



LASER 2000

Laser 2000 product portfolio



Laser 2000 - Experts in Photonics



About us

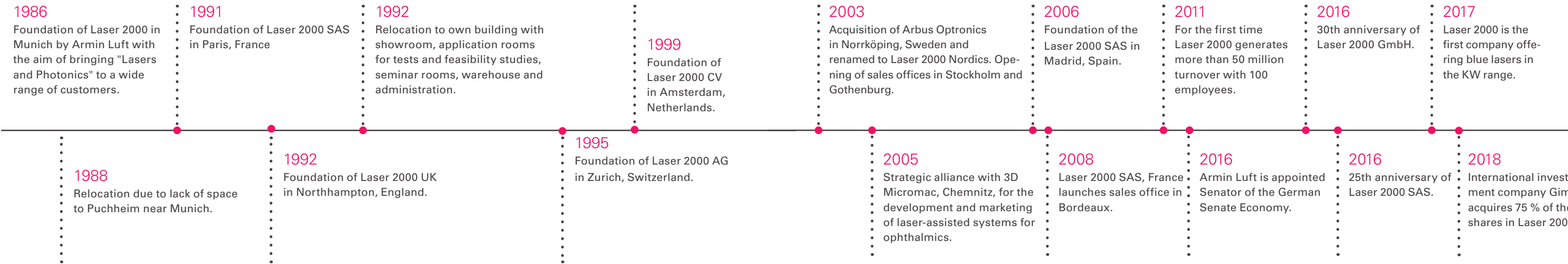
For more than 30 years, Laser 2000 has been providing innovative solutions and consulting for photonics and fiber optics that meet even the most demanding applications. We cooperate with global leaders to supply customer-specific solutions from a single source. We are avid promoters of optical technologies and are always on the cutting-edge of development, products and application options. We are driven by global thinking and local action. In order to

meet the individual market and customer needs in each country, our experienced team serves you all across Europe. With our subsidiaries in Germany, Austria, France, Spain and Sweden as well as our offices in Great Britain, Belgium and the Netherlands, we ensure optimum advice for our customers. Photonics is our passion and profession alike. It is also the basis for ensuring best customer satisfaction as a leading player on the European market for optical technologies in the photonics' century.

Armin Luft is senator of the German Senate of Economy

At the beginning of January 2016, Armin Luft, founder and CEO of Laser 2000 GmbH, was appointed to the German Senate of Economy due to his 40 years of experience and expertise as a pioneer in photonics. The association of leading personalities from business, science, media and culture as well as representatives from politics and diplomacy works

according to the guiding principle of John F. Kennedy: "Do not ask what your country can do for you, but rather ask what you can do for your country". Therefore, the Senate supports politics with the help of the competence of entrepreneurs and executives through impulses and practical suggestions.



Our business areas

Laser & Light Sources

Laser 2000 offers a very broad portfolio of lasers and broad-band light sources for a wide range of applications, ranging from discrete laser diodes and VCSELs, to diode lasers and solid-state lasers, through to high-performance lasers, including short-pulse lasers, fiber lasers, and excimer lasers. Applications include laser material processing, measurement technology, spectroscopy, biomedical technology (including microscopy applications), and many more.



Laser Material Processing

Laser beam sources have been established in the field of material processing for a long time, current developments are constantly opening up new opportunities for the use of high-performance lasers. Laser 2000 offers an innovative portfolio of lasers and components for laser material processing. In addition to femtosecond lasers, fiber lasers, and excimer lasers, we also offer high-power lasers with new wavelengths, e.g. for cutting and welding. Scanners, process heads, and optomechanical components complete our comprehensive range.



Laser Safety

With the steadily growing number of laser applications, laser safety has become an increasingly important issue. The use of class 3R and higher lasers requires some very extensive precautions to ensure safe working conditions for the laser. In order to meet these requirements, Laser 2000 offers a comprehensive portfolio of laser safety products, as well as the appropriate consulting to support safety at the laser workstation in the best possible way. The products are tested and certified according to the currently valid laser safety standards.



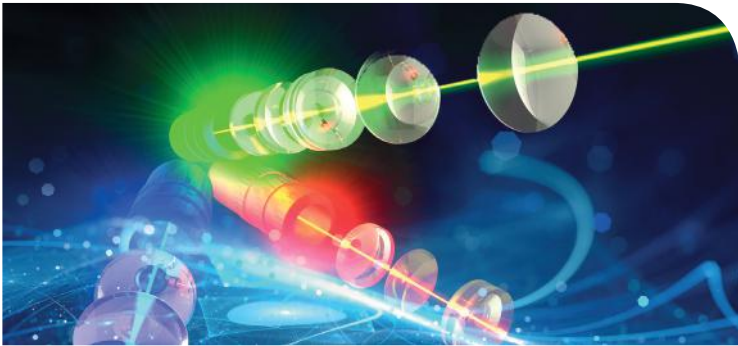
Laser Test & Measurement

A wide range of measurement techniques is required to investigate the various parameters that are necessary for the successful use of the laser. We offer from state-of-the-art measuring instruments for the laboratory, as an integral part of a laser system, up to flexible field measuring technology. Important devices include ones for power and energy measurement, beam profiling and M² measurement, divergence and angle measurement, wavelength and position measurement, and, in connection with this, the stabilization of all laser parameters.



Optics & Optomechanics

Laser 2000 offers optics components such as mirrors, lenses, optical filters, polarizers, and prisms. These optical elements are essential for the construction of laser systems or optical measuring instruments. In addition, we offer a wide range of accessories for mechanical elements used in the field of optomechanics. Our products range from simple holders to accurate lens and mirror holders to various manual positioning elements. Active or passive damped optical tables are available to serve as a basis for lab-structures.



Scan & Motion Systems

Many laser applications require precise and fast positioning of workpieces or lasers. The large Laser 2000 portfolio of linear stages, rotary stages, goniometers, and vertical stages as well as multi-axis systems covers a wide range of solutions for many different applications. Our products handle travel distances up to several meters, accuracies up to the nanometer range, and speed up to several meters per second. Additionally, they can be optimized for various loads and applications.



Machine Vision

Machine Vision is an integral part of today's automated, fast-moving industrial applications. It represents one of the most essential core competences in the production of goods. Typical fields of application for Machine Vision are 2D/3D measurement, parts and position recognition, and error detection. Laser 2000 focuses on applications with line lasers and DOE lasers (RPP), 3D stereo Machine Vision, and LEDs for line and bar lighting. We also develop special 3D camera systems for laser scanning applications.



Cameras

Cameras are needed for Machine Vision, astronomy, microscopy, and many other imaging applications. Our extensive product portfolio of optical detectors and camera solutions includes silicon detectors and InGaAs cameras. The products in our portfolio fulfill the most stringent requirements in terms of sensitivity and speed. For example, multispectral cameras can be used to record different wavelength ranges, and line cameras can be used to inspect continuous material.



Optical Test Equipment

Our range of optical test equipment products is perfectly suitable for the fields of photometry, spectroscopy, color measurement, or telecom applications. Optical measurement methods are used for applications in production, quality control, transport, biometric recording, medicine, telecom/datacom and fiber optics. We offer products such as spectrometers, systems for beam analysis and stabilization, attenuation, OTDR measuring devices for fiber optic cables, polarization controllers, analyzers and many more.



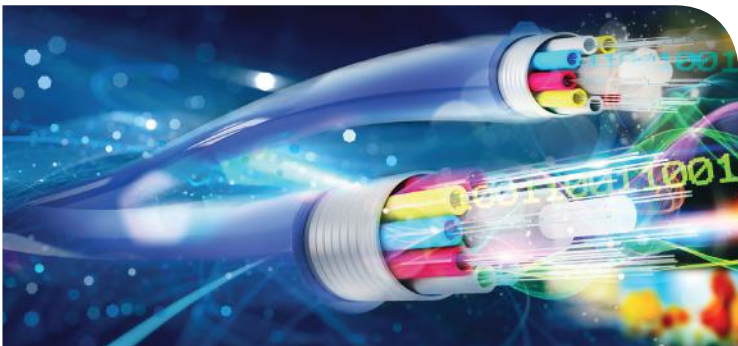
Fiber Optics

Our fiber optics product portfolio ranges from active components such as transceivers, transmitter diodes, and reception diodes to passive components such as splitters, WDMs, CWDMs, DWDMs, and optical switches. In addition, we also provide fibers, cables and pre-assembled patch cords/ pigtailed. Cable management systems such as splice boxes or 19-inch racks and corresponding plug-ins are important for maintaining an overview of network infrastructure. For harsh environments, special components are available.



Fiber Preparation

Cleavers or polishing machines are required to process fiber-end surfaces and fiber-optic cable connectors. For the loss-free connection of two fibers, a splicer is used. In general, a distinction is made between core centering and clad centering. Before the fibers are processed, it is particularly important to clean the end faces or ferrules of optical fibers and connectors with cleaning cartridges or swabs.



Network Engineering

Our network technology range includes components, systems, and solutions for optical transmission technology for telecom and industrial applications. We offer media converters and Ethernet/FTTX network terminators, CWDM/DWDM multiplexers, as well as Ethernet switches, and optical cross-connects. Finally, we also provide differentiating technology through layer 1 encryption and intelligent cybersecurity functionality.



Our service

Academy

Our Academy was founded in 2003 as part of a quality campaign aimed at sharing our high level of technical industry knowhow on an expert-to-expert level with our (prospective) customers. At the same time, we aim to transfer and increase knowledge on current topics and trends. Tremendous demand and positive feedback from participants demonstrate that the Laser 2000 Academy has closed an important gap in the education and training of professionals in this sector.



Quality

The customer is the focus of our company and our thoughts and actions. The high quality standards and their continuous optimization are for the benefit of our partners and customers. That means efficient processes, fast response times and highly motivated staff. Therefore, employees receive professional education and training. In addition, Laser 2000 is "Authorized Economic Operator (AEO)", a service that promotes partnership with our customers and suppliers.



Exhibitions

For many years Laser 2000 has been one of the largest exhibitor at the world's largest biennial industry fair "Laser World of Photonics". In addition to the most important exhibition for us, we also exhibit at all technology-relevant fairs and show the latest and most innovative products of "optical technologies". We look forward to welcoming you at one of our stands. We will be happy to send you free invitations on request. Convince yourself of our wide product range, our engineers will be pleased to demonstrate you the suitable solution for your problem.



Custom Solutions – Engineering your ideas!

With highly qualified employees and many years of industry know-how, we offer expert knowledge for your application. We realize design, integration, and production as well as the adaptation of proven standard products to your needs. With our experience and the global overview of products and trends, we select the optimal concepts and components. Furthermore, we design feasibility studies or determine process parameters in our own laboratory.



Visit our website www.laser2000.de



Services

The scope of services offered by Laser 2000 includes components, systems and customized solutions and is characterized by a high level of innovation as well as high reliability.

- Laser & Light Sources
- Laser Material Processing
- Laser Safety
- Laser Test & Measurement
- Optics & Optomechanics
- Scan & Motion Systems
- Machine Vision
- Cameras
- Test & Measurement
- Fiber Optics
- Fiber Preparation
- Network Systems
- Workshops and Seminars

