

**PASSION AND  
PRECISION  
FOR FUTURE**



## „PEOPLE“ IN FOCUS

### **BENEDIKT KULZER**

Managing director of  
SK TECHNOLOGY GmbH

### **STEFAN KULZER**

Founder, managing director and  
shareholder of SK TECHNOLOGY GmbH

Founder and shareholder  
of Roding Mobility GmbH





# SK TECHNOLOGY AT A GLANCE

More than 30 years of passion for production and technology



## ESTABLISHED IN 1988

37 years of company history as a family business in high-end machining and component production.



## A STRONG TEAM

- 316 employees  
- thereof 37 trainees
- 2 locations  
- Roding and Waldmünchen
- Certified Great Place to Work®
- and Great Place to Start®



## MANUFACTURING INFRASTRUCTURE

- 15.000 m<sup>2</sup>, including 10.000 m<sup>2</sup> of fully air-conditioned production and assembly infrastructure
- Over 130 state-of-the-art CNC, manufacturing and measuring machines for maximum precision
- 300.000 production hours per annum



## SK TECHNOLOGY 4.0

- Pioneer of digital precision
- Networked value chain
- Holistic industry 4.0 approach for 100% digitization and documentation of your products



# OUR PROCESS CHAIN

Consistent and interlinked



PRODUCTION  
CONSULTING



CAD AND CAM  
PROGRAMMING



CNC  
MACHINING



SURFACE  
TREATMENT



FINISHING AND  
ASSEMBLY



TECHNICAL  
CLEANING



SERVICE  
CLEANROOM



QUALITY  
ASSURANCE



SHIPPING AND  
LOGISTICS



# OUR CORE TECHNOLOGIES

Precision technology



## CNC MILLING

- 6 CNC 5 axis universal milling machines incl. robot system
- 30 CNC 5 axis milling machines
- 4 CNC 3 axis milling machines
- 1 CNC 5 axis large format portal milling machine



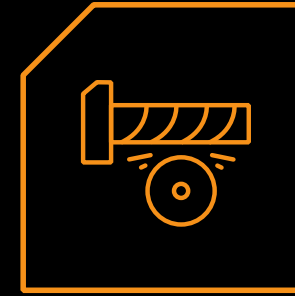
## CNC TURNING

- 2 CNC turning machine incl. robot system
- 21 CNC turning machines
- 6 CNC turning and milling machining centers



## ERODING

- 3 Die-sinking EDM machine incl. robot system
- 5 Multi-axis wire EDM machines
- 1 Start hole drilling rig



## CNC GRINDING, HONING & LAPPING

- 4 CNC Cylindrical grinding machines
- 4 CNC Profile and surface grinding machines
- 1 CNC Vertical grinding machine
- 1 Honing center
- 1 Lapping machine



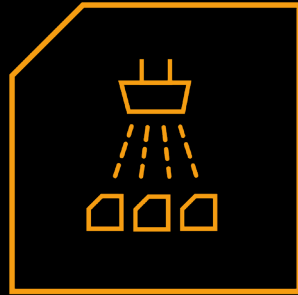
# ADDITIONAL SERVICES

Precision technology



## LASER MARKING

- High-tech labelling and marking for continuous tracking of serial numbers
- In-house serial number tracking system
- Barcodes and QR codes
- Alt. marking options such as engraving, etching and punching in-house



## PARTS CLEANING

- Spray-flood cleaning process
- Cleaning of undercuts and hidden inner contours
- Gentle vacuum drying



## PARTS MACHINING

- Various heat treatments
- Various surface treatments like coating etc.



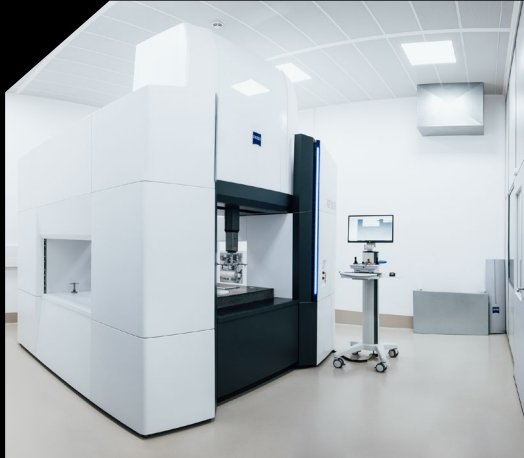
## ASSEMBLY

- Partial and complete assembly of mechanical assemblies
- Individual parts / prototypes
- Cleanroom service ISO class 7
- Procurement of all additional standard and purchased parts
- Functional tests and documentation



# QUALITY IS OUR DNA

From  $\mu\text{m}$  to large format



## ZEISS XENOS

- The world's most advanced 3D coordinate measuring machine
- Integrated precision rotary table
- Accuracy:  $0,3 \mu\text{m} + L/1.000$
- Measuring range:  
900 x 1500 x 700 mm



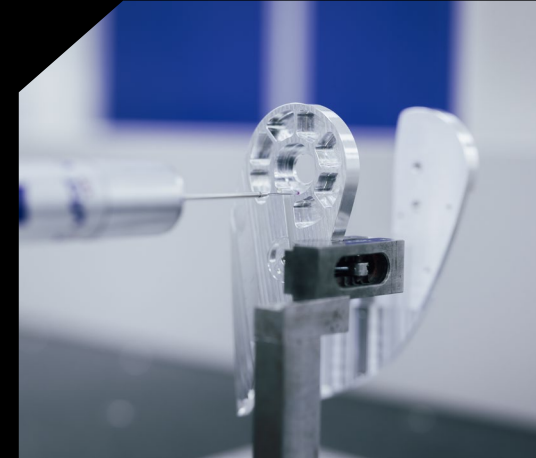
## MEASUREMENT LAB

- Temperature accuracy up to  $\pm 0,2^\circ\text{C}$
- 11 coordinate measuring machines for accuracies from  $0,7$  to  $1,9 \mu\text{m}$
- 27 measuring machines (optical, contour graphs, shaft, surface, roughness measuring instruments)
- ZEISS PiWeb



## CERTIFICATES

- EN 9100:2018 (aerospace)
- Including ISO 9001:2018
- Restamping approval
- Cleanroom ISO Class 7



## SAMPLINGS

- Initial sample testing
- Visual testing (VT)
- Process capability study
- Process-FMEA
- Process control plan (PLP)
- Process flow diagram (PAP)
- Cleanliness analysis



# YOUR SYSTEM SUPPLIER FOR SMALL AND MEDIUM SERIES

Best-in-class infrastructure for the world's best components

## OUR PROMISE OF ACCURACY

- More than 10.000 components per year 100 % digitized and certified
- 100 % air-conditioned manufacturing and assembly infrastructure
- Repeat accuracies of up to 0.5  $\mu\text{m}$  possible in assembly modules
- Dimensional accuracy of up to 0.3  $\mu\text{m}$  for components

## FLEXIBLE ON-DEMAND AUTOMATION

- Minimization of set-up and cycle times for repeated small and medium series
- HERMLE robot system for small and medium series

## SERIES ASSEMBLY

- Infrastructure for small and medium assembly
- BOM and PDM-based procurement process
- Pre-assembly of modules including testing and validation

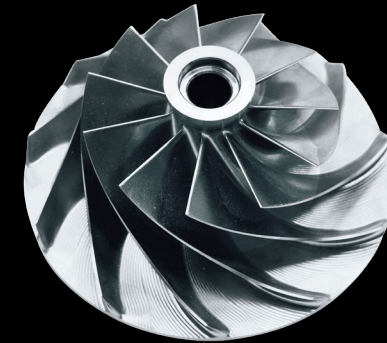




# SPECIALISTS

Many years of experience in the processing of materials that are difficult to machine

- **MU-METAL:** High magnetic permeability, good magnetic shielding properties
- **MOLYBDENUM:** High melting temperature, excellent mechanical strength, good heat resistance
- **INCONEL 718 + INCONEL 625:** High corrosion resistance, good strength at high temperatures, excellent oxidation resistance
- **TITANIUM:** Low density, high strength, excellent corrosion resistance, biocompatible
- **INVAR:** Low coefficient of thermal expansion, dimensionally stable with temperature changes
- **HASTELOY:** High corrosion resistance to a variety of aggressive media, good strength at high temperatures
- **KOVAR:** Low coefficient of thermal expansion, good dimensional stability, excellent weldability
- **HAYNES 25:** High strength at high temperatures, good oxidation resistance, excellent resistance to thermal fatigue





HIGH-END  
PRECISION FOR

**various  
INDUSTRIES**

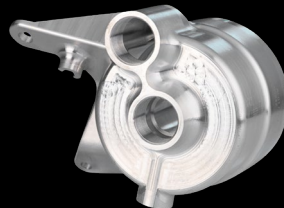
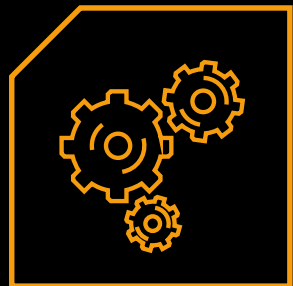
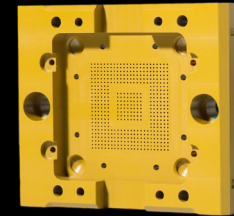
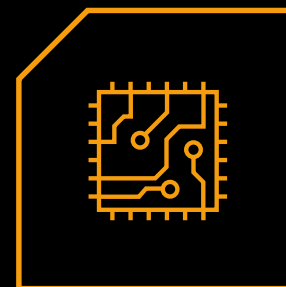
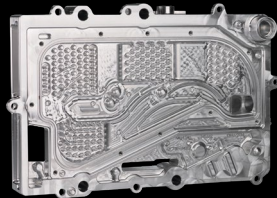
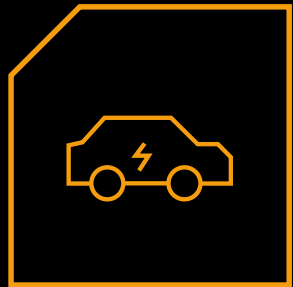
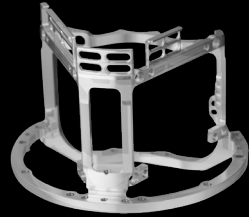
MADE IN RODING

Certified acc. to  
EN 9100:2018



# CONTINUED SUCCESS IN MANY INDUSTRIES

Reference projects





# AEROSPACE

Precision in outer space – made in Roding

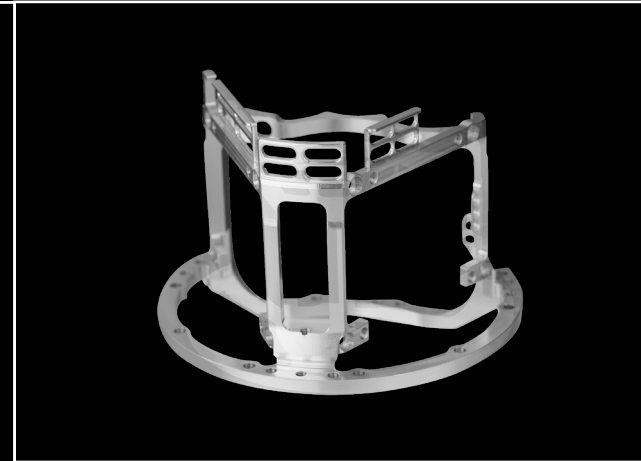


## OUR INDUSTRY KNOW-HOW

- Propulsion components for rockets
- High-end components for satellites
- Milled parts for Mars robot
- Hydraulic components for aircraft construction
- Precision parts for reconnaissance drones

## YOUR BENEFITS

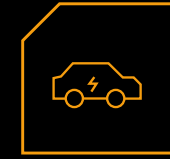
- Certification according to EN 9100:2018
- Traceability of your components and materials through our document management system (Docuware)





# AUTOMOTIVE & MOTOR SPORT

Our driving force – the mobility of tomorrow



## OUR INDUSTRY KNOW-HOW

- Manufacturing of high-tech propulsion components for fuel cells, hydrogen injection and battery operated drives
- Manufacture of various chassis components
- Components for conventional combustion engines
- Hydraulic components in the heavy-duty range for maximum mechanical loads

## YOUR BENEFITS

- Fast response times
- Large in-house production depth
- Large supplier network for additional services (surfaces, heat treatment, purchased parts, 3D printed components)
- Certification according to EN 9100:2018
- Highly effective – internal 300.000 production hours
- Documentation options for series (PPAP)





# OPTICAL INDUSTRY

Precision firmly in view



## OUR INDUSTRY KNOW-HOW

- Delicate structures, highly geometric tolerances, low-reflection and cleanest surfaces. We cope with the requirements of the optical industry with clear vision.
- Components for lithography
- Lens holder manufacturing

## YOUR BENEFITS

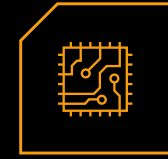
- Cleaning of components in-house: Washing cabin, ultrasonic, cleaning system Mafac JAVA
- Pre-cleaning and assembly in dust-free room with flowbox module – cleanroom class ISO 5 according to DIN 14644-1
- Machining of industry specific materials and super alloys such as Mumetal, Molybdenum, Inconel, Invar, etc.





# SEMICONDUCTOR INDUSTRY

Key elements for digitization

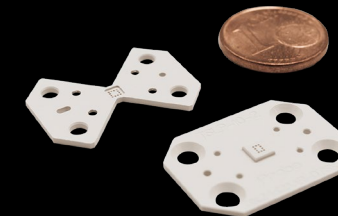
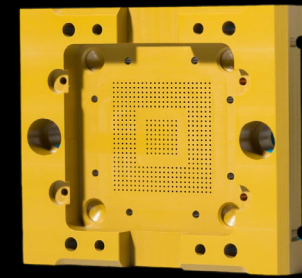


## OUR INDUSTRY KNOW-HOW

- Complex precision parts as well as complete assemblies for wafer production

## YOUR BENEFITS

- Cleaning of components in-house: Washing cabin, ultrasonic, cleaning system Mafac JAVA
- Pre-cleaning and assembly in dust-free room with flowbox module – cleanroom class ISO 5 according to DIN 14644-1
- Machining of industry specific materials, super alloys and plastics such as Peek, Vespel etc.
- Procurement and assembly of purchased parts according to BOMs





# MEDICAL SYSTEMS

Our heart beats for precision

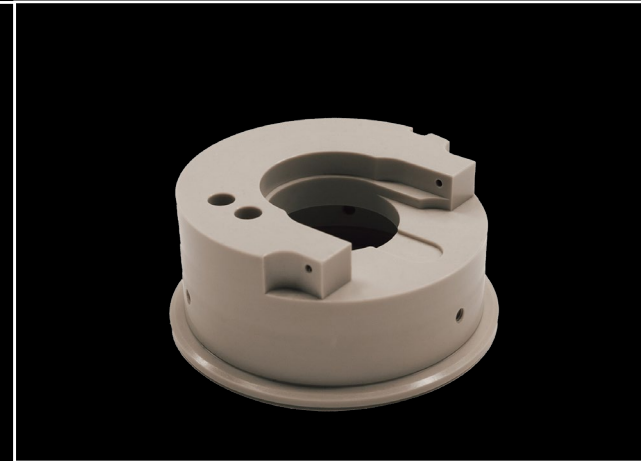


## OUR INDUSTRY KNOW-HOW

- Manufacturing of surgical aids such as gauges and surgical equipment

## YOUR BENEFITS

- Cleaning of components in-house: Washing cabin, ultrasonic, cleaning system Mafac JAVA
- Pre-cleaning and assembly in dust-free room with flowbox module – cleanroom class ISO 5 according to DIN 14644-1
- Processing of industry-specific materials (batch purity)
- Traceability of your components and materials through our document management system (Docuware)





# PLANT ENGINEERING & SPECIAL PURPOSE MACHINERY MANUFACTURE

Individual for each project



## OUR INDUSTRY KNOW-HOW

- Customized individual parts and assemblies with and without documentation

## YOUR BENEFITS

- Fast response times
- Large in-house production depth
- Large supplier network for additional services (surfaces, heat treatment, purchased parts, 3D printed components)
- Highly effective – internal 300.000 production hours
- Certification according to EN 9001:2018 (and EN 9100:2018)
- CFRP components in connection with RODING MOBILITY GmbH (part of SK group)





# CLEAN ROOM SERVICE

Cleaning, assembling, testing and packaging in cleanroom ISO class 7



## PARTICLE-FREE PRECISION COMPONENTS FOR FURTHER USE IN CLEAN ROOM ENVIRONMENTS

- Certified clean room after ISO clean room class 7 with integrated darkroom for inspections using black and white light
- Flow box compliant with ISO clean room class 5 (US Fed. Std. Class 100)
- H14 filter system with a regeneration time of < 20 minutes

## PROCESSING OPTIONS FOR INDIVIDUAL PARTS AND SMALL SERIES

- For components up to max. 1,000 kg
- Ultra-fine cleaning of components for vacuum applications
- Assembly of sensitive assemblies or devices
- Quality control and final acceptance in the clean room incl. documentation
- Labelling and ready-to-ship packaging under clean room conditions





# THESE CUSTOMERS TRUST US

References

**AIRBUS**



**Audi Sport**



**GEMÜ**



**LIEBHERR**



**OBRIST**  
— ENGINEERING —





# OUTLOOK

Our mission for the coming years



## 2025 - INVESTMENTS

- Ultra-fine cleaning system for the clean room ISO class 7
- ZEISS ATOS Q: 3D-scanning-system



## LONG-TERM GOALS

- 1 MWp (Megawattpeak) PV system
- Expansion of energy infrastructure
- Constant training rate at 15 – 20 %
- CO<sub>2</sub> neutrality

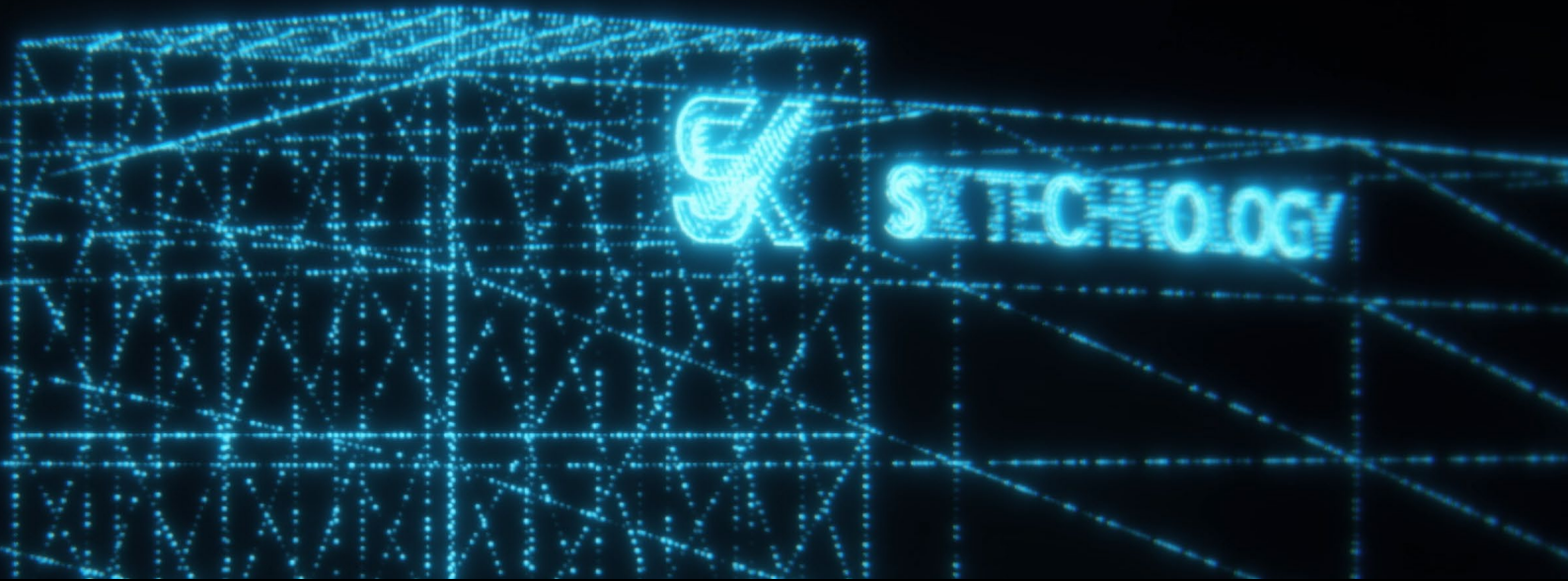


## THINK GREEN

Sustainable and future-oriented,  
60 % energy self-generated:

- Combined heat and power plant
- 900 kW PV plant
- Water / oil treatment plant

We are supporters of eco-friendly technologies. We believe in a cleaner future for everyone.



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