

# Index of products and services

- |  |  |
|--|--|
| <p><b>1 Laser and optoelectronics</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> 1.01 Solid-state lasers</li> <li><input type="checkbox"/> 1.02 Gas lasers</li> <li><input type="checkbox"/> 1.03 Diode lasers</li> <li><input type="checkbox"/> 1.04 Fiber lasers</li> <li><input type="checkbox"/> 1.05 Other lasers</li> <li><input type="checkbox"/> 1.06 Continuous Wave Lasers</li> <li><input type="checkbox"/> 1.07 Pulsed laser</li> <li><input type="checkbox"/> 1.08 Soft X-Ray (laser-induced)</li> <li><input type="checkbox"/> 1.09 Extreme Ultraviolet (EUV)</li> <li><input type="checkbox"/> 1.10 UV-Lasers (100–400 nm)</li> <li><input type="checkbox"/> 1.11 Visible Wavelength Lasers (400–750 nm)</li> <li><input type="checkbox"/> 1.12 Near Infrared (NIR) Lasers (750 nm–3 μm)</li> <li><input type="checkbox"/> 1.13 Mid Infrared (MWIR) Lasers (3–30 μm)</li> <li><input type="checkbox"/> 1.14 Far Infrared (FIR/LWIR) Lasers (&gt;30 μm–1mm)</li> <li><input type="checkbox"/> 1.15 Supercontinuum Lasers</li> <li><input type="checkbox"/> 1.16 Microlasers</li> <li><input type="checkbox"/> 1.17 Laser system components</li> <li><input type="checkbox"/> 1.18 Laser components</li> <li><input type="checkbox"/> 1.19 Safety / protection against laser radiation</li> <li><input type="checkbox"/> 1.20 Light-emitting diodes (LEDs) and components</li> <li><input type="checkbox"/> 1.21 OLEDs</li> <li><input type="checkbox"/> 1.22 Non-coherent light and radiation sources</li> <li><input type="checkbox"/> 1.23 Electro-optics</li> <li><input type="checkbox"/> 1.24 Acousto-optics</li> <li><input type="checkbox"/> 1.25 Integrated Photonics / Silicon Photonics</li> <li><input type="checkbox"/> 1.26 Polymer Photonics</li> <li><input type="checkbox"/> 1.27 Organic Photonics</li> <li><input type="checkbox"/> 1.28 Power-over-optical-fiber (PoF) Systems</li> <li><input type="checkbox"/> 1.29 Opto-electronic tubes</li> <li><input type="checkbox"/> 1.30 Opto-electronic components</li> <li><input type="checkbox"/> 1.31 Optical systems</li> <li><input type="checkbox"/> 1.32 Opto-mechanics</li> <li><input type="checkbox"/> 1.33 Software for Laser und Optics</li> <li><input type="checkbox"/> 1.34 Placement and assembly systems</li> </ul> <p><b>2 Optics</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> 2.01 Raw materials</li> <li><input type="checkbox"/> 2.02 Crystals</li> <li><input type="checkbox"/> 2.03 Processed components</li> <li><input type="checkbox"/> 2.04 Optical lenses</li> <li><input type="checkbox"/> 2.05 Diffractive optics</li> <li><input type="checkbox"/> 2.06 Freeform optics</li> <li><input type="checkbox"/> 2.07 Adaptive / deformable optical components</li> <li><input type="checkbox"/> 2.08 Optical transmission components</li> <li><input type="checkbox"/> 2.09 Other optical components</li> <li><input type="checkbox"/> 2.10 Design software for passive optical components</li> <li><input type="checkbox"/> 2.11 Systems for cleaning and maintenance of optics</li> <li><input type="checkbox"/> 2.12 Nanooptical systems, components and materials</li> </ul> | <p><b>3 Manufacturing technology for optics</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> 3.01 Optical manufacturing equipment for optical systems</li> <li><input type="checkbox"/> 3.02 Optical manufacturing processes for optical systems</li> <li><input type="checkbox"/> 3.03 Manufacturing materials for optical systems</li> <li><input type="checkbox"/> 3.04 Optical coating materials</li> <li><input type="checkbox"/> 3.05 Manufacturing of optical fibers</li> <li><input type="checkbox"/> 3.06 Machinery for the production of optical fibers</li> <li><input type="checkbox"/> 3.07 Manufacturing technology for optical systems, other</li> <li><input type="checkbox"/> 3.08 Adhesives for optical systems</li> </ul> <p><b>4 Sensors, test and measurement</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> 4.01 Measurement systems for laser characterization</li> <li><input type="checkbox"/> 4.02 Measurement and analysis systems for optical parameters</li> <li><input type="checkbox"/> 4.03 Systems for measuring optical parameters of devices and systems</li> <li><input type="checkbox"/> 4.04 Optical measurement systems</li> <li><input type="checkbox"/> 4.05 Optical sensors</li> </ul> <p><b>5 Services</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> 5.01 Application development and application labs</li> <li><input type="checkbox"/> 5.02 Optical design and engineering services</li> <li><input type="checkbox"/> 5.03 Processing centers</li> <li><input type="checkbox"/> 5.04 Contract production</li> <li><input type="checkbox"/> 5.05 System consultants</li> <li><input type="checkbox"/> 5.06 Simulation / Modeling / Numerics for optics and photonics</li> <li><input type="checkbox"/> 5.07 Maintenance and service for laser systems</li> <li><input type="checkbox"/> 5.08 Optics and illumination design</li> <li><input type="checkbox"/> 5.09 Second-hand equipment</li> <li><input type="checkbox"/> 5.10 Education and advanced training</li> <li><input type="checkbox"/> 5.11 Authorities, institutes, organizations, associations</li> <li><input type="checkbox"/> 5.12 Special information, databases</li> <li><input type="checkbox"/> 5.13 Technical literature, trade journals</li> <li><input type="checkbox"/> 5.14 Research and development</li> <li><input type="checkbox"/> 5.15 Customer-specific solutions</li> <li><input type="checkbox"/> 5.16 Technical consultants and agencies</li> <li><input type="checkbox"/> 5.17 Professional financing services</li> <li><input type="checkbox"/> 5.18 Subcontracting measurement</li> <li><input type="checkbox"/> 5.19 Measurement of damage threshold</li> <li><input type="checkbox"/> 5.20 Services, other</li> </ul> |
|--|--|

# Index of products and services

## 6 Systems by application sectors

- 6.01 Systems for the automotive industry and OEMs
- 6.02 Systems for toolmaking and mechanical engineering
- 6.03 Systems for printing technology and graphics
- 6.04 Systems for data processing and information technology
- 6.05 Systems for electronics
- 6.06 Systems for electrical engineering
- 6.07 Systems for the semiconductor industry
- 6.08 Systems for plastics processing
- 6.09 Systems for biophotonics, life sciences and pharma
- 6.10 Systems for research and science
- 6.11 Systems for show technology, advertising, art
- 6.12 Systems for sensor technology
- 6.13 Systems for illumination technology
- 6.14 Systems for solar production
- 6.15 Systems for environment engineering
- 6.16 Systems for the aerospace industry
- 6.17 Systems for security engineering
- 6.18 Systems for imaging and machine vision
- 6.19 Systems for production of energy storage
- 6.20 Systems for quantum optics
- 6.21 Systems for other sectors

## 7 Laser systems for industrial production engineering

- 7.01 Material processing systems
- 7.02 System peripherals of laser production engineering
- 7.03 Laser-based additive manufacturing
- 7.04 Laser systems for various materials
- 7.05 Laser systems for various applications
- 7.06 Laser systems for production of organic and printed electronics
- 7.07 Raw materials for material processing
- 7.08 System integration

## 8 Optical measurement systems

- 8.01 Laser-aided test and measurement systems
- 8.02 Optical Coherence Tomography OCT
- 8.03 Holographic systems and components
- 8.04 Lidar systems (Light detection and ranging)

## 9 Optical information and communication

- 9.01 Fibers, cabling, connectors and distribution
- 9.02 Active optical components and subsystems
- 9.03 Passive optical components and subsystems
- 9.04 Fiber optical test and measurement
- 9.05 Process and assembly equipment for fiber optical applications
- 9.06 Virtual Reality—Augmented Reality—Mixed Reality (xR-Applications)

## 10 Biophotonics and medical engineering

- 10.01 Applications
- 10.02 Methods and techniques

## 11 Imaging

- 11.01 Components
- 11.02 Applications
- 11.03 Image processing
- 11.04 Displays

## 12 Illumination and Energy

- 12.01 Illumination
- 12.02 Photovoltaics and renewable energy

## 13 Security

- 13.01 Applications
- 13.02 Modules
- 13.03 Equipment

## 14 Quantum Technologies

- 14.01 Laser systems for quantum technology
- 14.02 Subsystems & components for quantum technology
- 14.03 Applications