# // SOLID CARBIDE SPECIAL TOOLS

For Efficiency and Precision in Automotive, Aerospace and Medical Engineering





Sharp, homogeneous cutting edge with defined radius

## >> AEROSPACE PRECISION





Precision and perfection are obviously top priorities in aerospace engineering. The highest degree of process reliability is therefore required in all production areas. In addition, the costs for producing parts and components such as the engine must not 'get out of hand'. As in many other industries, producers and suppliers must strive to achieve cost reductions. This market, too, is highly competitive because of this.

For this reason, the development and design of highperformance special tools for machining complex engine components (blisks), turbine housings, and structural and integral components present a particular challenge. Safety and reliability are top priorities right from the tool development stage. Machining and material removal processes must be carried out on complex and safetyrelevant components with the utmost precision. In addition to absolute precision, optimising production costs by reducing cycle times and extending tool life are just some of the demands our solid carbide special tools fulfil in this highly sensitive field.



### >> AUTOMOTIVE EFFICIENCY





Cost optimisation strategy in the automotive and automotive supplier industry is particularly important, because of strong competition-, and the struggle for market shares and customer acceptance. In order to increase efficiency and reduce process costs, all parameters relevant to those costs are closely examined. This also applies to highperformance tools. Parts and components made of alloys such as aluminium and cast iron can be processed in a wide variety of ways using these tools.

By applying our knowledge of innovative tooling and machining techniques, we develop and design materialand component-specific tools for the automotive industry with display convincing performance. Reducing cycle times, enhancing process reliability and increasing tool life are key parameters for increasing efficiency in the automotive and automotive supplier industries. These factors help to ensure long-term machining process quality and meet cost optimisation targets, as well as ensuring long-term sustainability.



Polished chip spaces for frictionless chip removal



### >> MEDICAL TECHNOLOGY EXPERTISE

Parts and components in a wide variety of shapes and sizes made of stainless materials are used to manufacture medical devices. Efficiency and precision are dominating parameters in this market segment when it comes to processing these components by producers and suppliers. We develop individual solid carbide special tools that meet these requirements 100 % for our customers in the medical technology field. The fact that precision plays a special role in addition to cost-effectiveness and profitability is already predetermined by the use of the end products in operating rooms, in outpatient departments and on patients. A high level of expertise, know-how and industry knowledge is needed to match the requirements for precision and efficiency in the development of applicationspecific special tools. This applies to the manufacturing of medical devices and system components as well as instruments, implants and prostheses made of platinum, titanium or stainless steel. Our more than 35 years of experience in the development of high-performance tools, and intensive discussions with customers and users in demanding and future-oriented market segments, made us the specialist in medical technology meeting even the highest demands.





#### Process cost optimisation by using solid carbide special tools

• Up to 20 % shorter cycle times

- ) Up to 30 % greater process reliability
- ) Up to 50 % longer tool service life

### >> HIGH-VOLUME PRODUCTION SPECIALIST

Precision, increased efficiency and cost reduction are megatrends in industrial High-volume production. In automotive and aerospace engineering, medical technology and other sectors of the metalworking industry, the quest for maximum performance and cost minimisation are the dominant themes. That is why tooling – the selection and use of process and performance-optimised tools – plays an important role in the 'design-to-cost' strategy. Our development engineers already have machining and production process optimisation in mind at the tool development stage.

In a dialogue with our customers, we develop and produce high-performance tools for efficient material removal and machining of individual components. The requirements of high-volume production in terms of machining speed and precision cannot be met by 'off-the-peg' tools. Only special tools made of solid carbide, which are tailored to the material- and design-specific properties of the respective components, can achieve best possible results in terms of machining speed, cycle time reduction, process reliability and cost-effectiveness.







# >> PERFORMANCE AND CUSTOMER PROXIMITY

With a modern machine park and a motivated team of gualified employees, we have guaranteed our customers excellent quality 'Made in Germany' from the Sien, Germany production site since 1981. Maximum flexibility regarding implementation of customer requirements, as well as a high degree of expertise, are the basis for our success in Germany, Europe and across the globe. Convince yourself of the efficiency and precision of our solid carbide special tools. Challenge us - together with you, our specialists will develop the perfect tool for your individual machining process.





Hochleistungswerkzeuge

Werkzeugaufbereitung

K.-H. Müller Präzisionswerkzeuge GmbH Fürst-Dominik-Straße 44 55758 Sien, Germany

Telefon +49 (0) 6788 9798-0 Fax +49 (0) 6788 9798-99

info@mueller-sien.de www.mueller-sien.de



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