Precision is your top priority. We provide it.
The moment the quality of your product becomes visible. This is the moment we work for.
Your partner – from the initial idea to realization

Today, more than ever, safety and reliability are paramount. Products must be able to withstand extreme, partly unforeseeable conditions, and yet they must always be one step ahead of the competition at the same time. This is why future sustainability is the focus of our attention in our innovation activities. We subject our products to stringent testing procedures and make them fit for global use.

If safety, precision and the optimal use of materials are your number one priorities, your product is in the best possible hands with us. This reflects our fascination for functionality – for simple elegance and perfection. It embodies our respect for our spiritual forefathers who researched and developed with knowledge, passion and determination – inventors who worked together to create values that are now recognized around the globe and that have played their part in shaping the future. It is the name ZEISS – Carl Zeiss, Ernst Abbe and Otto Schott.

You have visions and are seeking a way of implementing them successfully. You want to stay true to your corporate values and protect people and the environment. We are the experts you have been looking for. Our tradition, our experience and the skills of our highly specialized and motivated staff guarantee the economical and punctual provision of the service you need – regardless of the complexity of your product and with the leading edge quality you require. We are your consultants – your technical service provider who supports you from the development of your product right up to its market launch.

Our services

The Quality Competence Center of ZEISS was accredited on the basis of the standard DIN EN ISO 17025 and is incorporated in the Integrated Management System of Carl Zeiss Jena GmbH in accordance with DIN EN ISO 9001, DIN EN ISO 14001 and DIN EN ISO 18001.

We support our customers from the initial product idea right up to the market launch. To achieve this goal, we bundle our know-how in the fields of optics, mechanical engineering, electronics, software and testing to develop customized, marketable systems in line with your wishes and requirements.

For technical details and more specifications please visit our website at www.zeiss.com/czjena
Calibration and test equipment management

We guarantee complete correlation to national standards for test equipment of all physical variables and are your partner for comprehensive test equipment management.

DAkkS/DKD (German Calibration Service) calibration:
- Parallel gage blocks to 800 mm, made of steel and ceramics
- Line scales to 600 mm, stage micrometers
- Cylindrical setting gages, plug gages, ring gages, test pins
- Sphere
- Optical flats
- Length measuring systems, 2-coordinate measuring equipment, profile projectors, measuring microscopes

Calibration to ISO standard (factory calibration):
- Calibration to VDI/VDE/DGQ 2617, 2618 and 2622
- Optical test equipment and all handheld measuring tools for mechanical variables
- Force, pressure and temperature measuring systems
- Electrical test equipment, crimp tools
- Calibration and maintenance of length measuring systems (e.g. ULM 600, Abbe 200, ZKM 250)
- Calibration of adjusting and testing devices
- Climatic test technology
- Cleanroom monitoring
- SAP-supported test equipment management system
- Test equipment repair service

Precision measurements in our accredited test laboratory according to ISO 17025

The qualified assessment of your specified components and products is guaranteed by our competence in the field of precision measurements.

Our services:
- Initial sampling
- Contract measurements
- 3D coordinate measurements
- Programming on basis of CAD model
- Fringe projection
- CAD dataset comparison
- Digitization of 3D objects
- Form, surface and contour measurements
- Optical coordinate measurement with image processing software
- Measurement of optical parameters
  - Flatness, radii
  - Focal length, back focal distances
  - Refractive indices, back vertex powers
  - Aberrations in optical systems
- Capability testing, statistical evaluation
Materials technology is increasingly important. Our laboratory has extensive and profound experience in this field. Use our broad spectrum of material testing capabilities for your products!

**Our services:**
- Hardness testing of metallic materials
- Brinell DIN EN ISO 6506-1
- Vickers DIN EN ISO 6507-1
- Rockwell DIN EN ISO 6508-1
- Hardness testing of plastics DIN EN ISO 2039-1
- Hardness testing of rubber and elastomers (Shore) DIN 53505
- Thermal treatment of materials and components, process consultation
- Materials analysis, atomic emission spectroscopy
- Evaluation of cemented, soldered and crimp connections, tensile, pressure and bend testing
- Evaluation of biocompatibility
- Advice on and evaluation of environmental compatibility of materials and products
- Advice on use and selection of materials

Safety testing of electrical equipment (instrument safety)

For the approval of your products on national and international markets, we offer you type testing for evaluation of their conformity to standards.

**Our services:**
- Medical electrical equipment DIN EN 60601-1, -2-22
- Usability DIN EN 60601-1-6, DIN EN 62366
- Measuring, control and laboratory equipment DIN EN 61010-1
- Safety of laser equipment DIN EN 60825-1
- Electrical equipment of machines DIN EN 60204-1
- Machine safety and risk assessment DIN EN ISO 12100
- Information technology equipment DIN EN 60950-1
- Conformity evaluation as per EU directives
- Product evaluation/testing as per SEMI
- Recognized testing site for CSA approvals for medical devices and laboratory equipment
- Customer consultation service for legal and normative stipulations
- Safety of optical instruments – artificial optical radiation
  - Surgical microscopes ISO 10936-2
  - Lamps/lamp systems EN IEC 62471
- Measurements, radiometric and photometric variables
Electromagnetic Compatibility

Transient emissions increasingly become a problem. We support you in reducing them, so this does not concern your products.

Conformity testing:
- Medical electrical equipment
  - DIN EN 60601-1-2
- Electrical measuring, control and laboratory equipment
  - DIN EN 61326-1
  - DIN EN 61326-2-x
- Industrial, scientific and medical devices
  - DIN EN 55011
- Information technology equipment
  - DIN EN 55022
  - DIN EN 55024
- Generic standards, testing and measuring procedures
  - DIN EN 61000-4-xx
  - DIN EN 61000-6-x
- Development advice and EMC optimization of products
- Standards compliant 10 m EMC chamber

Environmental simulation, climate, vibration, shock

Should your product perform at its best even under the toughest conditions? Here in the company we can simulate extreme requirements and prepare your product accordingly.

Our services:
- Application of the standards:
  - DIN ISO 9022-2
  - DIN ISO 9022-3
  - DIN EN 60068-2-xx
  - DIN EN 22248
- Climate simulation
  - Test room volume 0.3 to 30 m³
  - Temperature range –70 °C to +180 °C
  - Humidity 10 % to 99 %
  - Cold
  - Dry and humid heat
  - Temperature change
  - Temperature/humidity, cyclical
- Vibration exposure
  - Sine, noise 20 kN
  - Shock 40 kN
  - Frequency range 4 Hz to 3 kHz
  - Max. test object weight: approx. 200 kg
  - Vibrations, sinusoidal or random
  - Shocks, continuous shocks
  - Tipping and free fall
- Cold / heat cabinets, ovens
  - Temperature range –70 °C to 1200 °C
- Other tests
  - Drip and splash testing
  - IP protection rating
  - UV irradiation
  - Dust
  - Acoustics
- Building / ceiling vibrations