

**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

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



A STRONG TEAM

- 329 employees
– thereof 51 trainees
- 2 locations
– Roding and Waldmünchen
- Certified Great Place to Work®
- and Great Place to Start®



MANUFACTURING INFRASTRUCTURE

- 15.000 m², including 10.000 m² of fully air-conditioned production and assembly infrastructure
- 146 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



QUALITY
ASSURANCE



SHIPPING AND
LOGISTICS



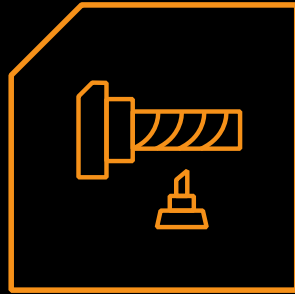
OUR CORE TECHNOLOGIES

Precision technology



CNC MILLING

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



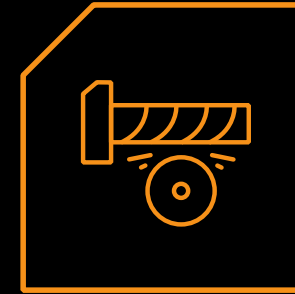
CNC TURNING

- 2 CNC turning machine incl. robot system
- 22 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

- 5 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



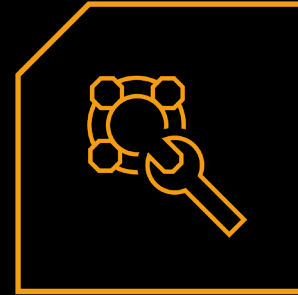
LASER MARKING

- 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.



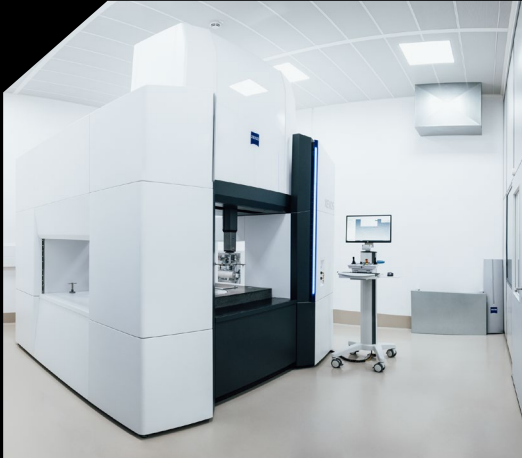
ASSEMBLY

- Partial and complete assembly of mechanical assemblies
- Individual parts / prototypes
- Assembly and packaging in flowbox acc. to cleanroom standards
- Procurement of all additional standard and purchased parts
- Functional tests and documentation



QUALITY IS OUR DNA

From μm 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



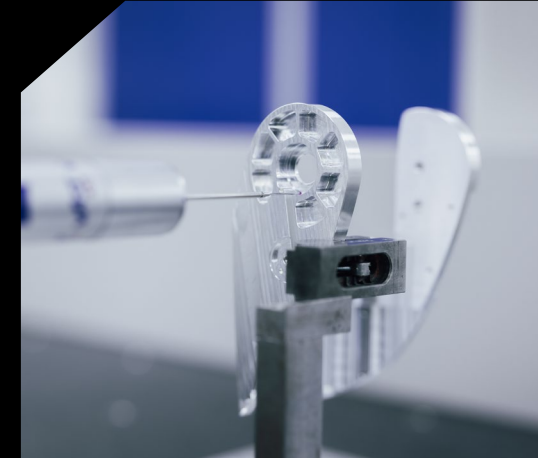
MEASUREMENT LAB

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



CERTIFICATES

- EN 9100:2018 (aerospace)
- Including ISO 9001:2018
- Penetration test level 2 (PT2)
- Restamping approval



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 μm possible in assembly modules
- Dimensional accuracy of up to 0.3 μm 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

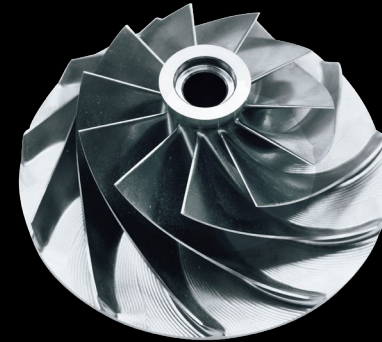




SPECIALISTS

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**

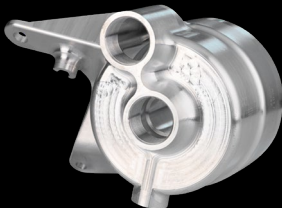
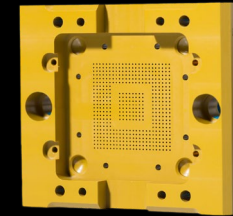
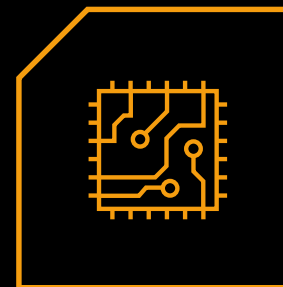
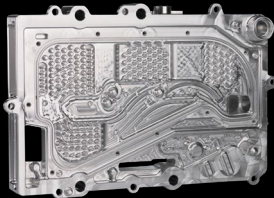
MADE IN RODING

Certified acc. to
EN 9100:2018



CONTINUED SUCCESS IN MANY INDUSTRIES

Reference projects





AEROSPACE

Precision in outer space – made in Roding

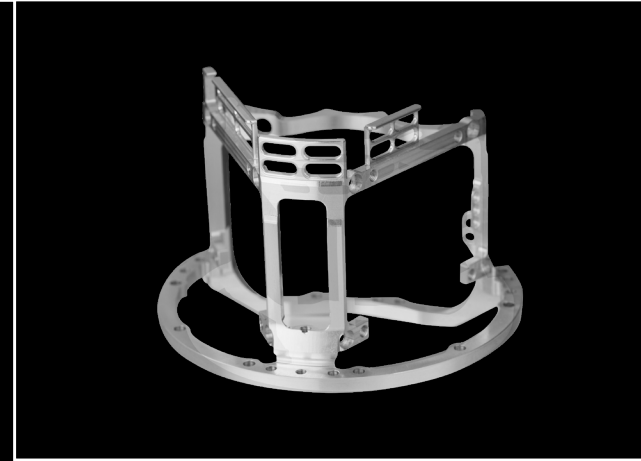


OUR INDUSTRY KNOW-HOW

- 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

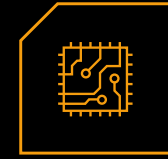
- Cleaning of components in-house: Washing cabin, ultrasonic, cleaning system Mafac JAVA
- Pre-cleaning and assembly in dust-free room with flowbox module – cleanroom class ISO 5 according to DIN 14644-1
- Machining of industry specific materials and super alloys such as Mumetal, Molybdenum, Inconel,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





SEMICONDUCTOR INDUSTRY

Key elements for digitization

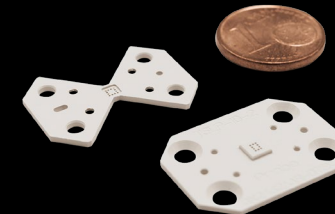
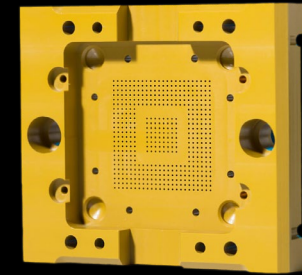


OUR INDUSTRY KNOW-HOW

- 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)





ASSEMBLY ACC. TO CLEANROOM STANDARDS

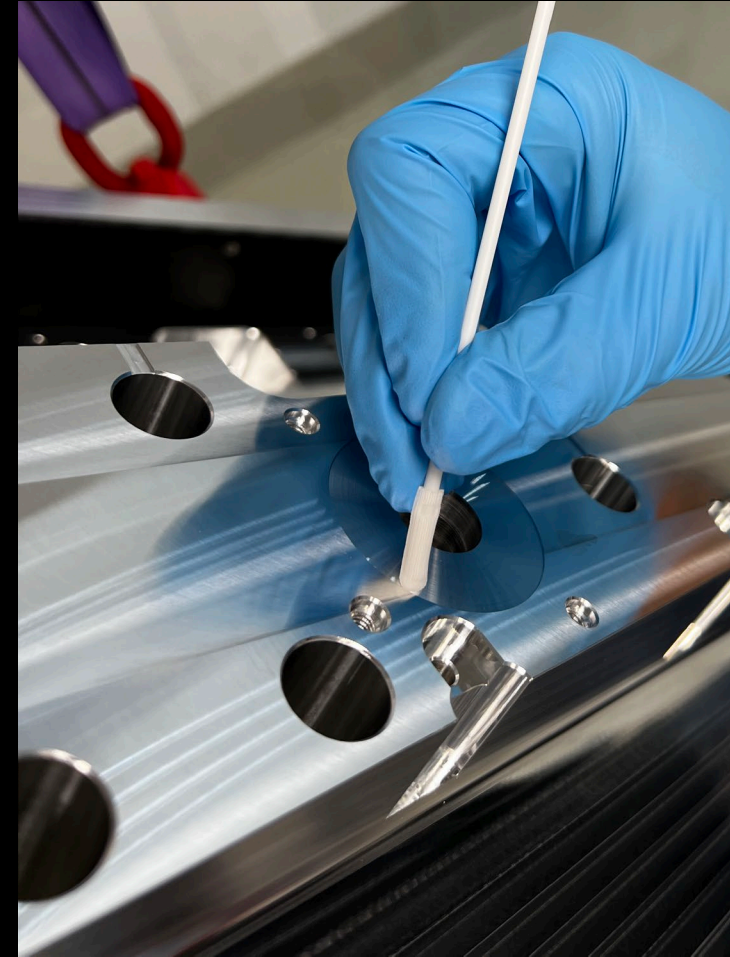
Cleanroom cell with FlowBox



To ensure product quality and process reliability, we also assemble and pack in a cleanroom environment, depending on customer requirements.

Cleanroom cell size:
2000 x 1500 x 2500 mm
Laminar Low Modul FMS 112
1925 x 705 mm

Cleanroom class ISO 5 acc. to 14644-1





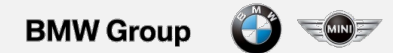
THESE CUSTOMERS TRUST US

References

AIRBUS



Audi Sport



GEMÜ



LIEBHERR



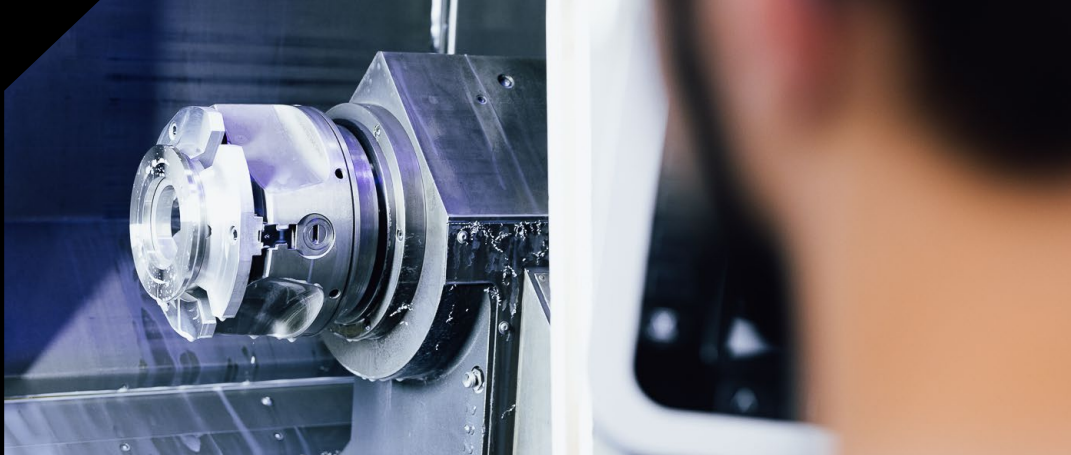
OBRIST
— ENGINEERING —





OUTLOOK

Our mission for the coming years



2024 - INVESTMENTS

- Construction of a clean room 80 m², ISO class 8 or 7
- Increasing the degree of automation



LONG-TERM GOALS

- Aquisition of a total of approx. 35.000 m² of development area at both locations
- EMAS certification for systematic improvement of energy and material efficiency
- Constant training rate at 15 – 20 %
- CO₂ 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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