



# PROJECT ENGINEERING

Smart solutions for efficient  
machining processes

TEAM CUTTING TOOLS



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

**Tooling a Sustainable Future**

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



# TEAM CUTTING TOOLS



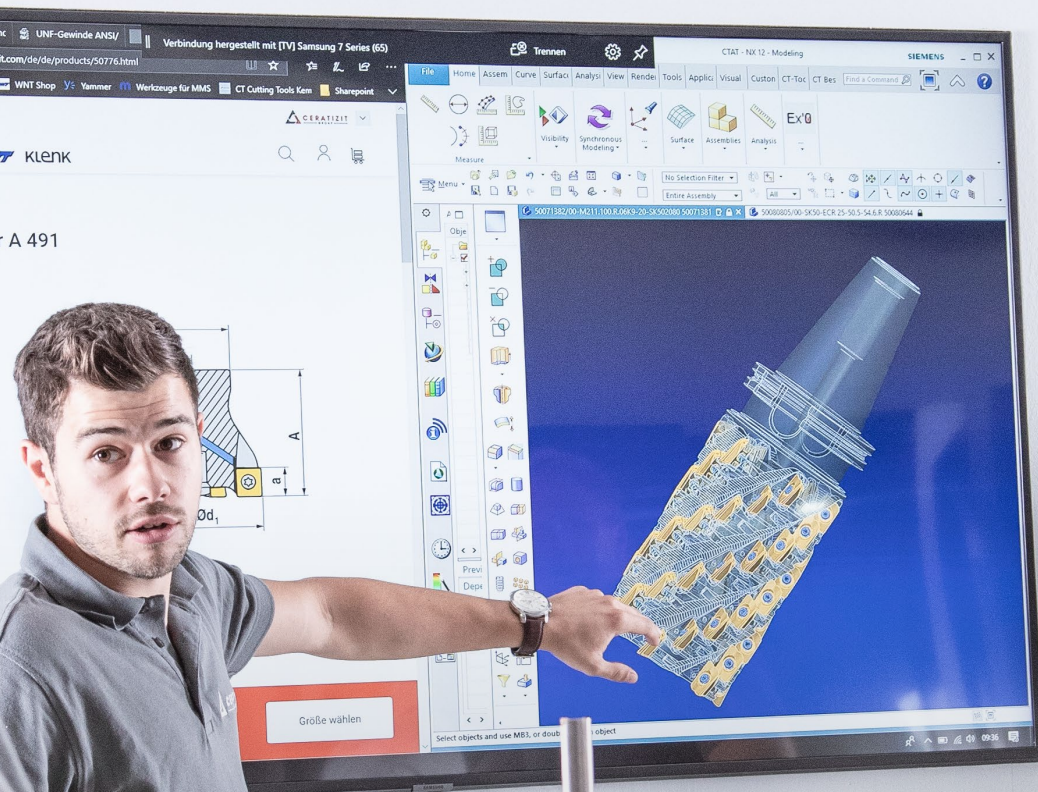
CUTTING SOLUTIONS BY  
CERATIZIT



KOMET



klenk



# Projects in the best possible hands

From consulting to successful completion, we realise your application-specific project goals

# THE CERATIZIT MACHINING SOLUTION

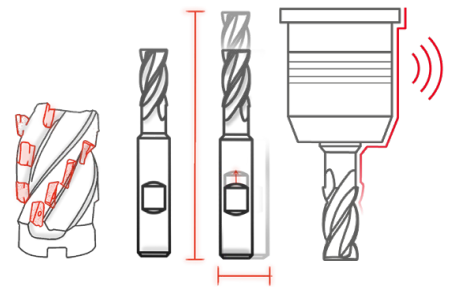
The machining industry is diverse and also very complex. Meanwhile, trends and innovations are incredibly fast-moving.

Thanks to our many years of experience, we can recognise all these challenges immediately and supply solutions designed specifically for them.

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

## OUR TOOLS

- ▲ Comprehensive standard tool range
- ▲ Individual customisation of the standard tool range
- ▲ Individual special tools and industry-specific tools
- ▲ Digital products



## OUR PEOPLE

- ▲ Experienced application engineers on site
- ▲ Support from local and international project teams
- ▲ Global network of experts
- ▲ Industry expertise
- ▲ Long-standing engineering knowledge
- ▲ Extensive technical expertise
- ▲ First-class service
- ▲ Professional advice
- ▲ Innovative tool concepts

# DEVELOPING OPTIMAL MANUFACTURING PROCESSES

Benefit from our innovative tool concepts, many years of experience and professional advice to increase your productivity

In order to machine increasingly complex workpieces cost effectively and to a high level of quality, all the process parameters need to be tailored to the specific task. Those who succeed in meeting these challenges will remain competitive on the global market.

However, the reality is that businesses often do not have the capacity to analyse manufacturing processes and optimise them to make them more efficient. There is also usually not enough time to tailor new cutting materials, tool geometries or process technologies to the individual machining operations.

This is precisely where our project engineering comes in. As one of the leading tool manufacturers and innovators in the machining industry, we develop ideal tool concepts for you based on key success factors such as efficiency, time and quality.

Why are we the ideal system partner for you? We have many years of experience in the development of innovative tool solutions, can draw on sound technical expertise and provide first-rate service. What's more, with our leading product brands Cutting Solutions by CERATIZIT, KOMET, WNT and KLENK, we are a full-service provider in machining, offering one of the most comprehensive ranges of cutting tools and services.

If you want to set the pace rather than risk falling behind the international competition, then get in touch with us now!

You can rely on us  
to implement your  
project successfully!



# WHAT YOU CAN EXPECT

## PROJECT CONSULTING



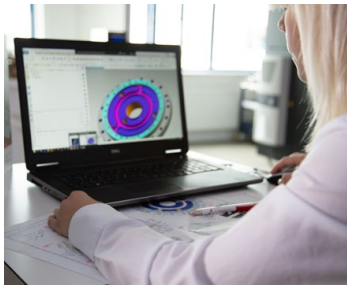
### We always keep your objectives in mind

and provide you with advice across all industries in all application ranges. Benefit from our many years of experience and our innovative solutions.

#### The services we provide

- ▲ Consulting service for all applications and industries
- ▲ Needs-oriented advice on process optimisation
- ▲ Dedicated project manager

## PROJECT DEVELOPMENT & QUOTATION



### Our interdisciplinary project team

develops the ideal machining concept for your individual specifications and objectives using high-end CERATIZIT tools.

#### The services we provide

- ▲ Development of a machining and tool concept
- ▲ Cycle time consideration
- ▲ Machining tests in our in-house Technical Centers
- ▲ Prognosis of the tooling requirement and tool costs per component
- ▲ Business quotation

## PROJECT IMPLEMENTATION



### Our expert team

implements the concept on your machine, working closely with you and your dedicated CERATIZIT application engineer. This on-site support guarantees you will receive a stable and cost-effective manufacturing process for your product.

#### The services we provide

- ▲ Detailed planning of the machining process
- ▲ Tool design
- ▲ Collision monitoring
- ▲ Tool assembly
- ▲ Support from a dedicated application engineer when proving out the machining process and for CNC programming
- ▲ Tool documentation
- ▲ Regular project status reports

## ONGOING SUPPORT



### Even after successful implementation

of the project, we are here for you. Your dedicated application engineer keeps an eye on your manufacturing processes, determines further potential for optimisation and provides you with ongoing support for all the challenges you face.

#### The services we provide

- ▲ Ongoing manufacturing support
- ▲ Series production support and process optimisation

# OUR EXISTING CUSTOMERS WILL VOUCH FOR THIS



**Workpiece:** Device head  
**Material:** EN-AW 6082  
**Project goal:** Complete solution for cycle time optimization

**Workpiece:** Titanium molybdenum inserts  
**Material:** Titanium molybdenum alloy  
**Project goal:** Efficient and process-secure machining

## CHALLENGE

At BAM GmbH, process security and flexibility for the series production of custom components has top priority. In order to continue to meet high customer standards as a systems supplier for new and complex production parts, a production strategy for tailored complete solutions is required.

Various components made from titanium molybdenum alloys are to be machined using a uniform tool concept in a manner that is economical and process-secure.

## SOLUTION

To machine multiple component families using aluminium cast parts, the machining strategy is optimally adjusted to BAM GmbH's modern machine fleet with standard and custom tools. Fewer tool changes and shorter machining times ensure efficient series production.

A uniform tool concept, which consists mainly of standard products, will be defined for machining the various components made from titanium molybdenum alloys. At the same time, both the machining strategy and the cutting data recommendations will be adapted to the respective components.

## SUCCESS STORY

The holistic process analysis makes a significant contribution to time- and cost-optimised project success:

The series production cycle time is reduced by more than 50% to less than five minutes per component.

The customer can produce the components with the required dimensional and form tolerances in a manner that is efficient, process-secure and economical. The result: cost savings of 79%, reduction in machining time per component of 59% and a clear increase in tool life.



From idea to project implementation, the cooperation was a great success that speaks for itself; there are now more projects in the planning and implementation stages!

Head of Production BAM GmbH,  
Josef Wittmann



The success of this project was all thanks to the cooperation with CERATIZIT. The professional experience of the CERATIZIT machining technicians with titanium molybdenum alloys was crucial to its success.

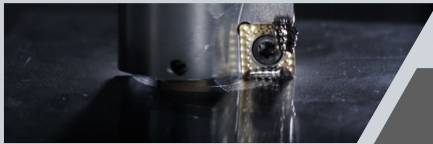
Kappler CNC Tool Purchasing,  
Jürgen Klittich

# 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.