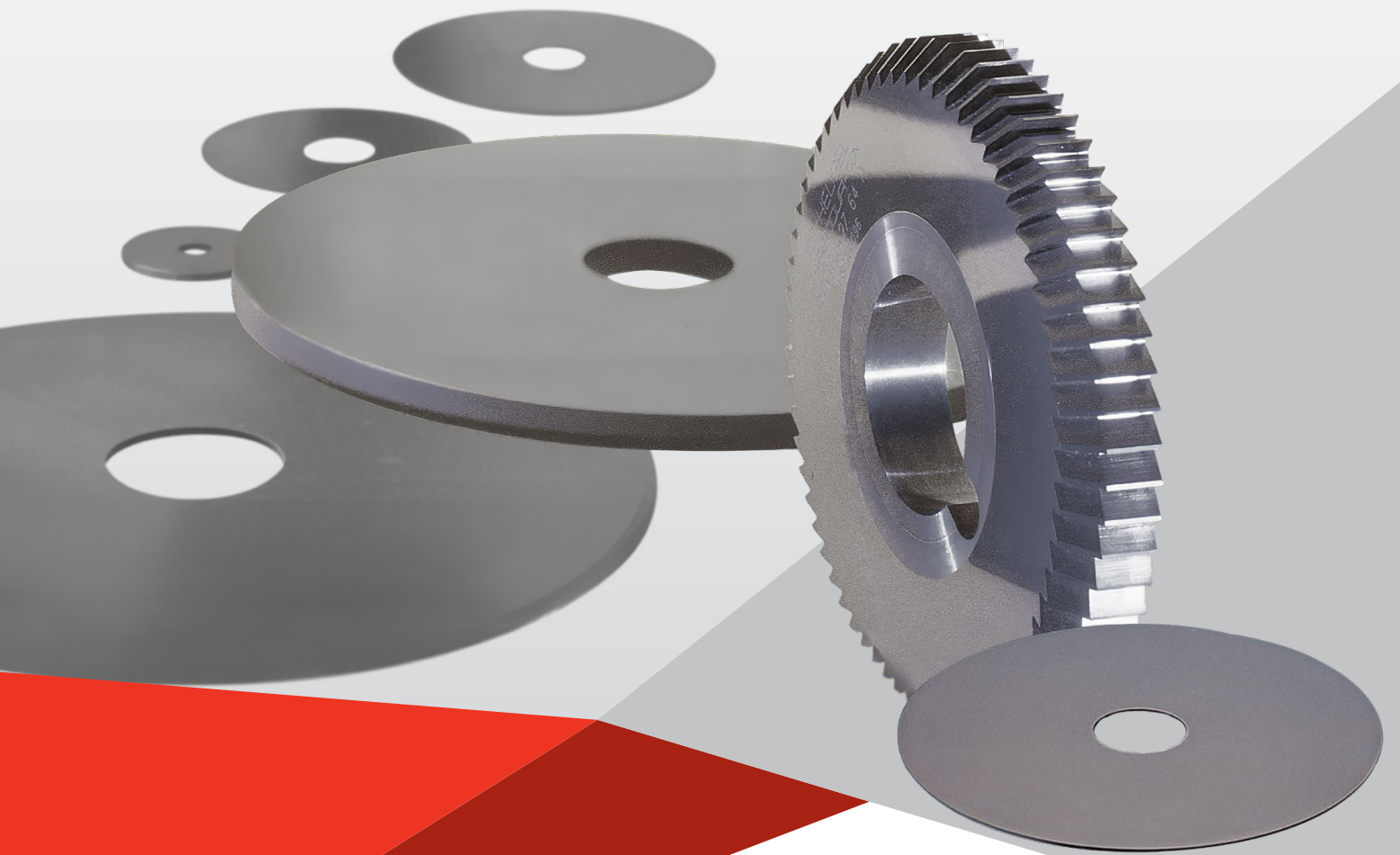


Circular tooling blanks



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

Tooling a Sustainable Future

ceratizit.com



CERATIZIT
GROUP



As we manage the entire process chain, we can always guarantee top quality and smooth collaboration.

The right blank for every cut

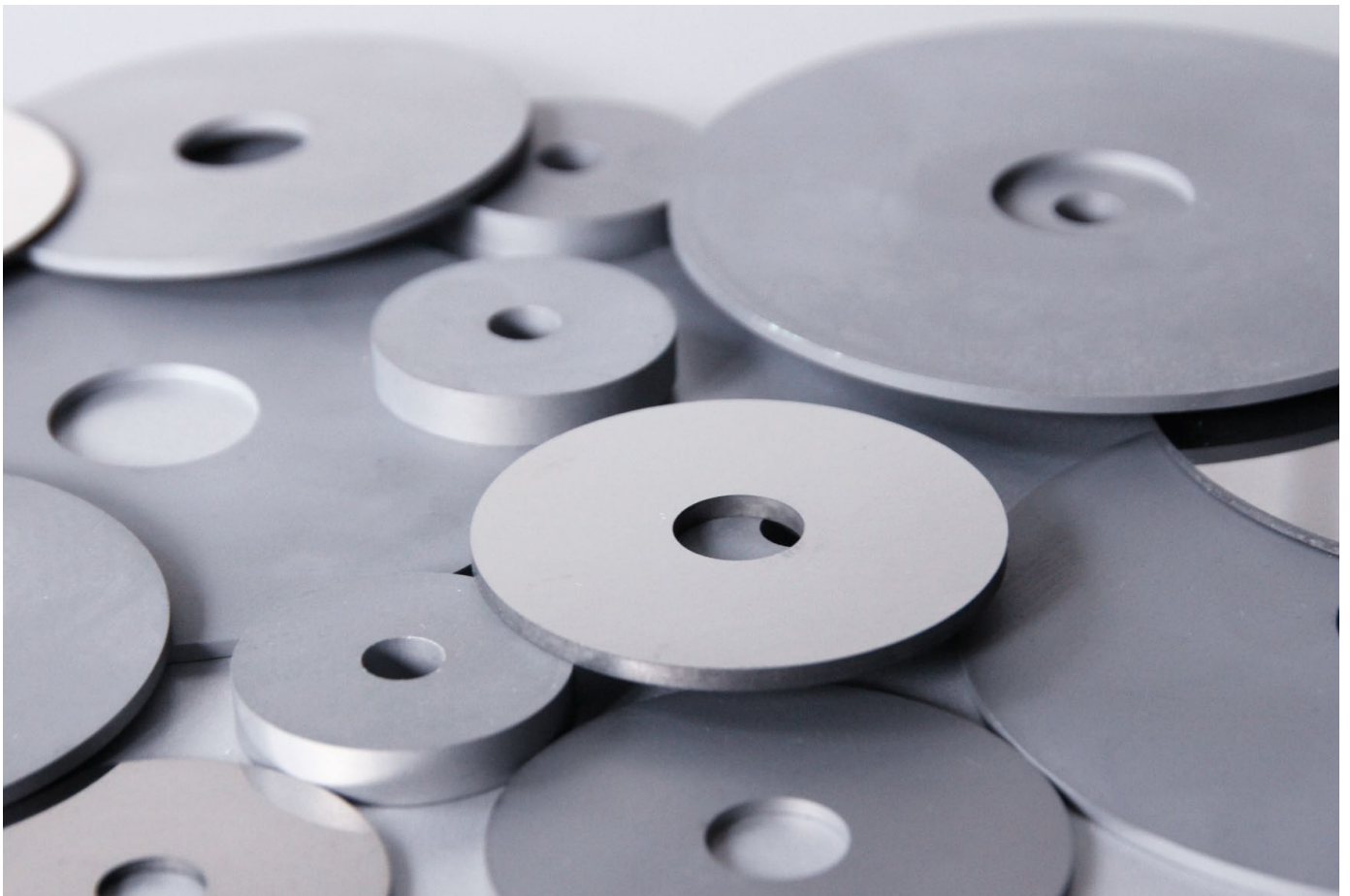
Requirements for hard metal materials are very high in the precision tooling industry. Our tooling blanks guarantee a long tool life, good parallelism and reliable concentricity. Thanks to our wide range of grades, we offer the optimal solution for every application.

Perfectly prepared to your needs

During our creation of the tooling blanks, we place great value on your ability to further process the products efficiently with marginal effort: **we guarantee precise finishes with low tolerances, a repeatable flatness as well as low grinding allowances.**

Standard programme and custom-made products

Our online shop offers a direct look into our standard programme, including inventory, and further simplifies the ordering process. Outside of this programme, we can additionally produce nearly any dimension – whether it's a blank or a pre-ground disk. We have developed the intuitive configurator tool GO2.0 on our online shop, where you will be able to configure your non-standard blanks incl. features in a few clicks. If you wish to have access, please contact our Customer Service.



Advantages & benefits



Advantages

Thanks to CERATIZIT you can manage the entire process chain, from the raw material to the finished product.

Carbide grades with an optimal ratio of hardness and fracture toughness.

Broad selection, also for proven corrosion-resistant carbide grades.

Technical advice on site: our people have the technical knowledge to support you.

Targeted recommendation of the most suitable grade.

Widest range of corrosion-resistant grades available on the market.

Consistent quality.

Profound knowledge of applications.

Homogeneous structure and minimised porosity, also for larger dimensions.

Metallurgical analyses in the CERATIZIT Group.

Benefits

Excellent product quality precisely adapted to your needs, maximum process reliability and holistic expertise.

Minimal wear and long service life and reduced costs mean higher productivity.

Always the right individual solution for every application.

Support for every challenge and innovation, rapid response when needed.

Tool life optimisation, increase in productivity.

Individual grade selection for the largest application range in the fields of stamping, bending, blanking and forming operations.

High productivity and repeatability.

Optimisation of processes and tool life.

Repeatability and high-quality and precise working results.

Additional technical support in the field of application optimisation and development.

Our grades

Our top-quality and established standard carbide grade CTS14Y shows reproducible cutting qualities and proved very resistant to wear in several applications and materials, such as machining grey cast iron, tempered iron, non-alloyed steels, super alloys, titanium and tantalum alloys, copper, graphite, aluminium and others.

Other grades for special applications are available on request.

Because we are able to offer the entire process chain from a single source – from production of raw materials and mineral ores through the composition of the powder and continuous improvement of the carbide powder and its processing – we can guarantee you supreme quality at all times.

CERATIZIT- grade code	ISO code	U.S. code	Grain size	Hardness			Transverse rupture strength [MPa]	Fracture toughness [Mpa*m ^{1/2}]
				[HV10]	[HV30]	[HRA]		
STANDARD GRADE								
CTS14Y	K10-K20	C3	submicron	1720	1690	92.5	2500	8.7
SPECIAL GRADES								
CTS12D	K05-K15	C3	submicron	1800	1770	92.9	3700	8.8

Please note: the information given here is for illustrative purposes only, and does not constitute either a specification or a representation.

Your partner to find the most suitable solution

At CERATIZIT, we aim to treat our customers as privileged partners and guide them in developing new products or improving existing ones.

Thanks to our engineering expertise and project management capacities, we can design innovative carbide solutions to meet the specific requirements of your product.

CERATIZIT's supreme experience of working with carbide, production experts on the ground and our dedicated engineering team are the guarantee of your future success!

Products

CERATIZIT offers a wide range of **standard and customised circular hard metal discs from Ø 8 mm up to Ø 400 mm**. Our team of experts helps you finding the optimum solution for your application and our catalogue provides common sizes of blanks from stock.

Our products benefit from the following properties of tungsten carbide:

- ▲ High wear resistance
- ▲ Good machining properties
- ▲ Fracture toughness
- ▲ Good parallelism and concentricity

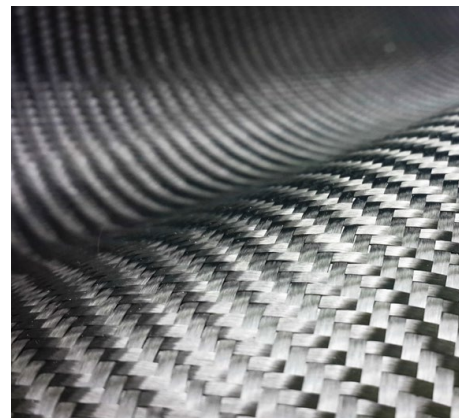
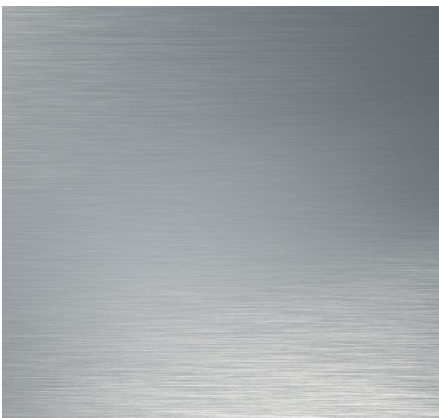
The following executions are possible, among others:

- ▲ As sintered with low grinding allowance (“near net shape” technology)
- ▲ Pre-ground (thickness, bore, OD, eroded keyway)
- ▲ Additional features possible: keyways, holes, preformed teeth, chamfers, grooves

Applications

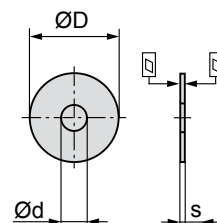
Our circular saw blades are specially designed for cutting tools manufacturers. They can be used for cutting the following material types, among others:

- ▲ Metal
- ▲ Plastic
- ▲ Cardboard
- ▲ Wood
- ▲ Composite material



Standard programme Ø 15.3 – 32.5

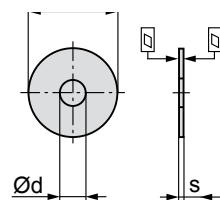
Blanks sizes, Grade CTS14Y



D [mm]	D Tol. + [mm]	d [mm]	d Tol. + [mm]	s [mm]	s Tol. + [mm]	Material Nr.
15.3	1.1	4.8	-0.5	0.8	0.15	11065827
15.3	1.1	4.8	-0.5	1.1	0.15	11065838
15.3	1.1	4.8	-0.5	1.3	0.15	11065839
15.3	1.1	4.8	-0.5	1.5	0.15	11598161
15.3	1.1	4.8	-0.5	1.8	0.15	11088142
20.5	1.1	4.8	-0.5	0.8	0.15	11065766
20.5	1.1	4.8	-0.5	1	0.15	11458873
20.5	1.1	4.8	-0.5	1.3	0.15	11065780
20.5	1.1	4.8	-0.5	1.5	0.15	11035241
20.5	1.1	4.8	-0.5	1.8	0.15	11065785
20.5	1.1	4.8	-0.5	2.3	0.15	11065787
20.5	1.1	4.8	-0.5	2.8	0.15	11065790
20.5	1.1	4.8	-0.5	3.3	0.15	11088144
25.5	1.1	7.7	-0.5	0.8	0.15	11739393
25.5	1.1	7.7	-0.5	1	0.15	11888021
25.5	1.1	7.7	-0.5	1.3	0.15	12615251
25.5	1.1	7.7	-0.5	1.6	0.15	12615253
25.5	1.1	7.7	-0.5	1.8	0.15	11888022
25.5	1.1	7.7	-0.5	2.3	0.15	11831186
25.5	1.1	7.7	-0.5	2.6	0.15	12615255
30.5	1.1	7.7	-0.5	0.8	0.15	11055386
30.5	1.1	7.7	-0.5	1	0.15	11213084
30.5	1.1	7.7	-0.5	1.2	0.15	11600659
30.5	1.1	7.7	-0.5	1.5	0.15	11035063
30.5	1.1	7.7	-0.5	1.8	0.15	11055399
30.5	1.1	7.7	-0.5	2.3	0.15	11055403
30.5	1.1	7.7	-0.5	2.8	0.15	11066421
30.5	1.1	7.7	-0.5	3.1	0.15	11016415
30.5	1.1	7.7	-0.5	3.6	0.15	11055406
30.5	1.1	7.7	-0.5	4.6	0.15	11035159
32.5	1.1	7.7	-0.5	0.8	0.15	11090462
32.5	1.1	7.7	-0.5	1	0.15	11147118
32.5	1.1	7.7	-0.5	1.3	0.15	11066459
32.5	1.1	7.7	-0.5	1.6	0.15	11065329
32.5	1.1	7.7	-0.5	2.3	0.15	11600466
32.5	1.1	7.7	-0.5	3.3	0.15	11056377

Standard programme Ø 40.5 – 63.5

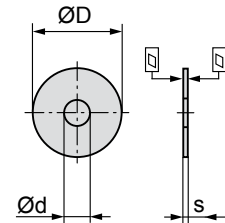
Blanks sizes, Grade CTS14Y



D [mm]	D Tol. + [mm]	d [mm]	d Tol. + [mm]	s [mm]	s Tol. + [mm]	Material Nr.
40.5	1.1	7.7	-0.5	0.8	0.15	11232569
40.5	1.1	7.7	-0.5	1.3	0.15	11412224
40.5	1.1	7.7	-0.5	1.6	0.15	11035685
40.5	1.1	9.7	-0.5	0.8	0.15	11055216
40.5	1.1	9.7	-0.5	1	0.15	11242361
40.5	1.1	9.7	-0.5	1.3	0.15	363063
40.5	1.1	9.7	-0.5	1.8	0.15	11055296
40.5	1.1	9.7	-0.5	2.1	0.15	11016428
40.5	1.1	9.7	-0.5	2.3	0.15	11055379
40.5	1.1	9.7	-0.5	3.3	0.15	11055382
40.5	1.1	9.7	-0.5	4.6	0.15	11055383
40.5	1.1	9.7	-0.5	6.6	0.15	11055385
50.5	1.1	12.7	-0.5	0.8	0.15	11054967
50.5	1.1	12.7	-0.5	1.1	0.15	11054980
50.5	1.1	12.7	-0.5	1.3	0.15	11011908
50.5	1.1	12.7	-0.5	1.5	0.15	11035060
50.5	1.1	12.7	-0.5	1.8	0.15	11035219
50.5	1.1	12.7	-0.5	2.1	0.15	11035221
50.5	1.1	12.7	-0.5	2.6	0.15	11016434
50.5	1.1	12.7	-0.5	2.8	0.15	11035256
50.5	1.1	12.7	-0.5	3.3	0.15	11066458
50.5	1.1	12.7	-0.5	3.6	0.15	11038330
50.5	1.1	12.7	-0.5	4.3	0.15	11593046
50.5	1.1	12.7	-0.5	5.3	0.15	11597420
63.5	1.1	15.7	-0.5	0.8	0.15	11016436
63.5	1.1	15.7	-0.5	1	0.15	11011917
63.5	1.1	15.7	-0.5	1.3	0.15	11011918
63.5	1.1	15.7	-0.5	1.5	0.15	11035283
63.5	1.1	15.7	-0.5	1.8	0.15	11011915
63.5	1.1	15.7	-0.5	2.3	0.15	11035647
63.5	1.1	15.7	-0.5	2.8	0.15	11035308
63.5	1.1	15.7	-0.5	3.3	0.15	11035658
63.5	1.1	15.7	-0.5	3.8	0.15	11035312
63.5	1.1	15.7	-0.5	4.3	0.15	11035644
63.5	1.1	21.7	-0.5	1.3	0.15	11054512
63.5	1.1	21.7	-0.5	2.1	0.15	11054516
63.5	1.1	21.7	-0.5	3.6	0.15	11054527
63.5	1.1	21.7	-0.5	6.3	0.15	11594125
63.5	1.1	21.7	-0.5	8.3	0.15	11591587

Standard programme Ø 80.5 – 200.5

Blanks sizes, Grade CTS14Y



D [mm]	D Tol. + [mm]	d [mm]	d Tol. + [mm]	s [mm]	s Tol. + [mm]	Material Nr.
80.5	1.1	15.7	-0.5	0.8	0.15	11680374
80.5	1.1	15.7	-0.5	1.1	0.15	11054477
80.5	1.1	15.7	-0.5	1.3	0.15	11054478
80.5	1.1	15.7	-0.5	1.8	0.15	11054482
80.5	1.1	21.7	-0.5	0.8	0.15	11200761
80.5	1.1	21.7	-0.5	1.1	0.15	11016441
80.5	1.1	21.7	-0.5	1.3	0.15	11035999
80.5	1.1	21.7	-0.5	1.5	0.15	11035042
80.5	1.1	21.7	-0.5	1.8	0.15	11010572
80.5	1.1	21.7	-0.5	2.3	0.15	368859
80.5	1.1	21.7	-0.5	2.8	0.15	11009639
80.5	1.1	21.7	-0.5	3.3	0.15	11035641
80.5	1.1	21.7	-0.5	4.3	0.15	11035659
80.5	1.1	21.7	-0.5	4.6	0.15	11035441
80.5	1.1	21.7	-0.5	5.3	0.15	11591983
90.5	1.1	21.7	-0.5	0.8	0.15	11609700
90.5	1.1	21.7	-0.5	1.4	0.15	11088284
90.5	1.1	21.7	-0.5	1.7	0.15	11132665
100.5	1.1	21.7	-0.5	0.8	0.15	11596182
100.5	1.1	21.7	-0.5	1	0.15	11159487
100.5	1.1	21.7	-0.5	1.1	0.15	11033420
100.5	1.1	21.7	-0.5	1.3	0.15	11035645
100.5	1.1	21.7	-0.5	1.8	0.15	11054438
100.5	1.1	21.7	-0.5	2.3	0.15	11054469
100.5	1.1	21.7	-0.5	2.8	0.15	11054471
100.5	1.1	21.7	-0.5	3.3	0.15	11011925
100.5	1.1	21.7	-0.5	4.3	0.15	11390534
100.5	1.1	21.7	-0.5	5.3	0.15	11598720
125.5	1.1	21.7	-0.5	1	0.15	11246975
125.5	1.1	21.7	-0.5	1.1	0.15	11141396
125.5	1.1	21.7	-0.5	1.2	0.15	11142583
125.5	1.1	21.7	-0.5	1.3	0.15	11197545
125.5	1.1	21.7	-0.5	1.8	0.15	11142586
125.5	1.1	21.7	-0.5	2.2	0.15	11011585
125.5	1.1	21.7	-0.5	2.8	0.15	11096111
125.5	1.1	21.7	-0.5	3.3	0.15	11592775
160.5	1.1	31.7	-0.5	1.3	0.15	11624700
160.5	1.1	31.7	-0.5	1.5	0.15	11146212
160.5	1.1	31.7	-0.5	2.3	0.15	11597113
200.5	1.1	31.7	-0.5	1.3	0.15	11600533
200.5	1.1	31.7	-0.5	1.5	0.15	11625203
200.5	1.1	31.7	-0.5	1.8	0.15	11012518

Hard Material Solutions

Hard cases are our speciality

We are your ideal partner when it comes to **high-quality hard materials for production processes, tool manufacturing and wear protection.**

From standard products to tailor-made solutions, from massive components to minute parts, from the blank to the fully finished product – a product that meets the highest standards of precision, surface treatment, and user-friendly assembly – our carbide solutions ensure improved efficiency and outstanding total cost of ownership.

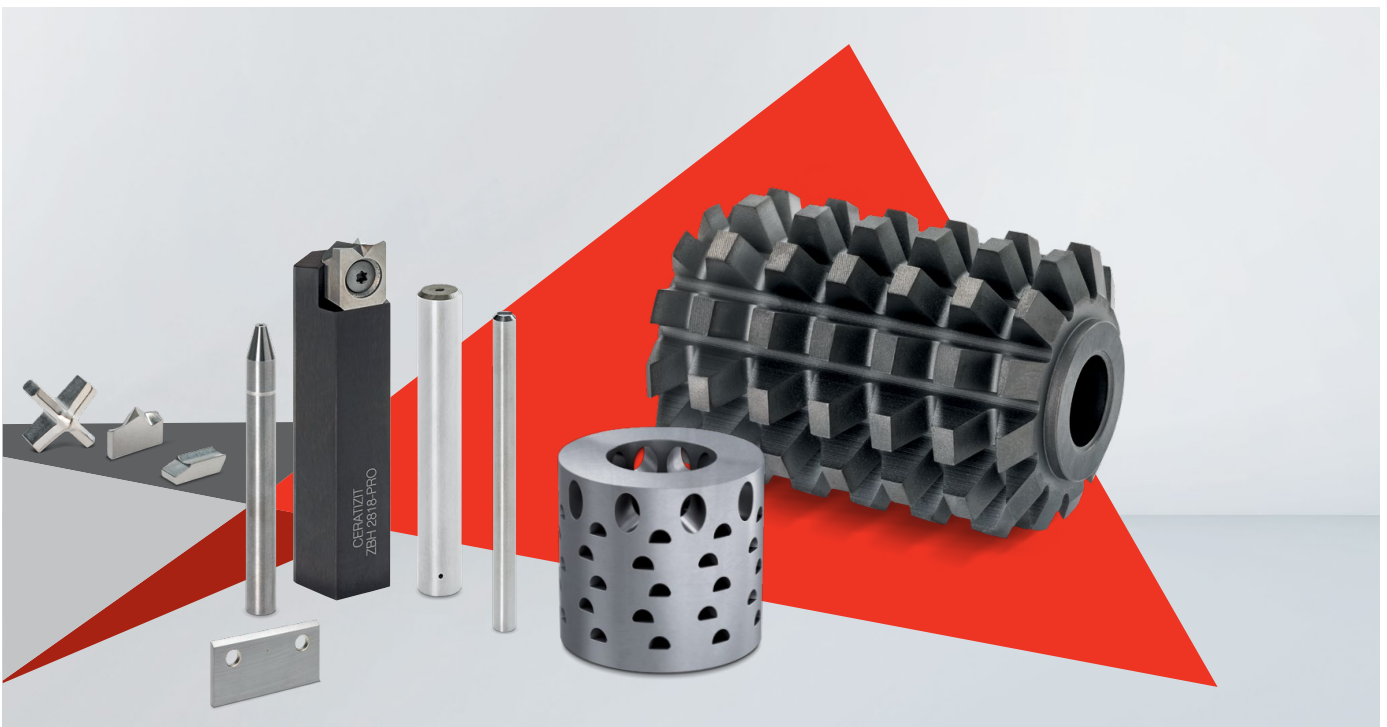
This is the case in a variety of application fields and industrial sectors. Even when subjected to extreme stress, our cemented carbides are notable for the high flexibility they offer in numerous industries. Our products are specially designed for extreme working conditions, making our Hard Material Solutions impressive tools for optimising your processes and increasing wear resistance.

Product portfolio

- ▲ Blanks and semi-finished products
- ▲ Water-jet cutting
- ▲ Hob milling
- ▲ Drawing tools & drawing nibs

Solutions for:

- ▲ Tool & die
- ▲ Fastening industry
- ▲ Injection technology
- ▲ Health industry
- ▲ Plastics industry



CERATIZIT Group

For over 100 years, CERATIZIT has been a pioneer in developing exceptional hard material solutions for machining and wear protection. The private company, with registered offices in Mamer, Luxembourg, develops and produces highly specialised cutting tools, indexable inserts, rods made from hard materials and wear parts.

The CERATIZIT Group is the global market leader in various application segments and successfully develops new carbide and cermet grades, such as for wood and stone working.

Facts & figures

 **Headquarters**
Mamer, Luxembourg



30 production sites



30 % of products developed in the last 5 years



2⁰⁰ R&D employees



80 countries in which we are active



7⁰⁰⁰ employees



25 innovation awards



1⁰⁰⁰ patents & utility models



1^{00 000} products



€ **1.5** bn turnover

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