Hob milling
with cemented carbide
Together towards profitable growth: we can give you the decisive competitive advantage.
Maximum efficiency for gear wheels – with carbide blanks for the hob industry

As a tool manufacturer you naturally expect only the best: to get the solution you need for the cost-effective production of gear wheels just when you need it. Hard Material Solutions by CERATIZIT specialises in the production of hobs, and offers you favourable delivery times and customer-specific carbide blanks for hobs, peel milling cutters and gear cutters which guarantee a consistently high metallurgical quality at all times. And to ensure that ‘customer-specific’ is not just an empty phrase, our team in Empfingen in South Germany will assist you as partners right from the first contact.

Benefit from maximum process reliability while increasing production efficiency on a permanent basis – with hobs from Hard Material Solutions by CERATIZIT.

Passion – precision – process reliability
Whether you make delicate gear wheels for the watch industry, supply the automotive sector or produce gear wheels for special gears – the experts at Hard Material Solutions by CERATIZIT can develop exactly the product you need. Working with you as partners we will create your carbide hobs for large-batch and high-volume production. As a leading carbide manufacturer our expertise covers the entire process chain of cemented carbide production, up to provision of the blanks which are of course delivered just in time to your production department.
## Advantages and benefits

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Benefits</th>
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<tbody>
<tr>
<td>Online configurator in the E-Techstore for automated blank production around the clock</td>
<td>Immediate preparation of a quotation, time saving</td>
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<tr>
<td>Near net shape for the minimum possible grinding allowance, close sintering tolerances</td>
<td>Speedy and economical processing thanks to reduced grinding work</td>
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<td>Premium carbide grades for maximum tool life</td>
<td>Longer service life = reduced payback time</td>
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<td>Higher cutting speeds compared to steel or PM steel</td>
<td>Faster gear wheel production</td>
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<td>5-axis machining</td>
<td>Reliable production of the most complex geometries</td>
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<td>Stock management and production procedures specially tailored to hob blanks</td>
<td>The optimised process chain guarantees minimum delivery times.</td>
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<tr>
<td>Hobs are also suitable for dry machining</td>
<td>Versatile application of CERATIZIT blanks for hobs</td>
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Dialogue – efficiency – progress

Our online configurator makes ordering of hobs a revolutionary experience. In just a few steps you can now create your individual blank here, when and wherever you wish. Alternatively, you can of course still send us a drawing which will be used as a basis for your individual calculation and for the design of your near-net-shape hob blank. This minimises the costs for you – efficiency starts right away with the enquiry, and continues well into the production process. As a result CERATIZIT products offer the ideal conditions for final products with a perfect finish.

Ultramodern cutting machines can handle even the most demanding gear geometries, in batch sizes between 1 and 250 items. We stand for more customer benefit in gear wheel production – with premium hobs from one of the world’s leading carbide experts.

Preform

Sintered part
Choose from the following options

Not only are hobs highly productive, they are extremely flexible. Any number of teeth, all kinds of profile displacements and any inclination angle you specify can be obtained.

One challenge, one solution and one choice:
Hard Material Solutions by CERATIZIT.

Shank-type hobs with gashes
Internal product code: WFSN

Hobs with bore
Internal product code: WFBN

Shank-type hobs with gashes and thread
Internal product code: WFSG

Hobs with bore, gashes and thread
Internal product code: WFBG

Gear cutters
Internal product code: ZFBN

Special hobs
Internal product code:
Shank type: WFSX
Type of bore: WFBX

Hobs in a new light – from Hard Material Solutions by CERATIZIT
# Ordering description for hobs

**WFSG 065-203/150-16 CTS20L**

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<tr>
<th></th>
<th>a</th>
<th>b</th>
<th>c</th>
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<tbody>
<tr>
<td>(a)</td>
<td>WF.. hob</td>
<td>External diameter in mm (rounded to nearest mm)</td>
<td>Total length (rounded to nearest mm)</td>
</tr>
<tr>
<td>(b)</td>
<td>S</td>
<td>Shank</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>Bore type</td>
<td></td>
</tr>
<tr>
<td>(c)</td>
<td>N</td>
<td>Gashes, neutral without thread</td>
<td></td>
</tr>
<tr>
<td></td>
<td>G</td>
<td>Gashes with thread</td>
<td></td>
</tr>
<tr>
<td>(*)</td>
<td></td>
<td>Special hobs based on drawing</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Additional information</td>
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**Carbide grade**

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*ceratizit.com/hobs*
Online configurator – the benefits of automation

With its online configurator, the E-Techstore now offers new possibilities. You can build your individual hob blanks very easily with just a few clicks. Try out the new configurator feature in our E-Techstore online shop, when and wherever you want!

Benefit from automated quotations to your exact conditions. You can then save your configuration for later processing and final ordering, or order directly!

Your order in just a few steps

Enter the finished dimensions of the requested hob.

You will immediately receive the offer for your blank (can be saved online or offline).

You can order either directly, or else later, when you receive the order from the end-user.

Your benefits at a glance

Complete flexibility and unimaginable celerity
Receive your quotation around the clock, after just a few clicks in our E-Techstore. Our configurator designs the blank for your hob, calculates the price and offers you a customised product, all on a fully automated basis.

Easy data input and quick checking
The configurator defines your product in an easy and intuitive way. By visualising the 2D drawing together with the entered dimensions, you can check your input quickly and reliably by comparing the sketch of your enquiry with the displayed drawing.

New networking possibilities
Our configurator prepares the routing, the bill of materials and a 3D model including a 2D drawing of the ordered blank. Based on this networking, our production kicks in only a few moments after your order has been placed. Upon request we can send you the 3D model (STEP) and the 2D drawing (PDF) within one hour. So the drawing can be approved within a short time and your article defined in your CAD data from the blank right through to the finished product.

Tooling the Future
The online configurator has created the basis for fully automated order handling. On the road to paperless production, product definition based exclusively on 3D data and many other interim goals associated with networked production we are one step ahead.

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Premium carbide for reliable processes

Your premium carbide solutions withstand the highest loads while showing little wear. For the production of customer-specific hobs CERATIZIT offers a number of carbide grades. Based on the geometry and application, we will be happy to offer you the optimum grade. All cutting edges of our hob blanks are extremely stable thanks to the very homogeneous carbide, which guarantees reliable processes.

Application fields

Hobs may be used for example for the production of gear wheels, worm wheels or gear racks in the following sectors:

- Automotive
- Mechanical engineering
- Watch industry
- Power engineering
Hard Material Solutions by CERATIZIT

Wear protection for all applications and industries

▲ Individual carbide solutions for your application
▲ Tools for metal forming
▲ High-performance components for tool construction

Extract from our product portfolio

Specialist for customised blanks and semi-finished products

The tool and dies industry

Waterjet cutting tubes

Carbide tools for injection technology

Premium carbide for the health industry

Precision tools for the fastening industry

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The CERATIZIT Group

For over 95 years, CERATIZIT has been a pioneer developing exceptional hard material products for cutting tools and wear protection.

The privately owned company, based in Mamer, Luxembourg, develops and manufactures highly specialised carbide cutting tools, inserts and rods made of hard materials as well as wear parts.

The CERATIZIT Group is the market leader in several wear part application areas, and successfully develops new types of cemented carbide, cermet and ceramic grades which are used for instance in the wood, metal and stone working industry.

Facts and figures

- 1 headquarters
  Mamer, Luxembourg
- 27 production sites
- > 60 sales subsidiaries
- > 6,000 employees
- > 100,000 different products
- > 600 patents and utility models
- > 100 employees in R&D
- > 10 innovation awards
- 30% of products developed in the last 5 years