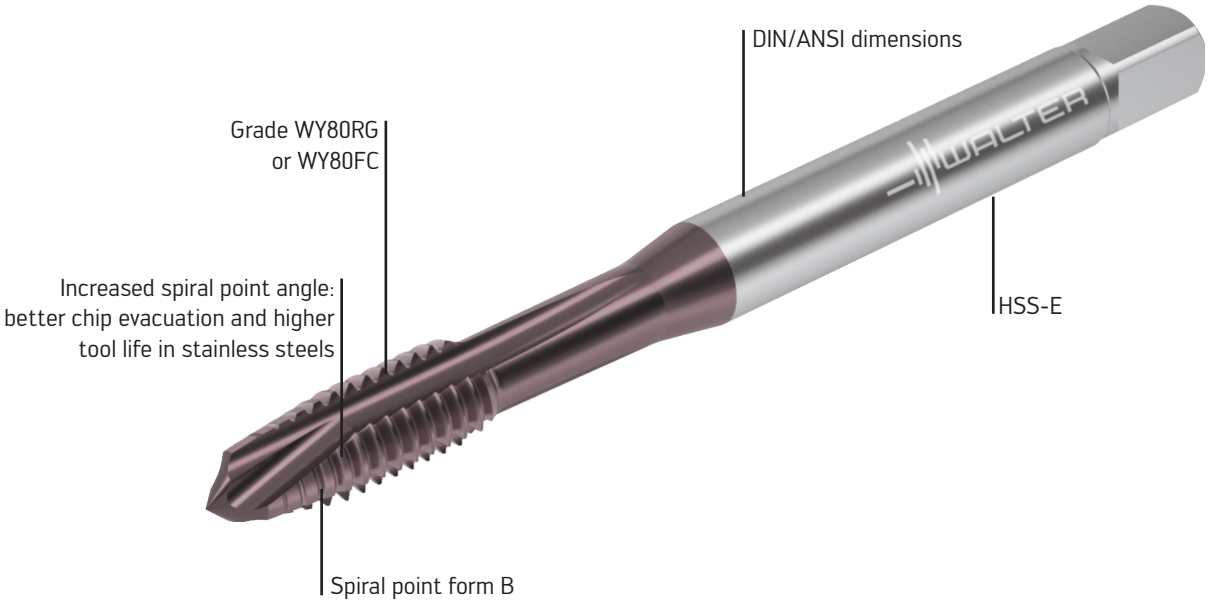


Workpiece Material:	316Ti
Coolant:	emulsion 6%
Thread dimension:	M6
Thread depth	15mm

	Competitors	TC217.M6-C0-WY80FC
v_c (sfm)	10	10
Tool life	2,100	3,050

Comparison Tool life





TC217 Advance cut tap **Fig.: TC217**

BENEFITS FOR YOU:

- High productivity in a wide range of different materials
- Excellent process reliability due to outstanding chip control
- Reduced inventory: machining of 2B and 3B tolerances with the same tap
- Large variety of thread types and dimensions available from stock

The all-rounders for small and medium batch sizes.

NEW TO THE RANGE

DIMENSION RANGE: TC115/TC216 Perform

DIN/ANSI	DIN
UNC 6-32 - UNC 3/4-10	UNC 6-32 - UNC 3/4-10
UNF 10-32 - UNF 3/4 - 16	M1.6 - M20
	MF 8X1 - MF 18X1.5

THE TOOLS: TC115/TC216

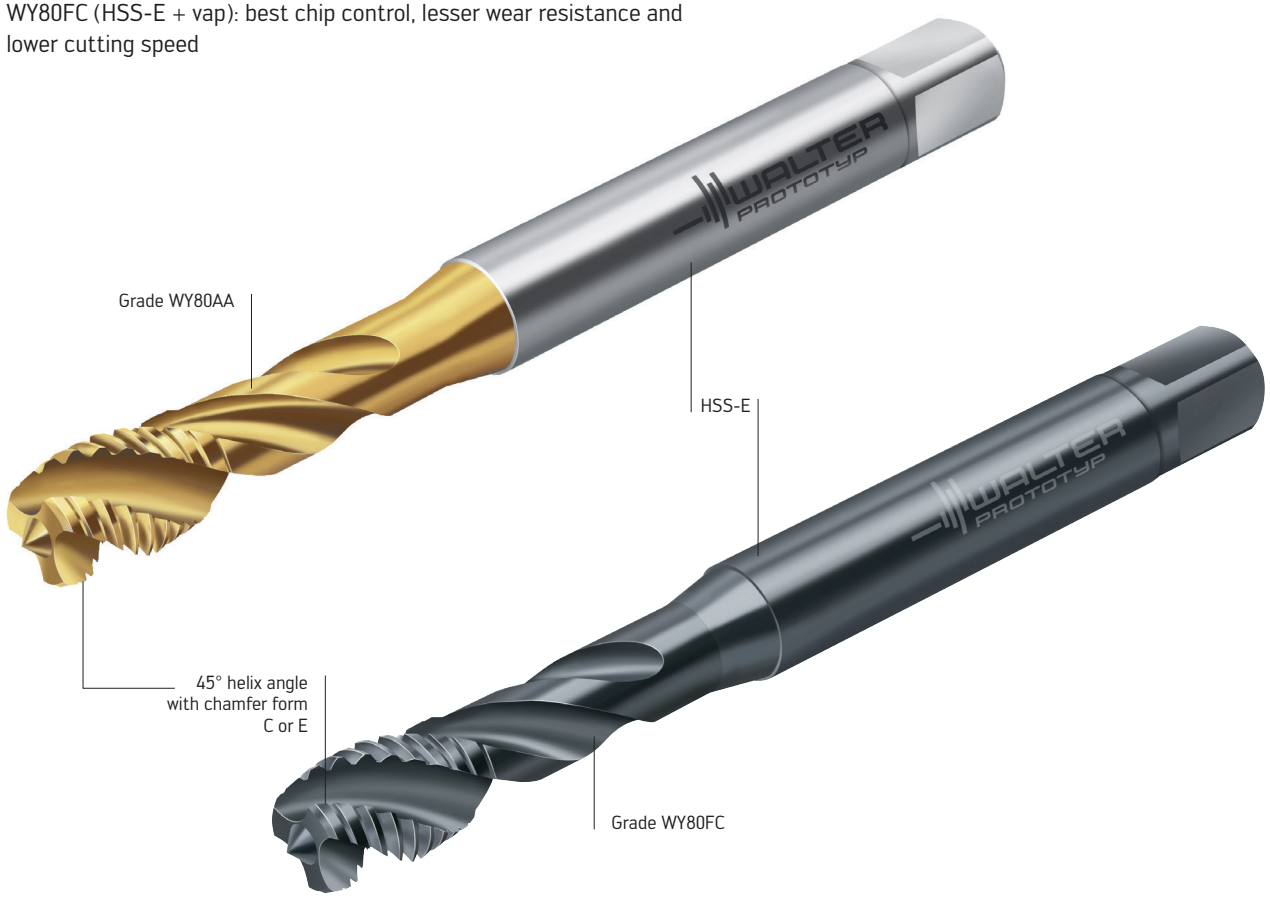
- Universal HSS-E cut taps
- Excellent self guidance due to low relief angles: no axial miscut in soft materials
- TC115: deep threads possible thanks to 45° helix angle

THE APPLICATION

- TC115: blind hole threads up to 3 x D_N
- TC216: through hole threads up to 3 x D_N
- Can be used universally for steel, stainless steels, cast iron and non-ferrous materials up to 300 HB
  - · unalloyed and alloyed steels
  - · austenitic stainless steels
  - · nodular cast iron (GJS)
  - · Al wrought alloys, AlSi alloys up to 7% silicon content
- Floating chucks can be utilized even in very soft materials

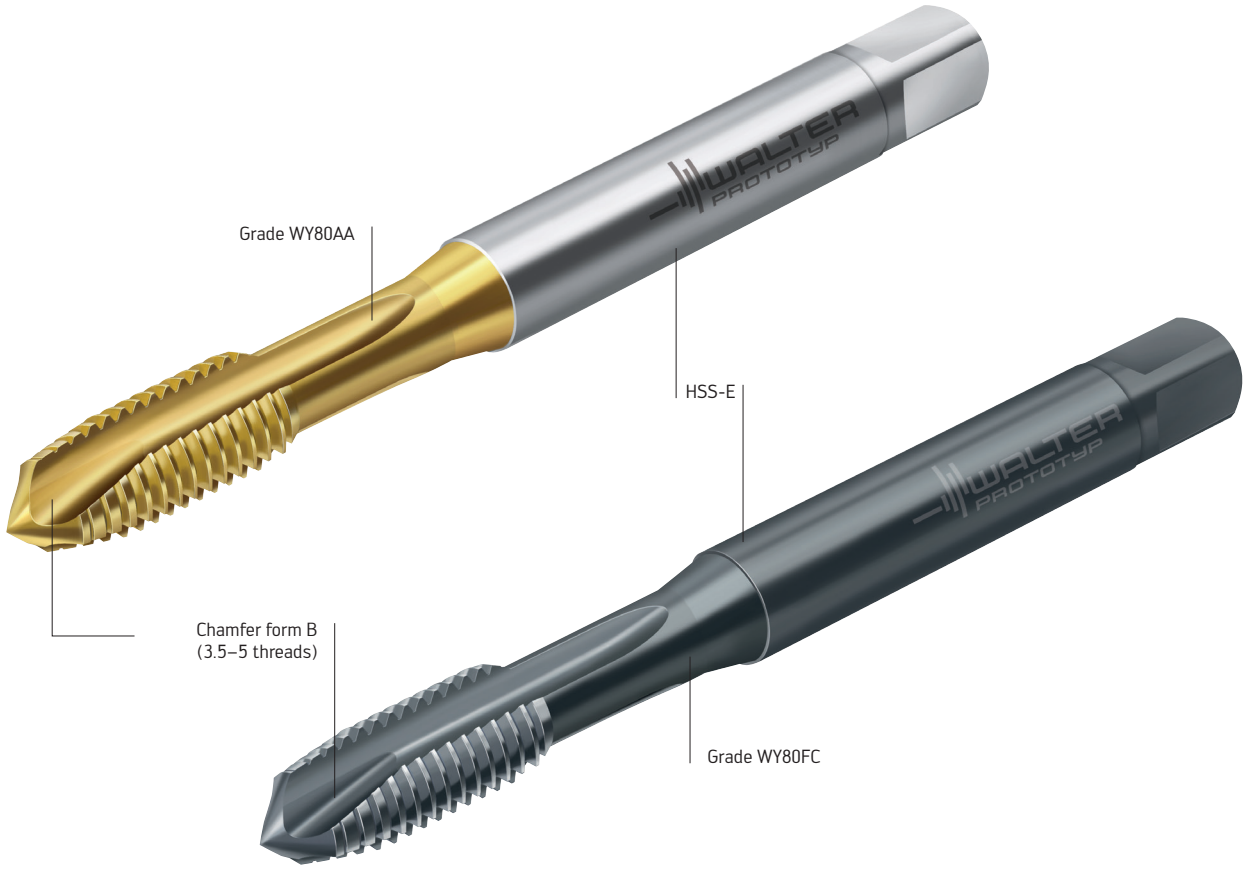
THE GRADES

- WY80AA (HSS-E + TIN): good wear resistance and higher cutting speed
- WY80FC (HSS-E + vap): best chip control, lesser wear resistance and lower cutting speed



The Walter Perform product line

The Perform line of tools from Walter will ensure that you enjoy a high level of profitability, as they also win your approval through their wide range of applications. They are ideal for use with a variety of materials, when the work at hand involves small and medium batch sizes.



BENEFITS FOR YOU - TC115/TC216

- Cost-efficient and reliable machining of small and medium batch sizes
- Reduced number of tools thanks to universal use in a wide range of materials

The specialist for stainless steels.

NEW TO THE RANGE

DIMENSION RANGE

DIN/ANSI
UNC 2-56 - UNC 3/4-10
UNF 10-32 - UNF 9/16-18

DIN
M1.6 - M36
MF 8x1 - MF 20-1.5
G 1/8-28 - G 1/4-19

THE TOOL

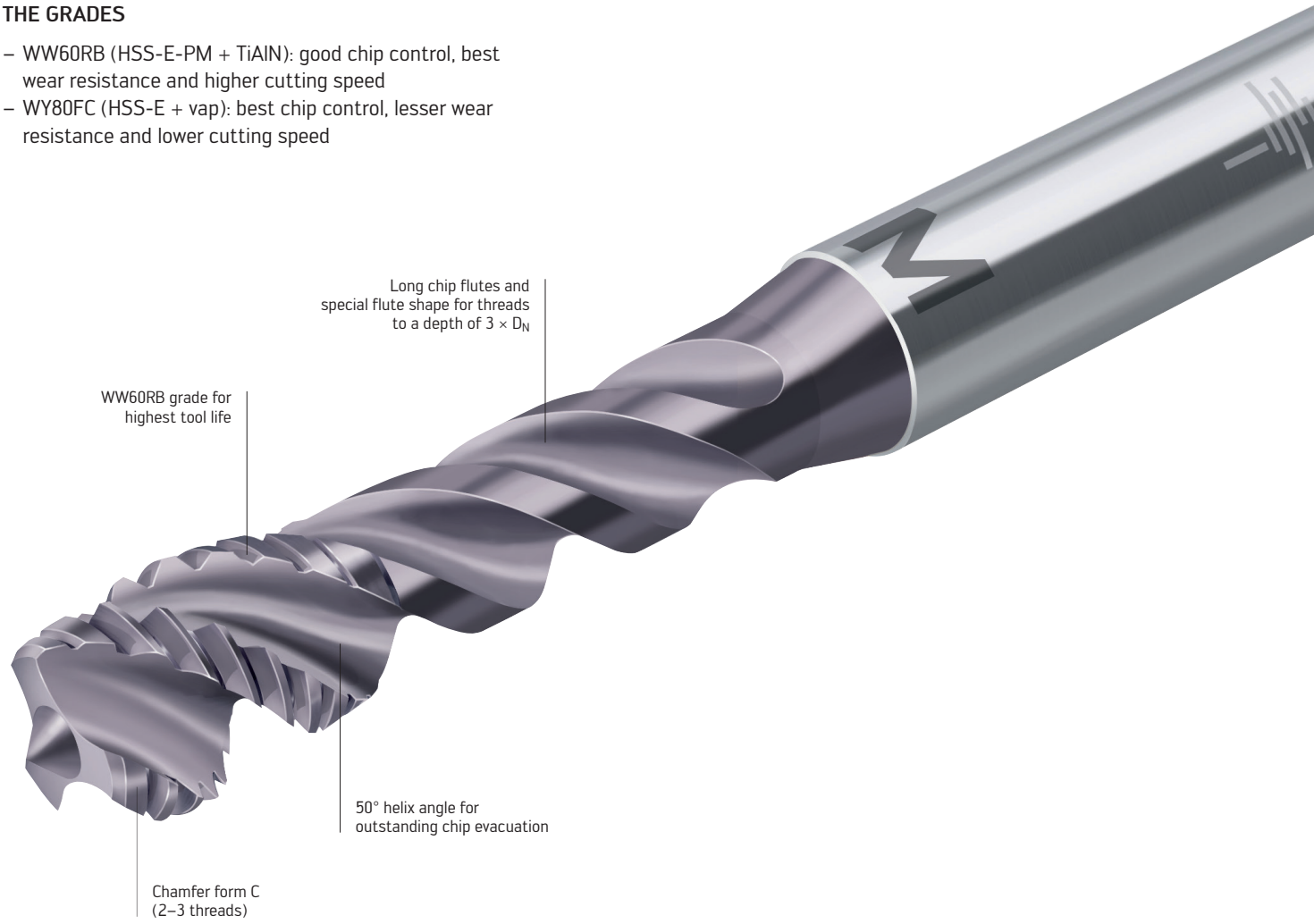
- High-performance blind-hole cut tap
- Designed for stainless steel machining: sharp cutting edges, fast helix and large rake angle
- Excellent chip evacuation due to 50° helix angle

THE APPLICATION

- Blind hole threads up to 3 x D_N
- Stainless steel: stainless steels up to 300 HB (austenitic and duplex)
- Steel: steels from 200 to 350 HB as secondary application

THE GRADES

- WW60RB (HSS-E-PM + TiAlN): good chip control, best wear resistance and higher cutting speed
- WY80FC (HSS-E + vap): best chip control, lesser wear resistance and lower cutting speed

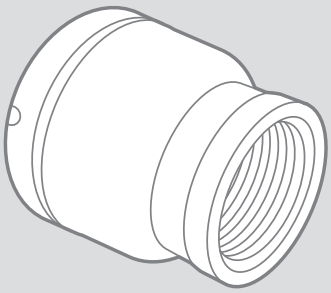


The Walter Supreme product line

Within the Supreme line, you will find tools with optimized machining qualities. These tools are always the first choice if high cutting speeds and long tool life are required when machining medium to large batch sizes.

Supreme tools are designed for machining very specific material groups, and often exceed the performance of comparable tools.

G1/4 TC142 coupling piece

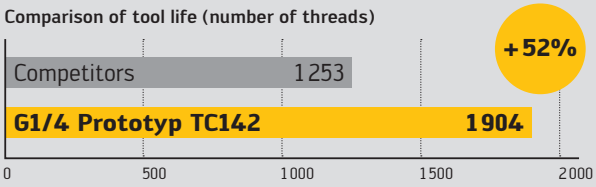


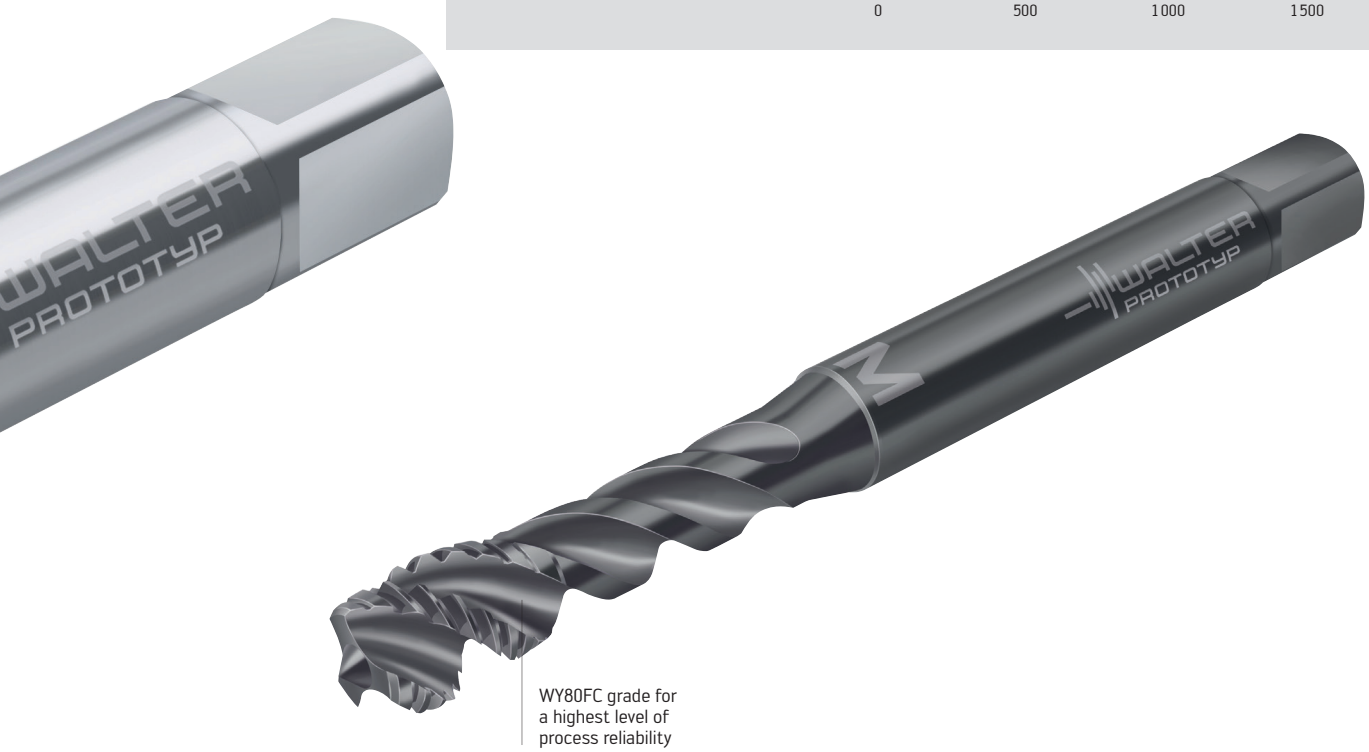
Material:	316 Ti
Tensile strength:	Approx. 175 HB
Tool:	**TC142-G1/4-LO-WY80FC**
Coating:	TiAlN
Hole type:	Blind hole
Thread depth:	2 × D_N
Cooling lubricant:	Emulsion 7%

Cutting data:

	Competitors	**TC142**
n	318 rpm	318 rpm
Cutting speed v_c	20 SFM	20 SFM

Comparison of tool life (number of threads)





WY80FC grade for a highest level of process reliability

BENEFITS FOR YOU

- Maximum tool life and high reliability for stainless steel machining
- Secure machining of deep threads in tough materials
- Two grades with unique strengths

Short chips - safe process.

NEW TO THE RANGE

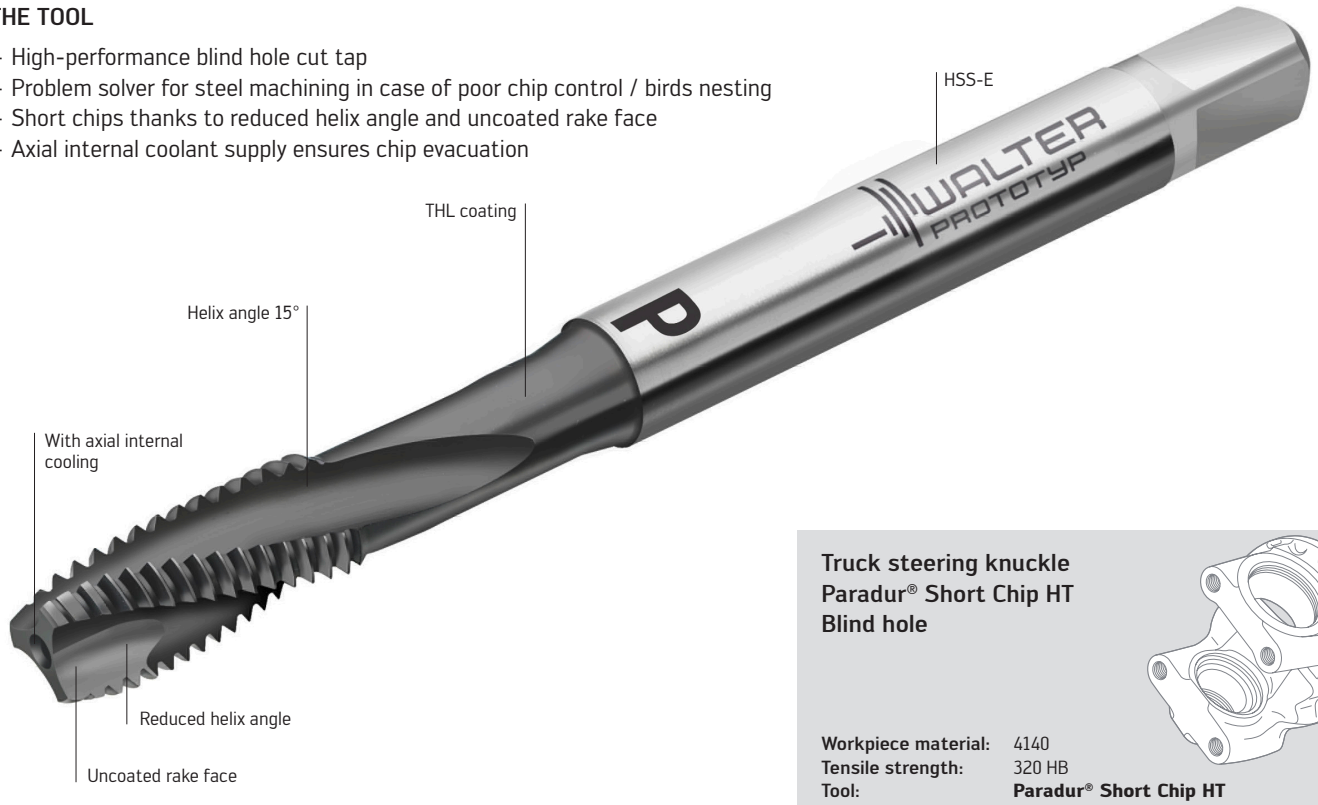
DIMENSION RANGE

DIN/ANSI
UNC 1/4-20 - UNC 5/8-11

DIN
M5 - M12
MF 12x1.5 - MF 16x1.5

THE TOOL

- High-performance blind hole cut tap
- Problem solver for steel machining in case of poor chip control / birds nesting
- Short chips thanks to reduced helix angle and uncoated rake face
- Axial internal coolant supply ensures chip evacuation



Paradur® Short Chip HT **Type:** 20410TR

THE APPLICATION

- Blind hole threads up to 3.5 x D_N
- Steels from 230 to 370 HB as main application
- Ductile cast iron (GJS) and Al wrought alloys as secondary application

BENEFITS FOR YOU

- High degree of process reliability even with deeper blind hole threads
- No birds nesting thanks to short chips
- Interference contours no problem thanks to short chips

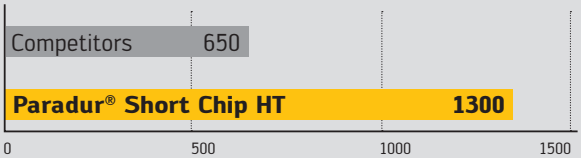
Truck steering knuckle
Paradur® Short Chip HT
Blind hole

Workpiece material:	4140
Tensile strength:	320 HB
Tool:	**Paradur® Short Chip HT** 20410TR-M16x1,5
Coating:	THL
Hole type:	Blind hole
Thread depth:	38 mm
Cooling lubricant:	Emulsion
Adaptor:	Floating holder

Cutting data

n	298 rpm
Cutting speed v_c	50 SFM

Comparison of tool life (number of threads)



The tool

- No bird nesting
- 100% longer tool life
- Good thread surface

_ PARADUR® ECO CI CUT TAP

Maximum productivity for cast iron machining.

NEW TO THE RANGE

DIMENSION RANGE

DIN/ANSI
UNC 8-32 - UNC 1-8
UNF 10-32 - UNF 1-12

DIN
UNC 6-32 - UNC 7/8-9
UNF 10-32 - UNF 7/8-14
M 3 - M 30
MF 6x0.75 - MF 30x1.5
G 1/8-28 - G 1 1/2-11

THE TOOL

- High-performance cut tap for grey cast iron machining
- Maximum wear resistance thanks to HSS-E-PM with high surface hardness
- Large number of flutes
- Internal coolant supply secures chip evacuation

THE APPLICATION

- Blind and through hole threads up to 3 x D_N
- Cast iron:
  - Primary application: Grey cast iron (GJL) and Compacted graphite iron (CGI)
  - Secondary application: Nodular cast iron (GJS) up to 2 x D_N
- Non-ferrous materials: AlSi alloys with an Si content > 7%

Paradur® Eco CI

Type: E2031406

BENEFITS FOR YOU

- Highest productivity for grey cast iron machining
- Extremely high tool life thanks to extraordinary wear resistance
- Short machining time due to high cutting speeds

_ PARADUR® X·PERT K CUT TAP

Maximum reliability for cast iron machining.

NEW TO THE RANGE

DIMENSION RANGE

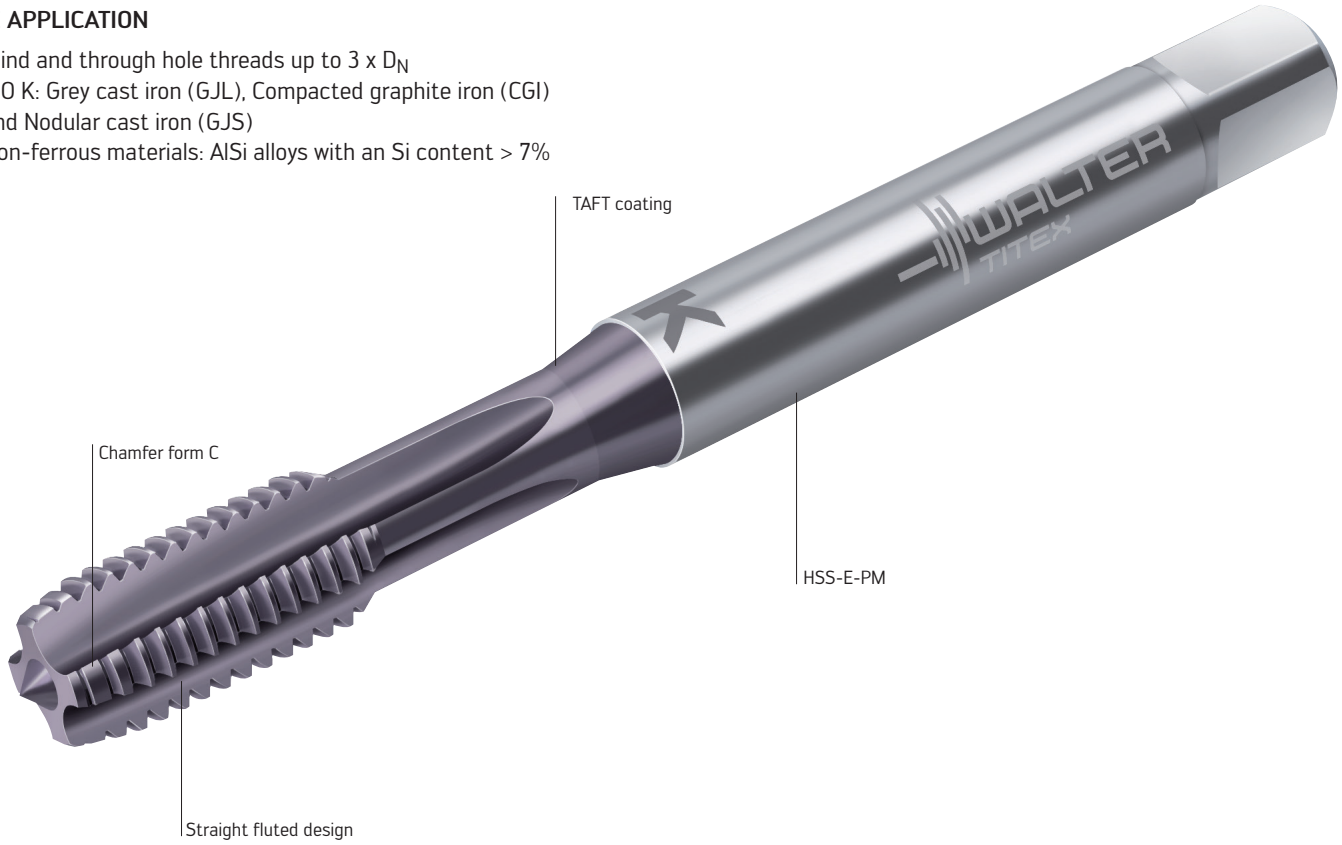
DIN/ANSI	DIN
UNC 2-56 - UNC 3/4-10	M 3 - M 20

THE TOOL

- Sturdy cut tap for cast iron machining
- Good wear resistance thanks to HSS-E-PM
- Large number of flutes

THE APPLICATION

- Blind and through hole threads up to 3 x D_N
- ISO K: Grey cast iron (GJL), Compacted graphite iron (CGI) and Nodular cast iron (GJS)
- Non-ferrous materials: AlSi alloys with an Si content > 7%



Paradur® X·pert K **Type:** K2031407

BENEFITS FOR YOU

- Good performance in all ISO K materials
- Reliable even in case of unfavorable conditions

– PARADUR® X·PERT N CUT TAP

The solution for soft and sticky aluminum alloys.

NEW TO THE RANGE

DIMENSION RANGE

DIN/ANSI
UNC 2-56 - UNC 3/8-16
STIUNC 2-56 - STIUNC 1/4-20
STIUNF 10-32 - STIUNF 1/4-28
M 2 - M 8

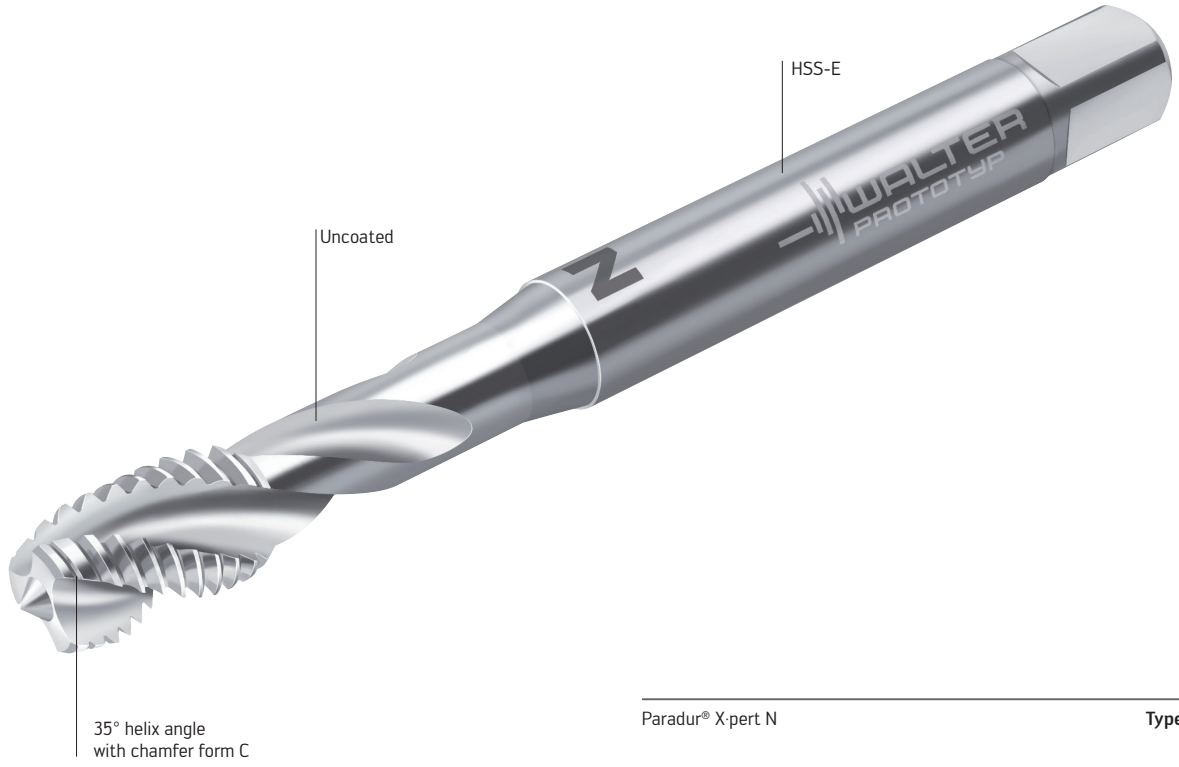
DIN
UNC 2-56 - UNC 3/8-16
STIUNC 6-32 - STIUNC 1/4-20
STIUNF 10-32 - STIUNF 1/4-28
M 1.6 - M 20
MF 8x1 - MF 20x1.5
M 3 LH - M 16 LH
G 1/8-28 - G 1-11

THE TOOL

– HSS-E cut tap
– Designed for soft and sticky aluminum alloys: sharp cutting edges and broad chip flutes
– Excellent self guidance due to low relief angles

THE APPLICATION

– Blind hole threads up to 3 x D_N
– Long-chipping materials with up to 200 HB
– Non-ferrous materials:
  • AlSi alloys with an Si content of up to 7%
  • Pure copper
– Materials with difficult cutting properties:
  • Pure Titanium and Nickel
– Plastics: Thermoplastics



Paradur® X·pert N **Type:** N205166

BENEFITS FOR YOU

– High process reliability because of excellent chip formation
– Little tendency to form built up edges thanks to bright finish
– No miscutting in soft materials

For the toughest challenges.

NEW

THE TOOL

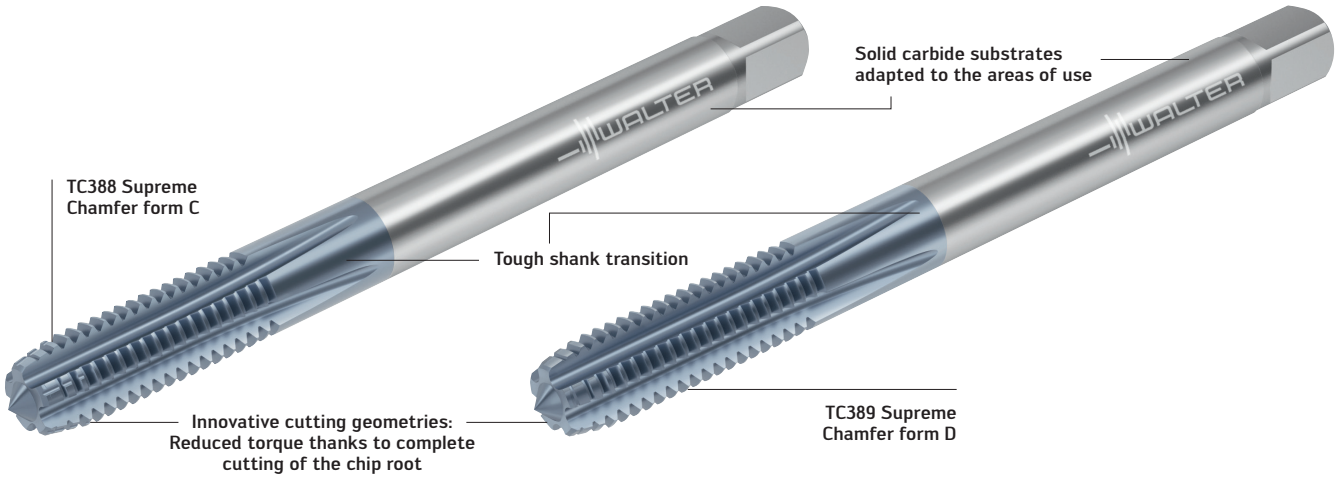
- Solid carbide tap for hard machining
- New cutting geometries for reduced torque when reversing
- Can be used with emulsion
- Suitable for manual rethreading to compensate quenching distortion

Dimension range:

- M3–M16
- G1/8" and G1/4"

THE APPLICATION

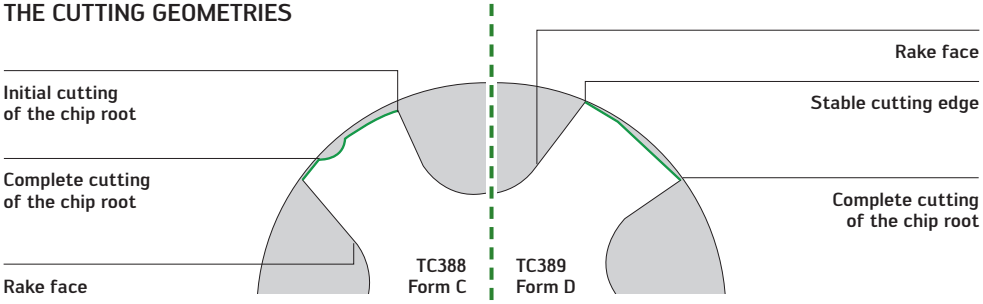
- Blind and through-hole threads up to 2.0 × D_N
- TC388 Supreme:
  - Hard materials with 50–58 HRC
- TC389 Supreme:
  - Hard materials with 55–65 HRC
  - Can be used starting from 50 HRC for through-hole threads



TC388/389 Supreme taps

Fig.: TC388-M8-C0-WJ30BA / TC389-M8-CD-WE10BA

THE CUTTING GEOMETRIES

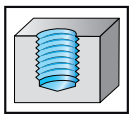
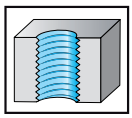


Watch the product video:
www.youtube.com/waltertools

BENEFITS FOR YOU

- High level of process reliability thanks to special cutting geometries
- Low cost per thread thanks to high tool life quantity and fast machining time
- No oil required; can be used with emulsion

Taps for all needs.

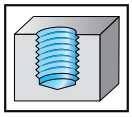
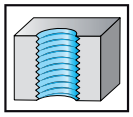



Tailored to different requirements:
Universal cut taps and cut taps for particular applications.

	Dimension range	Tool characteristics	Advantages	Material groups P	M	K	N	S	H	O
Paradur®/ Prototex® Eco Plus 	M, MF, UNC, UNF, G	– Universal high-performance cut taps, made from HSS-E-PM – Outstanding chip control	– Highest productivity in a wide range of materials and applications – Excellent process reliability	●●	●●	●●	●●			
TC117 Advance 	UNC, UNF, UN, UNS, STIUNC, STIUNF, M	– Universal HSS-E cut taps – Outstanding chip control – Large variety of standard tools	– High productivity in a wide range of materials and applications – Excellent process reliability – Machining of 2B and 3B tolerances with the same tap	●●	●●	●●	●●			
TC217 Advance 										
TC115 Perform 	M, MF, UNC, UNF	– Universal HSS-E cut taps – Excellent self guidance	– Cost-efficient and reliable machining of small and medium batch sizes – Floating chucks can be utilized even in very soft materials	●●	●●	●●	●			
TC216 Perform 										
Paradur® Short Chip HT 	M, MF, UNC	– Reduced helix angle and uncoated rake face – Problem solver	– Safe process thanks to short chips – No birds nesting	●●		●	●			
TC142 Supreme 	M, MF, G, UNC, UNF	– Sharp cutting edges, fast helix and large rake angle – For stainless steels	– Max tool life & reliability for stainless steels – Secure machining of deep threads in tough materials	●	●●					
Paradur® Eco CI 	M, MF, UNC, UNF	– HSS-E-PM with high surface hardness – For grey cast iron (GJL)	– Highest productivity for grey cast iron machining – Extremely high tool life			●●	●●			●●
Paradur® Advance X·pert K 	M, UNC	– Sturdy cut tap for cast iron machining – For GJL, CGI, and GJS	– Good performance in all ISO K materials – Reliable even in case of unfavorable conditions			●●	●			
Paradur® Advance X·pert N 	M, MF, UNC, G	– Sharp cutting edges and broad chip flutes – For sticky Al alloys	– High process reliability because of excellent chip formation – Little tendency to form built up edges				●●	●		●

Three for all applications: The new thread former generation.

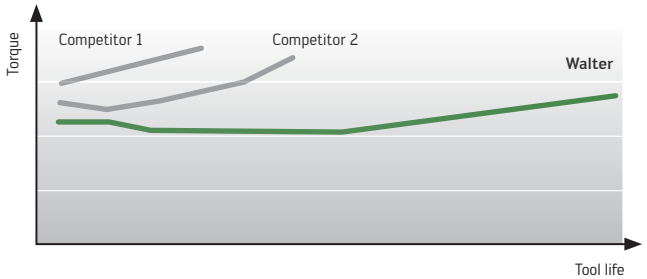
NEW

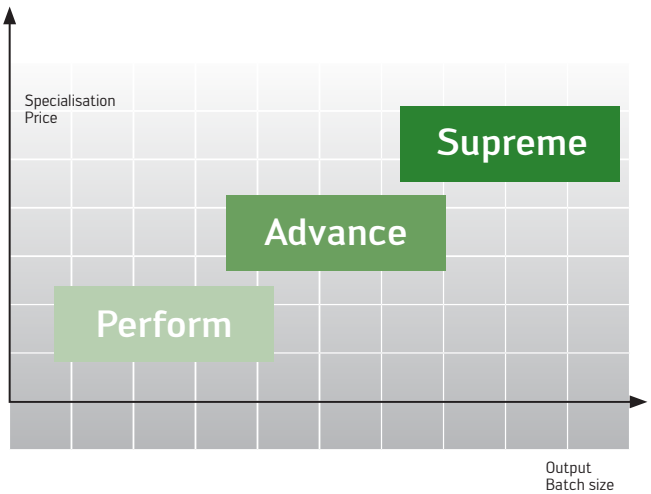



Tailored to different requirements:
Three thread formers with individual geometries and coatings for machining all formable materials and specifically for ISO P.

	Area of use	Tool characteristics	Advantages	Material groups P	M	K	N	S	H	O
TC470 Supreme 	ISO P	– Solid carbide thread formers – New geometry, coating, and surface treatment	– Maximum tool life – Low cost per thread – For ISO P materials	●●	●	●	●	●		
TC430 Supreme 	ISO P	– HIPIMS and TiN coating – Higher number of forming edges – HSS-E-PM – Short threaded part	– Maximum tool life – For ISO P materials	●●	●	●	●	●		
TC420 Supreme 	Universal	– TiN and TiCN coating – HSS-E-PM – Short threaded part	– Long tool life – For all formable materials	●●	●●	●	●●	●		
TC410 Advance 	Universal	– TiN coating – HSS-E – Long threaded part	– For small and medium batch sizes – For all formable materials	●●	●●	●	●●	●		

Reduced torque and longer tool life thanks to new geometry as well as pre-treatment and post-treatment





Specialist in chip-free ISO P machining.

NEW

THE TOOL

- HSS-E-PM thread former
- With and without lubrication grooves
- With and without internal coolant (axial/radial)
- Tolerances: 6HX and 6GX

THE GRADE

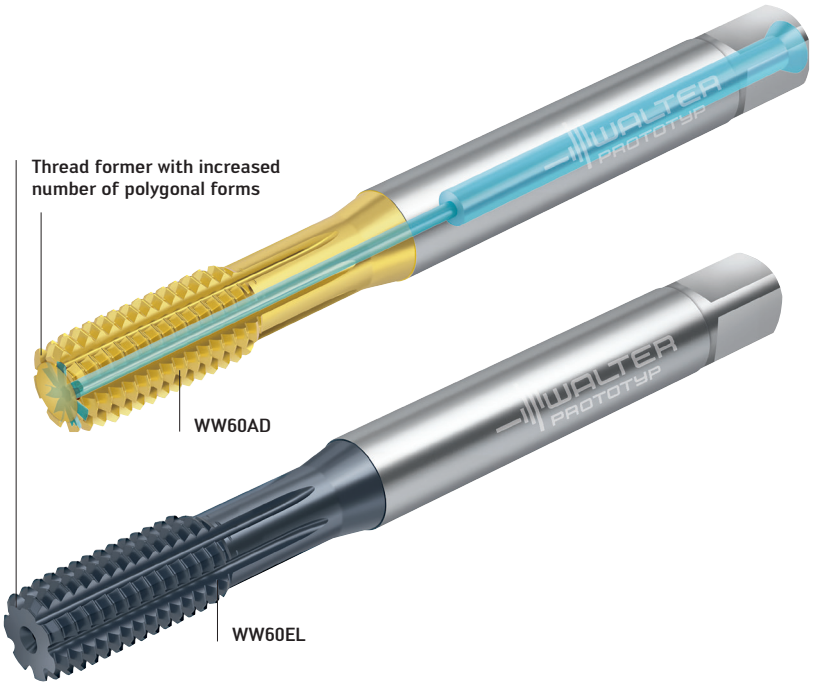
- WW60AD (HSS-E-PM + TiN)
- WW60EL (HSSE-PM + TiAlN)

Dimension range:

- Metric: M2–M20
- Metric fine: M8 × 1–M16 × 1,5

THE APPLICATION

- For blind-hole and through-hole threads
- Thread depth up to 3.5 × D_N
- Specialist for ISO P materials
- All formable steel materials
- Areas of use: General mechanical engineering, automotive and energy industries, etc.



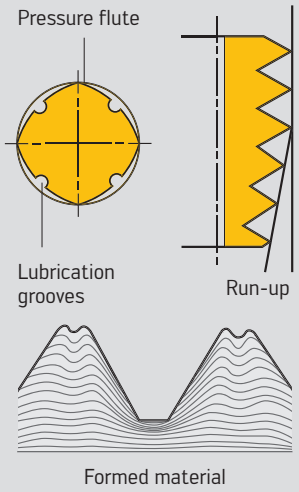
TC430 Supreme thread former **Fig.:** TC430

BENEFITS FOR YOU

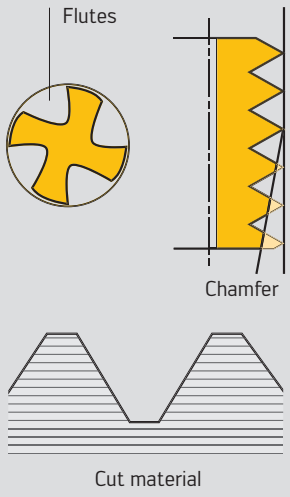
- Maximum tool life with ISO P
- No chip formation, no miscutting, improved surface finish
- Stable tool design to counteract the risk of breakages
- Very strong formed thread

Non-cutting production of internal threads

Thread former:



Tap:



_TC420 SUPREME THREAD FORMER

Superior performance, for universal use.

NEW

THE TOOL

- HSS-E-PM thread former
- With and without lubrication grooves
- With and without internal coolant (axial/radial)
- Tolerances: 6HX and 6GX

THE GRADE

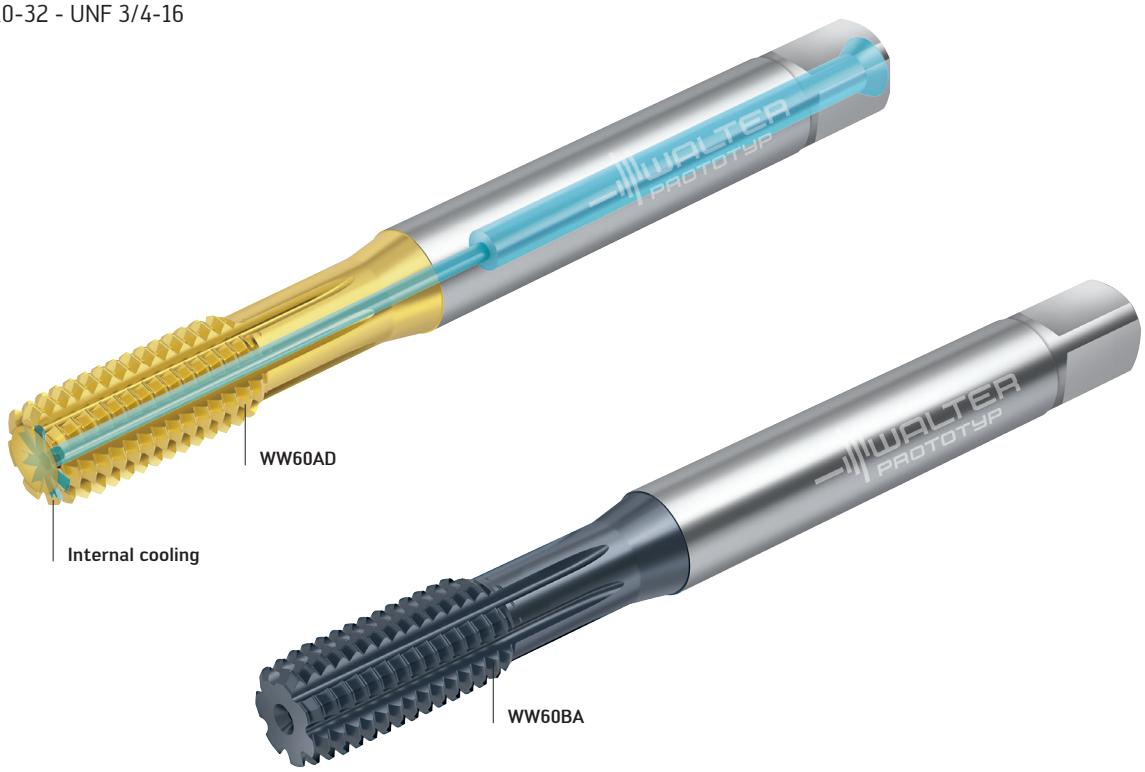
- WW60AD (HSS-E-PM + TiN)
- WW60BA (HSS-E-PM + TiCN)

Dimension range:

- Metric: M2–M20
- Metric fine: M8 × 1–M16 × 1.5
- UNC: UNC 10-32 - UNC 3/4-10
- UNF: UNF 10-32 - UNF 3/4-16

THE APPLICATION

- Blind-hole and through-hole threads
- Thread depth up to $3.5 \times D_N$
- Can be used universally for steel, stainless steels, cast iron and non-ferrous materials
- All formable materials
- Areas of use: General mechanical engineering, automotive and energy industries, amongst others



TC420 Supreme thread former **Fig.:** TC420

Watch the product video:
www.youtube.com/waltertools

BENEFITS FOR YOU

- Can be used universally
- Up to 30% lower torque
- High cutting speeds possible
- Better surface finish than that achieved using thread cutting

Even more powerful thanks to new geometry.

NEW

THE TOOL

- Universal HSS-E thread former
- New geometry and very high surface quality
- Reduced torque and longer tool life
- For small to medium batch sizes

THE GRADES

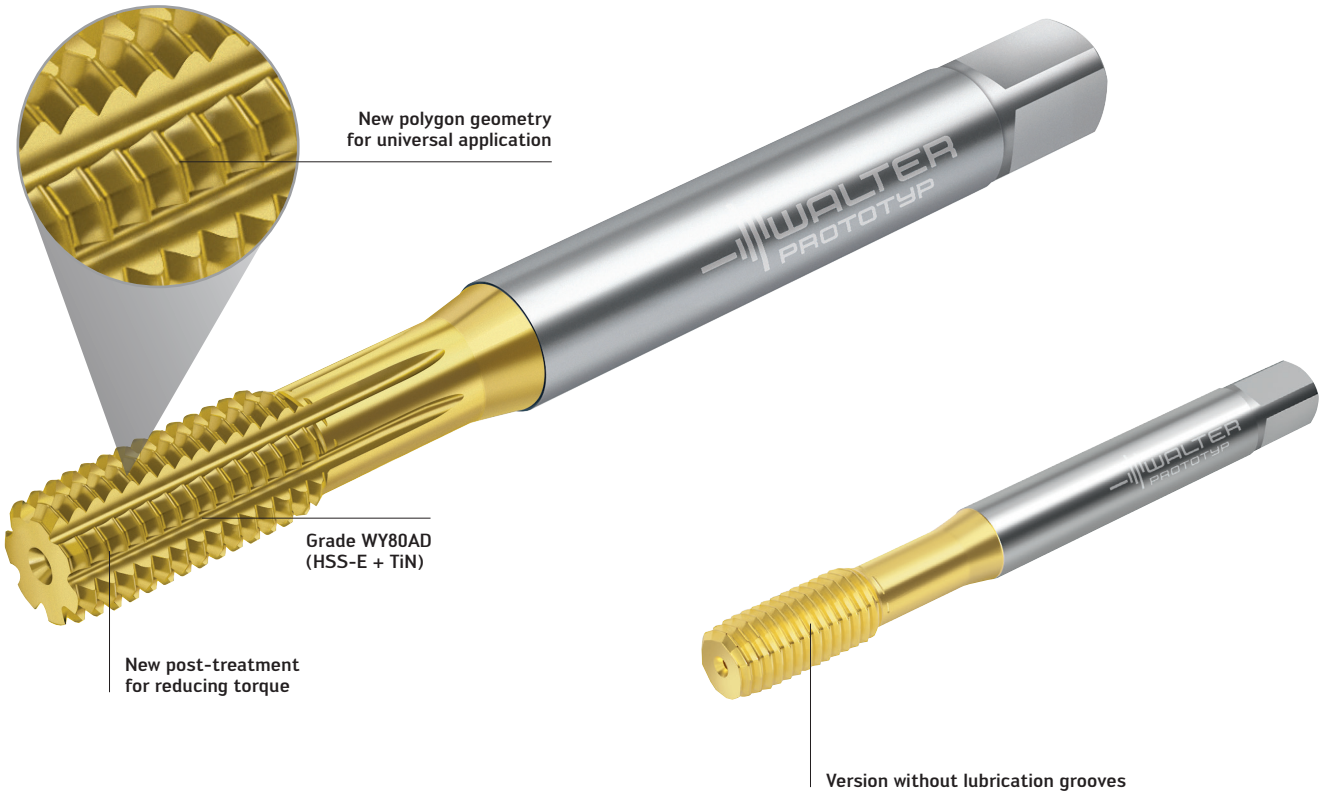
- WY80AD (HSS-E + TiN)

Dimension range:

- Metric: M1–M24
- Metric fine: M4 × 0.5–M30 × 2
- UNC: UNC 2–56 – UNC 7/8–9
- UNF: UNF 0–80 – UNF 7/8–14
- G: G1/8"–G1"

THE APPLICATION

- Blind-hole and through-hole threads
- Thread depth up to 3.5 × D_N
- Can be used universally for steel stainless steels, cast iron, materials with difficult cutting properties and non-ferrous materials
- All formable materials
- Areas of use: General mechanical engineering, automotive and energy industries, etc.



TC410 Advance thread former

Fig.: TC410-M10-C6-WY80AD and TC410-M10-C0-WY80AD

BENEFITS FOR YOU

- Cost-effective even for small and medium batch sizes
- Can be used in all formable materials
- Reduced torque and longer tool life thanks to new geometry and post-treatment

A cut above the rest for large batch sizes and mass production.

NEW

NEW 19-1

THE TOOL

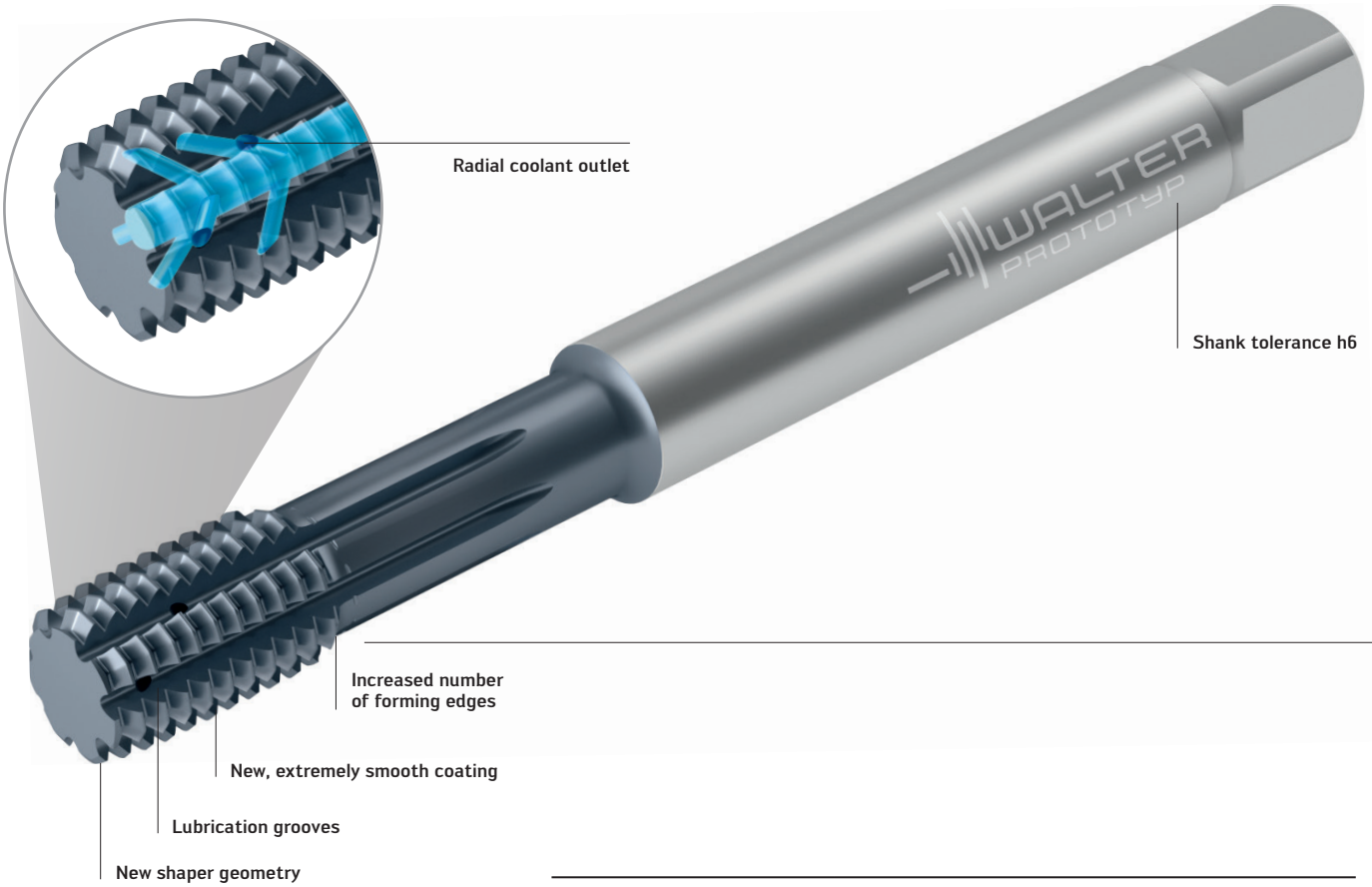
- Solid carbide thread formers
- New geometry, coating and surface treatment
- Grade: WG20EL (solid carbide + TiAlN)

Dimension range:

- Metric: M3–M10
- Metric fine: M10 × 1 – M16 × 1.5

THE APPLICATION

- Blind-hole and through-hole threads
- Thread depth up to 3.5 x D_N
- Specialized for steel (ISO P)
- Areas of use: Ideal for large-scale and mass production



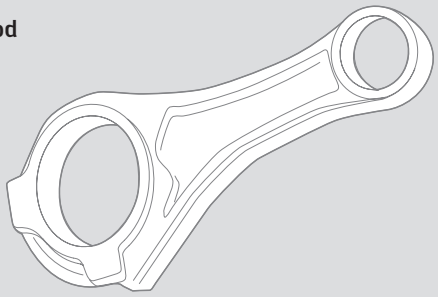
TC470 Supreme thread former **Fig.:** TC470-M10-C2-WG20EL

BENEFITS FOR YOU

- Low cost per thread for large batch sizes
- Maximum tool life thanks to the new substrate, innovative geometry and newly developed coating
- Reduced torque thanks to very high surface quality
- For all formable materials from the ISO P material group

APPLICATION EXAMPLE

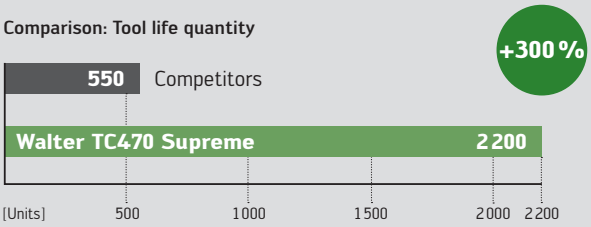
Connecting rod



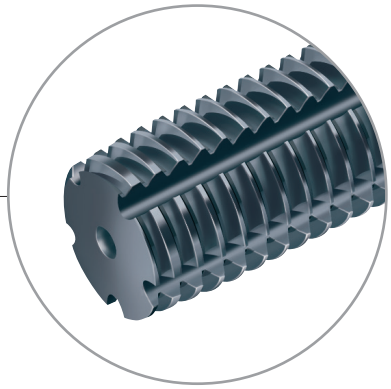
Material: C70s6

	Competitors (HSS-E)	**TC470 Supreme Solid carbide**
v_c (sfm)	42	79
Tool life quantity (units)	550	2200

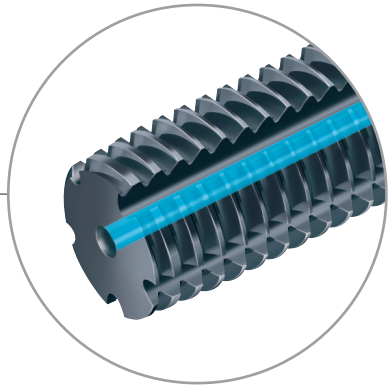
Comparison: Tool life quantity



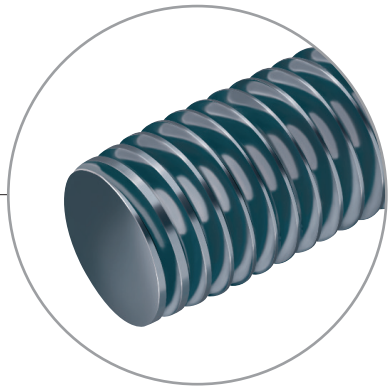
Additional variants:



With lubrication grooves



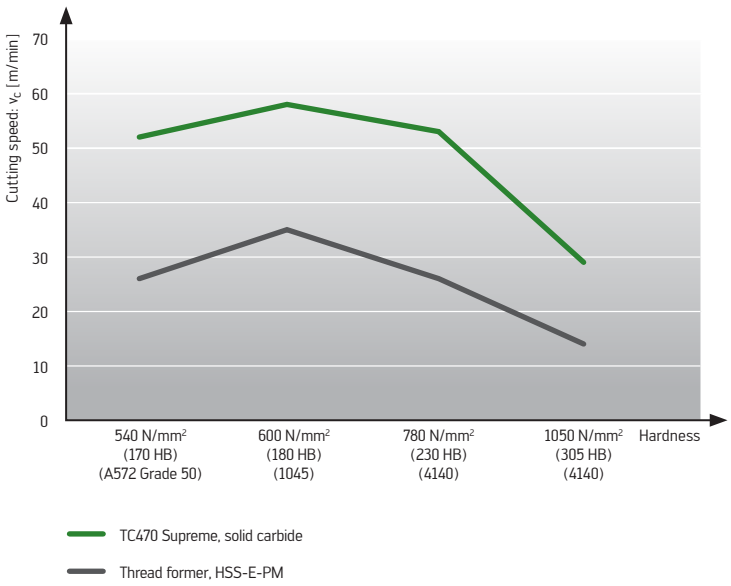
With lubrication grooves and axial internal coolant

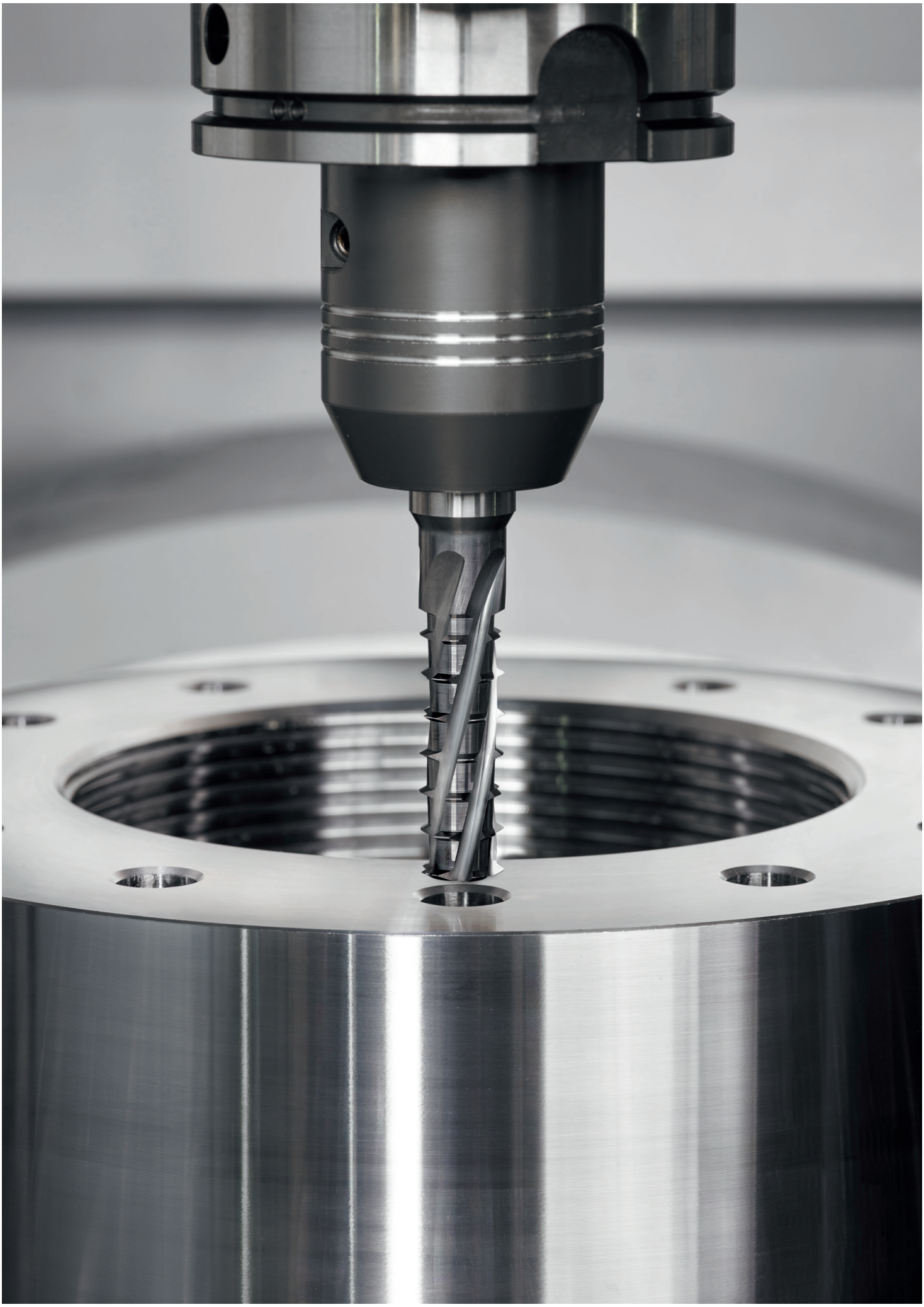


Without lubrication grooves, without internal coolant

Comparison of cutting data

M10 · 2 × D_N · blind-hole machining





Hard machining times two: Core hole and thread in one operation.

NEW

THE TOOL

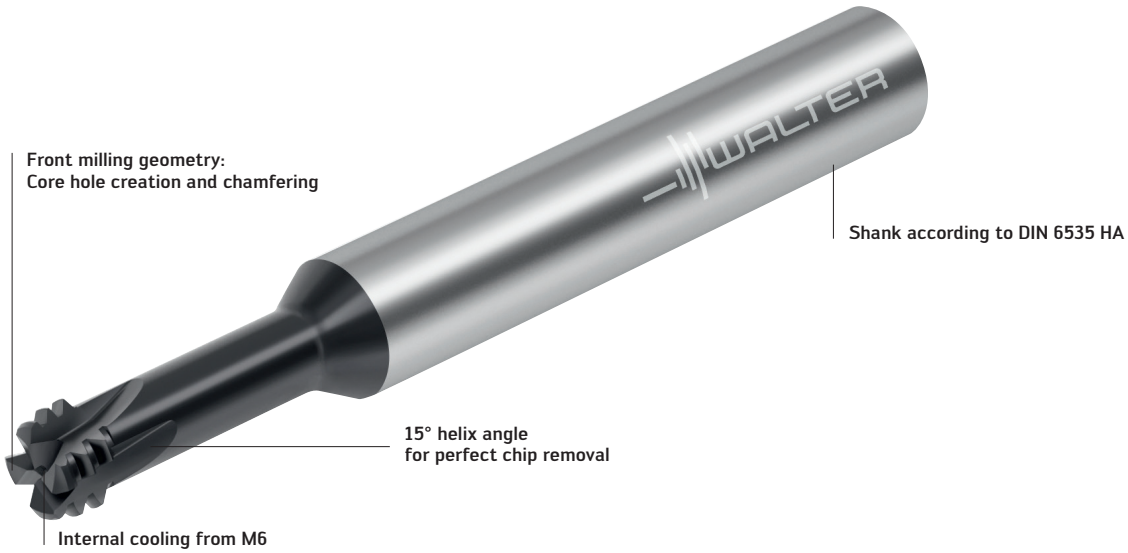
- Orbital thread mill drill for hard machining
- Creation of core hole and thread in one operation
- Can also be used for chamfering
- IMPORTANT: Left-hand cutting tool

Dimension range:

- M3–M16
- UNC 10–UNC 3/4

THE APPLICATION

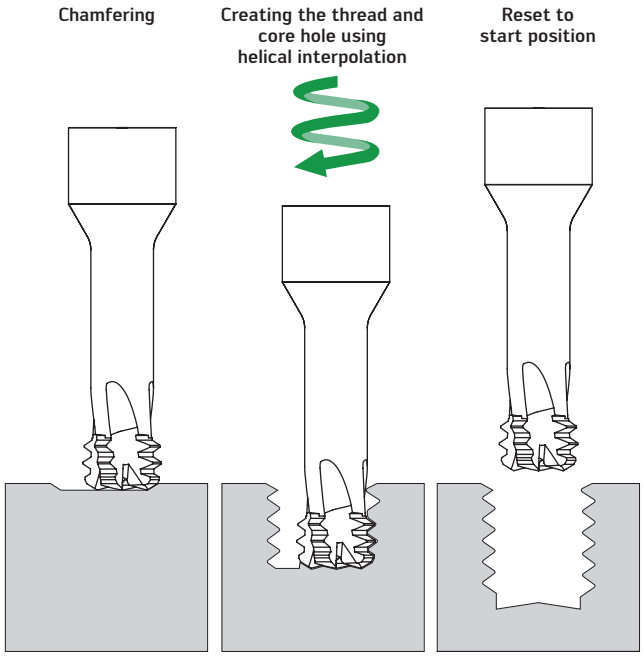
- Blind-hole and through-hole threads
- Can be used universally for steel and hard materials with 44–65 HRC
- Thread depths of 2.0 × D_N and 2.5 × D_N



TC685 Supreme thread milling cutter **Fig.:** TC685-M8-A1D-WB10RC

THE STRATEGY

The TC685 is designed as a left-hand cutting version. Right-hand threads are therefore machined synchronously. Chamfering should take place before thread milling. Cooling with compressed air enables maximum tool life quantities in materials > 50 HRC.



BENEFITS FOR YOU

- Maximum process reliability and tool life quantity
- Very low cost per thread
- Reduces the number of tool positions

Reduced cutting pressure – increased productivity.

NEW

THE TOOL

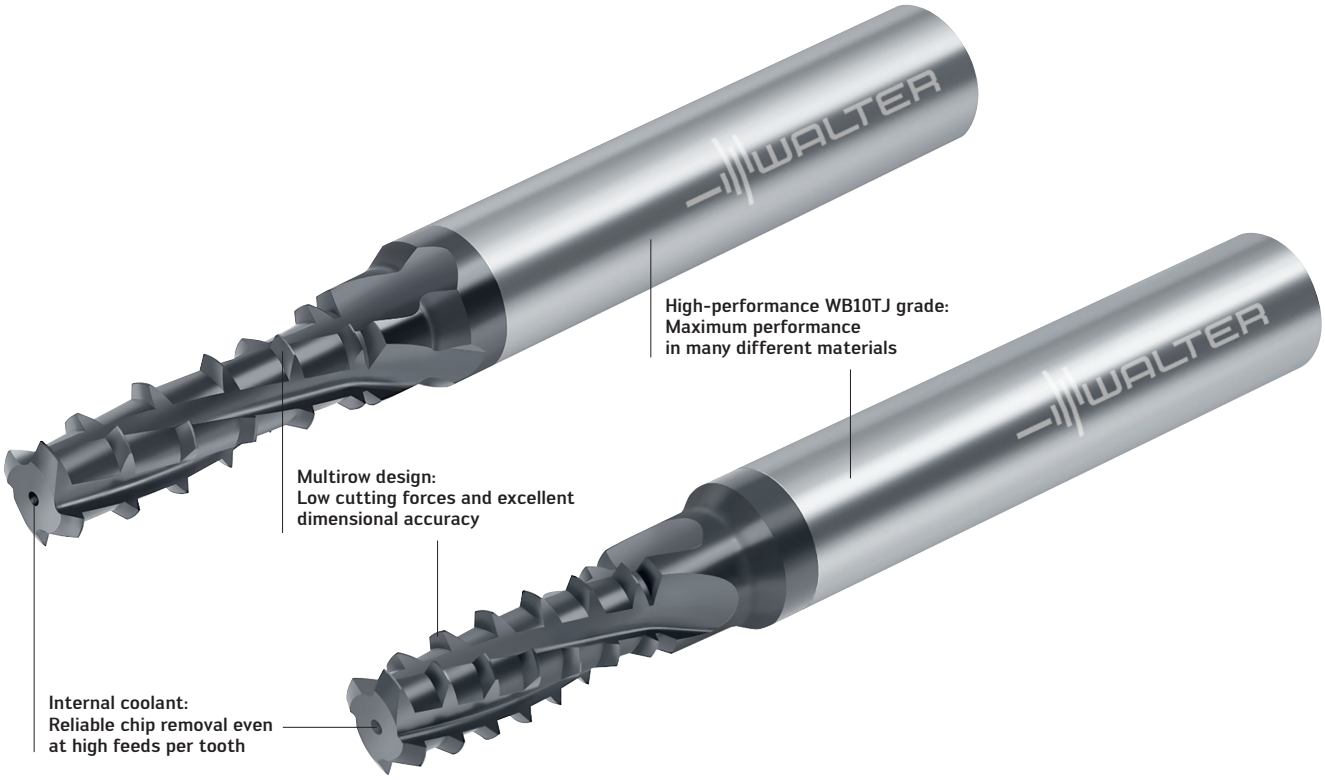
- Multirow thread milling cutter for universal application
- Designed for high cutting speeds and high feeds per tooth
- Shank according to DIN 6535 HA

Dimension range:

- M4–M20
- UNC 8–UNC 7/8

THE APPLICATION

- Blind-hole and through-hole threads
- Can be used universally for steel, stainless steels, cast iron, materials with difficult cutting properties and non-ferrous materials up to 48 HRC
- Thread depths of $2 \times D_N$ and $2.5 \times D_N$



TC620 thread milling cutter **Fig.:** TC620-M8-A1E-WB10TJ / TC620-M8-A1D-WB10TJ

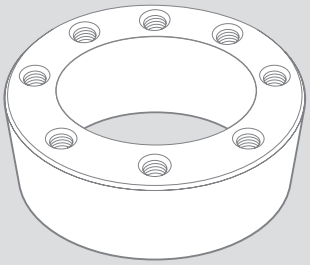
Watch the product video:
www.youtube.com/waltertools

BENEFITS FOR YOU

- Low costs per thread thanks to fast machining time and high tool life quantity
- High level of process reliability and easy handling due to extremely infrequent radius correction
- Very good results even under unfavorable conditions and difficult materials

APPLICATION EXAMPLE

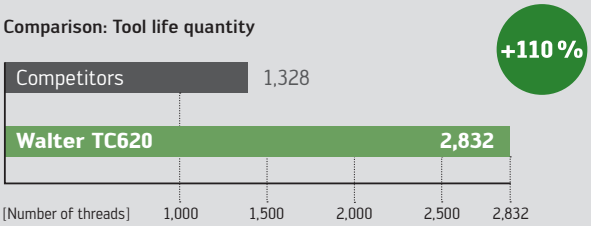
Thread milling – M10



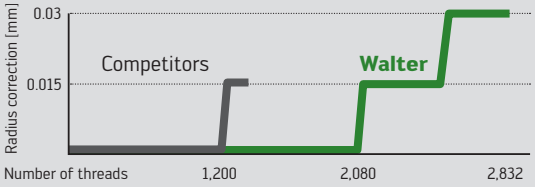
Material:	ISO P - 1.0503 (C45)
Strategy:	Conventional milling

	Competitors	TC620-M10-A1D-WB10TJ
v_c (sfm)	328	426
f_z (in)	0.0024	0.0079
Tool life quantity	1,328	2,832
Machining time (sec)	3.8	2.6

Comparison: Tool life quantity



Radius corrections



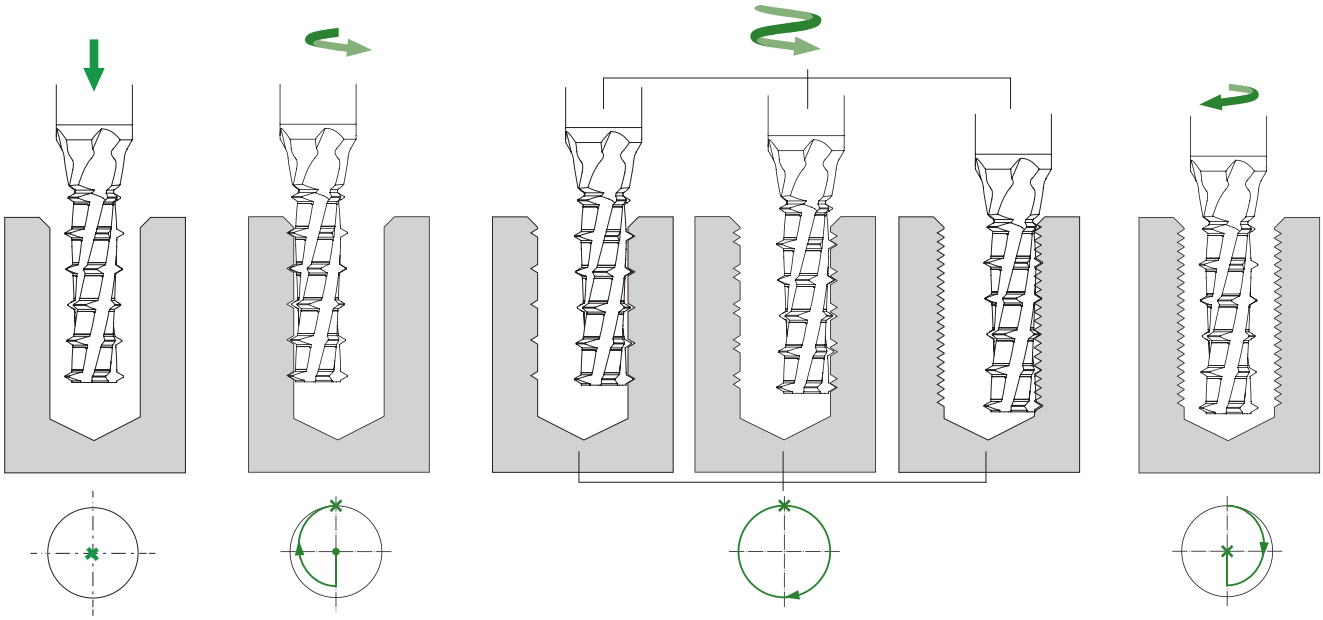
Easy handling, e.g. in unmanned production environments:
Radius corrections are only required after 2080 threads.

THE DESIGN

Thanks to the multirow tool design, the TC620 thread milling cutters impress with low cutting forces. This enables higher feeds per tooth than on conventional thread milling cutters.
The result: Lower wear and therefore higher tool life quantities.
The low cutting pressure means that radius corrections are rarely required.

THE STRATEGY

Once the row spacing is bridged, the thread is complete.
Conventional milling is advantageous when machining steel. Climb milling is recommended for tough materials, for example stainless steel. Some materials require a spring pass.



Positioning the milling cutter over core hole and plunging

Entrance loop

Producing the thread using helical interpolation until the row spacing is bridged

Exit loop

Three families – uniquely productive and versatile.

NEW

THE TOOL

- Universal indexable insert thread milling cutter
- Designed for high cutting speeds and high feeds per tooth

Single-row tools:

- With flute for completely cylindrical threads
- With Weldon shank and Walter Capto™ interface

THE APPLICATION

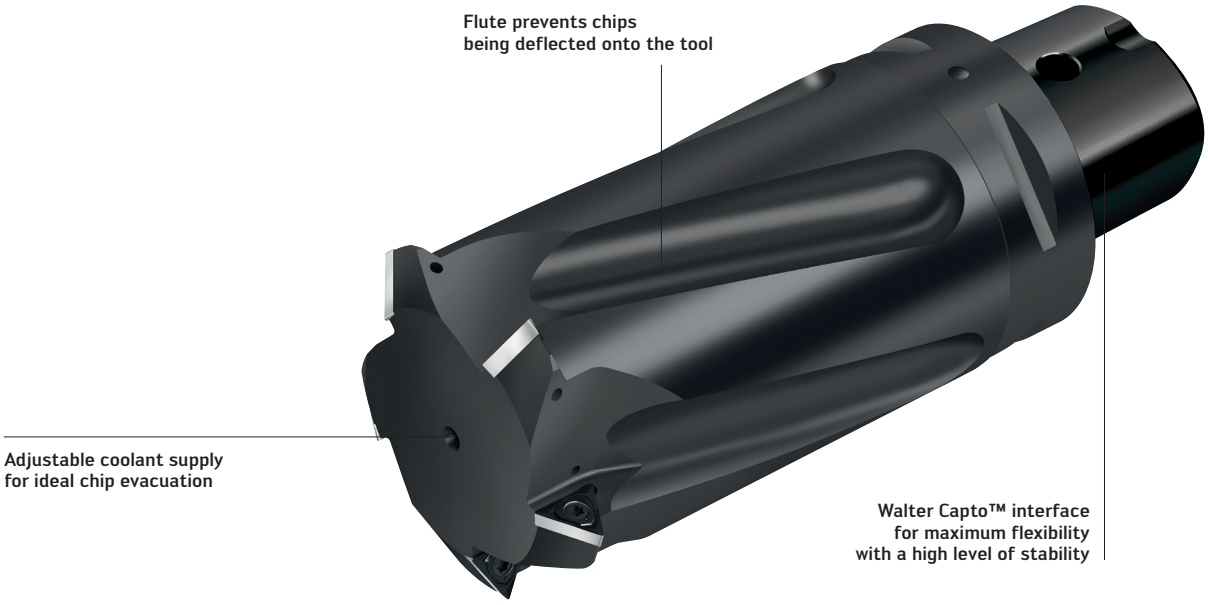
- For threads with a nominal diameter from 24 mm/1 in
- Pitch range: 1.5–10 mm/18–4 TPI
- Can be used universally for steel, stainless steels, cast iron, materials with difficult cutting properties and non-ferrous materials up to 55 HRC

THE THREAD MILLING INSERT

- Positive basic shape with three cutting edges
- Wear-resistant, universal grade: WSM37S
- Defined corner radii for producing threads in accordance with various standards

Two geometry variants:

- D67: Universal geometry for maximum tool life quantity
- D61: With anti-vibration land for a high level of operational smoothness with long projection lengths and difficult conditions



Powered by
Tiger·tec®Silver

T2713 thread milling cutter **Fig.:** T2713-73-C6-5-14

BENEFITS FOR YOU

- **100% productivity:** Fast machining and high tool life quantity
- **100% process reliability:** Easy handling and few radius corrections
- **100% quality:** High operational smoothness and completely cylindrical threads
- **100% flexibility:** Various different thread pitches and lengths

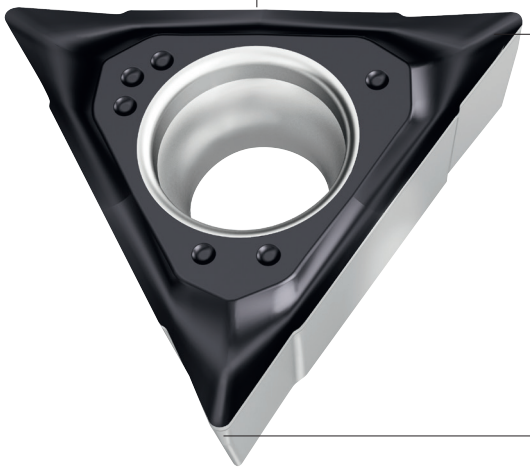
Watch the product video:
www.youtube.com/waltertools

NEW ADDITION TO THE PRODUCT RANGE

T2713-94-C8-5-22
- For threads from M125/UN 5"
- With Walter Capto™ C8 interface

P26300-2204-D61 WSM37S
- For the pitch range 6–10 mm and 4 TPI

P26310-..G11-D61 WSM37S
- With 55° flank angle, for G threads (BSP)
- Designed for single-row tools



P26310 indexable insert **Fig.:** P26310-09G11-D61 WSM37S

THE STANDARD RANGE

- Different dimensions:
  UNC 1"–UN 5" / M24–M125 / G1"–G3 1/2"
- Different projection lengths:
  $2.0 \times D_N$, $2.5 \times D_N$ and $3.0 \times D_N$
- Tools for UN threads also available with inch shank

Also available from:

Walter Xpress

T2711-29-W32-3-09-3-24

T2712-29-W32-3-09-2-36

T2713-29-W32-3-09

C – Milling

High-feed milling at lightning speed.

NEW

NEW 19-1

THE TOOL

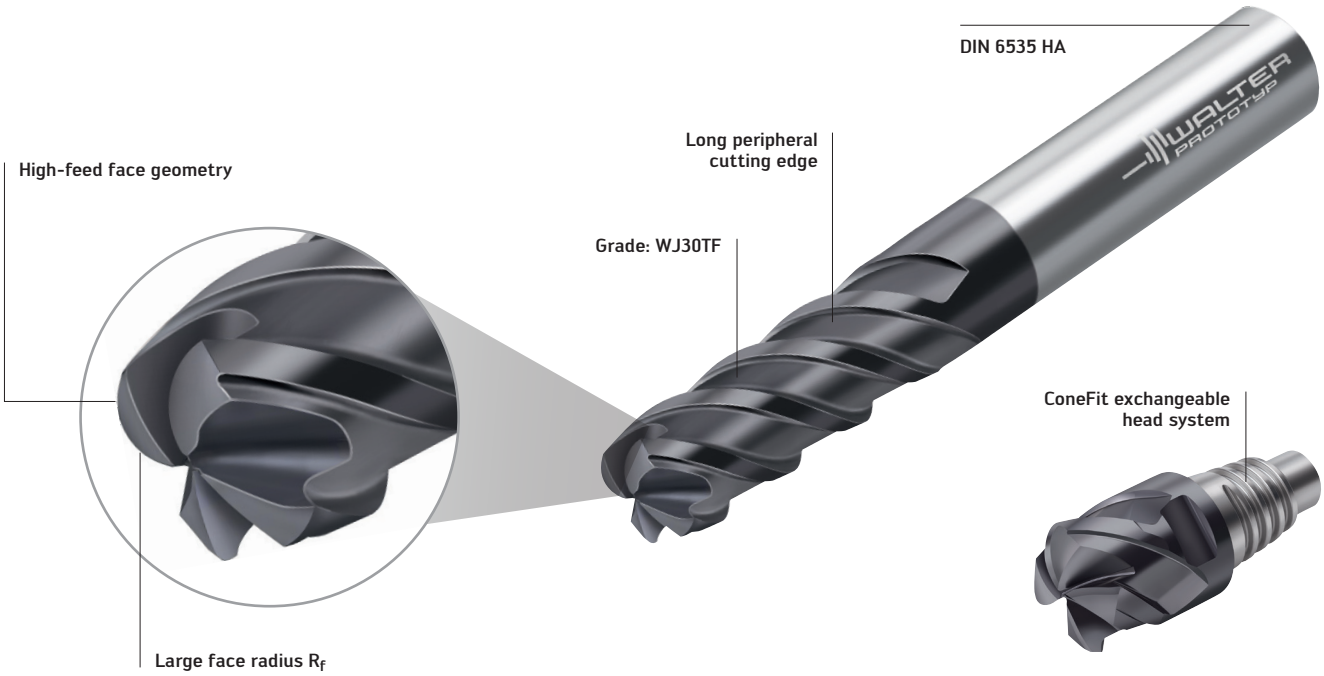
- Solid carbide milling cutter with high-feed face geometry
- Designs with both cylindrical shank and ConeFit exchangeable head system
- Long peripheral cutting edge for good chip removal and for providing support when machining walls
- Dia. 1–25 mm / 1/8–1"
- z = 2–4

THE GRADE

- WJ30TF (for ISO groups P, M, K and S)

THE APPLICATION

- Can be used universally for steel, stainless steels, cast iron, materials with difficult cutting properties and non-ferrous materials
- Near-net roughing with high feeds per tooth at low depth of cut
- Machining operations for pocket, groove and freeform surfaces
- Areas of use: General mechanical engineering, mold and die making



Flash

MC025 Advance solid carbide milling cutter

Fig.: WJ30TF

BENEFITS FOR YOU

- High-feed tools available from dia. 1 mm
- High process reliability thanks to low radial load on the tool
- Low inventory costs thanks to universal usability
- Can be reconditioned multiple times

High-feed milling at the highest level.

NEW 19-1

NEW

THE TOOL

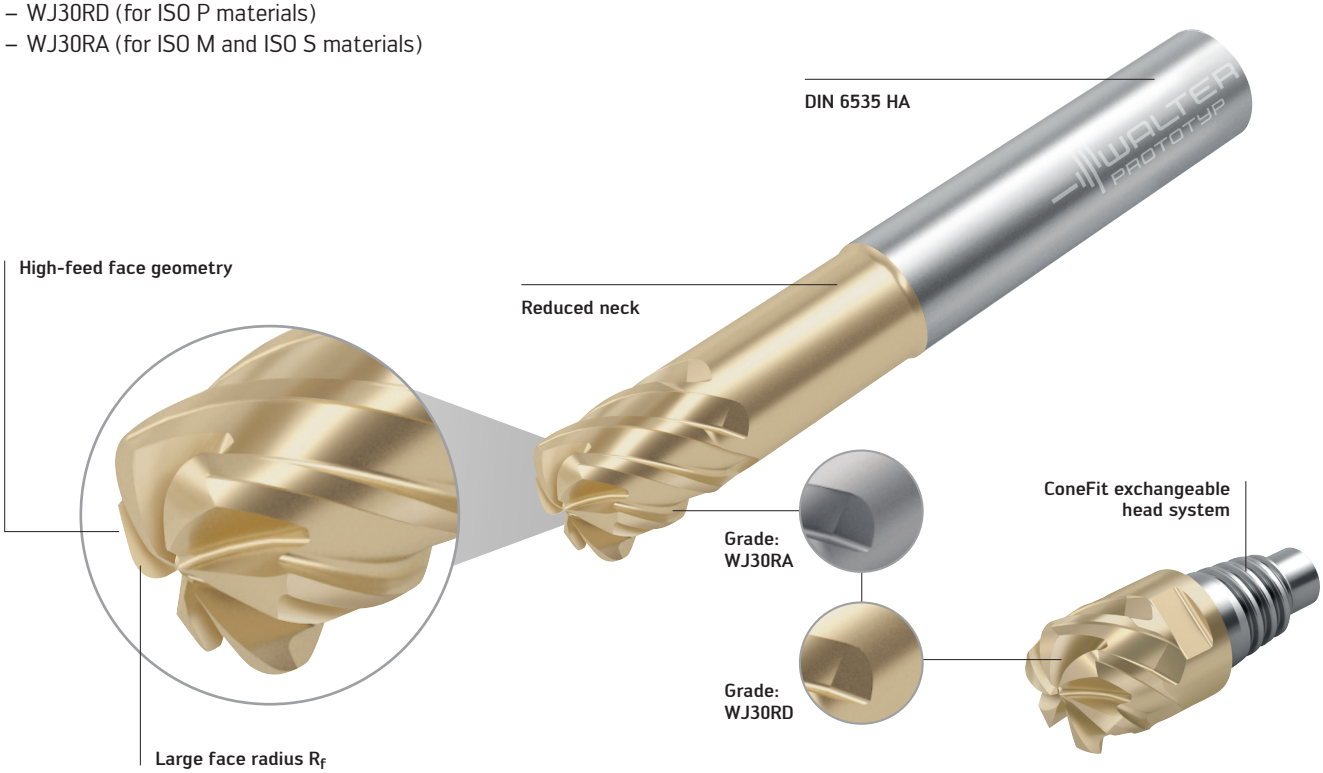
- Solid carbide milling cutter with high-feed face geometry
- With cylindrical shank and ConeFit exchangeable head system
- Short, stable peripheral cutting edge
- High number of teeth and reduced neck
- Two designs for different primary applications:
  - Dia. 6–25 mm / 1/4–1"
  - z = 5–6

THE GRADES

- WJ30RD (for ISO P materials)
- WJ30RA (for ISO M and ISO S materials)

THE APPLICATION

- Can be used universally for steel, stainless steels, and materials with difficult cutting properties
- Near-net roughing with high feeds per tooth at low depth of cut
- Machining operations for pocket, groove and freeform surfaces
- Areas of use: Mold and die making, medical technology, aerospace and energy industries



Flash

MD025 Supreme solid carbide milling cutter

Fig.: WJ30RD and WJ30RA

BENEFITS FOR YOU

- High-feed tools with even more teeth for maximum productivity
- Ideal for variable use on complex components thanks to compact design and reduced neck for deep cavities
- High process reliability thanks to low radial load on the tool

_MC232 PERFORM SOLID CARBIDE MILLING CUTTER

Uniquely efficient – for universal use in ISO P, M and K.

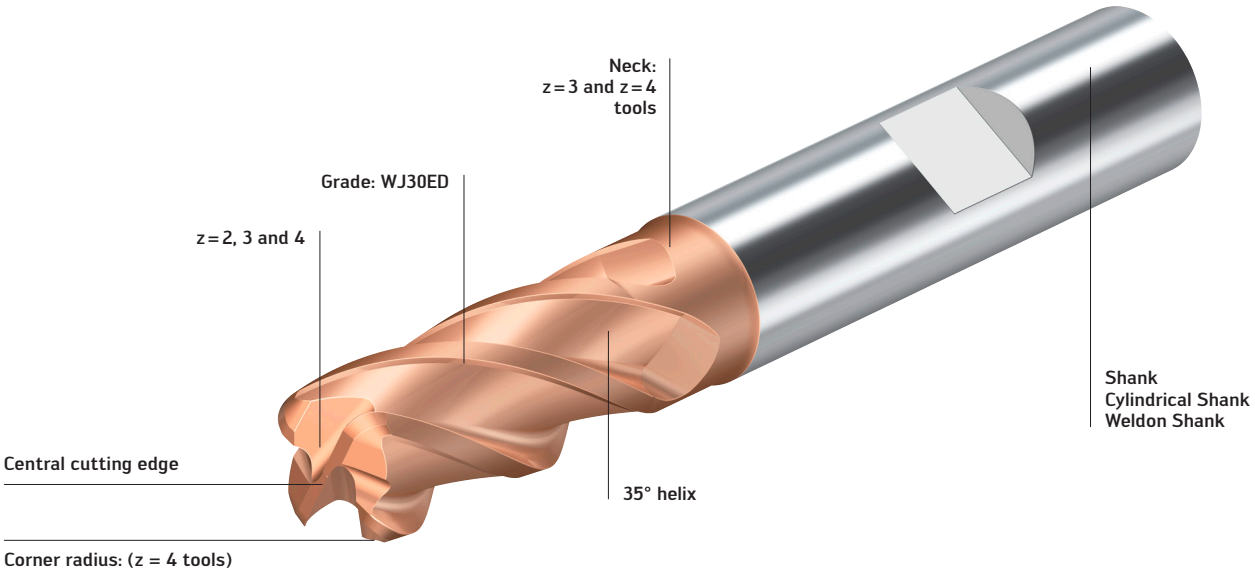
NEW TO THE RANGE

THE APPLICATION

- Can be used universally for steel, stainless steels, and cast iron
- Lateral milling, full slotting, pocket milling, helical plunging, ramping
- Areas of use: General mechanical engineering, mold and die making, automotive and energy industries

THE TOOLS

- Solid carbide milling cutters from the Perform line
- Metric and inch
- With and without neck (z = 3 and z = 4 tools)
- With and without corner radius (z = 4 tools)
- 1 family; 125 dimensions
- With 2, 3 or 4 cutting edges
- Dia. 2–20 mm; 1/8–3/4"



Walter Prototyp MC232 Perform **Fig.:** MC232-12.0W4B200C-WJ30ED

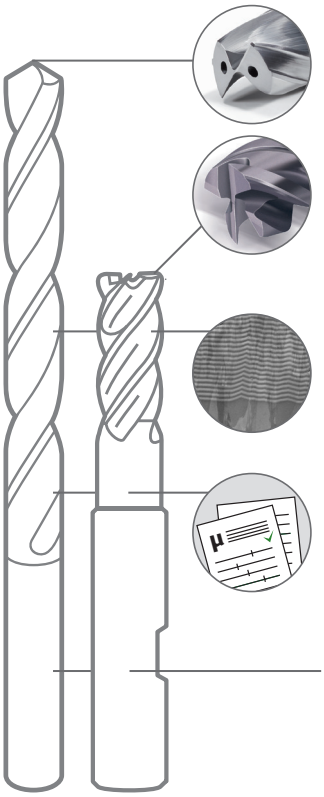
BENEFITS FOR YOU

- Can be used universally for diverse milling strategies with various different materials
- Wide range of applications thanks to tools with reduced neck and corner radii
- High level of cost efficiency for small and medium batch sizes

_WALTER RECONDITIONING SERVICE

Reconditioning to the original manufacturer quality really pays off.

The Reconditioning Service from Walter Multiply makes a significant contribution towards lowering your production costs. This service can provide you with Walter Titex and Walter Prototyp tools that are as good as new, in the original manufacturer quality and all at an attractive price-performance ratio.



ORIGINAL GEOMETRIES
Cutting edge geometries are extremely complex. During reconditioning, Walter calls upon its extensive manufacturing experience to return them to their original condition.

ORIGINAL COATING
When it comes to tool performance, the coating is key. Only Walter uses the original coating process during reconditioning.

ORIGINAL TOLERANCES
These marks of quality are just as important when reconditioning as when Walter manufactures a completely new tool. To achieve this, we only use the most up-to-date measuring methods.

RECONDITIONING RANGE
Walter's solid carbide milling cutters and drills can be reconditioned as standard and special tools.

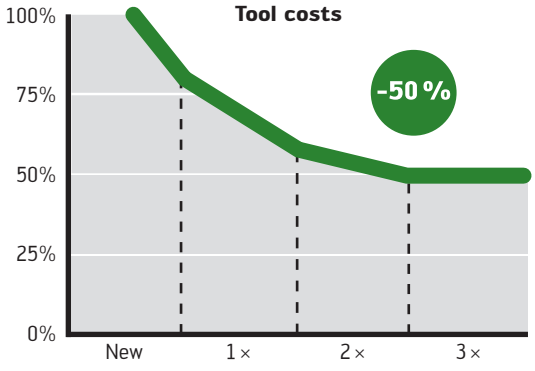
Reconditioning Service
Original Walter Quality

OUR MARK OF 100% QUALITY
Look for the "Original Walter Quality" label. This label indicates that a tool has been reconditioned to original manufacturer quality. It even appears in the ordering documents, enabling you to see the tools for which we recommend our Reconditioning Service.

50% LOWER COSTS!

Tools are often disposed of far too early, even though the Walter Reconditioning Service can restore the tool a number of times to original manufacturer quality. Benefit from reduced costs, reliable production processes and consistent tool life by having your tools reconditioned at our Reconditioning Centre, which is available worldwide. That's how you save up to 50% on your tool costs!

Find out more at: www.reconditioning.walter



Number of reconditioning operations

High machining volume due to maximum number of teeth.

NEW

NEW 19-1

THE TOOL

- Xtra·tec® XT M5008 high-feed milling cutter
- 0–15° approach angle
- Depth of cut 1 mm
- Extremely close pitch
- Oversize milling cutter for maching operations requiring deep wall clearance
- Two pitches for different applications
- Dia. 16–66 mm (or 5/8–2½")
- Interfaces: ScrewFit, cylindrical-modular, cylindrical shank and shell mill mount

THE INDEXABLE INSERTS

- Double-sided indexable inserts with four cutting edges
- Rhombic basic shape for small tool diameters and high number of teeth
- Curved cutting edges for maximum stability
- Combines stability with easy-cutting geometries
- Tiger·tec® cutting tool materials for optimum cutting data and tool life

Powered by
Tiger·tec® Silver
Tiger·tec® Gold

Xtra·tec® XT M5008 high-feed milling cutter

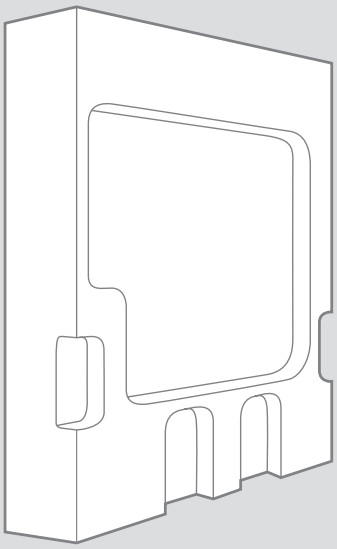
Fig.: M5008-032-T28-06-01

THE APPLICATION

- For steel, stainless steels, cast iron and materials with difficult cutting properties
- Face milling at high feed rates, for plunging, inclined plunging and circular interpolation milling
- Areas of use: Energy industry, mold and die making, among others

APPLICATION EXAMPLE

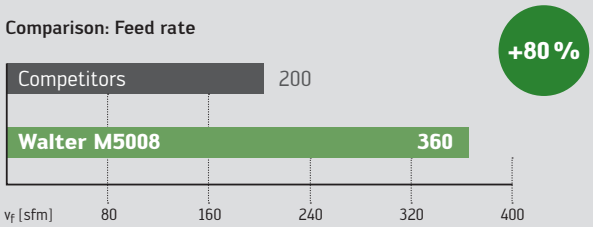
Base plate:
Roughing the pockets



Material:	P20, ISO P
Tool:	M5008/dia. 32 mm
Indexable insert:	ENMX08T316R-D27
Cutting tool material:	WKP35G

	Competitors	Walter
Number of teeth	3	6
v_c (sfm)	558	558
f_z (in)	.040	.035
v_f (in/min)	200	360
a_p (in)	.020	.028
a_e (in)	.787	.787

Comparison: Feed rate



BENEFITS FOR YOU

- Can be used universally
- Optimum productivity thanks to extremely close pitched tools
- High machining volume thanks to the combination of low depths of cut and high feed per tooth rates
- High process reliability due to stable indexable insert
- Low vibration tendency in long tools
- Reduced process costs thanks to Tiger·tec® cutting tool materials and four cutting edges

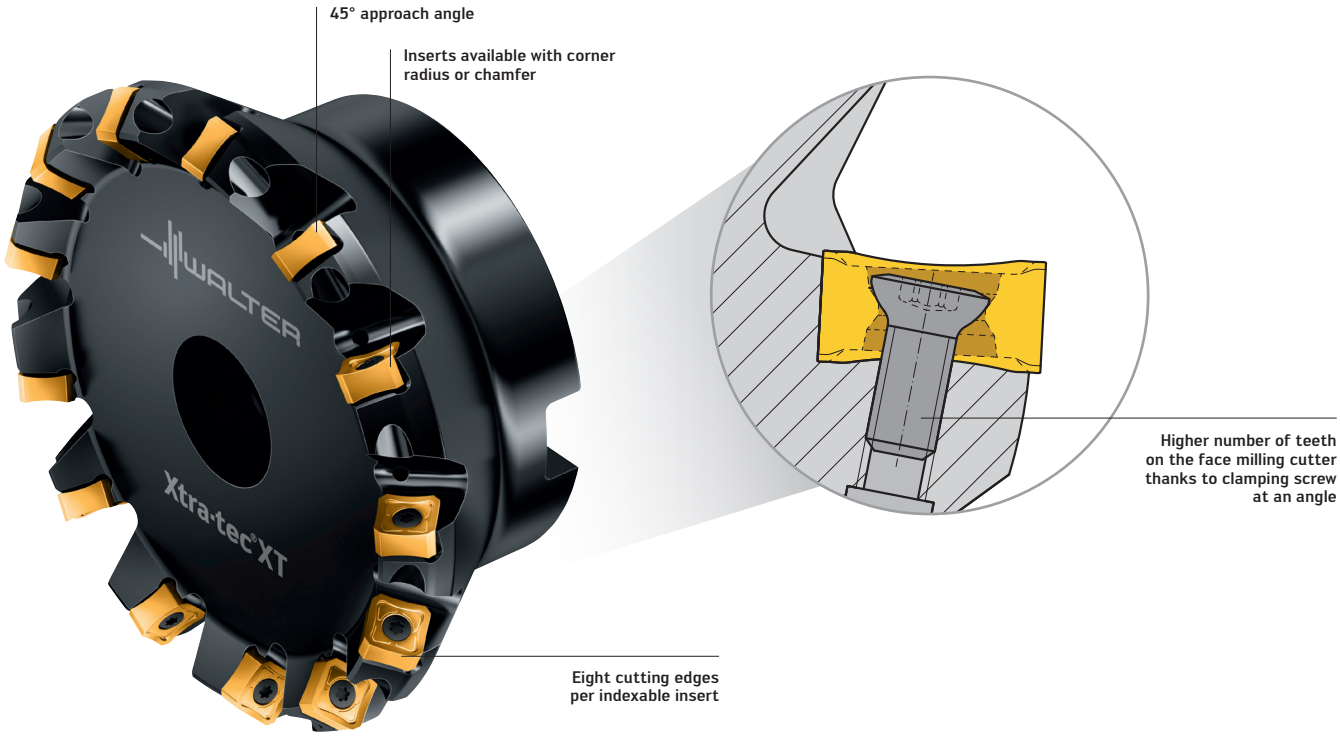
Watch the product video:
www.youtube.com/waltertools

Small indexable inserts, great productivity

NEW

THE TOOL

- Face milling cutter with square, double-sided indexable inserts
- Small indexable inserts, resulting in a higher number of teeth
- Indexable inserts with improved access to the clamping screw for easy handling
- Body protected against wear by a special surface treatment
- Clamping screw at an angle for maximum number of teeth
- Two pitches for different applications
- Dia. 25–100 mm (or 1–4")
- Cost-efficient machining up to a depth of cut of 5 mm
- Interfaces: ScrewFit and shell mill mount



M5009 face milling cutter

Fig.: Dia. 100 mm; z = 13 with SN . X0904 . .

BENEFITS FOR YOU

- High level of stability – ideal for small machining allowances and variable conditions
- Maximum feeds, tool life and productivity thanks to small indexable inserts and high number of teeth
- High level of process reliability due to stable, double-sided indexable inserts
- Very good handling thanks to easily accessible clamping screw at an angle – prevents typical installation mistakes
- Highly cost-effective thanks to low cutting tool material costs

THE INDEXABLE INSERTS

Roughing insert:

- Square, double-sided indexable inserts with eight cutting edges
- Inserts available with corner radius or chamfer
- Easy-cutting geometries
- Variants:
  - Circumference fully sintered for maximum cost efficiency (SNMX0904...)
  - Circumference fully ground for maximum precision (SNGX0904.., SNHX0904..)
- Tiger·tec® Gold and Tiger·tec® Silver cutting tool materials for maximum cutting speeds

Wiper insert:

- Double-sided indexable insert with two cutting edges (XNGX0904...)

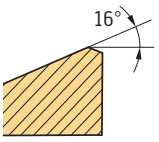
THE APPLICATION

- For all steel and cast iron workpieces, stainless steels or materials with difficult cutting properties and non-ferrous metals
- For face milling, roughing and rough-finishing with wiper inserts
- Use on less powerful machines due to the positive, soft cutting action

THE GEOMETRIES

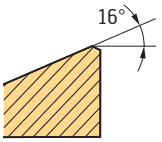
F27 – The stable one

- For unfavorable machining conditions
- Maximum cutting edge stability
- High feeds



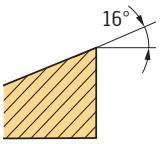
F57 – The universal one

- For medium machining conditions
- Can be used universally



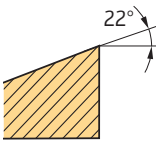
F67 – The easy-cutting one

- For good machining conditions
- Low cutting forces
- Medium feeds



K88 – The sharp one

- For machining aluminium
- Low cutting forces
- Sharp cutting edges



Invest in the future

Xtra·tec® XT and Walter Green represent shared responsibility for our use of precious resources. From raw material procurement to development and manufacture through to packing and inventory: The entire CO_2 needs of Xtra·tec® XT are balanced, documented and compensated.

Walter Green

Performance and reliability extend your perspective.

NEW

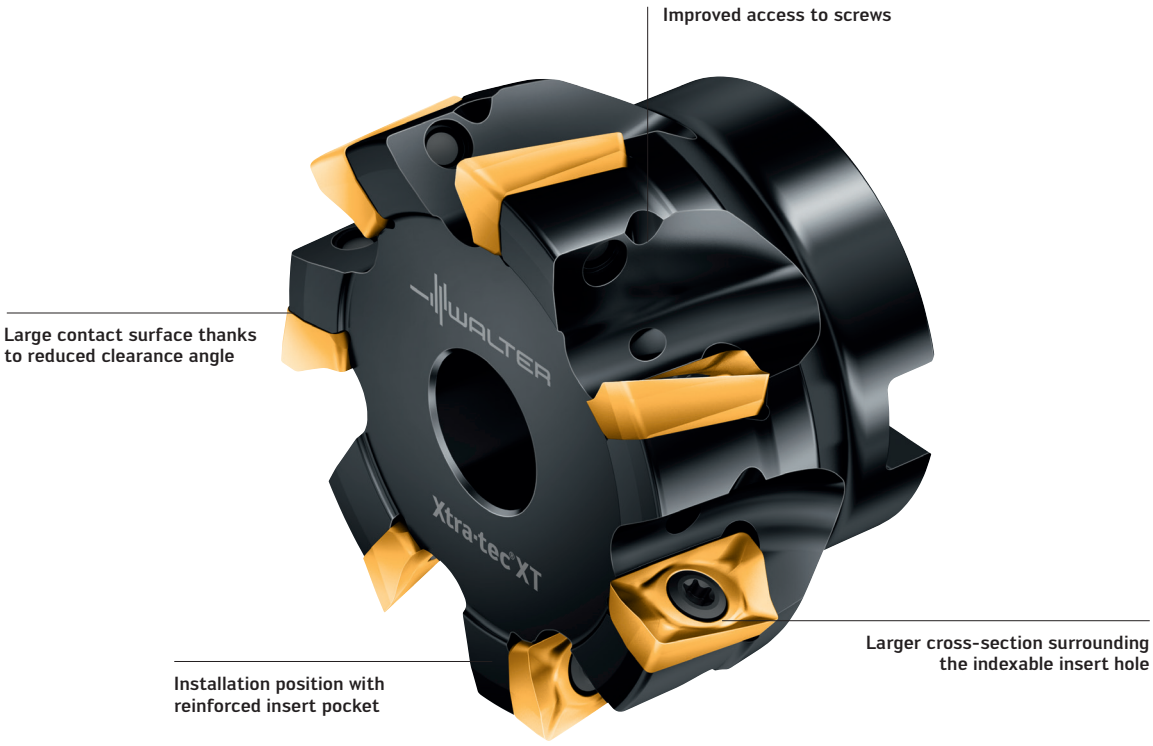
NEW 19-1

THE TOOL

- Xtra·tec® XT M5130 shoulder milling cutter
- Stable cross-section due to modified installation position of the indexable inserts
- Two pitches for different applications
- Approach angle: Exactly 90°
- Oversize milling cutter for machining operations on deep shoulders
- Dia. 10–160 mm (or 0.5–6")
- Interfaces: ScrewFit, cylindrical-modular, Weldon or cylindrical shank and shell mill mount

THE INDEXABLE INSERTS

- Rhombic, positive indexable inserts
- Two cutting edges with positive basic shape
- Stabilised cross-section due to reduced clearance angle
- Three indexable insert sizes with different corner radii:
  - AC..0602..: r = 0.2–1.6 mm, $a_{p\ max}$ = 5 mm
  - BC..1204..: r = 0.4–4.0 mm, $a_{p\ max}$ = 12 mm
  - BC..1605..: r = 0.8–6.0 mm, $a_{p\ max}$ = 15 mm
- Variants:
  - Circumference fully sintered (ACMT.., BCMT..)
  - Circumference fully ground (ACGT.., BCGT.. or ACHT.., BCHT..)



Powered by
Tiger·tec® Silver
Tiger·tec® Gold

Xtra·tec® XT M5130 shoulder milling cutter

Fig.: M5130-063-B22-07-15

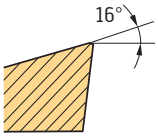
THE APPLICATION

- Universal system
- For steel, stainless steels, cast iron, non-ferrous metals and materials with difficult cutting properties
- Face milling, shoulder milling, ramping, pocket milling and circular interpolation milling
- Small indexable inserts, high number of teeth: Ideal for workpieces with small machining allowances
- Areas of use: Energy industry, mold and die making, general mechanical engineering

THE GEOMETRIES

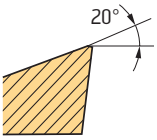
F55 – The stable one

- For unfavorable machining conditions
- Maximum cutting edge stability
- High feeds



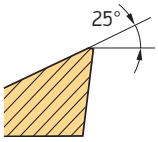
G55/G65 – The universal one

- For medium machining conditions
- Can be used universally for most materials



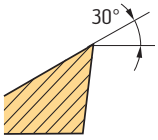
K55 – The easy-cutting one

- For good machining conditions
- Low cutting forces
- Medium feeds



M85K85 – The sharp one

- For machining aluminium
- Low cutting forces
- Sharp cutting edges



BENEFITS FOR YOU

- Optimum cutting data and tool life for maximum productivity
- Maximum process reliability thanks to high stability
- Perfectly adapted to the machining operation due to different indexable insert sizes, corner radii and geometries
- Lower tool costs and minimised effort thanks to universal usability
- No additional finishing operations thanks to exact 90° angle
- Excellent handling thanks to improved access to screws
- Maximum cost efficiency thanks to Tiger·tec® cutting tool materials, high number of teeth and small indexable inserts

Six effective approach angles of exactly 90°.

NEW

NEW 19–1

THE TOOL

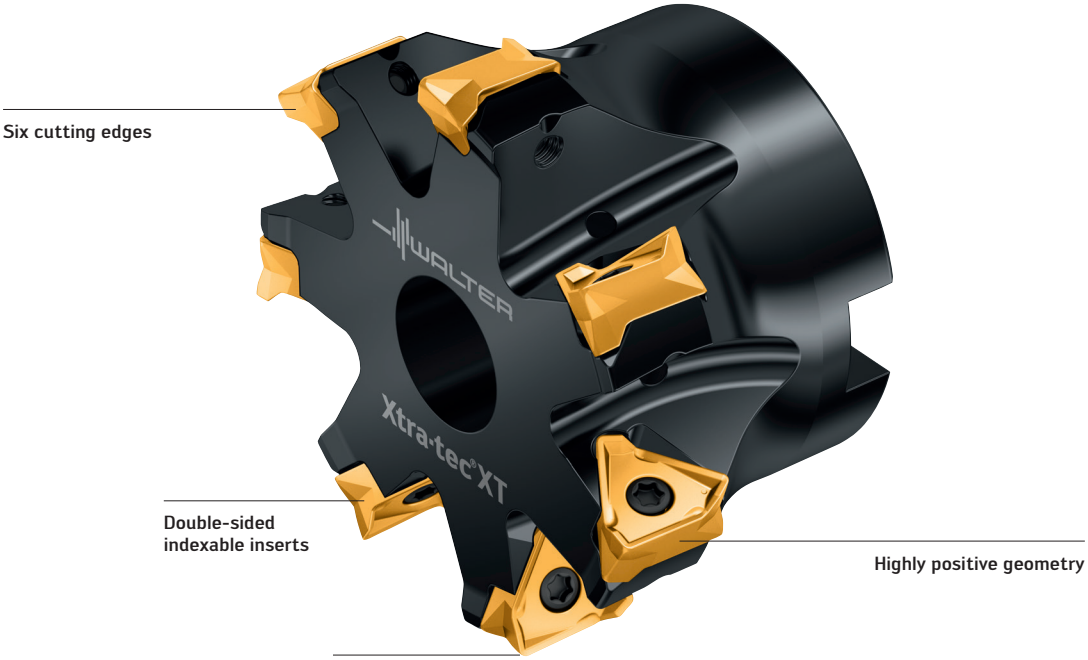
- Xtra·tec® XT M5137 shoulder milling cutter
- Shoulder milling cutter with triangular, double-sided indexable inserts
- Two pitches for different applications
- Interface: Shell mill mount
- Dia. 50–100 mm
- Maximum depth of cut $a_{p\ max}$ = 8 mm

THE INDEXABLE INSERTS

- Design with facet
- Easy-cutting geometry
- Circumference-sintered indexable inserts for maximum cost efficiency (TNMU160508R-G57)

THE APPLICATION

- Can be used universally for steel, stainless steels, cast iron and materials with difficult cutting properties
- Face milling, shoulder milling, ramping, pocket milling and circular interpolation milling
- Areas of use: Energy industry, mold and die making, general mechanical engineering



Powered by
Tiger·tec® Silver
Tiger·tec® Gold

Xtra·tec® XT M5137 shoulder milling cutter **Fig.:** M5137-063-B22-07-08

BENEFITS FOR YOU

- High process reliability thanks to stable, double-sided indexable inserts
- No additional finishing operations thanks to exact 90° angle
- Reduced process costs thanks to Tiger·tec® cutting tool materials and six cutting edges per indexable insert
- Simple tool selection and low cutting tool material costs

Small indexable inserts, large depth of cut.

NEW 19-1

NEW

THE TOOL

- M5012 face milling cutter with 88° approach angle
- Dia. 32–100 mm, at $a_{p\ max}$ = 8 mm
- Small indexable inserts, resulting in a higher number of teeth
- Easily accessible clamping screws at an angle
- Two pitches for different applications
- Interfaces: ScrewFit and shell mill mount

THE INDEXABLE INSERTS

- System inserts: Can be used in
  Xtra·tec® XT M5009 face milling cutters (45° approach angle)
  and in
  Xtra·tec® XT M5012 face milling cutters (88° approach angle)

Roughing insert:

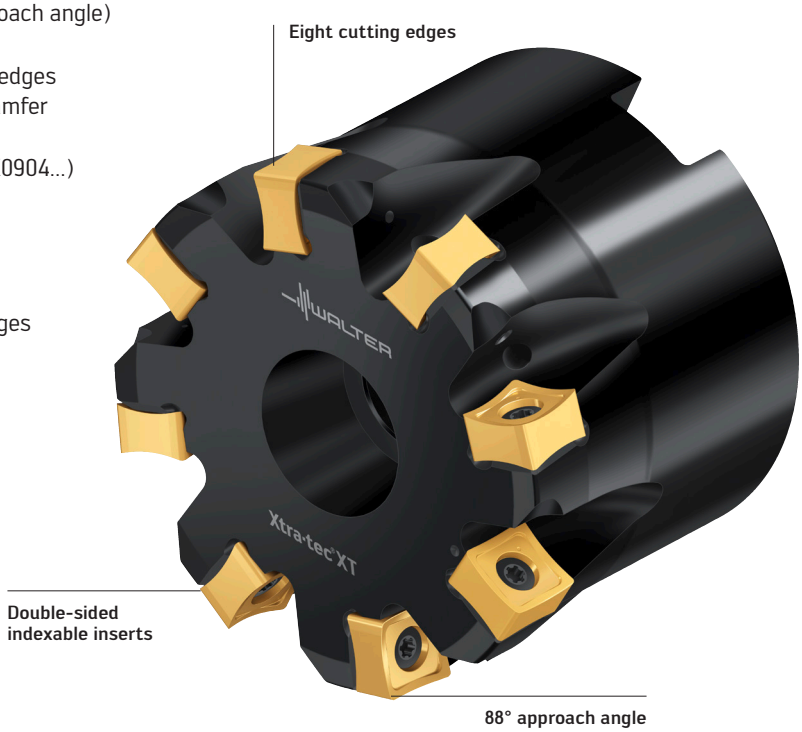
- Double-sided indexable inserts with eight cutting edges
- Easy-cutting geometries with corner radius or chamfer
- Variants:
  - Circumference fully ground (SNGX0904..., SNHX0904...) for maximum precision
  - Circumference fully sintered (SNMX0904...) for maximum cost efficiency

Wiper insert:

- Double-sided indexable insert with two cutting edges (XNGX0904...)

THE APPLICATION

- For steel and cast iron materials, stainless steels, materials with difficult cutting properties and non-ferrous metals
- Face milling, roughing and rough-finishing with wiper inserts
- Can also be used on less powerful machines due to the positive, soft cutting action
- Face milling with greater depth of cut ($a_{p\ max}$ = 8 mm)



Powered by
Tiger·tec® Silver
Tiger·tec® Gold

Xtra·tec® XT M5012 face milling cutter **Fig.:** M5012-063-B22-08-08

BENEFITS FOR YOU

- Ideal when space is limited (e.g. by clamping devices)
- Maximum feeds, tool life and productivity thanks to small indexable inserts and high number of teeth
- High process reliability thanks to stable, double-sided indexable inserts
- Easy handling thanks to easily accessible clamping screw at an angle (prevents typical assembly mistakes)
- Highly cost-effective thanks to low cutting tool material costs

_M4003 FACE MILLING CUTTER

Four cutting edges for one-of-a-kind surfaces.

NEW TO THE RANGE

NEW ADDITION TO THE PRODUCT RANGE

– SDET.. cermet indexable inserts

THE TOOL

– Dia. 20–160 mm (or 3/4")
– Available with parallel shank and bore adaption
– Two insert sizes: SD..09T3.. and SD..1204..
– Depths of cut: 4.5 and 6.5 mm

THE INDEXABLE INSERTS

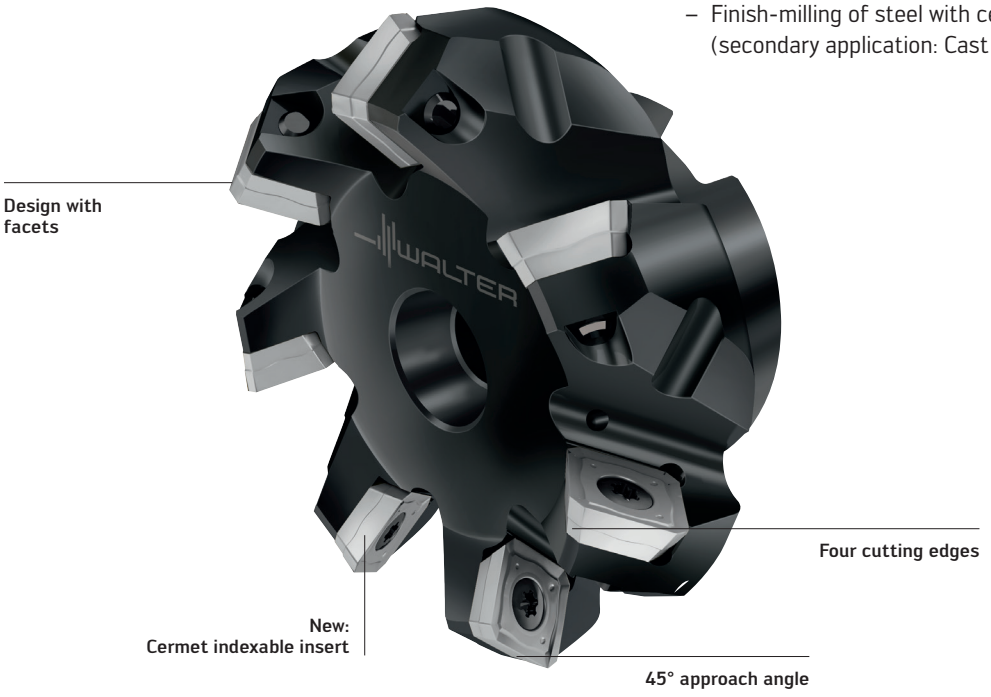
– Square system inserts with facets
– 15° clearance angle
– Circumference-sintered design for maximum cost efficiency
– Design with circumference fully ground for maximum precision

THE GRADES

– Three CVD-coated grades: WKP25S, WKP35G and WSM45X
– Three PVD-coated grades: WKK25S, WSM35S and WSP45S
– New: Uncoated cermet – WEP20

THE APPLICATION

– Roughing, semi-finishing and finishing
– New: High gloss surfaces thanks to the use of cermet indexable inserts
– Finish-milling of steel with cermet cutting tool material (secondary application: Cast iron and stainless steels)



M4003 face milling cutter **Fig.:** SDET1204AZN-F57 WEP20

BENEFITS FOR YOU

– High degree of cost efficiency thanks to system insert which can be used universally
– Reduced procurement and inventory costs
– Reduction of machining steps by combining roughing and finishing
– Long tool life, with consistently high surface quality
– Low power requirement thanks to highly positive geometries
– Save resources thanks to CO_2-offset manufacturing

Walter Green

Maximum cost efficiency – truly universal.

NEW TO THE RANGE

NEW ADDITION TO THE PRODUCT RANGE

- New indexable insert size RNMX1005M0
- Now also with Tiger·tec® Silver PVD WSM35S grade
- Milling cutter dia. 25 mm with parallel shank or modular ScrewFit interface

THE TOOL

- Eight cutting edges thanks to double-sided basic shape
- Secure indexing using the flank face

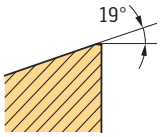
THE APPLICATION

- Face milling and copy milling
- For steel, stainless steels and materials with difficult cutting properties
- Areas of use: Aerospace and energy industries (ideal for milling turbine blades)

THE GEOMETRIES

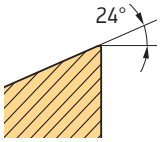
G57 – The universal one

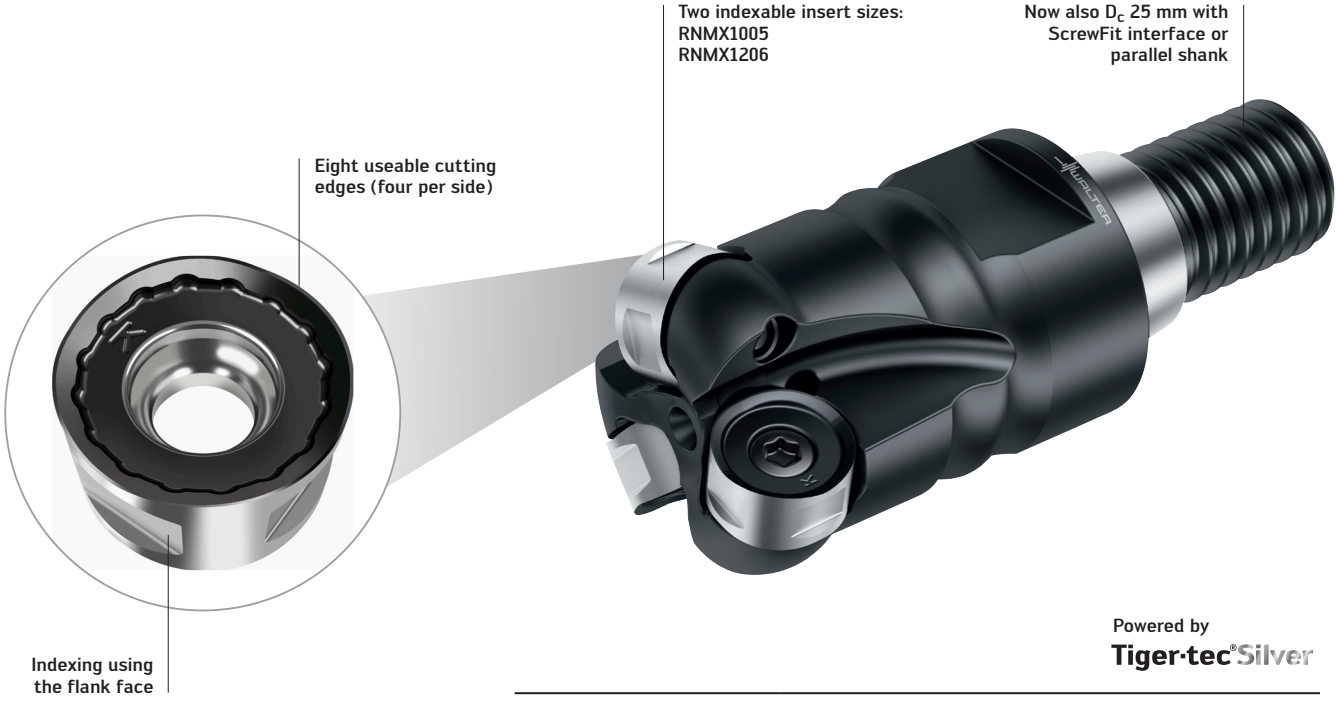
- For medium machining conditions
- Can be used for most materials



K67 – The easy-cutting one

- For good machining conditions
- Low cutting forces
- Medium feeds





M2471 copy milling cutter **Fig.:** M2471-025-T22-03-05

BENEFITS FOR YOU

- High metal removal rate even when used on less powerful machines thanks to soft-cutting geometries and positive cutting characteristics
- Tiger·tec® Silver WSM35S and WSP45S grades: Can be used universally in ISO P, ISO M and ISO S materials
- Low cutting tool material costs due to sintered design and eight cutting edges
- High process reliability thanks to stable indexable inserts with secure indexing

Plug & Play – the cylindrical-modular standard interface.

NEW

NEW 19-1

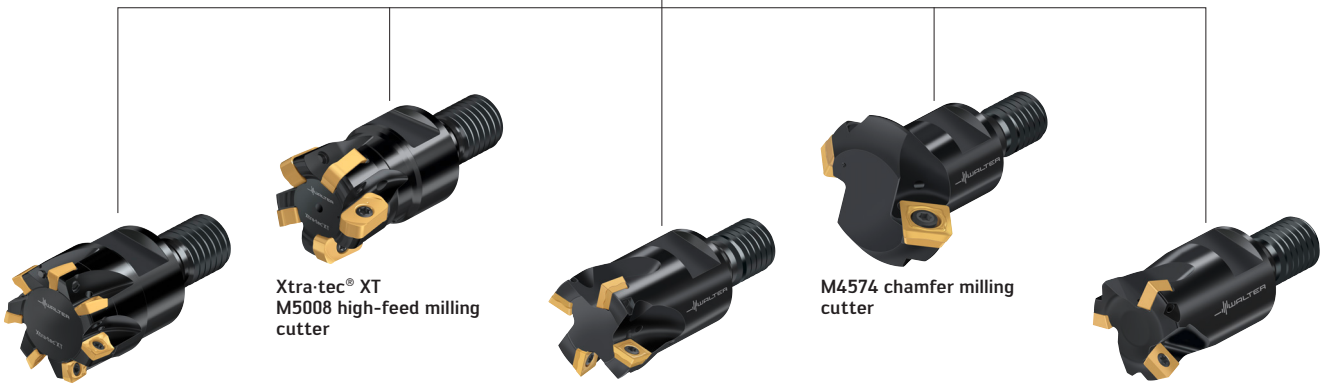
THE INTERFACE

- Cylindrical-modular interface for milling tools
- For milling tools in dia. range 3/4" - 1–1/4" (10–42 mm)
- Tools can be centred on the adaptor on the cylindrical section
- Suitable for commonly used adaptors with cylindrical-modular interface

THE APPLICATION

- Ideal as an interface for smaller tools

THE RANGE



Xtra·tec® XT M5130 shoulder milling cutter

Xtra·tec® XT M5008 high-feed milling cutter

M4132 shoulder milling cutter

M4574 chamfer milling cutter

M4002 high-feed milling cutter

Product range overview: Milling tools with cylindrical-modular interface

BENEFITS FOR YOU

- Easy to change existing milling tools (no need to invest in new adaptors)
- Maximum flexibility through exchanging a wide range of modular milling tools
- Easy to assemble and dismantle
- Long tool life thanks to good concentricity of tool interface
- High process reliability thanks to high stability of tool interface

D – Adaptors

Accure·tec – vibration-free machining with long milling tools.

NEW

NEW 19-1

THE ADAPTOR

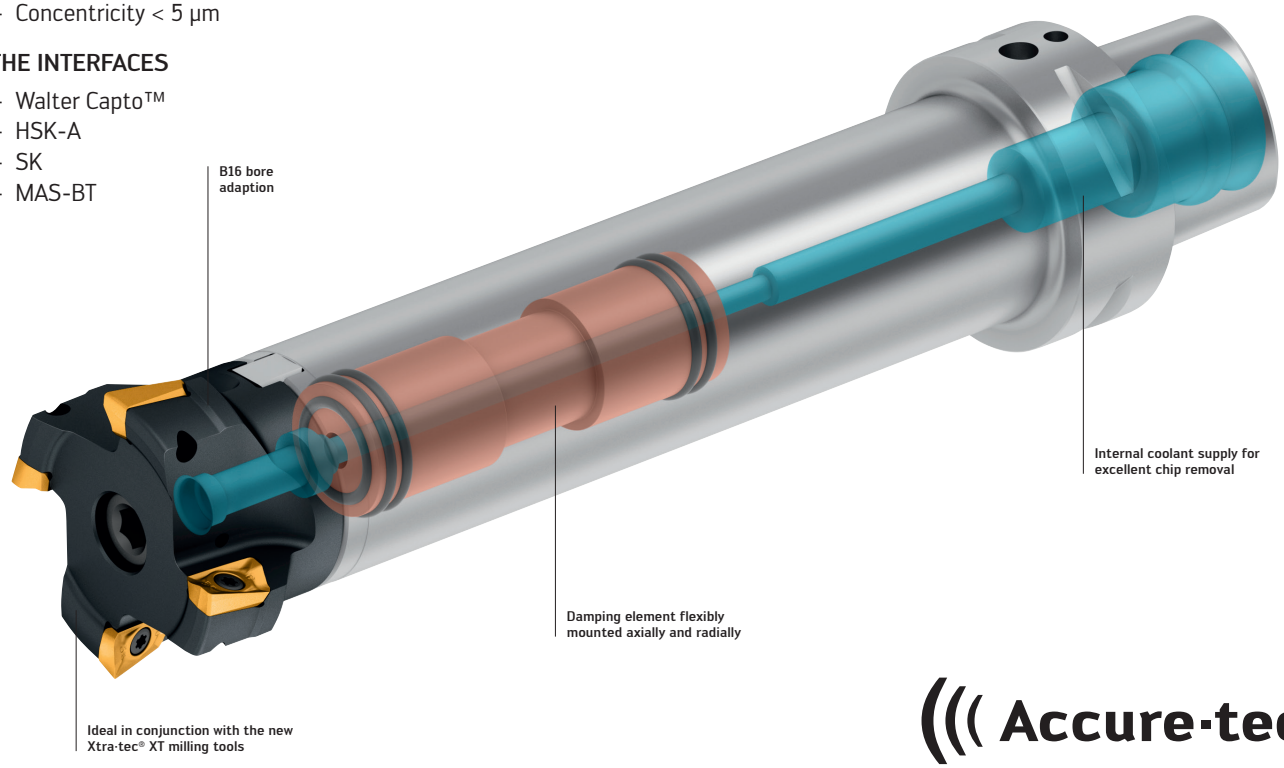
- Accure·tec AC001 vibration-damped adaptors for milling
- Patented vibration damping
- For shell mill mount milling cutters
- Cylindrical design
- High rigidity
- Internal coolant supply
- Concentricity < 5 µm

THE INTERFACES

- Walter Capto™
- HSK-A
- SK
- MAS-BT

THE APPLICATION

- Machining deep pockets
- Machining complex one-piece workpieces
- Long overhangs of up to 4 × D are possible
- Areas of use: Mold and die making, aerospace, general mechanical engineering, automotive and energy industries



Accure·tec

Vibration-damped end mill adaptor **Fig.:** AC001-C6-B16-160

BENEFITS FOR YOU

- High productivity and surface quality – with long service life for the tool and spindle
- Vibration damping preset at the factory; install directly (no time lost tuning)
- Quick, stable process
- Reliable machining operations with projection lengths of up to 4 × D are possible
- Depth of cut up to three times higher compared to conventional methods
- Optimum chip removal thanks to internal coolant supply

For more Accure·tec adaptors, see the Turning section

Minimize axial forces – make the most of your tool's performance.

NEW 19-1

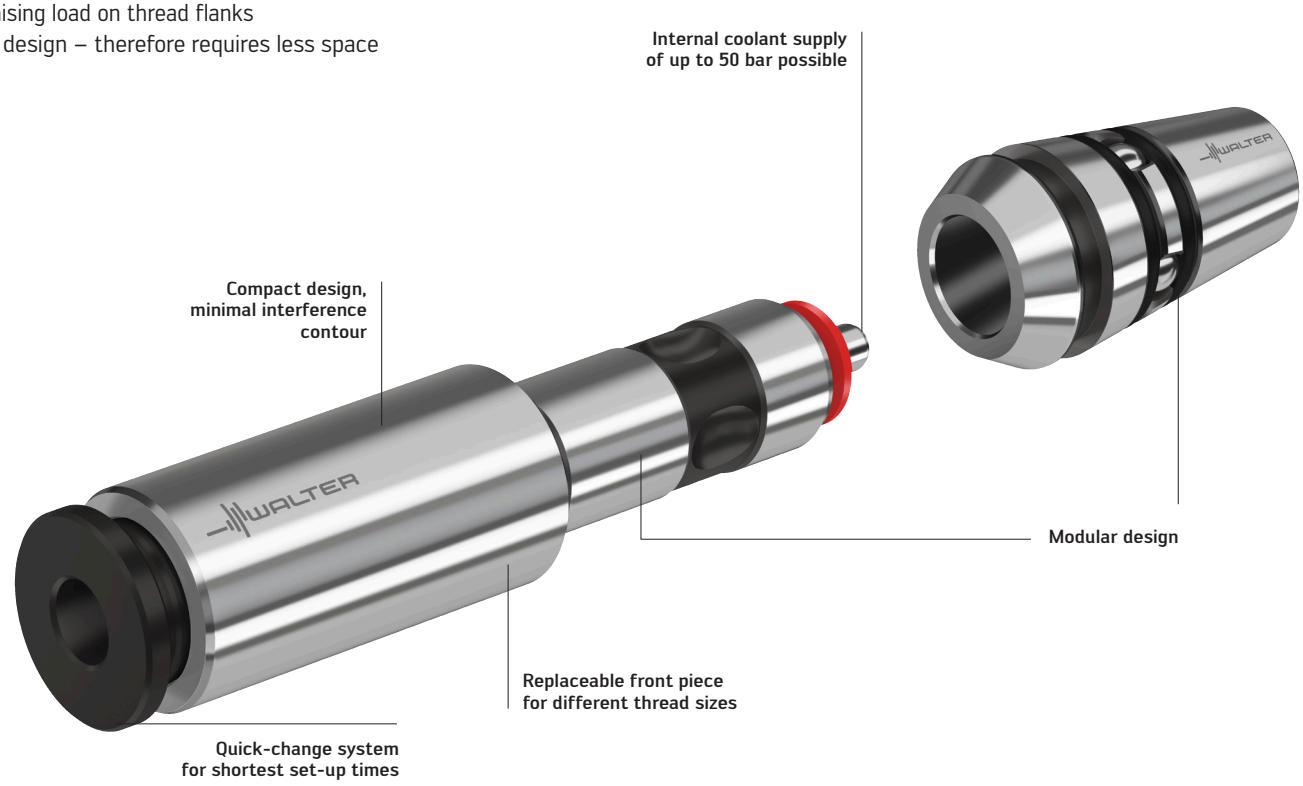
NEW

THE ADAPTOR

- AB735 synchronous threaded insert for axial movement and pressure compensation
- Can be used in all common ER collet chucks
- In sizes ER16 to ER32
- For all tool types with and without internal coolant

THE APPLICATION

- Compensating synchronization errors
- Avoiding high axial forces
- Minimising load on thread flanks
- Sleek design – therefore requires less space



Synchronous threaded insert

Fig.: AB735-ER20
AB735-ER20-R060-035

BENEFITS FOR YOU

- Low investment costs due to modular design
- Increased tool life and process reliability
- Higher productivity thanks to faster tool changing
- Low-maintenance; lower risk of tool breakage
- Saves costs as fewer tools required

Watch the product video:
www.youtube.com/waltertools

_GL00.. ER COOLING NOZZLE

Optimize tool life and lubrication.

NEW

THE COOLING NOZZLE

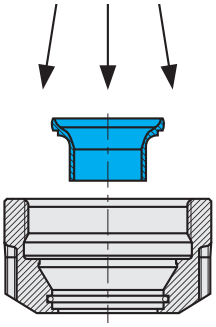
- GL00.. ER cooling nozzle
- For collets ER16, ER20, ER25, ER32
- For ER collets with:
  Tool dia. 3–10 mm – ER16
  Tool dia. 6–12 mm – ER20
  Tool dia. 6–16 mm – ER25
  Tool dia. 6–16 mm – ER32

THE APPLICATION

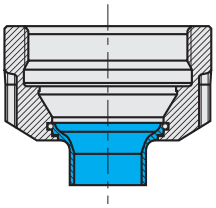
- Can be used for all ER collets in accordance with DIN 6499
- Holemaking, threading, milling
- For tools without internal coolant
- Targeted cooling along the cutting edge

THE HANDLING

Fitting

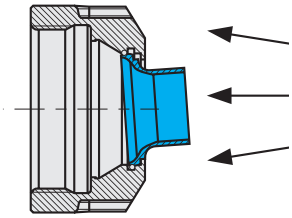


Installed

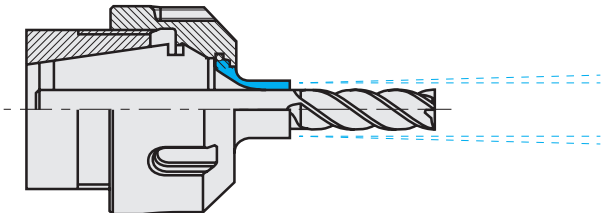


ER cooling nozzle **Fig.:** GL00..

Removal



Cooling along the tool periphery



Watch the product video:
www.youtube.com/waltertools

BENEFITS FOR YOU

- Better cooling and lubrication
- Longer tool edge life
- Improved chip removal

ScrewFit – the adaptor for the new Xtra·tec® XT M5130 shoulder milling cutters.

NEW TO THE RANGE

NEW ADDITION TO THE PRODUCT RANGE

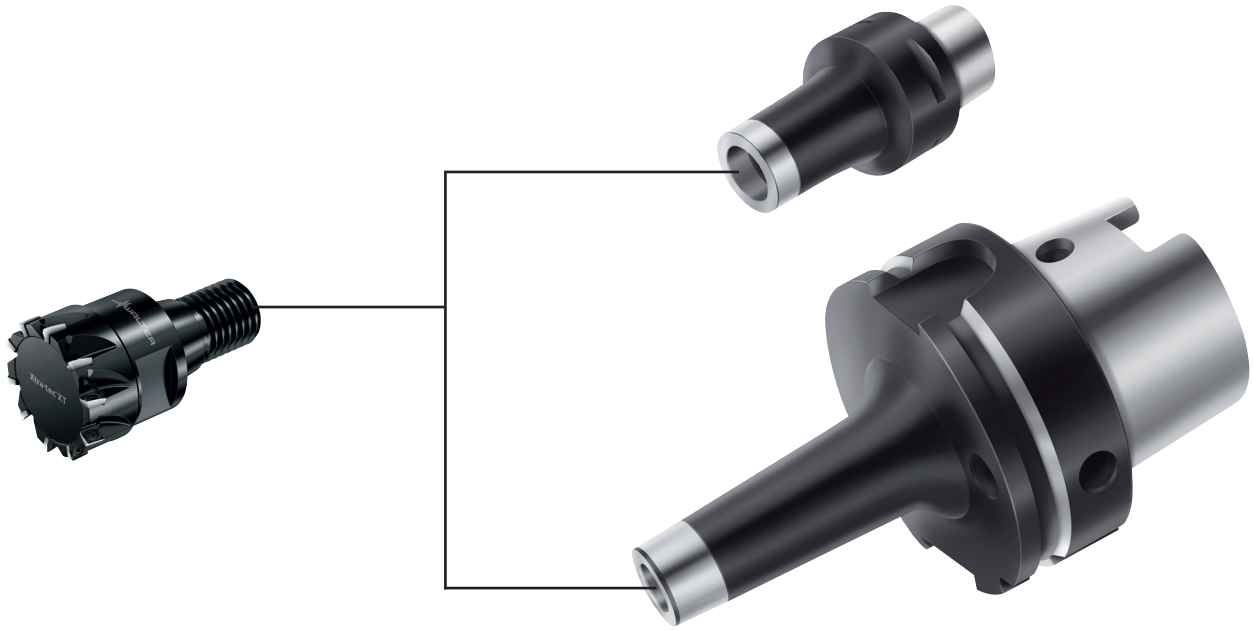
- ScrewFit adaptor AK530.H100A...
- ScrewFit adaptor AK580.C8...

THE ADAPTOR

- Walter Capto™ C8... for T09, T14, T18, T22, T28, T36, T45
- HSK 100A.. for T09, T14, T18

THE APPLICATION

- On machining centers, lathes and multi-task machines
- Holemaking and milling operations



Xtra·tec® XT M5130 shoulder milling cutter + ScrewFit adaptors **Fig.:** M5130, AK530.H.., AK580.C...

BENEFITS FOR YOU

- Short and tough
- High concentricity for longer tool life and better surfaces
- High rigidity for reduced vibration
- High repeat accuracy
- Easy tool changes in the machine

Walter GPS

The latest generation of tool navigation.

The right tool at the click of a mouse
With just four clicks, Walter GPS takes you from the definition of your objective to the most cost-effective 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

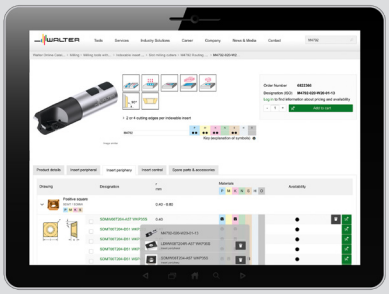
How to find and order your standard tools:

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 Catalog 2018
contains the entire standard range of our competence brands Walter, Walter Titex and Walter Prototyp. It is supplemented regularly with the latest Product Innovations catalog.

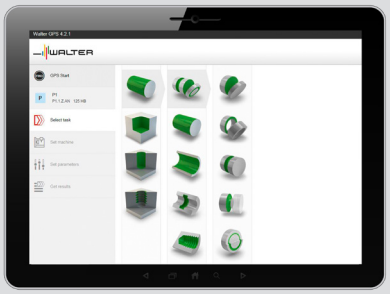
At walter-tools.com, you can access and order your Walter products quickly and conveniently online – via smartphone, tablet or PC. The benefit for you: Direct access from any device, displayed in an optimised form, at any time.

Walter online catalogue



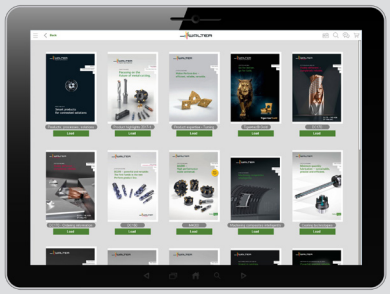
Tool-specific search
You can find products in the Walter online catalogue using the familiar structure of our product catalogue as well as filter and search functions. Other features: A shopping function and also links to drawings and models.

Walter GPS



Application-based search
With Walter GPS, it takes just a few steps to find the optimum machining solution for your component, online and offline – and the solution can be transferred directly to the Walter TOOLSHOP if required.

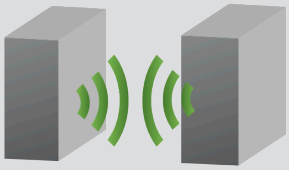
Walter eLibrary



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

Digital ordering methods

TOOLSHOP



EDI B2B

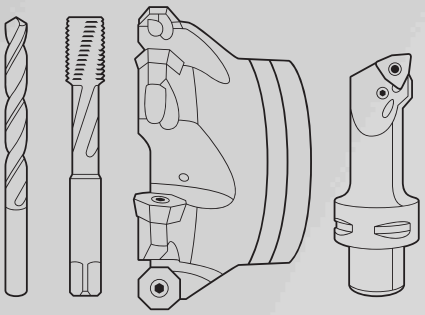
Walter TOOLSHOP & EDI
The Walter TOOLSHOP offers customers opportunities to find information and place orders quickly. EDI (electronic data interchange) also makes it possible to exchange documents (e.g. orders) – even special tools can be ordered.

Walter USA, LLC

N22W23977 RidgeView Parkway West
Waukesha, WI 53188, USA

Phone: 800-945-5554 Fax: 262-347-2500
service.us@walter-tools.com

www.walter-tools.com/us
www.facebook.com/waltertools
www.youtube.com/waltertools



Walter Canada
Mississauga, Canada
service.ca@walter-tools.com

Walter Tools S.A. de C.V.
Carr. Estatal KM 2.22 #431, Módulo 3, Interior 19 y 20
El Colorado Galindo, Municipio El Marqués,
Querétaro, C.P. 76246, México
Phone: +52 (442) 478-3500
service.mx@walter-tools.com

Printed in the USA 629388-292, EDP-# 7930014 (1/2020)

Walter product highlights · Edition 2019-1
Subject to change – Printed in US 7930014 (01/2020)