

FOR CERAMIC COMPONENTS

From Concept to Series – Without Tooling Costs

Why CNC Prototyping?

Conventionally manufactured ceramic prototypes are often tool-dependent, time-consuming, and only partially representative of series production. In contrast, CNC prototyping enables the direct production of precise ceramic components without investment in tooling. Designs, geometries, and materials can be quickly adapted, tested under realistic conditions, and securely validated for series production, with significantly reduced time and cost risk.

Which Applications Benefit from CNC Prototyping?

- ✓ **Product Development:** Functional testing of new designs without tooling investment
- ✓ **Material Selection:** Comparative tests of different ceramic materials from our extensive range
- ✓ **Modifications:** Adaptation of series components for trials or special applications
- ✓ **Small Series Production:** Cost-effective manufacturing from from single parts to small batches for customised solutions



YOUR ADVANTAGES WITH CNC PROTOTYPING

Cost Efficiency

- No tooling costs during the prototyping phase
- Flexible design modifications without new investment

Time Savings

- Faster time-to-market through accelerated development
- From concept to functional prototypes in weeks instead of months

Risk Minimisation

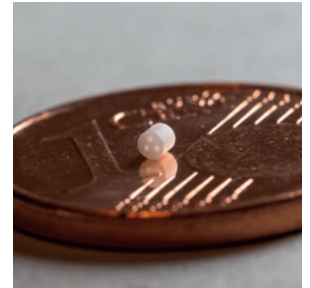
- Series-like material properties for realistic long-term testing
- Avoidance of costly corrections during series production

Guaranteed Precision and Surface Quality

- Drilling from 0.1 mm diameter
- 3D contours, pockets, grooves, and slots
- Surface roughness Ra 0.3 µm achievable
- Turned or milled prototypes and individual parts

Process Advantages

- Rapid geometry changes without new tools
- Flexible material choice for trials and comparative testing
- Flexibility, performance, and cost-effectiveness using modern 5-axis machining centres with CAD/CAM integration



Micro-drilling



Precision contours



Geometric diversity

How Can We Support Your Design?

- Feasibility analysis of your CAD data
- Optimisation proposals for CNC-compatible manufacturing
- Material consultation for your specific requirements – choose from one of the widest ceramic material ranges
- Detailed material datasheets at www.rauschert-tec.com



**DO YOU HAVE A CHALLENGE?
YOUR CHALLENGE IS OUR DRIVE – CONTACT US**

Rauschert Heinersdorf-Pressig GmbH

T: +49 9265 78-0

E: info@rauschert-tec.com

www.rauschert-tec.com



Subject to errors and alterations. The information in this document only contains general descriptions of the technical options available and performance features. We will be pleased to submit you a personal offer.