



# PRODUCT PORTFOLIO HIGHLIGHTS

## EVERYTHING FOR MACHINING – FROM THE SPINDLE TO THE MACHINE TABLE

TEAM CUTTING TOOLS



CERATIZIT is a high-technology engineering group specialised in cutting tools and hard material solutions.

**Tooling the Future**

[www.ceratizit.com](http://www.ceratizit.com)

# CERATIZIT GROUP

Tooling the Future – CERATIZIT is a high-technology engineering group specialized in cutting tools and hard material solutions.

As part of the CERATIZIT group, we have exclusive raw material sourcing, enormous resources and master the entire process chain: From the mine to powder production and shaping to sintering, finalization and surface finishing to recycling, we ensure our customers the highest quality.

Also with the innovative strength (e.g. in the development of new powder types), the sales network and the consulting expertise, you benefit from our large network and our character as a „one-stop shop“ for cutting tools.



**> €1B** TURNOVER  
IN 2019

**>30%** PRODUCTS  
THAT ARE LESS THAN  
5 YEARS OLD

**>30** PRODUCTION  
SITES

**>80** COUNTRIES  
IN WHICH  
WE ARE ACTIVE

**>1000** PATENS  
AND UTILITY MODELS

**>200** EMPLOYEES  
IN R&D

**14** INNOVATION  
AWARDS  
SINCE 2002

**>100.000** DIFFERENT  
PRODUCTS



# Welcome!



Placing your order is quick and easy  
**Customer Service Centre**

**Freephone Number**  
UK: 0800 073 2073  
Ireland: 1800 93 22 55

**Freefax Number**  
UK: 0800 073 2074

**E-Mail**  
info.uk@ceratizit.com



It couldn't be easier  
**Ordering via the Online Shop**

<http://cuttingtools.ceratizit.com>



On-site technical support  
**Your Local Technical Sales Engineer**



Your customer number



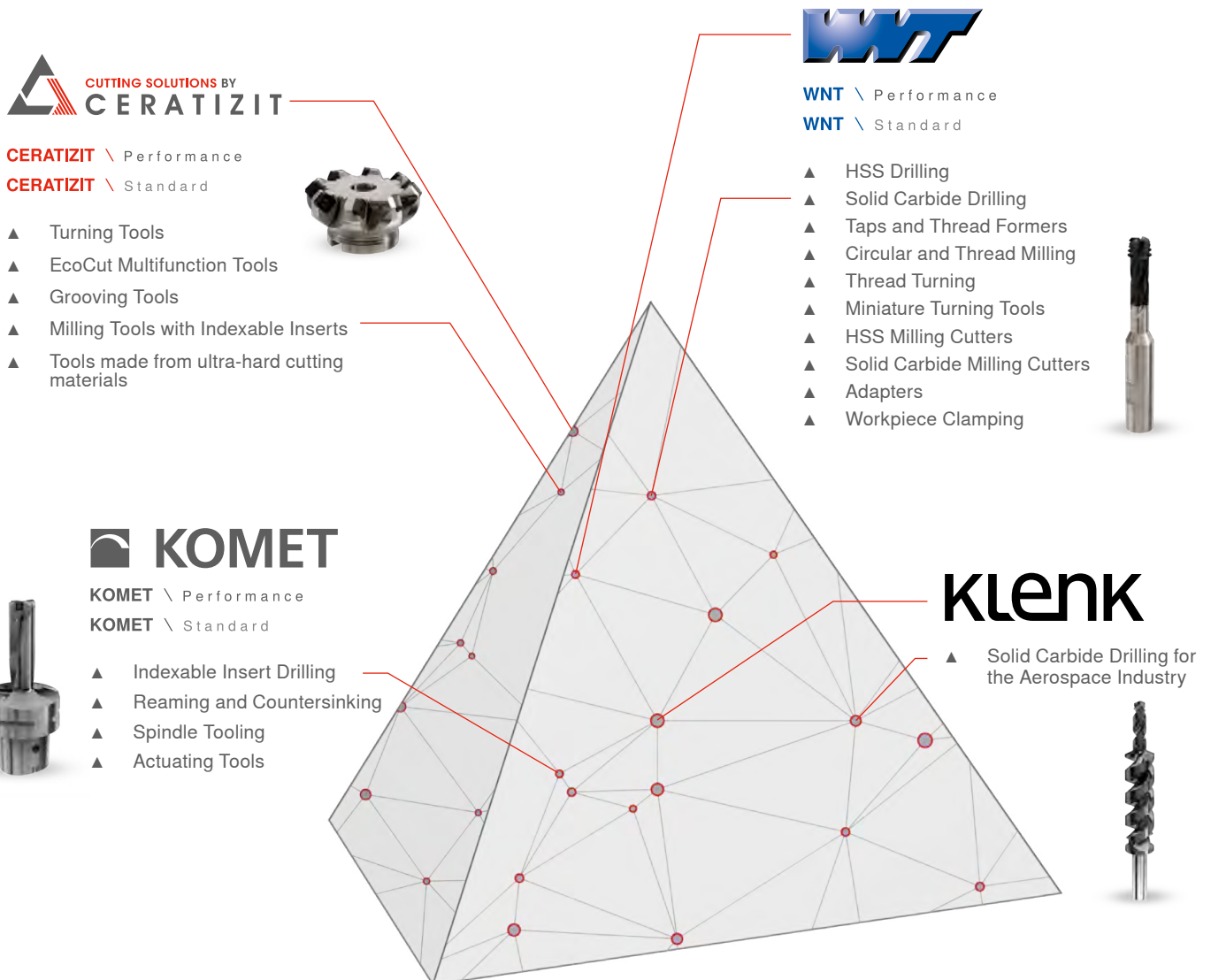
# THE CUTTING TOOL SOLUTION

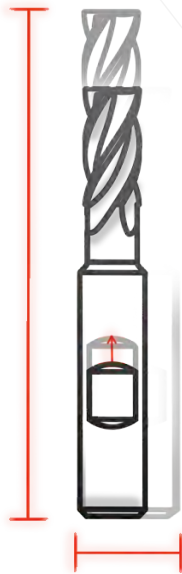
## Team Cutting Tools from the CERATIZIT Group

With 75,000 high quality products exclusively for metal cutting CERATIZIT leads the market with the most comprehensive product range available. Be it turning, drilling, milling, grooving, finish-boring, clamping: for every operation we offer a broad range of innovative, state-of-the-art products. For every application the ideal tooling solution.

CERATIZIT, your specialist for metal cutting, offers everything between the machine spindle and the table.

- FULL RANGE **PRODUCT PORTFOLIO**
- **INNOVATIVE** ORIENTATION
- HIGHEST **TECHNICAL COMPETENCE**
- INDEPENDENT **QUALITY GUARANTEE**
- DEEP **INDUSTRY KNOWLEDGE**
- FAST AND EFFICIENT **AVAILABILITY**



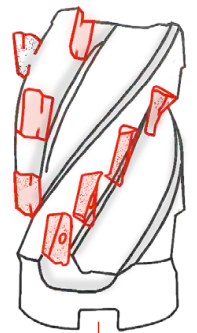


## SEMI-STANDARD

The SEMI STANDARD TOOL PROGRAM enables you to adapt your own standard tools in a wide variety of dimensions across many product areas – quickly and individually.

## CUSTOMIZED

As one of the leading tool manufacturers and innovative pulse generator in machining, we develop optimal tool concepts for you and develop special tools that are based on the most important success factors such as efficiency, time and quality.



## STANDARD

With 75,000 quality tools exclusively for machining, CERATIZIT has the most comprehensive range on the market. Whether turning, drilling, milling, grooving, spindling, clamping: We offer you a wide selection of innovative products based on the latest technical standards for every application – with 99 % availability.



# THE CATALOGUE

The Team Cutting Tools from the CERATIZIT Group tool catalogue containing around 65,000 machining tools.

With this catalogue, CERATIZIT presents the tool portfolio of a new, holistic, specialist machining team: the Team Cutting Tools from the CERATIZIT Group. The brands Cutting Solutions by CERATIZIT, KOMET, WNT and KLENK have united under this name to offer users an unprecedented range of top machining tools.

The merging of the internationally leading brands Cutting Solutions by CERATIZIT, KOMET, WNT and KLENK under the name „Team Cutting Tools“ has created a powerful full-range supplier in metal cutting. This pooled expertise is now available in the first joint complete catalogue, which contains around 65,000 top machining tools. Team Cutting Tools has access to the entire selection of the united brands, which are now highly specialised product brands in the catalogue



New developments and enhancements will appear every three months in our **UP2DATE** supplementary catalogue.



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# \ DRILLING TOOLS

## THE EXPERTS IN EFFICIENT SOLID DRILLING AND BORE MACHINING



HSS Drilling



Reaming and  
Countersinking



Indexable  
Insert Drilling

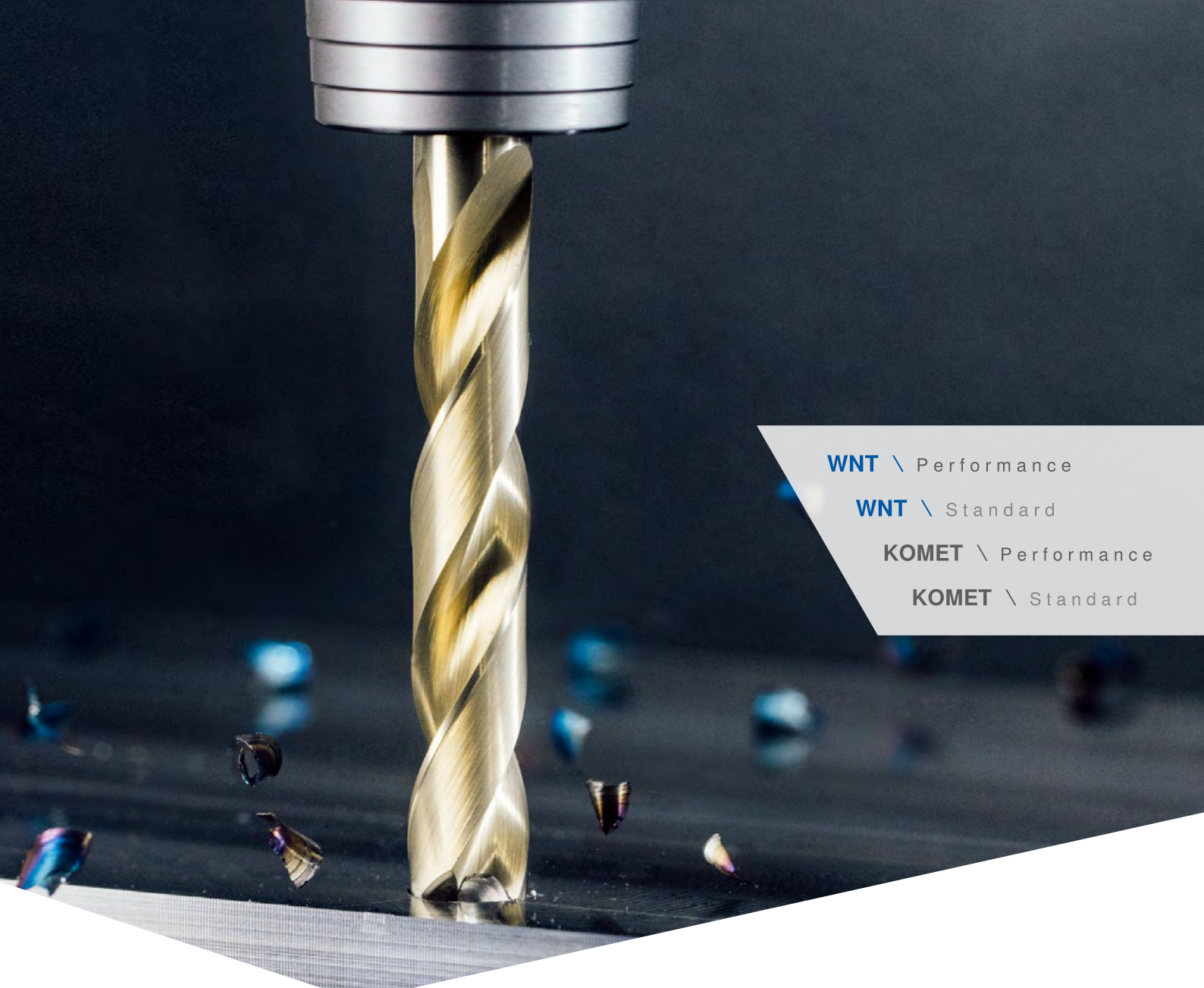


Solid Carbide  
Drilling



Spindle Tooling





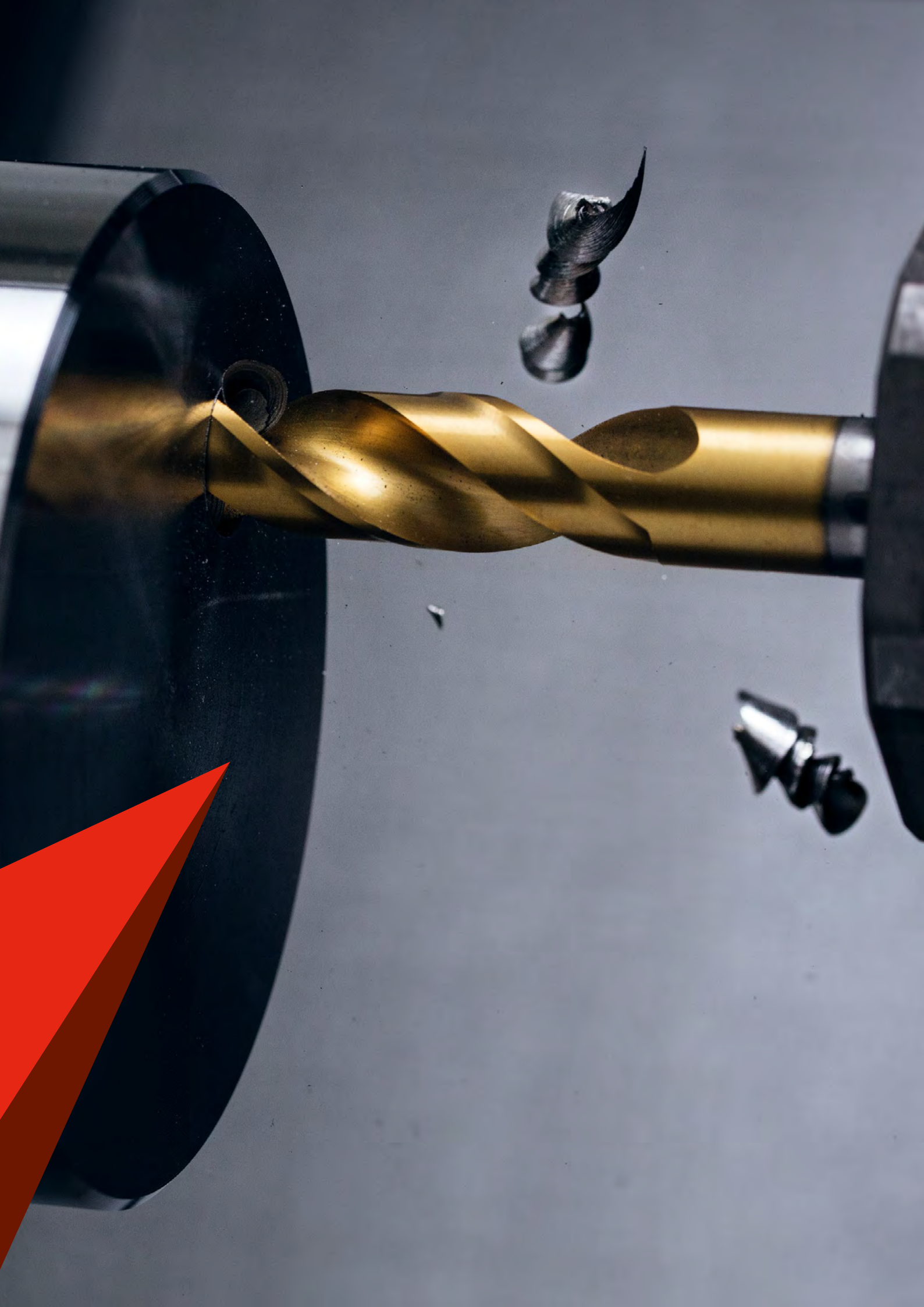
**WNT** \ Performance

**WNT** \ Standard

**KOMET** \ Performance

**KOMET** \ Standard

High-precision drilling, reaming, countersinking and boring is our speciality. With a diverse range of drilling tools and our in-depth knowledge of bore machining, we always have the perfect solution for your requirements.



## HSS Drilling

Our range of HSS drilling tools leaves no user without options. We have twist drills with diameters from 0.15 mm, centre drilling, stepped drilling and counterboring tools for virtually all materials. This includes TiN coated HSS drills for universal applications.

## THE HIGHLIGHT

### HSS-E-PM Twist Drill

The HSS-E-PM drill fills the gap between conventional HSS drills and solid carbide drills.

#### Advantages

- ▲ High cutting edge stability due to the relief grind
- ▲ Specially designed for use in higher-strength steels/materials
- ▲ Homogeneous HSS-PM structure ensures high levels of wear resistance
- ▲ TiN coating ensures it can be used universally

#### Benefits

- ▲ Longer tool life than conventional HSS drills
- ▲ Universal use
- ▲ Increased cutting data
- ▲ Enhanced process security
- ▲ Outstanding price-performance ratio



For the full range of our HSS Drilling Tools have a look into our Main Catalogue Chapter 1 or online at: [cuttingtools.ceratizit.com](http://cuttingtools.ceratizit.com)



## Solid Carbide Drilling

Our solid carbide high-performance drilling tools are the first choice for achieving outstanding performance in the drilling process. As well as high feeds, these tools stand out due to their excellent alignment precision, reliable chip evacuation and good self-centring.

# THE HIGHLIGHTS

## WTX – Ti

### High Performance Drill

Solid carbide high-performance drill specially designed for machining heat-resistant super alloys, materials that are difficult to machine plus rust and acid-resistant steels.

#### Advantages

- ▲ Significant increase in process security through improved flute and core diameter geometry
- ▲ Increased tool stability due to stabilised cutting edges
- ▲ More wear-resistant due to new coating technology with subsequent surface treatment
- ▲ Higher cutting speeds and feed rates can be achieved

#### Benefits

- ▲ Longer tool life achievable
- ▲ Maximum process security
- ▲ Improved performance
- ▲ Machining time minimised
- ▲ Excellent bore quality



## WTX – AL

### High Performance Drill

DLC-coated solid carbide high-performance drill, specially designed for applications in aluminium, non-ferrous metals and cast iron materials.

#### Advantages

- ▲ More wear-resistant due to DLC coating
- ▲ Optimised chip clearance
- ▲ From 8xD only the head is coated in order to ensure better and safer chip removal
- ▲ High-gloss polished chip flutes avoid chip jams and/or ensure the safe removal of chips

#### Benefits

- ▲ Increased tool life
- ▲ Maximum process security
- ▲ Higher cutting rates can be achieved
- ▲ Specialised for use in non-ferrous metals



## WTX – Feed UNI

### High Performance Drill

Three-edged solid carbide high-feed drill for increased productivity and hole quality.

#### Advantages

- ▲ Feed rates are two to three times higher compared to conventional double-edged solid carbide drills
- ▲ Universal application
- ▲ Drill geometry enables high tool positioning accuracy
- ▲ Tried-and-tested DPX 74S universal drill coating increases performance
- ▲ Reduced cutting pressure/cutting force distribution
- ▲ Low cutting temperature
- ▲ Extremely smooth flute surfaces (no droplets)

#### Benefits

- ▲ Extended service life/tool life
- ▲ Maximum process security
- ▲ Wide range of applications
- ▲ Increased productivity
- ▲ Accurate positioning of holes
- ▲ Increased hole quality (roundness)



For the full range of our Solid Carbide Drilling Tools have a look into our Main Catalogue Chapter 2 or online at: [cuttingtools.ceratizit.com](http://cuttingtools.ceratizit.com)



## Indexable Insert Drilling

Exceptional value for money and efficiency: our indexable insert drills achieve the very best results when machining large bore diameters. High feeds, maximum chip volumes and universal application options increase your productivity many times over.

# THE HIGHLIGHTS

## KUB Pentron

The KUB Pentron indexable insert drill is the all-rounder for process-secure drilling under various conditions.

### Advantages

- ▲ Available from Ø 14.00 mm to Ø 65.00 mm
- ▲ 20 % higher cutting and feed rates than the indexable insert drills already on the market
- ▲ Wide range of indexable inserts available
- ▲ Four usable cutting edges made from the best substrates with customised coatings
- ▲ Wide range of shank variants (ABS, cylindrical, PSC)
- ▲ Surface-treated, wear-resistant base body
- ▲ FEM-optimised chip channels guarantee safe chip removal
- ▲ MMS-compatible
- ▲ Easy handling

### Benefits

- ▲ Long service life
- ▲ High cutting values reduce the machining time
- ▲ Consistent deflection in all materials and at all feed rates
- ▲ Maximum process security
- ▲ Wide range of applications



## MaxiDrill 900

The MaxiDrill 900 indexable insert drilling system is synonymous with high productivity in rough machining up to 5xD.

### Advantages

- ▲ Available from Ø 12.00 mm to Ø 63.00 mm to 5xD
- ▲ Patented indexable insert ensures excellent spot drilling results
- ▲ Optimal radial force compensation ensures high tolerances and surface qualities
- ▲ Four usable cutting edges made from the best substrates with customised coatings
- ▲ Surface-treated, wear-resistant base body
- ▲ Easy handling through the use of just one centre plate

### Benefits

- ▲ Long service life
- ▲ High cutting values reduce the machining time
- ▲ Maximum process security
- ▲ Wide range of applications



## KUB Trigon

The KUB Trigon indexable insert drilling system boasts high accuracy and exceptional performance even under unstable conditions.

### Advantages

- ▲ Available from Ø 14.00 mm to Ø 44.00 mm
- ▲ Tight drilling tolerances up to IT 8 possible
- ▲ High surface quality achievable
- ▲ Wide range of specialised indexable inserts
- ▲ Wear-resistant, surface-treated base body
- ▲ The cutting edge geometry ensures good centring
- ▲ Also ideal for use on less powerful machines

### Benefits

- ▲ Long service life
- ▲ Potential rework on the hole no longer needed
- ▲ Maximum process security
- ▲ Wide range of applications
- ▲ Combi shank allows clamping in Weldon and Whistle Notch adapters



For the full range of indexable insert drilling have a look into our Main Catalogue Chapter 3 or online at: [cuttingtools.ceratizit.com](http://cuttingtools.ceratizit.com)

KOMET \ Performance    KOMET \ Standard

## Reaming and Countersinking

Our comprehensive product range includes reamers and countersinks that are suitable for more or less every material. From standard products to high-performance tools for customers with exacting requirements in terms of radial run-out accuracy, our product range is sure to have the ideal tool for your application.

### THE HIGHLIGHT REAMAX TS

REAMAX TS is a versatile, modular reaming head system.

#### Advantages

- ▲ All conventional materials can be machined
- ▲ Through and blind hole drilling can be produced with a single system
- ▲ Extremely small drilling tolerances can be achieved (from IT4)
- ▲ Machining depths up to 5xD
- ▲ High-speed machining at cutting speeds up to 300 m/min and feed rates up to 2.4 mm/rev

#### Benefits

- ▲ Longer tool life than conventional HSS drills
- ▲ Universal use
- ▲ Increased cutting data
- ▲ Enhanced process security
- ▲ Outstanding price-performance ratio



For the full range of reaming and countersinking have a look into our Main Catalogue Chapter 4 or online at: [cuttingtools.ceratizit.com](http://cuttingtools.ceratizit.com)





KOMET \ Performance

## Spindle Tooling

Boring tools provide the ideal alternative to reaming when it comes to creating precise holes. As experts in efficient bore machining, we can offer a wide range of boring tools of the highest quality.

### THE HIGHLIGHT

## MicroKom – BluFlex 2

### Precision Spindle Head

The BluFlex 2 is a high-precision spindle system with digital display, Bluetooth function and ABS interface.

#### Advantages

- ▲ Micron-precise display resolution
- ▲ Unit: mm/inch possible
- ▲ Display can be rotated through 180°
- ▲ Straightforward operation via touch display
- ▲ Bluetooth: simple display on any conventional smartphone
- ▲ Higher RPM can be achieved due to integrated part balance correction
- ▲ Highly sensitive adjustment for precise width of cut
- ▲ Absolute position measuring system: the absolute and relative slide position is output every time the device is switched on

#### Benefits

- ▲ Maximum flexibility: wide diameter range can be covered with a single system (Ø 6 – 365 mm)
- ▲ User-friendly tool for precise boring
- ▲ Time-saving: easy to adjust the spindle head using the free app



For the full range of our spindle tools have a look into our Main Catalogue Chapter 5 or online at: [cuttingtools.ceratizit.com](http://cuttingtools.ceratizit.com)



# \ THREADING WITHOUT COMPROMISE

WNT \ Performance

WNT \ Standard

Our varied range of taps and thread formers covers all conceivable areas of application. Whether you are looking for taps and thread formers, circular and thread milling cutters or thread turning tools, you are sure to find the perfect tool for your needs in our product range.



Thread Turning  
Tools



Taps and  
Thread Formers



Circular and  
Thread Milling



WNT \ Performance    WNT \ Standard

## Taps and Thread Formers

No matter whether you are machining steel, stainless steel, cast iron or non-ferrous metals, our high-quality taps will allow you to create perfect internal threads, time and time again. We also offer a wide range of thread formers for manufacturing heavy-duty internal threads using non-cutting methods. Our varied product range is sure to impress.

### THE HIGHLIGHT

#### Through Hole – Machine Taps, right hand

HSS-E machine tap type STABIL UNI CNC for through hole machining, thread type M, right-hand thread.

##### Advantages

- ▲ Suitable for synchronised CNC machining with minimum length compensation chuck, which can significantly increase the service life of the tool.
- ▲ Despite its high level of toughness, high wear resistance with good friction resistance properties
- ▲ Suitable for application temperatures up to 450°C

##### Benefits

- ▲ Long service life
- ▲ Maximum reliability at a low price
- ▲ Wide range of applications: thanks to the „TiN-GS“ coating, a wide range of materials can be machined in a process-secure manner



For the full range of our taps and thread formers have a look into our Main Catalogue Chapter 6 or online at: [cuttingtools.ceratizit.com](http://cuttingtools.ceratizit.com)

## Colour ring identification for the Performance Taps

To ensure you have got the right tap for the right material, we now provide our WNT Performance Taps with the relevant colour coded rings.

### Material – Colour ring identification

The uniform colour coding of the WNT Performance Taps is done according to the standard VDI 3323 and is in material groups and divided by the different materials to be machined. The same colour scheme is also used in the main WNT catalogue to visually guide you to the correct tap selection. In addition you can quickly identify the correct application data for the tensile strength of the material to be machined. The colour coding is also shown in the online shop for easy online ordering.

### Coloured rings – overview

		for steel up to 750 N/mm <sup>2</sup> Type ST uncoated tap for steel up to 750 N/mm <sup>2</sup> tensile strength			for aluminium and non-ferrous metal Type NW, Soft and Ms for aluminium, short-chipping brass and soft materials
		for steel to 1100 N/mm <sup>2</sup> Type ST and VG coated tap for steel up to 1100 N/mm <sup>2</sup> tensile strength			for heat resistant alloys Type Ti, Ni and AMPCO for heat-resistant steel, titanium and Inconel
		for steel up to 1400 N/mm <sup>2</sup> Type HR for steel up to 1400 N/mm <sup>2</sup> tensile strength			for hardened steels Type HT for hard machining
		for corrosion and acid-resistant steels Type VA for stainless steel			for universal application up to 1100 N/mm <sup>2</sup> Type UNI for the all-purpose use
		for cast iron materials Type GG for cast iron			

The colour and the number of colour rings give information on:

- ▲ the application group
- ▲ the tool type (for example type HR, NW, HT, UNI, ...)
- ▲ the tensile strength in N/mm<sup>2</sup> of the material to be machined



WNT \ Performance    WNT \ Standard

## Circular and Thread Milling Tools

Whether for small batch sizes with large threads or to achieve extra short machining times in batch production, our wide range of circular and thread milling cutters, which are available with solid carbide indexable inserts or as single solid carbide tools, are sure to boost your production.

### THE HIGHLIGHTS

#### MiniMill – Circular Milling Cutter

The MiniMill circular milling cutter system is a modular circular milling tool with different solid carbide heads.

##### Advantages

- ▲ The perfect cutting head for every application
- ▲ Different holders depending on the overhang
- ▲ Same threading inserts for different leads and diameters
- ▲ In addition to circular thread milling, other circular and linear milling operations can be achieved
- ▲ Maximum flexibility and stability

##### Benefits

- ▲ Maximum flexibility: same threading inserts for different leads and diameters, thereby reducing tool costs
- ▲ Wide machining spectrum: due to the modular design, in addition to circular thread milling, other circular and linear milling operations can be performed
- ▲ Extremely cost-effective and process-secure production of threads



#### Circular Thread Milling Cutter

The circular thread milling cutter type H is specially designed for thread production in hardened and difficult-to-machine materials.

##### Advantages

- ▲ The tool is perfectly suited to hard machining
- ▲ Drilling, countersinking and thread milling with one tool
- ▲ Suitable for the production of right-hand and left-hand threads
- ▲ Wear-resistant TiAlN coating
- ▲ Blind holes and through holes can be produced
- ▲ Different tolerances can be produced

##### Benefits

- ▲ Time-saving: drilling, countersinking and thread milling with a single tool at high cutting speeds
- ▲ Wide range of applications: creates right and left-hand threads and is suitable for producing through and blind hole threads
- ▲ The ultimate in thread quality: burr-free threads with high surface quality



For the full range of our circular and thread milling tools have a look into our Main Catalogue Chapter 7 or online at: [cuttingtools.ceratizit.com](http://cuttingtools.ceratizit.com)

WNT \ Performance

## Thread Turning Tools

As a specialist in thread manufacturing, we offer a wide range of thread turning tools, both for use on conventional turning machines and CNC machines. No matter what the application, our thread turning tools will ensure that you always have the chip under control.

### THE HIGHLIGHT

#### Standard External Thread Turning Insert HCN2525

Similar to full profile inserts, the core diameter can also be produced during thread machining with multi-tooth threading inserts. This ensures a burr-free thread. In addition, the higher number of teeth can increase productivity compared to full profile inserts; it can double it with two-tooth inserts and triple it with three-tooth inserts.

##### Advantages

- ▲ Increased productivity
- ▲ Fewer passes required during thread production
- ▲ Time savings during thread production

##### Benefits

- ▲ Longer service life due to fewer cuts
- ▲ Burr-free thread production
- ▲ Time savings



For the full range of our thread turning tools have a look into our Main Catalogue Chapter 8 or online at: [cuttingtools.ceratizit.com](http://cuttingtools.ceratizit.com)



# \ TURNING

## SPECIALIST IN INDEXABLE INSERT TOOLS FOR TURNING AND GROOVING

**CERATIZIT** \ Performance

**WNT** \ Performance

Innovative, revolutionary and powerful – our turning products are underpinned by many years of experience in the development and production of carbide tools. You will find everything you are looking for and more in our vast universe of turning tools.





Miniature  
Turning Tools



EcoCut



Grooving  
Tools



Turning Tools

Sliding Head  
Lathes Tools





**CERATIZIT** \ Performance

## Turning Tools

You can rely on our range of turning tools. State-of-the-art Dragonskin coating technology means that every indexable insert is an expert in its field. The innovative tool holders also ensure excellent stability and security for a successful turning process.

# THE HIGHLIGHTS

## FreeTurn

High Dynamic Turning (HDT) – the Revolution in Turning. Be Part of the FreeTurn Generation!

### Advantages

- ▲ Better chip control
- ▲ Multiple machining processes possible with one tool
- ▲ Fewer empty runs in the turning process
- ▲ Fewer tool changes
- ▲ The full circumference of the indexable insert is used

### Benefits

- ▲ Increased flexibility
- ▲ Greater process security
- ▲ Cost-effective operation
- ▲ Effective use of the machine capacity
- ▲ Reduced tooling costs
- ▲ Reduction in storage costs/tool variety



## X7-Line – The multi application grades CTPX710 and CTPX715

The new X7 multi-use grade can be used across all application windows. This is limited only by the chip breaker.

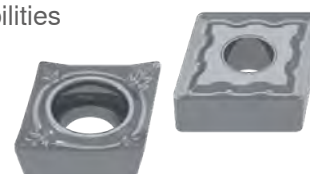
Many materials, many requirements ... only one indexable insert!

### Advantages

- ▲ Universal carbide grade for use with super alloys, stainless steels, steels and aluminium alloys.
- ▲ High wear resistance Dragonskin AlTiN based Coating for longer service life.
- ▲ Revolutionary smooth, flawless coating for best chip removal.

### Benefits

- ▲ Simple grade selection, improves the clarity of tool selection
- ▲ Reduction of stock variety
- ▲ More flexible application possibilities with one insert



## CBN Inserts – Grade CTB H15 – for machining hardened steels

Extreme demands are placed on tools used for hard machining. The cost and service life of tools play a significant role.

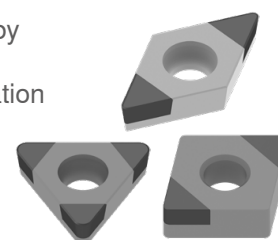
The new CTB H15 CBN cutting material grade provides the perfect solution. The specialist for machining case-hardened components increases service life by up to 40 % compared to its predecessor and can be used very flexibly.

### Advantages

- ▲ Perfect for small series due to a very wide, flexible process window
- ▲ Excellent surfaces from the very first cut due to the very sharp cutting edges
- ▲ Also suitable for internal turning operations
- ▲ First choice for hard-soft machining or for case-hardened workpieces

### Benefits

- ▲ Up to 40 % longer service life than the popular CTB H20C (PBC 25S) grade
- ▲ The service life for hard-soft machining can be increased by up to 70 %
- ▲ Flexible due to a wide application range window
- ▲ From 32 HRC



For the full range of our turning tools have a look into our Main Catalogue Chapter 9 or online at: [cuttingtools.ceratizit.com](http://cuttingtools.ceratizit.com)



**CERATIZIT** \ Performance

## EcoCut

Drilling into solid material, turning and grooving with a single system. Our multi-purpose tools are the Swiss Army knife of cutting tools. Just one tool covers multiple applications, saving you valuable time and money.

### THE HIGHLIGHT

#### EcoCut – “Classic” 2,25xD

The ultimate multi-function tool for a cost-effective machining process. The tool is designed to perform many different turning operations.

##### Advantages

- ▲ Perfect chip flow with increased tool life thanks to the ChipBooster
- ▲ Solution where there are few tool stations
- ▲ Less time and effort spent on programming
- ▲ Time savings over the entire machining process
- ▲ Creation of a flat bottom hole

##### Benefits

- ▲ Time savings
- ▲ Maximum process security
- ▲ High flexibility



For the full range of our EcoCut tools have a look into our Main Catalogue Chapter 10 or online at: [cuttingtools.ceratizit.com](http://cuttingtools.ceratizit.com)



**CERATIZIT** \ Performance

## Grooving Tools

Be in control with our grooving tools. The outstanding stability of the tool system means even difficult grooving tasks with uncontrolled chips or high temperatures are easy to accomplish.

### THE HIGHLIGHT

## SX-System – the universal grooving tool

The SX system covers all areas of grooving and has been developed for the most demanding parting off, grooving and longitudinal turning applications: Designed using FEM modelling, it combines high stability with optimised force distribution. Additionally SX-DC Toolholders with targeted Direct Cooling (DC) thro' coolant supply.

#### Advantages

- ▲ Versatile due to different chip breaker
- ▲ As Modular or Mono System
- ▲ Active insert clamping
- ▲ Perfect chip flow and chip control with DC

#### Benefits

- ▲ Fast changing of inserts
- ▲ Increased process security
- ▲ Longer service life



For the full range of our grooving tools have a look into our Main Catalogue Chapter 11 or online at: [cuttingtools.ceratizit.com](http://cuttingtools.ceratizit.com)



WNT \ Performance

## Miniature Turning Tools

A wide range of products for the smallest workpieces. Our miniature turning tools provide outstanding efficiency and maximum performance when machining contours at millimetre level.

### THE HIGHLIGHT

## UltraMini – Inserts for Internal Turning

UltraMini cutting inserts for various turning applications are available from  $\varnothing$  0.5 mm. The tool inserts are fully ground from the shank to the cutting edge and so guarantee an unprecedented level of changeover precision.

#### Advantages

- ▲ Excellent repeatability
- ▲ Through coolant supply
- ▲ More or less every contour can be machined
- ▲ Machining possible in virtually all materials
- ▲ Only two different tool holders are required for all cutting inserts

#### Benefits

- ▲ The tool inserts are fully ground from the shank to the cutting edge and so guarantee an unprecedented level of changeover precision
- ▲ Wide range of applications and high flexibility
- ▲ Machining of small workpieces



For the full range of our miniature turning tools have a look into our Main Catalogue Chapter 12 or online at: [cuttingtools.ceratzit.com](http://cuttingtools.ceratzit.com)

CERATIZIT \ Performance WNT \ Performance WNT \ Standard

## Sliding Head Lathes Tools

As a tool specialist for sliding head tooling, we are able to provide an exceptionally comprehensive range of products. We are sure to have the perfect tooling solution for your needs, allowing you to instantly utilise your sliding head lathe with no limitations.

### THE HIGHLIGHTS

#### XheadClamp

Fast tool change with high repeatability – this production requirement is met with the newly developed XheadClamp holder system. The system boasts a simple adjustment process that saves users valuable time. In addition, the XheadClamp system sets standards in terms of flexibility and handling. It makes it quick and easy to precisely change the indexable insert, turning, grooving or threading insert, or to change to a different geometry.

##### Advantages

- ▲ Extremely high clamping forces
- ▲ Repeatability of less than  $\pm 7.5 \mu\text{m}$
- ▲ Maximum stability
- ▲ All heads can be installed irrespective of system size
- ▲ No variable X and Y dimensions when changing the head
- ▲ Centre height is retained even when the insert size is changed

##### Benefits

- ▲ Quicker and easier to change the heads with only one screw
- ▲ Tools can be adapted to the component
- ▲ Extremely fast indexable insert change thanks to exchangeable head
- ▲ Maximum flexibility by selecting from a wide range of exchangeable heads



#### VertiClamp

The VertiClamp system is mainly used for sliding head lathes. The vertical arrangement of the cutting edges saves space and ensures vertical alignment. The axial indexable insert system ensures that the insert seat is perfectly protected from swarf and ensures a high degree of indexable insert changeover precision.

##### Advantages

- ▲ The connection between the indexable insert and holder guarantees optimum fixation.
- ▲ Two intact cutting edges, even after insert breakage
- ▲ High changeover precision due to the axial indexable insert system with defined stop
- ▲ Cutting forces are transferred directly from the insert to the holder so that no shearing forces act on the screws

##### Benefits

- ▲ Insert can be changed on both sides due to combi tool holder
- ▲ A wide range of indexable inserts and geometries increase flexibility



For the full range of our sliding head lathes tools have a look into our Sliding Head Catalogue or online at: [cuttingtools.ceratizit.com](http://cuttingtools.ceratizit.com)

# \ MILLING TOOLS FOR EVERY APPLICATION

**CERATIZIT** \ Performance

**WNT** \ Performance

**WNT** \ Standard



Let the chips fly! We offer a comprehensive range of milling tools – from HSS milling cutters for standard applications to solid carbide high performance tools, we have everything you need to perfect your milling process.





## HSS Milling Cutters

Our range of products includes HSS milling cutters for all common applications. These are available as uncoated or high-quality coated HSS milling cutters, which allow extremely high feeds and cutting speeds. We also offer milling cutters made from powder metallurgically produced HSS that are suitable for the most demanding applications and increased service life.

### THE HIGHLIGHT

#### End Milling Cutter HSS-E Co 8

HSS milling cutter with a good price-performance ratio.

##### Advantages

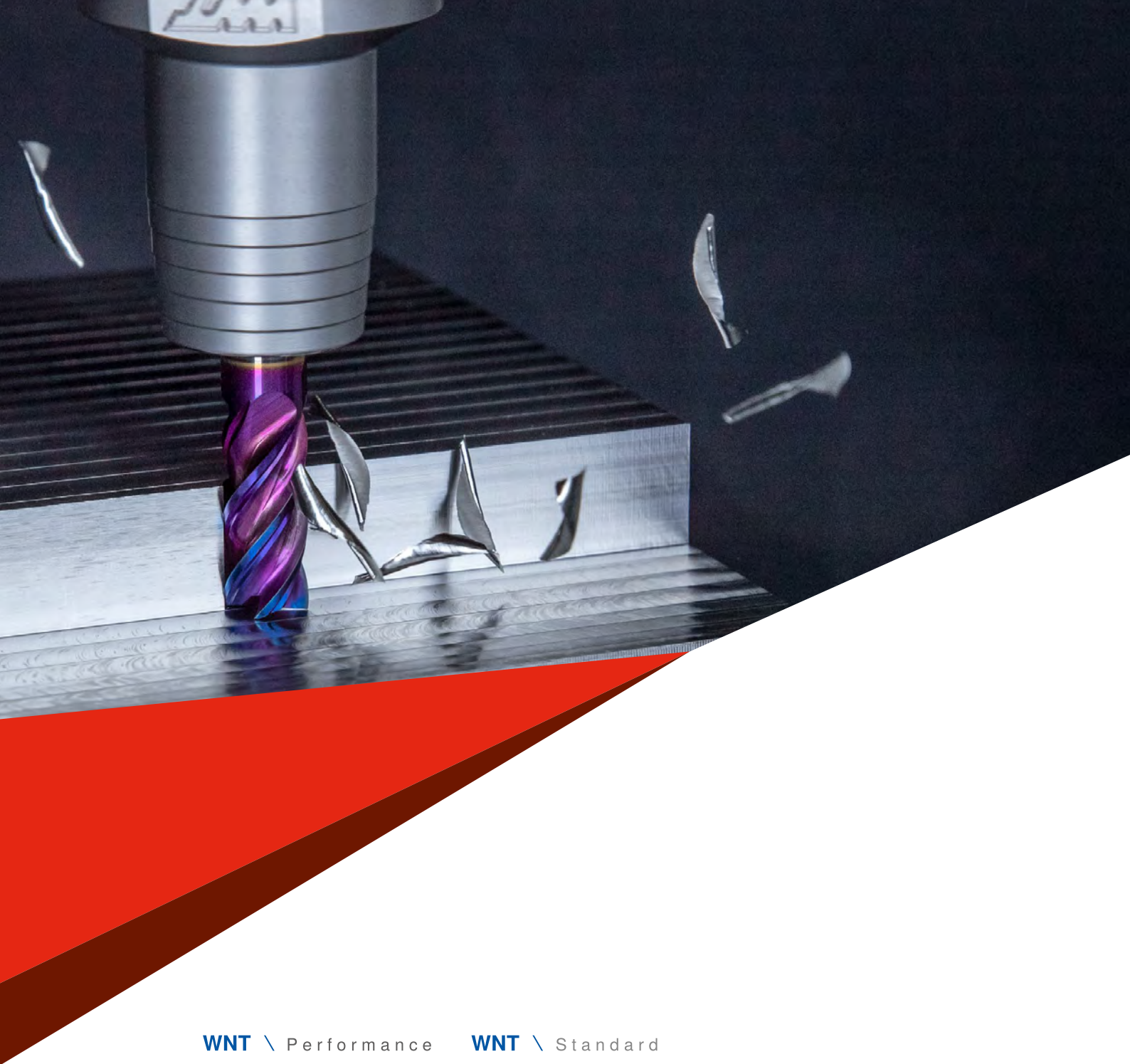
- ▲ Extremely resistant to breakage
- ▲ Available as a form cutter and angle milling cutter
- ▲ Due to its sharpness it is ideal for soft non-ferrous metals and plastics
- ▲ Resistant to impacts and vibrations

##### Benefits

- ▲ Affordable price
- ▲ Can also be used under unstable conditions



For the full range of our HSS Milling Cutters have a look into our Main Catalogue Chapter 13 or online at: [cuttingtools.ceratizit.com](http://cuttingtools.ceratizit.com)



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## Solid Carbide Milling Cutters

Our solid carbide milling tools ensure you always do a good job. As well as all traditional tool types, we also stock a number of special milling cutters and special tools for high-performance machining of steel, stainless steel and aluminium.

## THE HIGHLIGHTS

### SilverLine – End Milling Cutter

#### Ultimate, universal, ultra-quick

The test results speak for themselves: Our tried-and-tested SilverLine is far exceeded by the upgrade in terms of performance and service life. The new milling cutters give our customers a unique competitive edge.

#### Advantages

- ▲ Tried-and-tested tool
- ▲ Excellent price-performance ratio
- ▲ Can be used in almost all materials
- ▲ Wet and dry machining possible

#### Benefits

- ▲ Increased process security
- ▲ Improved performance
- ▲ Increased stability
- ▲ More flexibility

#### Features

- ▲ Optimised core geometry
- ▲ Latest Dragonskin coating
- ▲ Improved chip clearance
- ▲ Expanded product range



### AluLine

#### With optimised coating and geometry for the effective machining of aluminium and non-ferrous metals

Solid carbide milling tools from CERATIZIT ensure you always do a good job: We have added milling tools for machining aluminium and non-ferrous metals to our product portfolio. This means you will now be able to find the ideal product for any application.

The AluLine milling cutters meet the most demanding requirements when machining aluminium and non-ferrous metals. This is all made possible thanks to the special geometry and the specifically tailored coating.

#### Advantages

- ▲ Economical and process-secure machining of aluminium and non-ferrous metals
- ▲ Versatile tool selection, a tool available for more or less every application
- ▲ Long service life, thanks to the ultra-smooth DLC coating
- ▲ Also suitable for dry machining

#### Benefits

- ▲ Maximum service life, even in abrasive materials
- ▲ Low adhesion of chips
- ▲ High cutting speeds and feed rates make for a cost-effective machining process



### BlueLine – Finish Milling Cutter

Maximum performance and unbeatable portfolio for high-performance machining of hardened materials.

#### Advantages

- ▲ Powerful substrate, perfectly adapted to the machining of hardened materials
- ▲ High-performance coating with maximum temperature resistance
- ▲ Customised geometry for economical machining up to 65 HRC
- ▲ Extremely precise micro cutter to stay within the lowest tolerance

#### Benefits

- ▲ Cost-effective machining of hardened materials up to 65 HRC
- ▲ Long service life due to perfectly coordinated substrate, geometry and coating
- ▲ Huge tool selection provides the right tool for every machining job



## MonsterMill TCR

### End Milling Cutter with Corner Radius

The MonsterMill TCR has been developed for machining titanium parts. It is predestined for use in the area of medical technology and for the aerospace industry.

The MonsterMill TCR milling cutter is setting new standards in titanium machining and impresses thanks to its process security and long tool life.

#### Advantages

- ▲ Innovative Dragonskin coating reduces thermal loads and enables high levels of wear resistance
- ▲ A new type of high-performance substrate for extreme toughness and flexural strength
- ▲ Perfect geometry designed to match the material
- ▲ Also available as an uncoated version in order to avoid contamination of the material

#### Benefits

- ▲ Irregular pitch for extremely quiet running and good surfaces
- ▲ High process security as the polished chip spaces ensure safe and targeted swarf removal



## PCD Milling Tools

### Hard cutting material = long tool life

The PCD milling cutters are designed to machine and withstand particularly abrasive materials. The PCD cutting materials are therefore extremely well-suited to machining lightweight construction materials like aluminium, magnesium and fibre-reinforced plastics.

The polycrystalline diamond is a synthetically produced diamond material which comes very close to the hardness of monocrystalline diamond (natural diamond).

#### Advantages

- ▲ Its high level of hardness makes it possible to machine very abrasive materials
- ▲ Significantly higher cutting speeds possible
- ▲ Significant increases in tool life, as PCD is very wear-resistant
- ▲ The very best surface qualities can be achieved

#### Benefits

- ▲ Significantly higher tool life possible than with solid carbide
- ▲ High cutting speeds and feed rates increase productivity
- ▲ Less work required when inspecting workpieces manufactured using PCD tools
- ▲ Good price-performance ratio



## CircularLine – End Milling Cutter

CircularLine end mills are designed for the trochoidal milling process. This shortens machining times and extends the tool life.

#### Advantages

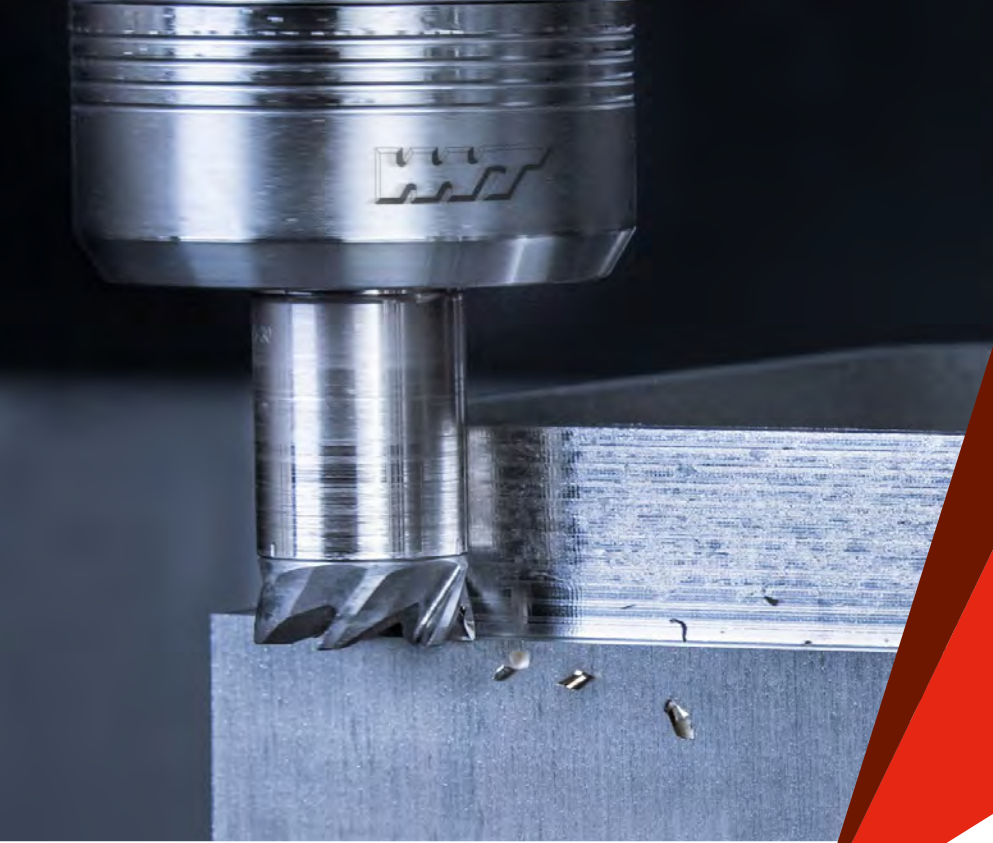
- ▲ Narrow pitch chip breaker ensures chips are short
- ▲ Universal tool with 5–6 cutting edges for extremely quiet running and a high material removal rate
- ▲ Available in various lengths (2xDC, 3xDC, 4xDC)
- ▲ Large selection of cutting edge designs

#### Benefits

- ▲ Cutting depth of up to 4xDC achievable
- ▲ Also suitable for less powerful machines
- ▲ Higher chip removal rate than is possible with HPC machining
- ▲ High process security due to short chips



For the full range of our Solid Carbide Milling Cutters have a look into our Main Catalogue Chapter 14 or online at: [cuttingtools.ceratizit.com](http://cuttingtools.ceratizit.com)



WNT \ Performance

## Exchange Head System

Want to reduce your costs and are looking for an alternative to solid tools? Then our exchangeable head systems are the perfect solution for you! These systems are stable, have very high radial run-out accuracy and also provide you with the utmost flexibility as there is an exchangeable head to suit almost every application.

## THE HIGHLIGHT

### MultiLock

MultiLock – The exchangeable head system for advanced performance. Excellent performance thanks to perfectly adapted cutting data values on the interface and cutting edge geometry.

#### Advantages

- ▲ High-precision interface
- ▲ Flat, stable interface with face contact
- ▲ Positive locking ensures stability
- ▲ Steel carbide combination has a vibration-dampening effect

#### Benefits

- ▲ Longer tool service life
- ▲ High stability and very resource-efficient
- ▲ Ensures high force absorption
- ▲ Optimum surface quality



For the full range of our Exchange Head Systems have a look into our Main Catalogue Chapter 2, 4 and 14 or online at: [cuttingtools.ceratizit.com](http://cuttingtools.ceratizit.com)



**CERATIZIT** \ Performance

## Milling Tools with Indexable Inserts

Our high-quality milling tools with indexable inserts will ensure that you are perfectly equipped to take on all possible milling operations, such as face milling, shoulder milling or high-feed milling. A variety of systems for the production are the perfect addition to the comprehensive product portfolio.



# THE HIGHLIGHTS

## Face Milling – System MaxiMill 271

Efficient face milling system with double-sided indexable insert with 8 cutting edges.

Efficiency, process security and flexibility. That is what MaxiMill 271 stands for. The extremely soft-cutting tool system can be used in a wide range of applications thanks to the fine and standard pitch holders, while the wiper insert also helps achieve first-class finishes. Furthermore, the system stands out thanks to the cutters's excellent wear behaviour and also impresses with optimal chip formation and removal.

### Advantages

- ▲ High concentric and axial running accuracy due to narrow manufacturing tolerances and the precision periphery ground indexable inserts
- ▲ Irregular pitch for extremely quiet running
- ▲ Perfect chip evacuation
- ▲ Positive indexable insert geometries for soft cutting
- ▲ Indexable inserts with Masterfinish geometry and Masterfinish indexable inserts
- ▲ Extensive portfolio of indexable inserts
- ▲ Two holder variants can be used with one indexable insert type, face milling variant and high feed variant

### Benefits

- ▲ Optimal surface quality
- ▲ Wide range of applications
- ▲ Extremely cost-effective
- ▲ High process security



## Shoulder Milling – System MaxiMill 491

Milling system with 8 usable cutting edges per indexable insert, which produces an exact 90° profile.

### Advantages

- ▲ High concentric and axial running accuracy due to narrow manufacturing tolerances and the precision periphery ground indexable inserts
- ▲ Irregular pitch for extremely quiet running
- ▲ Perfect chip control, reduction of chip jams
- ▲ Positive indexable insert geometries for soft cutting
- ▲ Indexable inserts with Masterfinish geometry
- ▲ Extensive portfolio of indexable inserts

### Benefits

- ▲ High surface qualities
- ▲ High process security
- ▲ Wide range of applications
- ▲ Reduction of production costs



## High-Feed Milling – System MaxiMill HFC

The high-feed milling system for extreme chip removal rates.

### Advantages

- ▲ Cutting depth of up to 3.3 mm
- ▲ Soft cut with positive geometry
- ▲ Sturdy indexable insert
- ▲ Irregular pitch for extremely quiet running
- ▲ Optimised chip spaces for excellent chip evacuation
- ▲ Cutting forces are exerted primarily in the axial direction
- ▲ Minimal stress on the machine spindle

### Benefits

- ▲ High chip removal rate
- ▲ Maximum process security
- ▲ Lower costs per part



For the full range of our Milling Tools with Indexable Inserts have a look into our Main Catalogue Chapter 15 or online at: [cuttingtools.ceratizit.com](http://cuttingtools.ceratizit.com)

When it comes to tool clamping, it is better not to leave anything to chance. We can offer the perfect adapter for your customised machining applications, no matter how specific, with reliability guaranteed.



Rotating Tool Holders

Static Tool Holders

# \ TOOL CLAMPING

## CLAMPING SOLUTIONS FOR MACHINING



WNT \ Performance

WNT \ Standard



WNT \ Performance    WNT \ Standard

## Rotating Tool Holders

Reliability, radial run-out accuracy, repeatability and vibration damping – we have the perfect clamping solution for every rotating tool, whether for traditional standard applications or high-speed machining.

## THE HIGHLIGHTS

### High Pressure Chuck

The high vibration damping in hydro expansion technology ensures optimum workpiece surfaces and a longer tool life. Its simple operation without additional devices also impresses. These robust and low-maintenance chucks are available from stock in a wide variety of versions. They are ideal for boring.

#### Advantages

- ▲ All common interfaces available from stock
- ▲ Excellent vibration damping
- ▲ Quick and easy clamping
- ▲ Maximum flexibility by using reduction sleeves
- ▲ Min. 550 NM clamping force
- ▲ Temperature resistance up to 170 °C
- ▲ Ideal runout  $\leq 3 \mu\text{m}$

#### Benefits

- ▲ Fast delivery times
- ▲ Large product portfolio
- ▲ Optimal surface quality
- ▲ Maximum flexibility
- ▲ Very high clamping forces



### Centro-P, ER Precision Collet Chuck

The Centro-P ER precision collet chuck is among the very best collet chucks available. Unique, patented design features enable much greater accuracy to be achieved than with conventional ER collet chucks. The system also boasts significantly higher clamping forces, meaning the Centro-P can be used in much broader areas of application.

#### Advantages

- ▲ High accuracy
- ▲ Extremely high clamping forces
- ▲ High radial run-out accuracy (3  $\mu\text{m}$  with 3xD)
- ▲ High stability and rigidity
- ▲ Universal chuck (drilling/milling/threading)
- ▲ Balance quality of G2.5 at  $n = 25.000 \text{ 1/min}$

#### Benefits

- ▲ Fast delivery times
- ▲ Large product portfolio
- ▲ Optimal surface quality
- ▲ Maximum flexibility
- ▲ Very high clamping forces



### Torsional Vibration Dampers with ABS Connection

Defined radial grooves in the flat surface of the ABS connection create the required degree of torsion freedom. This segmentation covers the entire circumference of the ABS connection and divides it into multiple axially rigid support segments. Thus, the drilling tool can be effectively prevented from being tilted by cutting forces.

#### Advantages

- ▲ Minimal noise level
- ▲ Low vibration machining
- ▲ Increased process security
- ▲ Maximum service life

#### Benefits

- ▲ Optimised surface quality
- ▲ Cost reduction
- ▲ Fewer rejects



For the full range of our Rotating Tool Holders have a look into our Main Catalogue Chapter 16 or online at: [cuttingtools.ceratizit.com](http://cuttingtools.ceratizit.com)



WNT \ Performance    WNT \ Standard

## Static Tool Holders

Reliability, radial run-out accuracy, repeatability and vibration damping – we have the perfect clamping solution for every rotating tool, whether for traditional standard applications or high-speed machining.

### THE HIGHLIGHT

#### PSC Toolholder – DDJN 93°/55°

Tool holder with PSC interface for efficient turning.

##### Advantages

- ▲ Optimal cooling due to internal duct
- ▲ High flexural strength

##### Benefits

- ▲ Reduced setup times
- ▲ Self-centring



For the full range of our Static Tool Holders have a look into our Main Catalogue Chapter 16 or online at: [cuttingtools.ceratzit.com](http://cuttingtools.ceratzit.com)

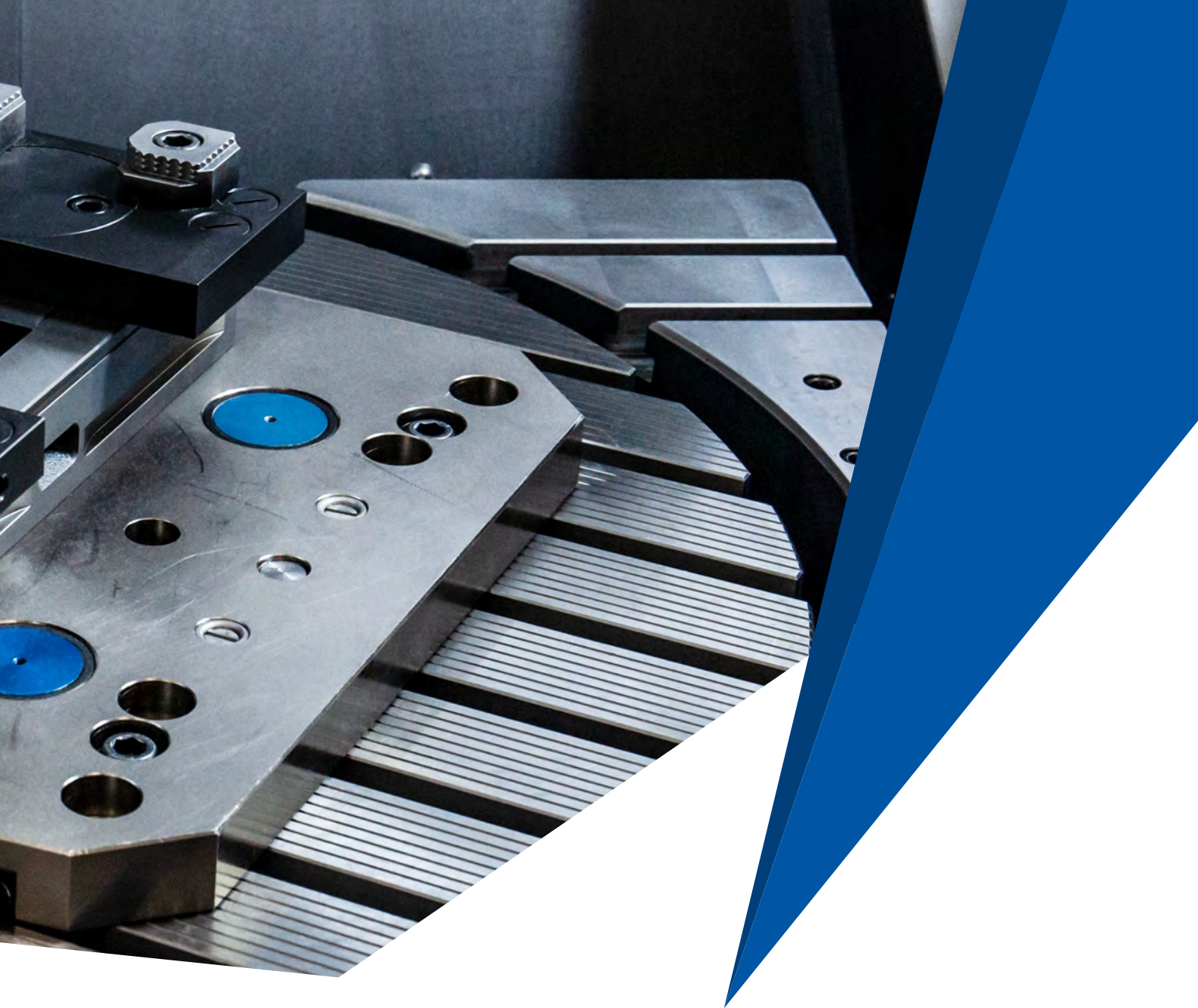
# \ WORKPIECE CLAMPING ALWAYS WELL PREPARED



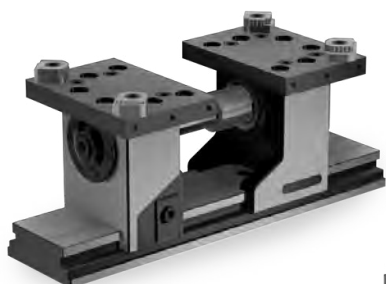
WNT \ Performance

Everything from a single source – and perfectly clamped! We are a reliable partner for workpiece clamping and offer effective clamping systems for a wide range of applications.





Single Vice



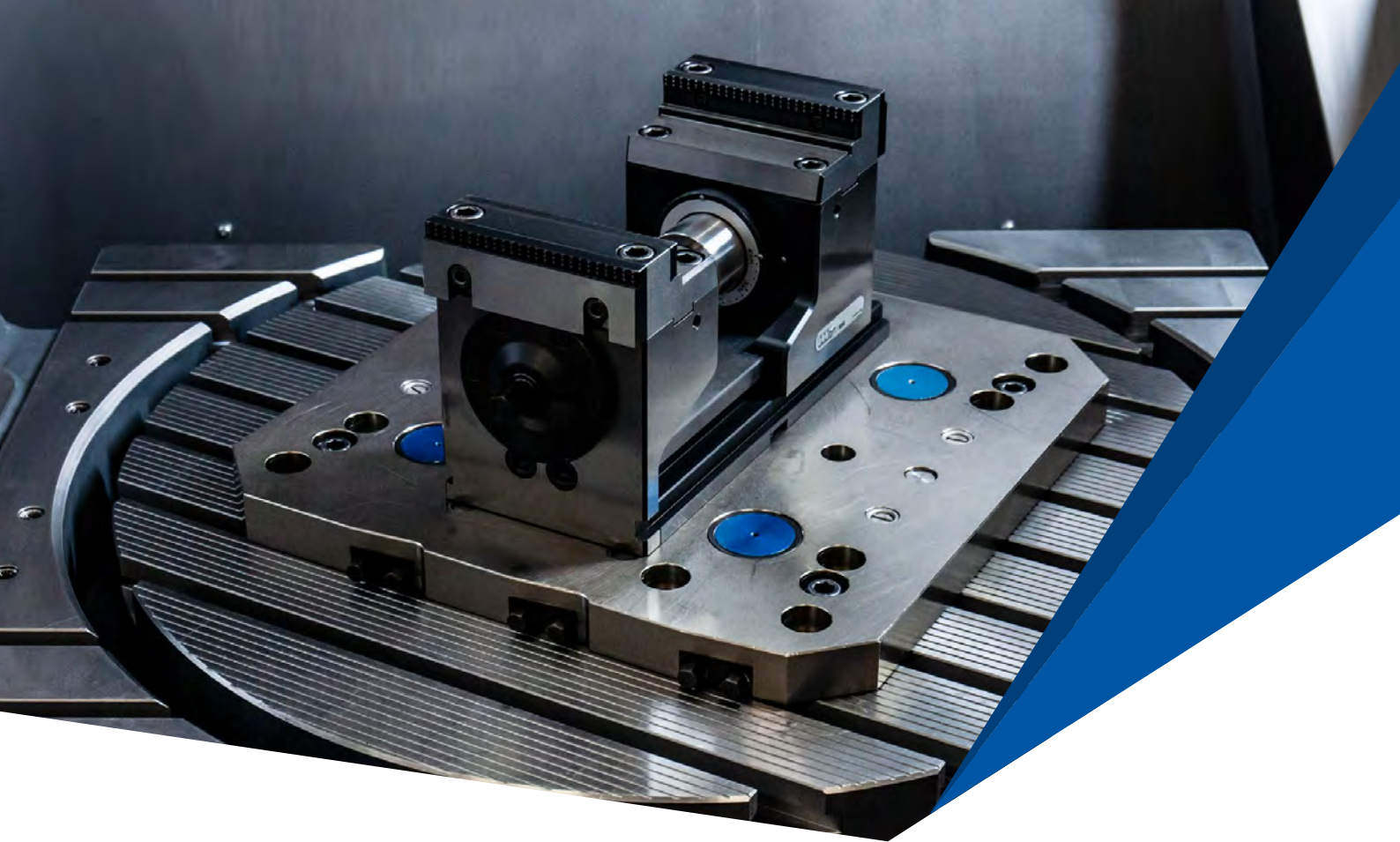
Centric Vice



Multiple Vice



Clamping Variants



WNT \ Performance

## Single Vice

Our extremely effective clamping systems offer huge potential in terms of reducing set up times. High precision and repeatability with optimum force amplification set these systems apart from the rest.

### THE HIGHLIGHT

## H5G-Z, 5-Axis

#### Vice with Movable Fixed Jaw

Powered clamping system perfect for 5-axis machining with clamping by tension of 40kN directly on the workpiece.

#### Advantages

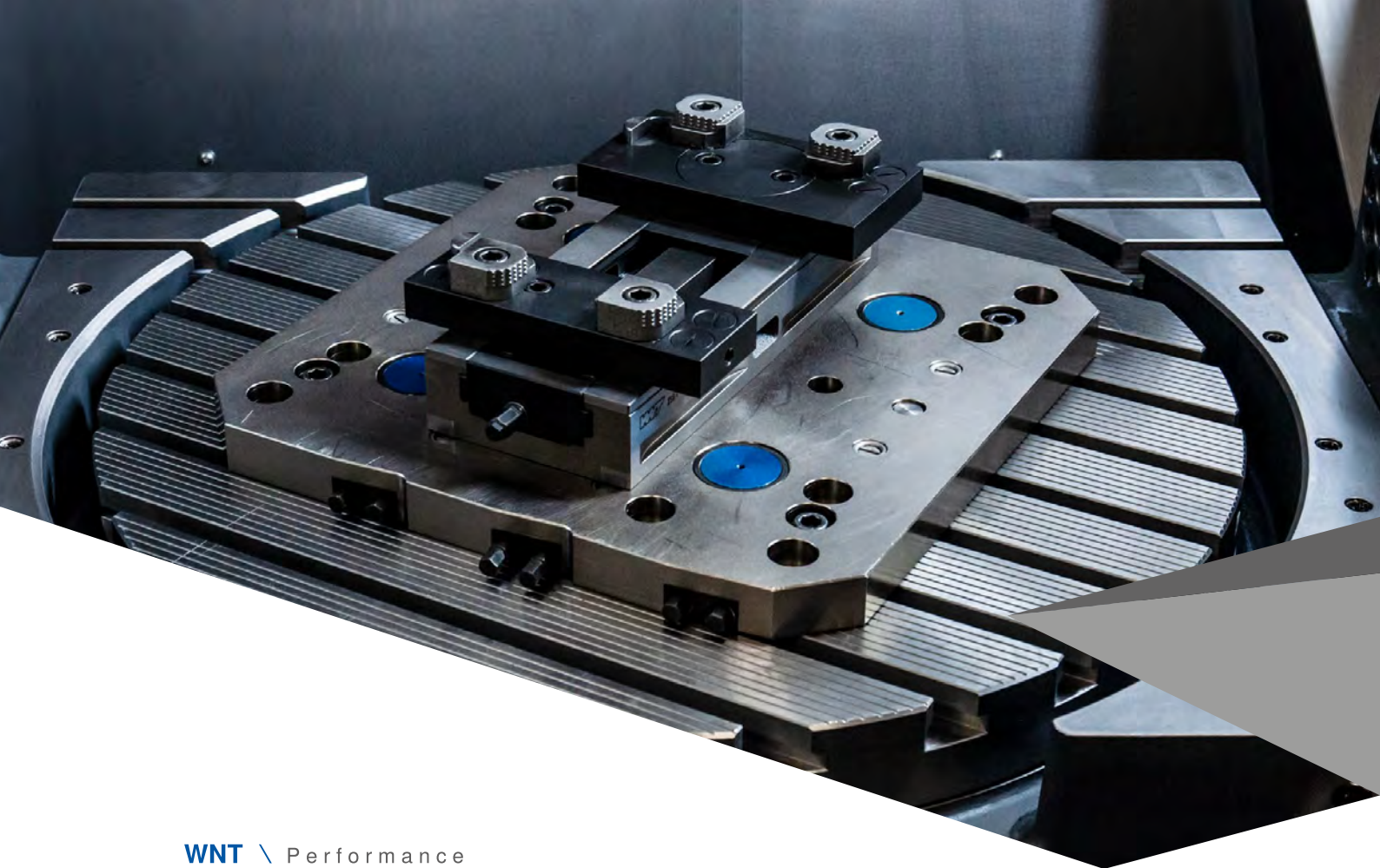
- ▲ Fast handle clamping with hexagon socket
- ▲ Mechanical power transmission
- ▲ Drawbar extension
- ▲ Scale
- ▲ Movable fixed jaw sliding
- ▲ Optimal accessibility
- ▲ Continuous clamping force adjustment

#### Benefits

- ▲ High flexibility and perfect accessibility
- ▲ Faster, improved orientation
- ▲ Reduced setup times
- ▲ Extremely high level of process security



For the full range of Workpiece Clamping have a look into our Workpiece Clamping Catalogue or online at: [cuttingtools.ceratizit.com](http://cuttingtools.ceratizit.com)



WNT \ Performance

## Centric Vice

Our centric vices are suitable for workpiece automation in your production processes as they offer high process security, universal application options and very good access to the workpiece for the tool.

### THE HIGHLIGHT ZSG 4

#### Sealed Centric Vice

ZSG 4 centric vice, mechanical version with high precision and clamping force. Closed system with optimised chip flow for high process security.

#### Advantages

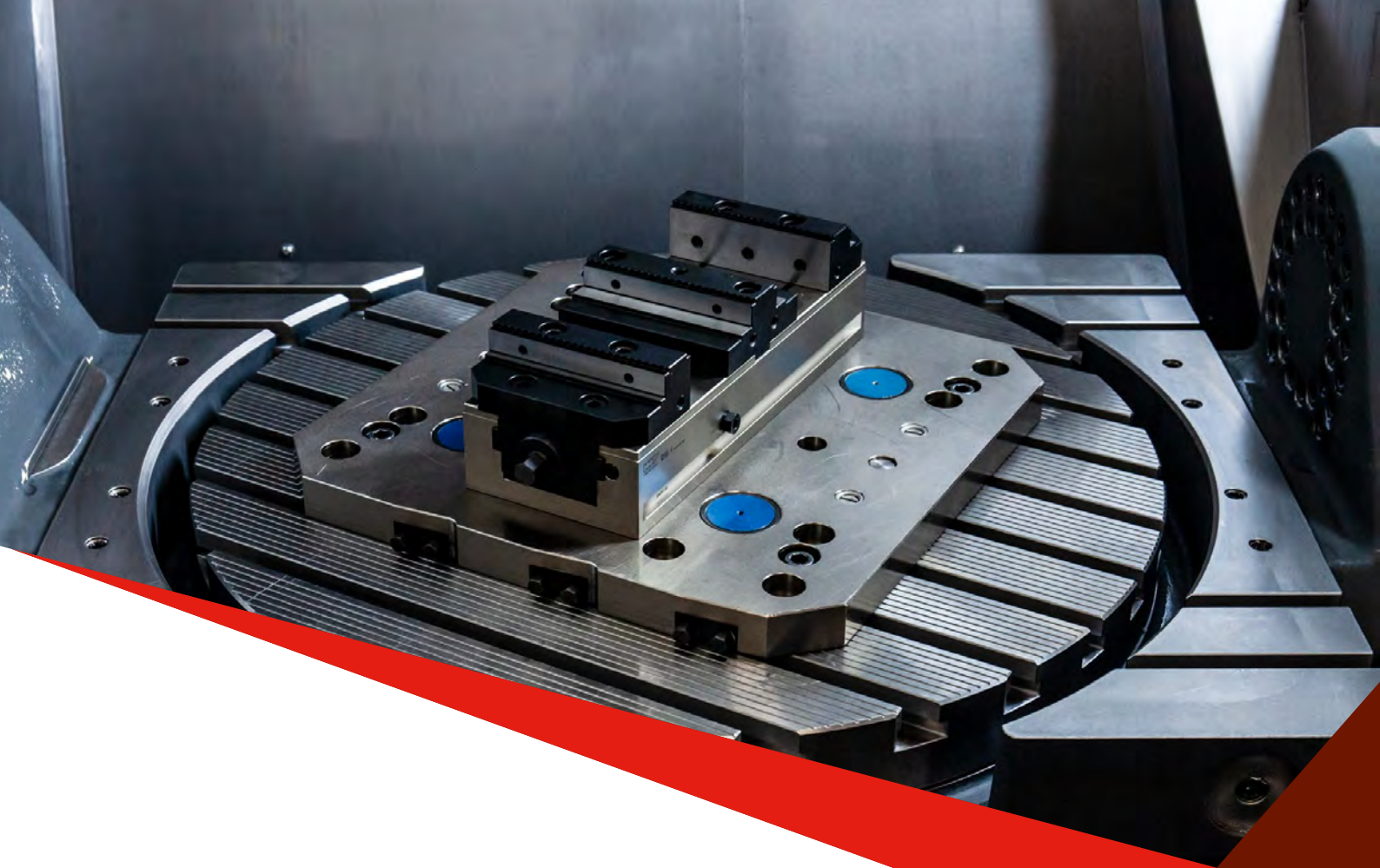
- ▲ Closed system
- ▲ High accuracy
- ▲ Ideal for automation
- ▲ Large clamping range
- ▲ Jaw change with only two screws
- ▲ Ball bearing mounted spindle
- ▲ Compact design

#### Benefits

- ▲ Process security
- ▲ Reduced setup times
- ▲ Precise production



For the full range of Workpiece Clamping have a look into our Workpiece Clamping Catalogue or online at: [cuttingtools.ceratizit.com](http://cuttingtools.ceratizit.com)



WNT \ Performance

## Multiple Vice

Shortened set up times, multi-purpose usage and optimum utilisation of the machine table – our multiple vices increase your machine uptime and often play a key role in optimising production processes.

## THE HIGHLIGHT DSG 4

### Double Vice without Jaws

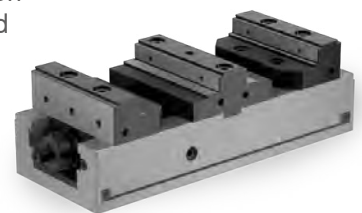
The user-friendly DSG 4 double vice system ensures consistently high precision and a wide application range.

#### Advantages

- ▲ Induction-hardened base body
- ▲ Case-hardened system jaws
- ▲ Nickel-plated base body
- ▲ Fully encapsulated drive
- ▲ Straightforward, stable third hand operation

#### Benefits

- ▲ Consistently high precision
- ▲ Minimal cleaning required
- ▲ Process security
- ▲ Reduced setup times



For the full range of Workpiece Clamping have a look into our Workpiece Clamping Catalogue or online at: [cuttingtools.ceratizit.com](http://cuttingtools.ceratizit.com)



WNT \ Performance

## Clamping Variants

When it comes to increasing machine capacities and reducing setup times to a minimum, our zero point clamping systems are the perfect solution. These clamping variants have been proven to speed up manufacturing processes while maintaining outstanding precision and process security.

### THE HIGHLIGHT

## MNG – Base Plate

#### Rectangular 2-location

Optimisation of the clamping system, fixture and workpiece change in the production process by means of the MNG base plate.

#### Advantages

- ▲ Low mechanical clamping system
- ▲ Easy handling and high insertion force (20 kN at the clamping bolt)
- ▲ Hardened dowel bushes
- ▲ Stainless and vacuum-hardened

#### Benefits

- ▲ Optimisation of setup times
- ▲ High accuracy when changing vice
- ▲ Constant zero point



For the full range of Workpiece Clamping have a look into our Workpiece Clamping Catalogue or online at: [cuttingtools.ceratizit.com](http://cuttingtools.ceratizit.com)

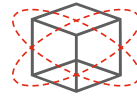
# FAST AND EFFICIENT AVAILABILITY



On the latest technology

## Technical Training

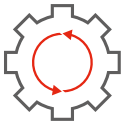
Our engineers are provided with constant training to keep them up to speed on all technical matters. We will gladly share this knowledge with you. Use our Service for the further education of your metal cutting technicians in the Technical Centre.



Tool data always at your fingertips

## Cutting data and CAD models for day-to-day assistance

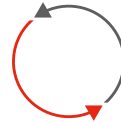
In addition to detailed cutting data we also offer 2D and 3D models to assist you with your tool management or for simulating an operation. All data for this Service is available for you in our Online Shop.



Bringing the old back to life

## Regrinding, not replacing

Your used precision tool is in the best possible hands with us. We return your tool to you with the original finish, coating and geometry – as good as new and ready for use back in the machine.



We come full circle

## Our recycling service

Our joint contribution for the good of the environment: we take back your carbide and process it appropriately. You receive a credit from us that you can redeem with your next tool purchase.



Intelligent Machining

## Industry 4.0 with ToolScope

ToolScope is a modular assistance system for monitoring and optimizing machining processes. With it, we are the only company that offers not only the tools, but also the expertise and capabilities to master and improve processes throughout the entire machining process.



Competent advice also available on call

## Application engineers with know-how

An application engineer is always available by phone to answer your application-specific questions. Even if they are not on-site with you, our experts are always ready to answer your questions.

Use our Service by telephone Monday to Friday from 8.00 am – 6.30 pm.

The Freephone number is 0800 073 2 073.



It couldn't be easier

## Ordering via the Online Shop

In the Online Shop you can select and order your tool with a mouse click, 24 hours a day, 7 days a week.

All your transactions including those in the past can be viewed clearly and easily in the online shop. Register and use our Service:

[cuttingtools.ceratizit.com](http://cuttingtools.ceratizit.com)



Your competent partner on-site

## Technical advice from your Technical Sales engineer

There is a simple reason why we like to support our customers: we want the best for them. And the best solutions are developed when we work together.

Thanks to many years of practical experience our experts are able to quickly recognize your individual needs and assist you in optimizing your productivity.



Stock around the clock!

## Tool Supply 24/7

If you install a Tool-O-Mat it means that we take on all the procurement and stocking costs for you. You have 100 % availability of all tools at all times and without expenditure.



From single items to large orders!

## There are no minimum order quantities

No matter which tool you need, we promise you quick and uncomplicated delivery. Even if you only order one item! We do not have minimum order quantities.

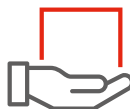


Your tool is ready!

## High product availability thanks to state-of-the-art logistics

Why own stock? We take care of that for you!

With the cutting-edge logistics center of the cutting tools industry, we guarantee that your order will be delivered promptly.



Where is my order right now?

## Order Delivery Tracking

For those who do not want to lose sight of their order: With the shipment number you can track the current status of your order online – no matter how your order was placed.

# UNITED. EXPERIENCED. METAL CUTTING.



**SPECIALIST FOR INDEXABLE INSERT TOOLS  
FOR TURNING, MILLING AND GROOVING**

The product brand CERATIZIT stands for high-quality indexable insert tools. The products are characterized by their high quality and contain the DNA of many years of experience in the development and production of carbide tools.



**THE QUALITY LABEL FOR  
EFFICIENT BORE PRODUCTION**

High-precision drilling, reaming, countersinking and boring is a matter of expertise: efficient tooling solutions for drilling and mechatronic tools are therefore part of the KOMET brand name.



**EXPERTS FOR ROTATING TOOLS,  
TOOL HOLDERS AND CLAMPING SOLUTIONS**

WNT is synonymous with product diversity: solid carbide and HSS rotating tools, tool holders and efficient workholding solutions are all part of this brand.



**CUTTING TOOLS  
FOR THE AEROSPACE INDUSTRY**

Solid carbide drills specially developed for the aerospace industry bear the product name KLENK. The highly specialised products are specifically designed for machining lightweight materials.

**CERATIZIT UK & IRELAND LTD**  
Europa Link \ UK-Sheffield S9 1XU  
Tel.: +44 114 242 8 820  
info.uk@ceratizit.com \ www.ceratizit.com

