



**FUCHSHOFER**  
PRÄZISIONSTECHNIK



**FAM**  
FUCHSHOFER ADVANCED  
MANUFACTURING

# FUCHSHOFER

— since 1994 —



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## OVERVIEW

- 6000 m<sup>2</sup> production space
- around 140 employees - including 15 trainees
- 60 CNC - machine centers

## COMPANY HISTORY

- founded in 1994
  - CEO: Hannes Fuchshofer
  - location: Eibiswald (Styria, Austria)
  - core competence: CAM-CNC high precision manufacturing
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# OUR EXPERTISE



**CNC Manufacturing**



**Quartz glass  
Technical Ceramics**



**Metal  
Additive Manufacturing**



# MACHINERY CNC MANUFACTURING

- Turning centers with up to 9 axes
- Milling centers, from 3 to 5 Axis
- Wire cutting
- Flat grinding
- Circular grinding
- CAM system
- Tool management

## MATERIALS

- aluminium
- stainless steels
- hardened steels
- Nickel-based superalloy
- chrome
- titanium alloys
- plastics

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# μm-PRECISE MANUFACTURING

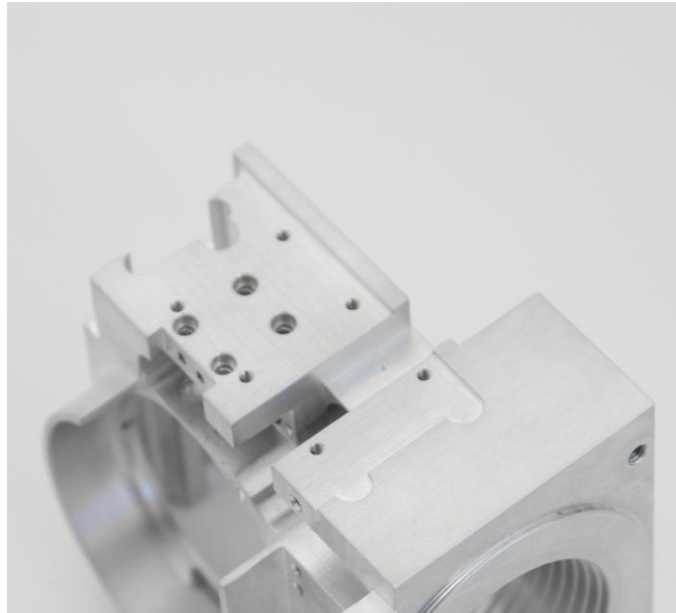
## KERN Micro HD

- Optimized temperature management
- Integrated linear motor drives
- 100% quality due to innovative micro-gap hydrostatics



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# OUR EXPERIENCE



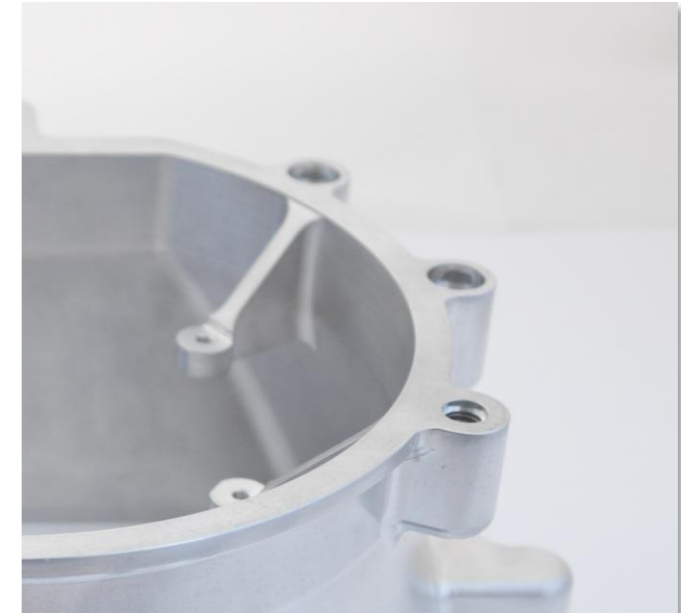
## Wide range of components

- From small screws to gearboxes
- Our capabilities depends on shape and processing.



## Materials and Quality

- Many years of experience in machining a wide range of materials
- Comprehensive quality control.



## Everything from a single source

- Manufacture of complex components
- Surface coatings
- Heat treatments.

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# TECHNICAL CERAMIC & ADVANCED MATERIALS

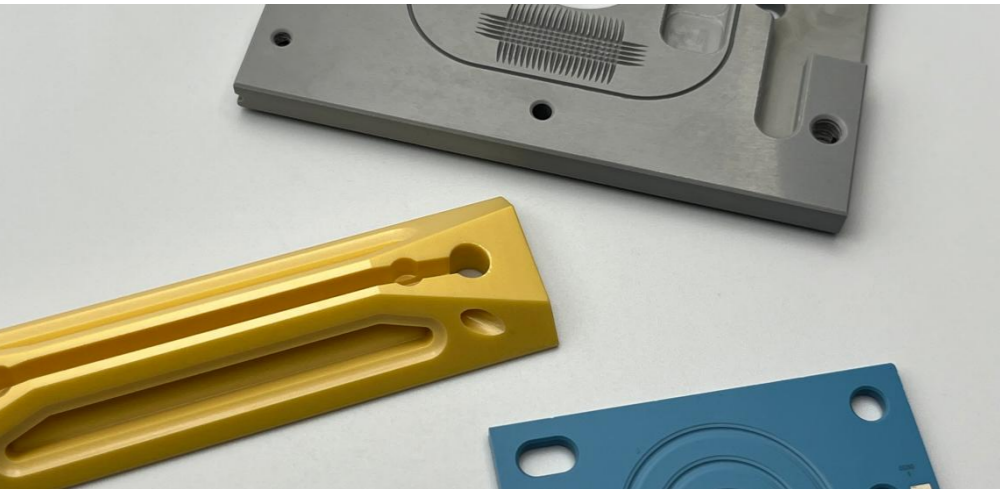
We process Technical Ceramics and high-performance materials using specialized machinery – with precision and care for the material.

Our team offers technical support for components that are very difficult to machine.

## MATERIALS

- Technical Ceramic  
(SiC/SiSiC, Si<sub>3</sub>N<sub>4</sub>, Al<sub>2</sub>O<sub>3</sub>, ZrO<sub>2</sub>...)
- Technical Glass / Glass Ceramic  
(quartz glass, sapphire glass,  
ZERODUR®,...)
- Composite Materials
- Hard Metal (e.g. tungsten carbide)





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# OUR EXPERTISE

- Machining of Technical Ceramics and Hard Materials
- Ultrasonic machining, mainly of Non-oxide Ceramics
- CNC machining of Glass Ceramics & ZERODUR®

## Fields of Application:

- Semiconductor industry
  - Chemical industry
  - Medical technology
  - Metrology
  - Aerospace
  - General mechanical engineering
  - Customer-specific production areas
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# OUR CAPABILITIES

- 5-axis ultrasonic machining centers
- 3-axis ultrasonic machining centers
- 3-axis CNC machining centers

## **Ultrasonic Drilling**

Starting from  $\varnothing$  0.3 mm

## **Ultrasonic Grinding**

Surface, peripheral, and contour grinding

## **Ultrasonic Milling**

3D contours, e.g. pockets, grooves, and slots

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# METROLOGY



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# MODULE ASSEMBLY

- Professional assembly standards
- Time and costs saving
- Accelerated production processes
- Incl. purchasing and logistics
- In-house assembly



# ISO & EN – certified

Continuous Improvement of our Quality Processes



ISO 9001 (Quality Management)



ISO 14001 (Environmental Management)



EN 9100 (Aerospace Standard)

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# ADDITIVE MANUFACTURING

We print high-performance metals using additive manufacturing (AM) technology – ideal for complex geometries and weight reduction.

Our expertise includes design support, post-processing, and integrated quality control.

Fuchshofer is a reliable partner for functional prototypes and small series production.

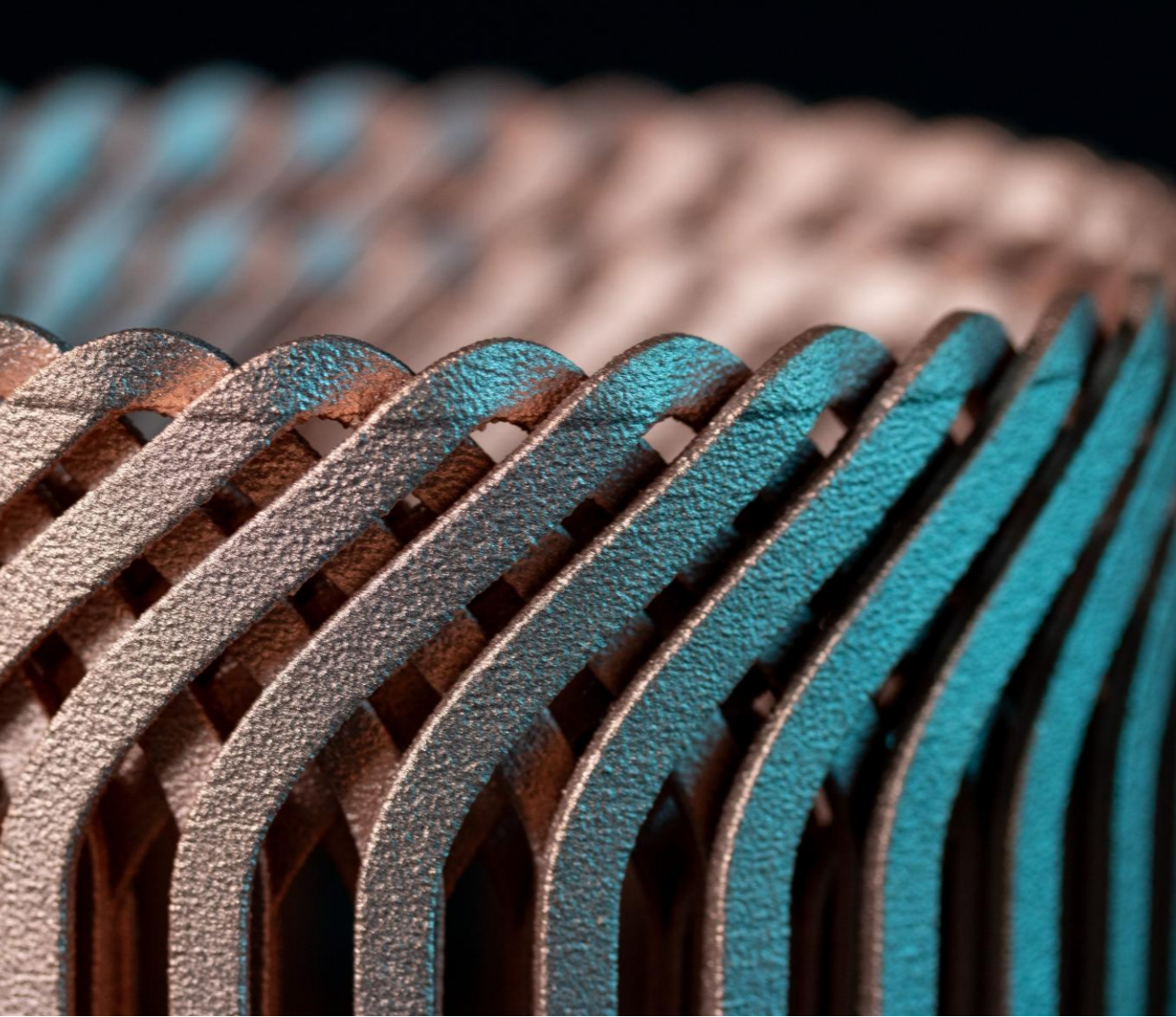


## MATERIALS

- Inconel® 718 + 625
- Stainless steel 316L
- 1.2709 tool steel
- m4p™CXplus
- Pure-copper (CuCP)
- m4p™ CH100-Fe
- Ti6Al4V/Ti64
- AlSi10Mg
- m4p™StrengthAl
- m4p™PureAl
- m4p™PureTi grade2
- Constellium CP1

## OUR EXPERTISE

- Build job simulation
  - High-tech components
  - Lightweight structures
  - Engine components
  - Cooling components
  - Custom cooling solutions
  - Electromobility
  - Satellite components
  - Coating samples (Al)
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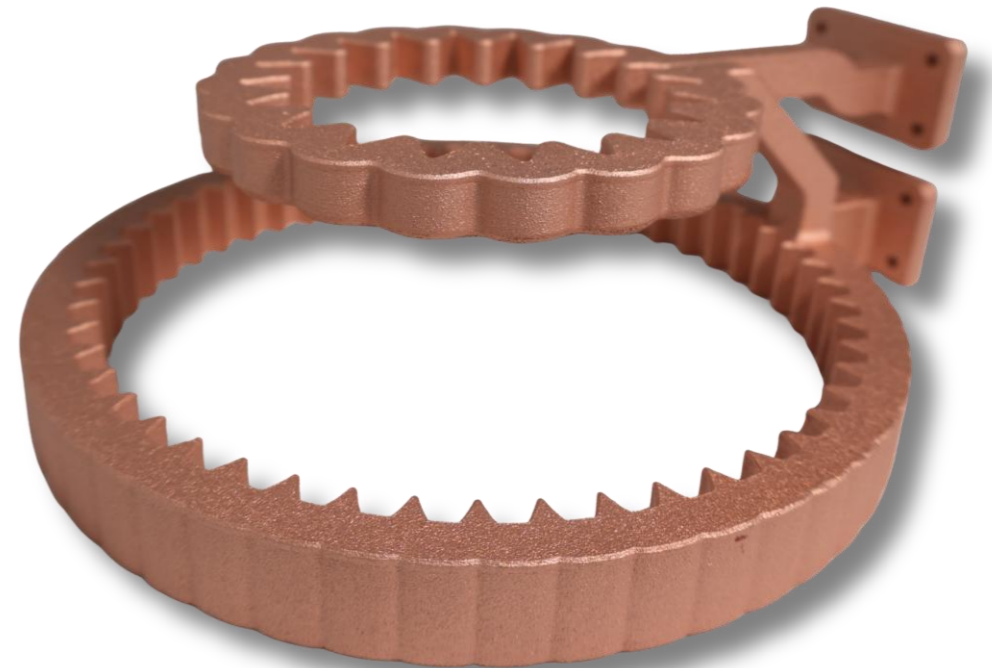


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# APPLICATION EXAMPLES

## Pure Copper Inductors:

- Adaptation of the inductor geometry close to the component contour
- Flow-optimized cooling water system
- Electrical conductivity between 97.4 and 100 %IACS



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# APPLICATION EXAMPLES

## Surface Treatments:

- Natural anodizing
- Hard anodizing
- Black anodizing
- Blasting



AlSi10Mg Surface Finish Samples: Hard Anodized, Natural Anodized, Black Anodized

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# AM WITH CNC POST-PROCESSING

Comprehensive post-processing ensures top quality:

- CNC machining for accurate final contours
- Heat treatment to optimize material properties
- Surface finishing for functionality and aesthetics
- Dimensional inspection for complete quality assurance



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# L-PBF System FAM – EOS M290

## BUILDING VOLUME

250 x 250 x 325 mm – 400 W

250 x 250 x 325 mm – 1000 W

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## MATERIALS

- Inconel® 625
- Stainless steel 316L/1.4404
- 1.2709 tool steel
- m4p™CXplus
- Pure-copper (CuCP)
- Ti6Al4V/Ti64
- m4p™StrengthAl
- m4p™PureAl
- m4p™PureTi grade2





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## 2x Eplus3D EP-M400S

### **BUILDING VOLUME**

400 x 400 x 450mm – 4 x 700 W

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### **MATERIAL**

Inconel 718  
Constellium CP1

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# Eplus3D EP-M650

## **BUILDING VOLUME**

650 x 650 x 800 mm – 4 x 700 W

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## **MATERIAL**

AlSi10Mg

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FUCHSHOFER  
PRÄZISIONSTECHNIK

„Today better than yesterday.  
Tomorrow better than today.“

- HANNES FUCHSHOFER -

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