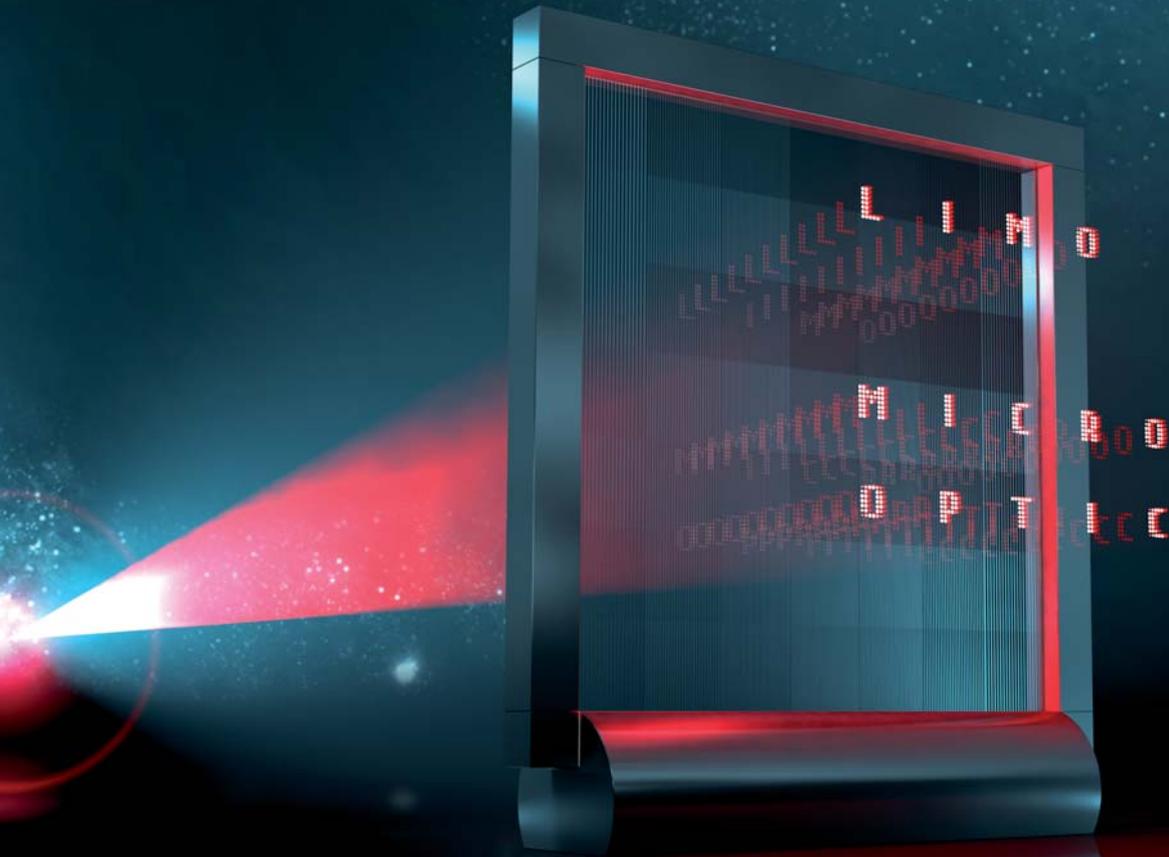


Beam Shaping Excellence



LIMO

A Focuslight Company



Every photon. In the right place, at the right time.

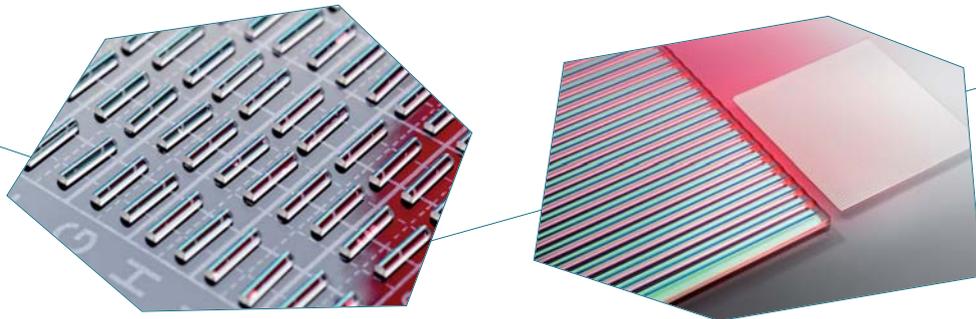
LIMO: The world of beam shaping

Whether it's materials processing, illumination or measurement engineering, light and laser technologies form the basis of technological progress and have established themselves as an integral part of the everyday technical world. But is there a way to control and individually shape laser light so that it can be used as a tool? The answer is yes: with refractive micro-optics and beam shaping solutions.

For years, LIMO has been an international leader in the field of efficient beam shaping. At our headquarters in Dortmund, Germany, an interdisciplinary team made up of 230 engineers, physicists, technicians and a host of other specialized employees works together to develop high-precision micro-optics components and laser systems.

LIMO specializes in three different areas: optical components, industrial laser systems, and complete optical systems.

Thanks to our exceptional know-how in each of these fields, we are able to expand the potential of light, allowing it to be harnessed technically and cost-efficiently for individual applications in both industry and research. This in turn unlocks entirely new dimensions in industrial production processes that can be summed up in a single phrase: Every photon. In the right place, at the right time.



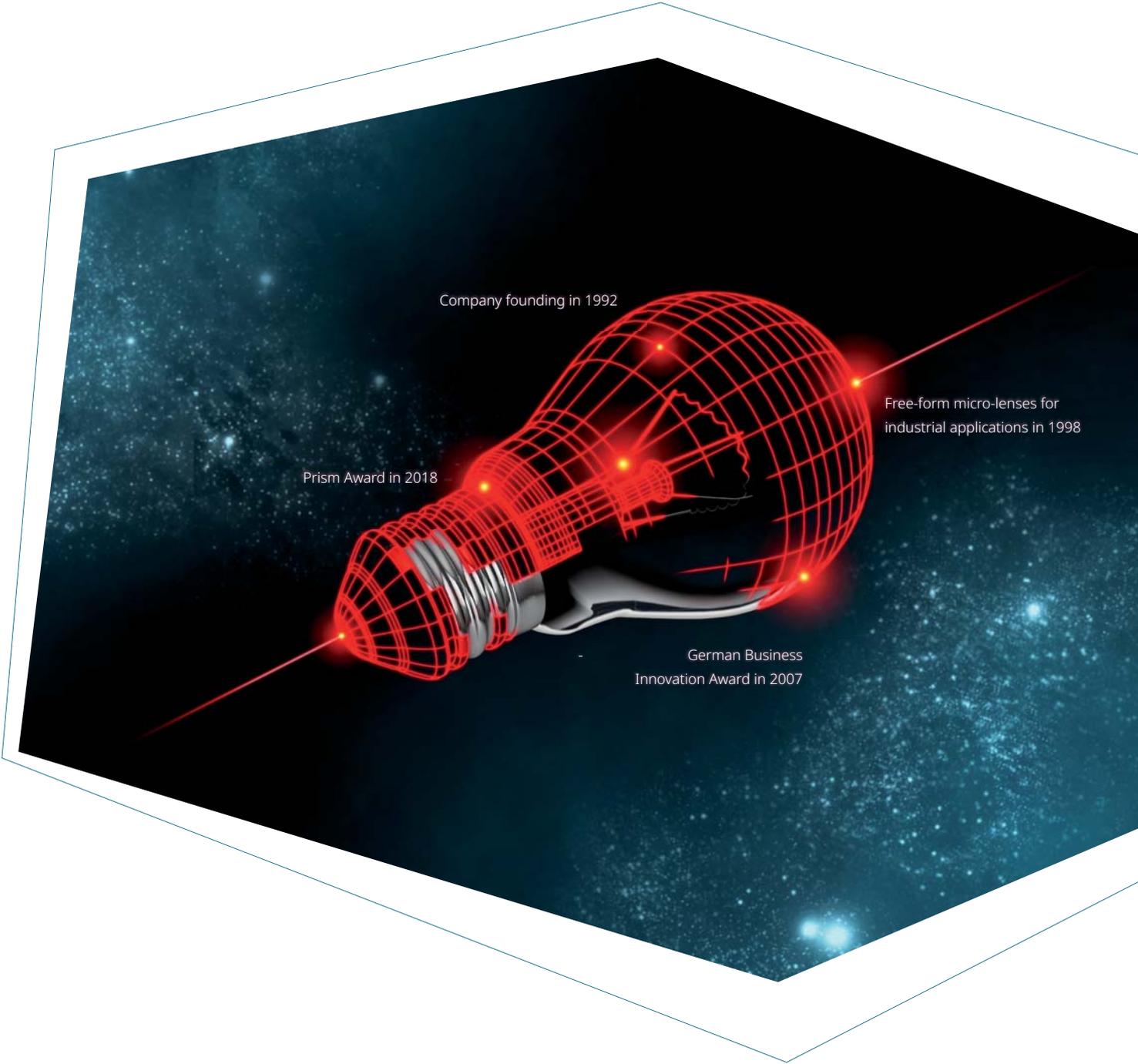
Light years ahead. Thanks to evolving expertise.

LIMO: Leading technology for the markets of tomorrow

For over 25 years, LIMO has ranked among the leading international specialists for laser beam shaping. As soon as the company was founded in 1992, it became clear that our technological innovations would alter the industrial and research landscape significantly. And in the span of just a few years, we established ourselves as the market leader in the field of refractive micro-optics. Within a short time, we then expanded our product portfolio by developing high-performance diode lasers and beam shaping systems for all types of lasers.

The experience and highly specialized knowledge gained from this formative period also serve as the foundation for our latest process-engineering breakthrough in the area of optics production. The high process speed of our wafer-based production technology—the only one of its kind in the world—puts an entirely new cost structure within reach for applications with extremely high volumes. This makes it possible to fabricate large quantities of any desired lens geometry with consistently high levels of quality and functionality, delivering both quantity *and* quality for the high-volume markets of tomorrow.



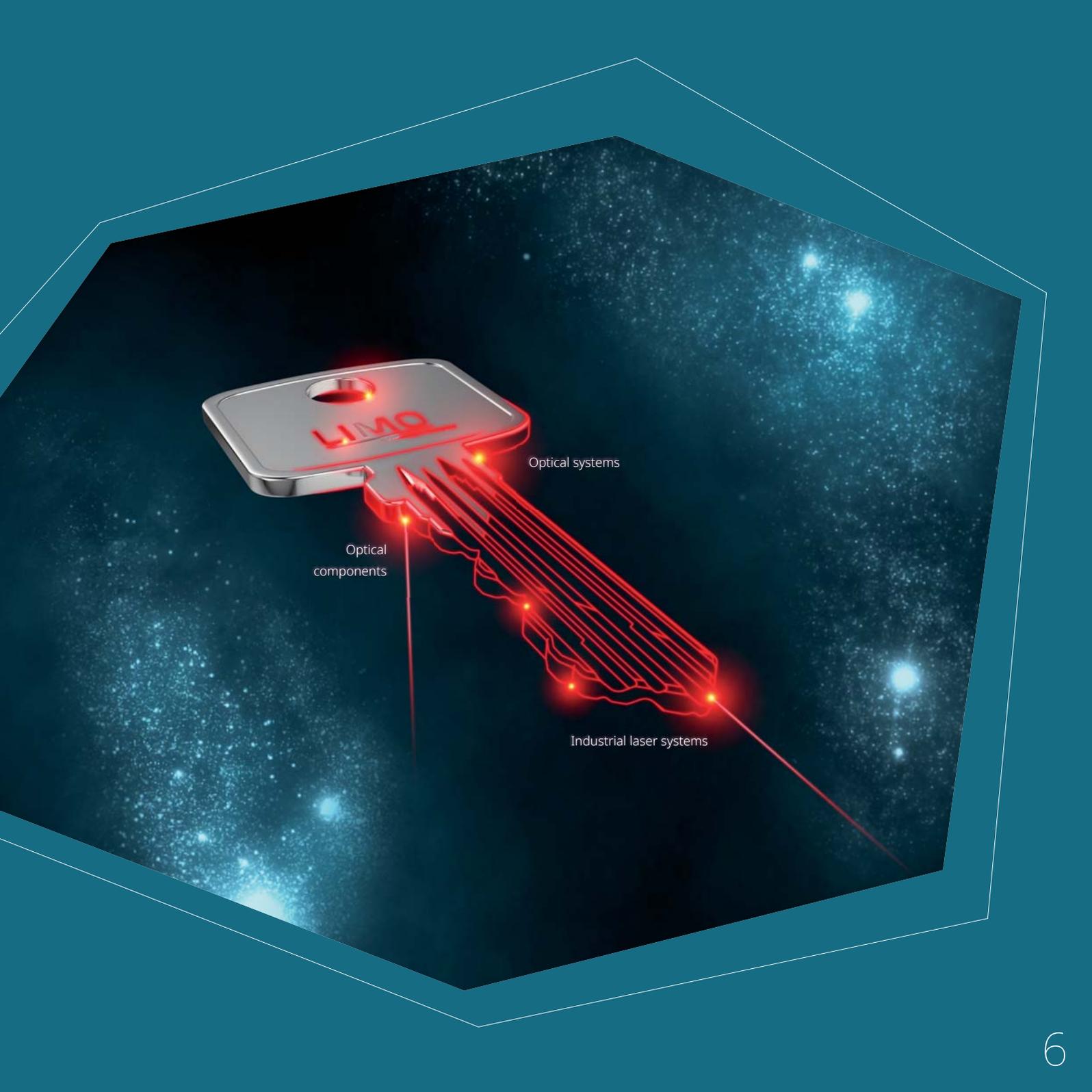


Company founding in 1992

Free-form micro-lenses for industrial applications in 1998

Prism Award in 2018

German Business Innovation Award in 2007



LIMO

Optical systems

Optical components

Industrial laser systems



Optics and lasers. The key technologies.

LIMO: Complete solutions from a single source

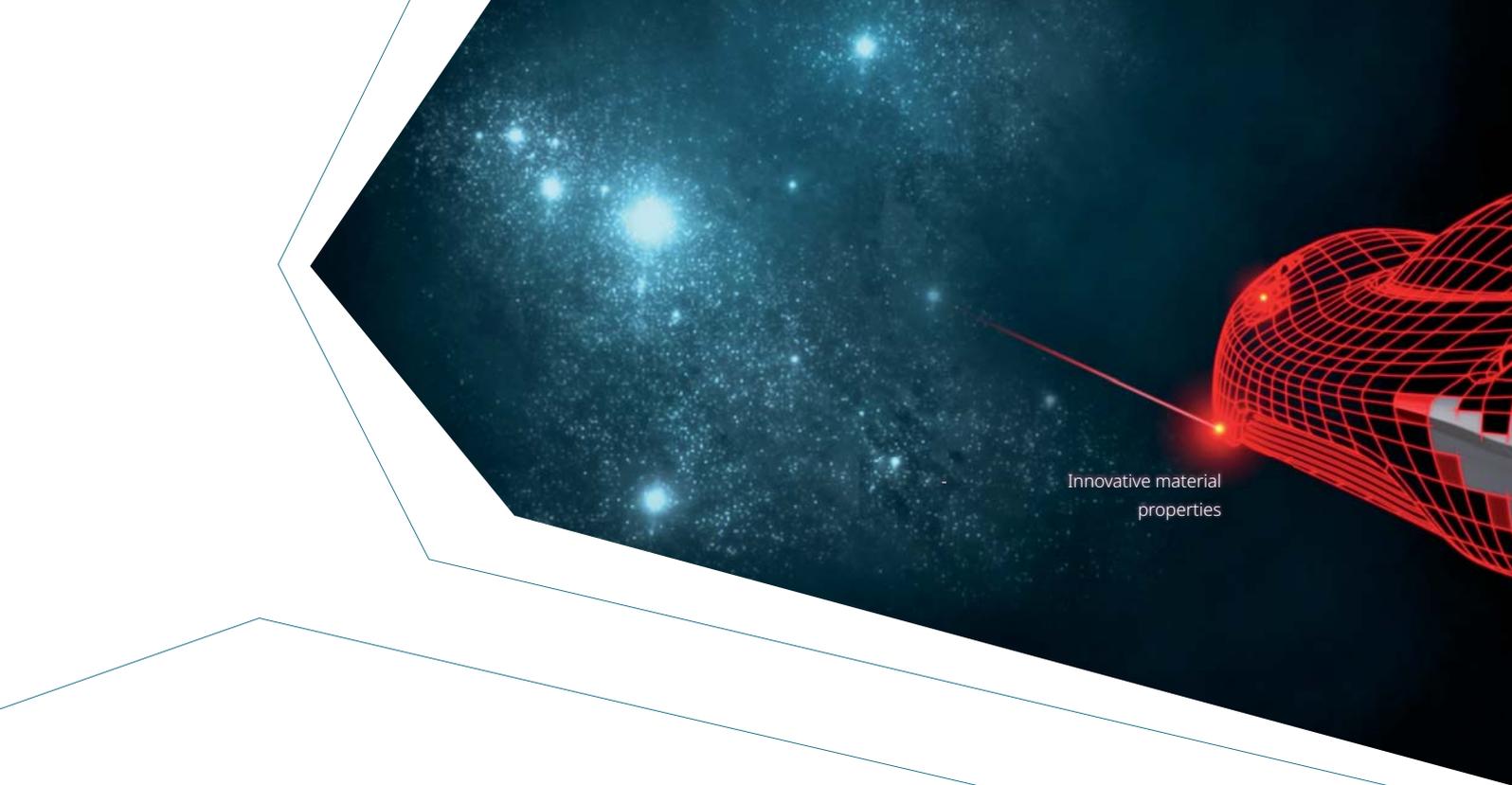
With its optical solutions and efficient laser systems, LIMO provides the key technologies necessary for laser-based production processes and applications. LIMO micro-optics can be used to shape laser beams to create points, lines, rectangles or other custom geometries, and thus provide a revolutionary way to process materials and enhance their existing properties. Our core competencies include the following fields:

Optical components: We manufacture our components on wafers, producing tens of thousands of lenses from high-grade glass and crystals in a single process step. For consistently high levels of quality and functionality.

Industrial laser systems: Processable modules with integrated micro-optics systems can be implemented in existing production equipment to provide solutions that are efficient in terms of both technology and cost.

Optical systems: Our complete linear beam shaping systems are used in the industrial production of displays, predominantly as a non-destructive way to separate the substrate in laser lift-off methods for flexible OLED displays.

Combined with the extensive customizability we offer in each of our three areas of expertise, our ability to deliver complete solutions from a single source makes us a strong partner for businesses in a wide range of different industries.



Innovative material
properties

Custom-made systems for industry and research.

LIMO: Versatile industry solutions

From made-to-order design and production to high-precision integration, the optical solutions we develop are always the result of close collaboration with our customers. As a group, these customers use LIMO systems in both industrial production and research applications. For example, LIMO's industrial laser systems produce safe and reliable weld seams on plastic parts used in the medical technology and automotive industries. Scalable laser lines enable large-area surface processing and allow coatings to be functionalized. And LIMO's high-precision micro-optics are the first choice for safety-critical LIDAR systems and intelligent 3D sensors.

Laser-based production technologies



High-performance
sensors



Above all, our customers benefit from the strong advantage of consistent quality, reliable performance and significant added value. Aside from this, we also provide a comprehensive range of services in support of our products and solutions. This not only includes delivery and installation, but also training and hassle-free maintenance on-site. As a result, we help our customers and partners achieve reliable production processes, thereby strengthening their productivity and competitiveness.



Research

Health

Advanced Manufacturing

Information Technology

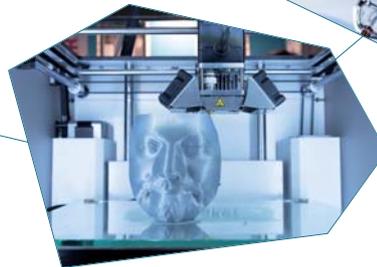
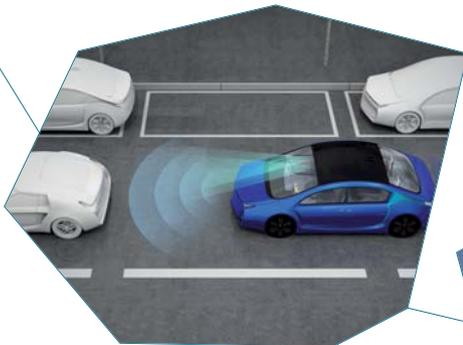
Automotive

A focus on the future. And limitless applications.

LIMO: Identifying potential. Seizing opportunity.

The 21st century is the century of light. Laser systems and photonics are a key technology and driver of innovation across all industries and markets, and are already in use in many different areas of life today. Whether it's medical technology and 3D printing or self-driving cars and autonomous transportation—none of these future trends is possible without laser technology. And with facial recognition and object detection systems as well as the challenges posed by Industry 4.0, cutting-edge information technology also depends on innovative ideas in the field of beam shaping.

That's why LIMO invests in the development of forward-thinking technologies on an ongoing basis. Our highly qualified engineers, physicists and technicians conceptualize, test and evaluate new ideas around the clock. And when we've identified new potential, we take full advantage of our opportunity. It's the only way we can offer our customers innovative systems and help them achieve success. And it's why our motto is "Shaping the future. Together."





LIMO

A Focuslight Company

LIMO GmbH

Bookenburgweg 4-8
44319 Dortmund | Germany

Phone: +49 231 22 24 1- 0

Fax: +49 231 22 24 1- 140

info@limo.de

www.limo.de