

Innovations 2016

New capabilities of the ABS GmbH in development and manufacturing of electronics and camera systems



The ABS GmbH Jena strengthens its competences in development, manufacturing and quality assurance

New company headquarters in Jena – the „city of optics“

- Manufacturing workshop (CNC machine, sandblasting system)
- Electronics manufacturing with high quality requirements
- Clean-room technology to meet high cleanliness demands
- Ultrasonic cleaner for glasses, optics and special parts
- Testing equipment for robustness, climate and humidity
- From the idea to the prototype – all services under one roof



From climate chamber to vibration measurement setup – we are testing in-house



- Temperature testing from -75°C to 180°C
- Climate testing from 10°C to 95°C
- Humidity testing from 10% to 98% relative humidity
- Vibration testing up to 15 kN Sinus
- Shock testing up to 45 kN
- Test measurements for ESD and radiation behaviour
- Leakage detection (IP65, IP67, IP69)
- Testing procedures for sophisticated applications in agriculture, automotive, aviation, railroad, astronomy, manufacturing, laboratory devices, life science, security etc.



Cleanliness – one of the key quality requirement for optics and camera technology



- ultrasonic cleaning system for optical components (clean-room quality)
- sophisticated water-purification unit with prefilter 0,2 µm
- UV-sterilization und ion exchanger for desalination
- final cleaning in separate laminar flow cabinets with H14 filters
- separate cleaning equipment to prewash coarse dirt of turned and milled parts

In-house CNC machine for prototyping small series manufacturing



- manual/CNC, 4-axis milling, drilling, thread cutting
- manufacturing of customized solutions and precision parts
- reduced processing time during development
- production of special parts and prototypes on short notice and with high efficiency
- construction and manufacturing of complex casing-prototypes and special solutions (i.a. TEC, passive cooling, mechanical shutter)
- with the accuracy of swiss precision machines: 5µm