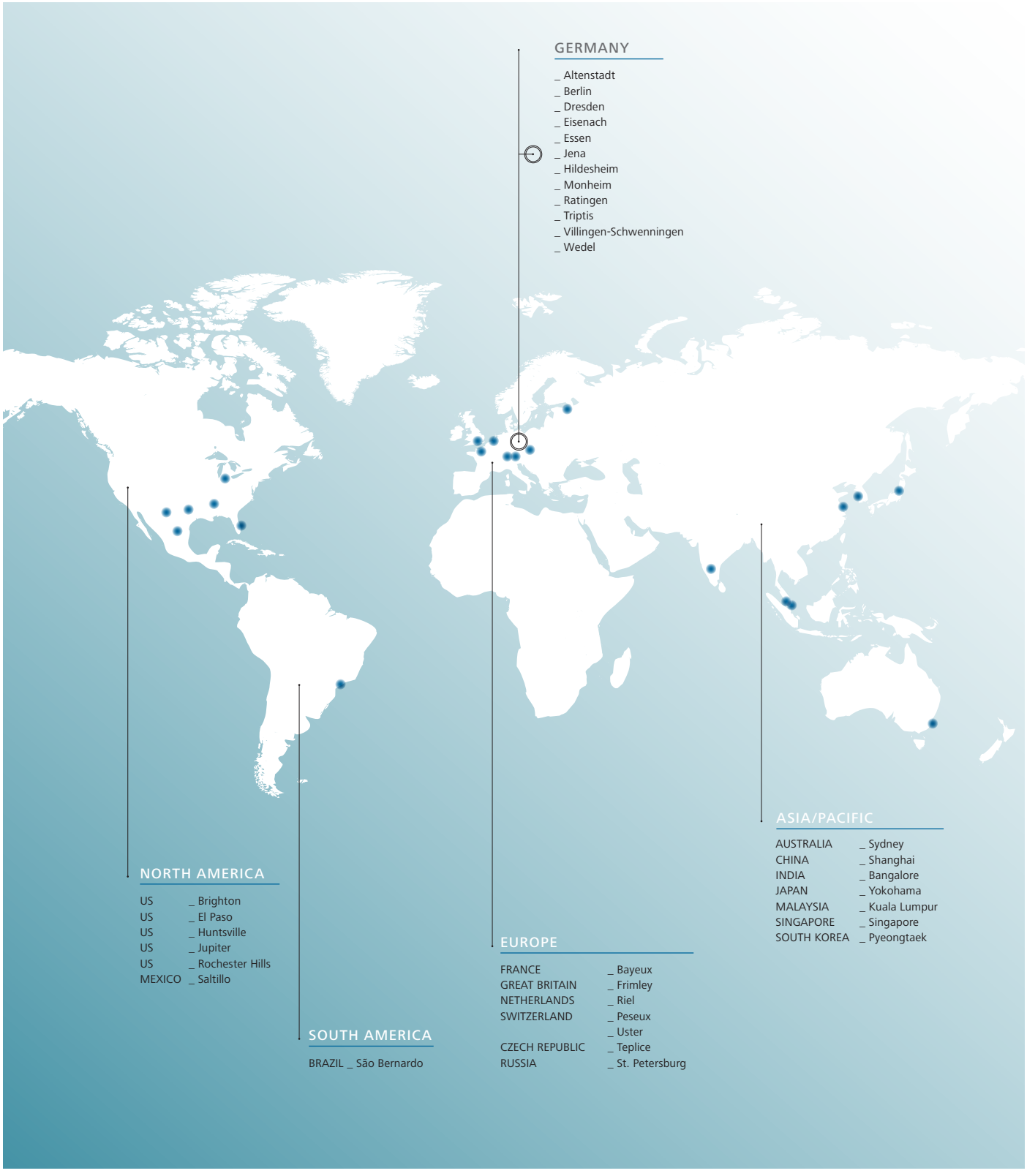
JENOPTIK

JENOPTIK IN PROFILE

2014/2015

Jenoptik worldwide

AS AT MAY 2015



A portrait of Jenoptik

We are a globally operating integrated photonics Group which is present in more than 80 countries. Optical technologies are the very basis of our business. Our customers primarily include companies in the semiconductor equipment, automotive and automotive supplier, medical technology, defense and security as well as the aviation industries. In 2014, our 3,553 employees generated revenue of approximately 590 million euros.

THE JENOPTIK GROUP STRUCTURE

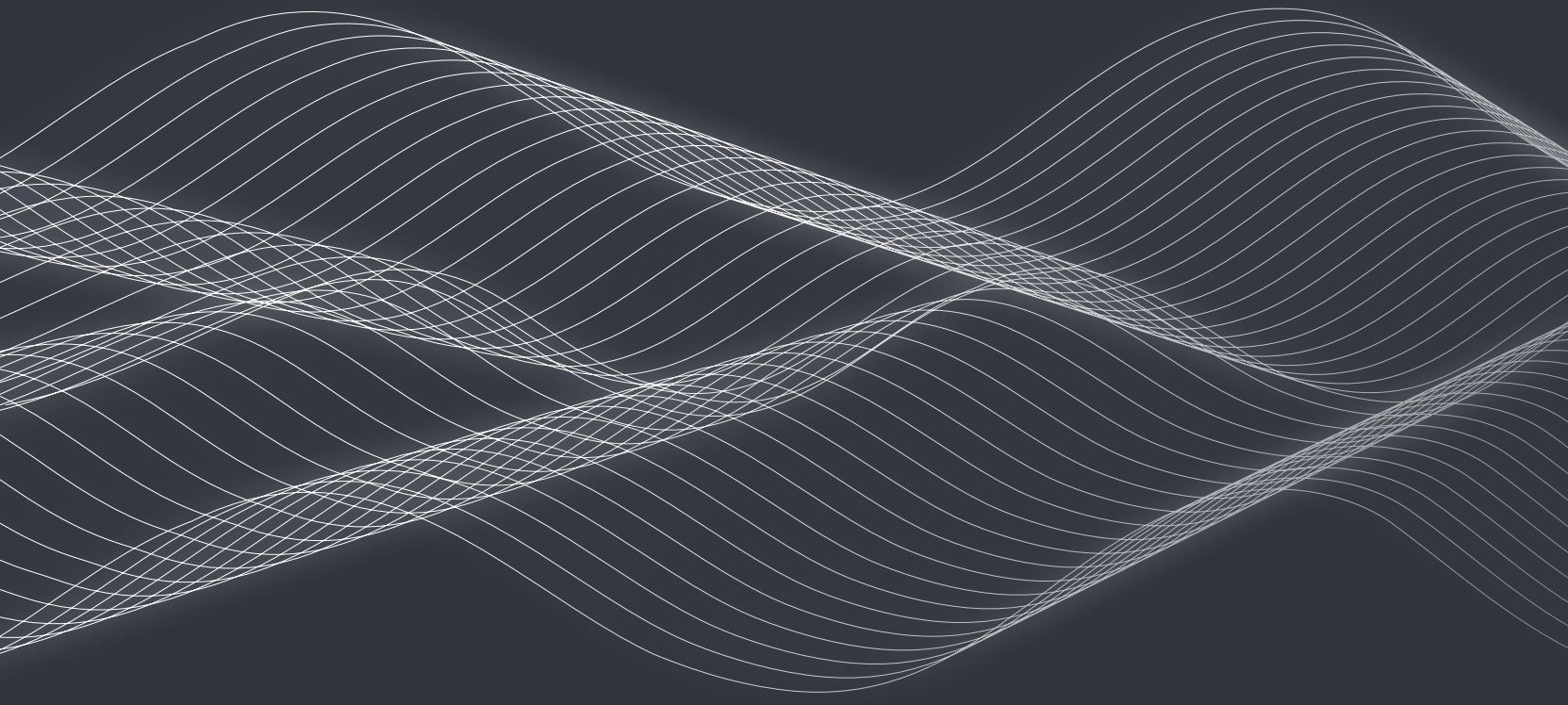
Corporate Center

Lasers & Optical Systems segment		Metrology segment		Defense & Civil Systems segment
Lasers & Material Processing	**Optical Systems**	**Industrial Metrology**	**Traffic Solutions**	**Defense & Civil Systems**
We supply reliable, efficient and precise laser technology for industrial processing of various materials. Our customers benefit from our holistic approach, as we cover the entire value chain – from semiconductor material, laser sources, laser system and systems engineering for production facilities through to industrial waste gas cleaning systems.	We are one of very few manufacturers in the world to produce integrated optical systems and precision optics for the most stringent demands in terms of quality. We are a development and production partner for optoelectronic and optomechanical systems, modules and assemblies based on optical, micro-optical and layered optic components made from glass, infrared materials and plastics.	As global metrology specialists, we develop and produce high-precision production measuring technology. Our experience in tactile, optical and pneumatic measuring methods puts us in a position to offer custom solutions for the widest range of measuring tasks – at every stage of the production process and in the metrology room.	We develop and produce components and systems for better traffic safety on the world's roads. This includes mobile and stationary systems such as speed and red light monitoring equipment and special solutions for detecting other traffic violations. In our function as a service provider, Jenoptik also covers all aspects of the associated process chain.	We focus on equipment for military and civil vehicles, trains and aircraft, drive and stabilization engineering, energy systems as well as laser and infrared sensor technology. Optoelectronic instruments and systems for the security industry as well as software, measurement and control technology complement our service range.

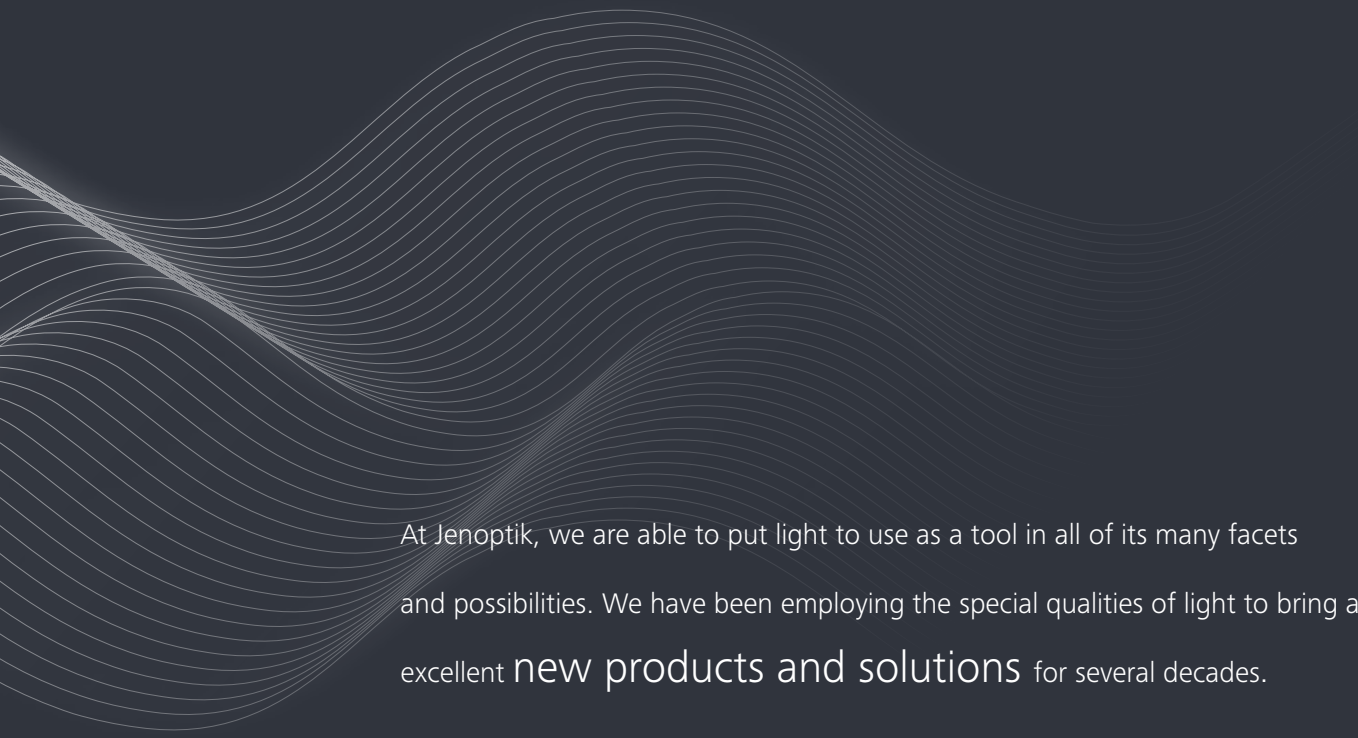
Shared Service Center

Light:

A tool for the future



- **Protection of the climate and the environment:** Detecting, eliminating, or reducing hazardous materials, recognizing heat loss



At Jenoptik, we are able to put light to use as a tool in all of its many facets and possibilities. We have been employing the special qualities of light to bring about excellent new products and solutions for several decades.

The significance of photonics will continue to grow dynamically in the years to come, and it will play a major role in boosting technological efficiency. As a crossover technology, photonics is one of the main motors of innovation and economic growth today. And at Jenoptik, we are excellently positioned to take part in this development.

- **Metrology:** Obtaining precise measurements, gathering new knowledge, improving efficiency, reducing costs, raising product longevity, improving quality

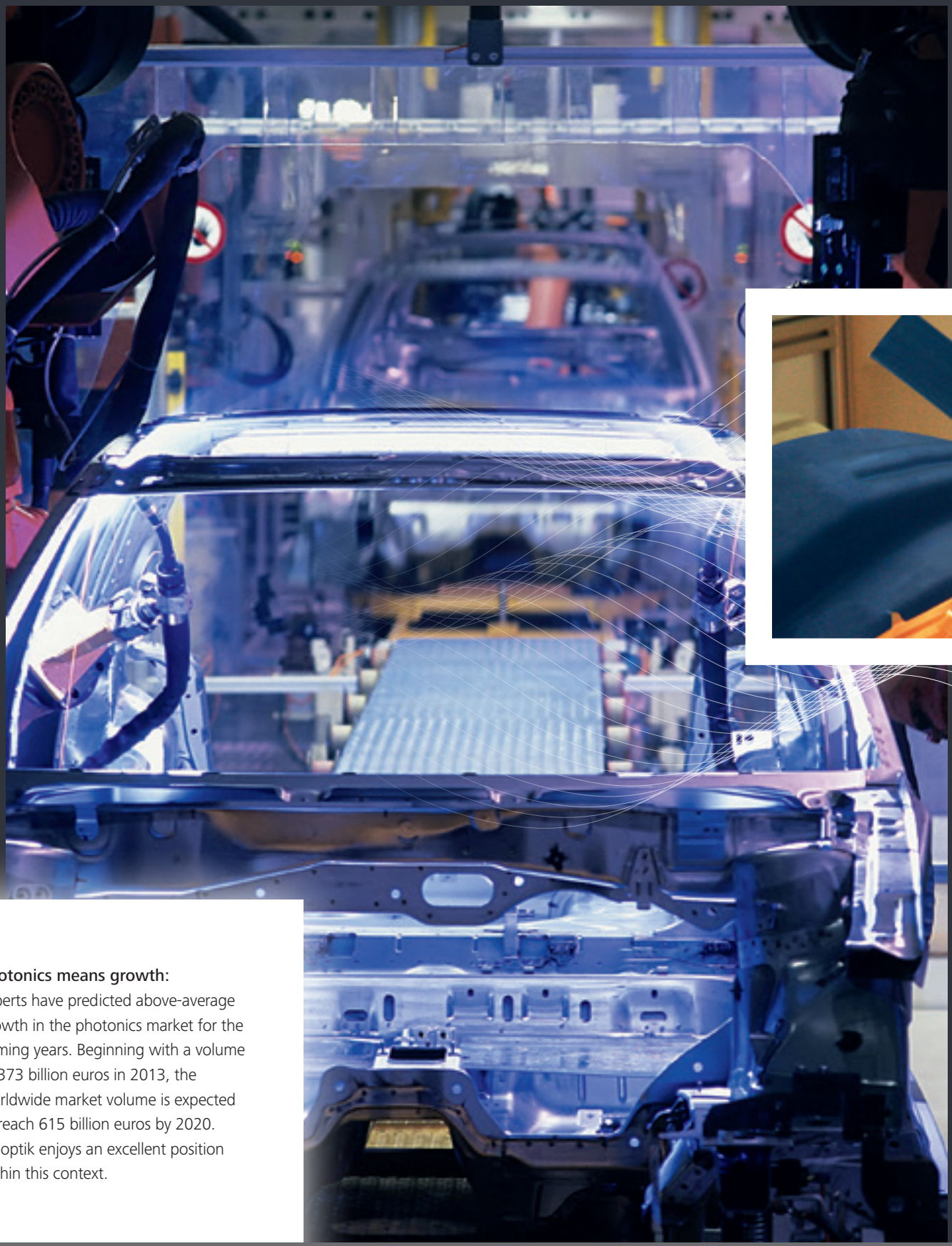
What is photonics?
Photonics makes use of the particular qualities of light for use in modern technical applications and solutions in virtually all important areas of industry and our lives. The term reflects the importance of the photon, or light particle, just as the term “electronics” refers to the electron.

- **Street and rail traffic:** Making mobility safer, expanding driver assistance systems, making independent mobility possible, making engines more efficient

Making mobility safer

Photonics lays the foundations for intelligent traffic solutions. Complex traffic movements can be recorded and large amounts of data processed in the blink of an eye. Driver assistance systems can defuse critical situations in almost real time. Photonic technologies are crucial to the implementation of futuristic mobility solutions such as automatic vehicles and pilotless air and rail traffic.

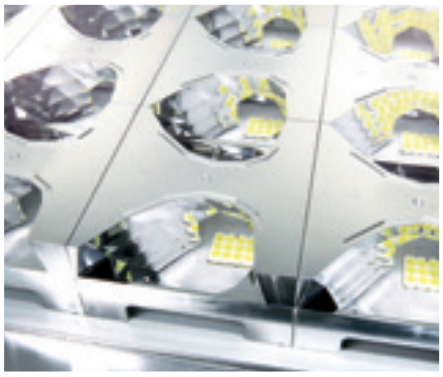
- **Aerospace:** Reducing weight, increasing capacities, safeguarding communications, making navigation more reliable

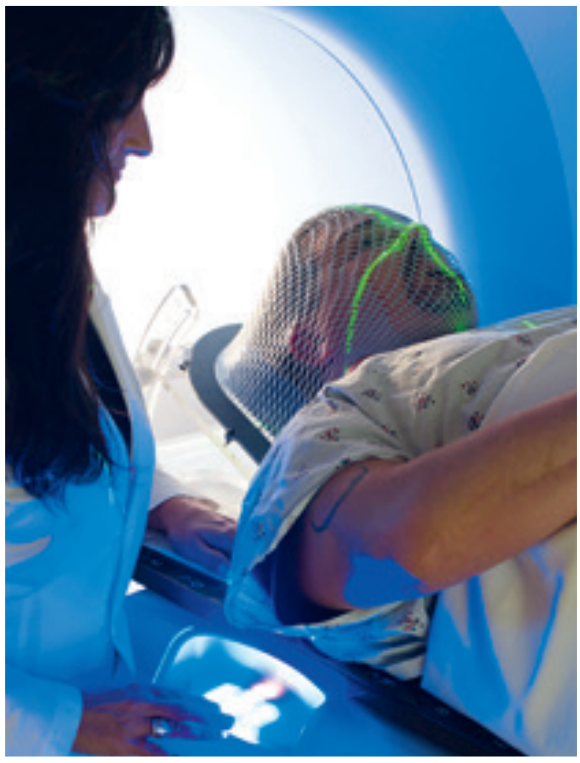


Photonics means growth:
Experts have predicted above-average growth in the photonics market for the coming years. Beginning with a volume of 373 billion euros in 2013, the worldwide market volume is expected to reach 615 billion euros by 2020. Jenoptik enjoys an excellent position within this context.

- **Car and vehicle manufacturing:** Reducing resource use, improving energy efficiency, increasing manufacturing precision, making lightweight construction possible

Using light energy with efficiency and precision





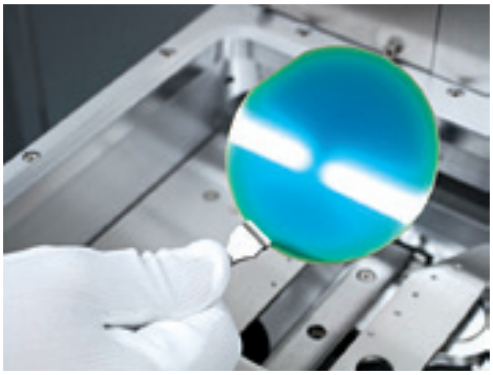
Light energy is used in photonics with precision for a wide variety of applications. Lasers are now being used in growth markets the world over as a high-performance precision tool, adaptable to each task at hand – from automobile production and aerospace to the manufacturing of highly efficient LED lighting modules. Lasers also now allow for minimally invasive medical procedures with fewer and weaker side effects.

- **Sources of light:** Saving energy, creating an atmosphere, supporting efficient work methods, improving safety at work

Photonics drives innovation:
As an "enabling" technology, photonics now plays a major role in the initial and further development of products and solutions in a number of fields, including the automotive industry, machine engineering, telecommunications, and medical technology. Due to its wide scope of application, the influence of photonics goes well beyond this to encompass many other economic areas as well.

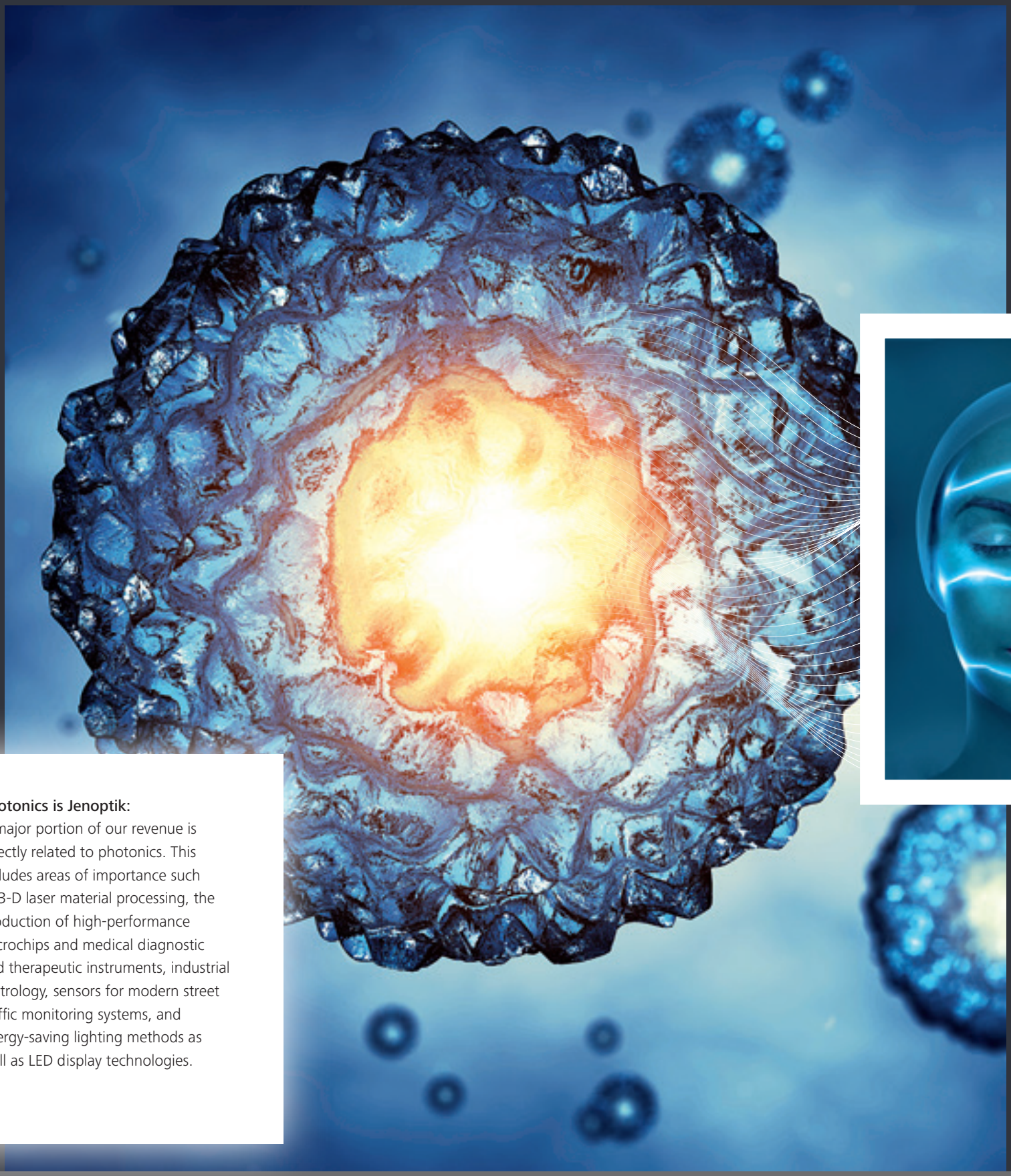
- **Production and machine construction:** Reducing waste, optimizing production times, improving flexibility, establishing new manufacturing processes

Forming the future with precision performance



Precision photonics is used in the production of highly complex computer chips for countless industrial fields of application. These chips are indeed already a major component of our everyday mobile electronics. Innovative coating processes protect their surfaces better from damage, and ultrashort laser pulses provide for an improved microstructuring of sensitive materials in areas such as medical technology. With high-precision processing methods, photonics helps to improve conventional materials while making it possible to use new materials as well.

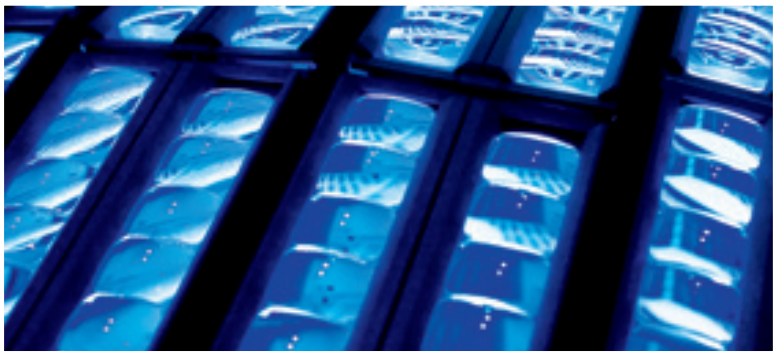
- **Lithography:** Establishing innovative areas of application, manufacturing nanostructures, making mobile devices more powerful, saving energy through downsizing



Photonics is Jenoptik:
A major portion of our revenue is directly related to photonics. This includes areas of importance such as 3-D laser material processing, the production of high-performance microchips and medical diagnostic and therapeutic instruments, industrial metrology, sensors for modern street traffic monitoring systems, and energy-saving lighting methods as well as LED display technologies.

- **Health and life sciences:** Recognizing illnesses more rapidly, providing people with gentle medical treatment, improving people's quality of life, improving food security

Protecting people’s health into the future



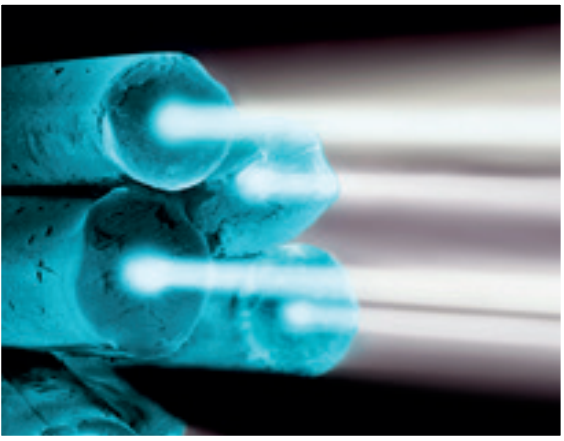
Optical imaging processes provide new insights into the complex interplay of various factors within our bodies. These methods allow for better diagnoses and make the microscopic analysis of living cells possible alongside the parallel analysis of a variety of substances. Illnesses can thus be researched with increasing precision and individual therapies can be developed such as genetic analysis and cancer therapy. Photonics technologies also play a key role in the production of medical instruments and implants.

- **Sensors and analysis:** Improving analysis results, making detailed analysis more precise, creating innovative solutions

Photonics is the future!
Whether it comes to saving resources or providing energy, protecting the environment, the food supply or healthcare, people today are faced with numerous challenges that can be met with the help of "solutions with light". In connection with other technologies, this will lead to numerous new areas of development, as we move forward into the future.

- **Safety and security:** Saving lives, keeping people safe, monitoring property and spaces, preventing malfunctions

Bringing worlds together in the blink of an eye



The mobile age has brought about a merging of our communications channels. We are able to be everywhere in real time with the multi-functional systems we use to communicate, take photographs, make films, and use as projection devices. Exchanging large amounts of data across the world has become a regular part of our everyday lives. Modern communications is indeed unthinkable without the use of photonics. Optical transmission and data storage allows us access to information from all around the world within seconds.

- **Communications:** Exchanging information efficiently, bridging distances rapidly, storing large amounts of data in a small space

Our achievements, our goals

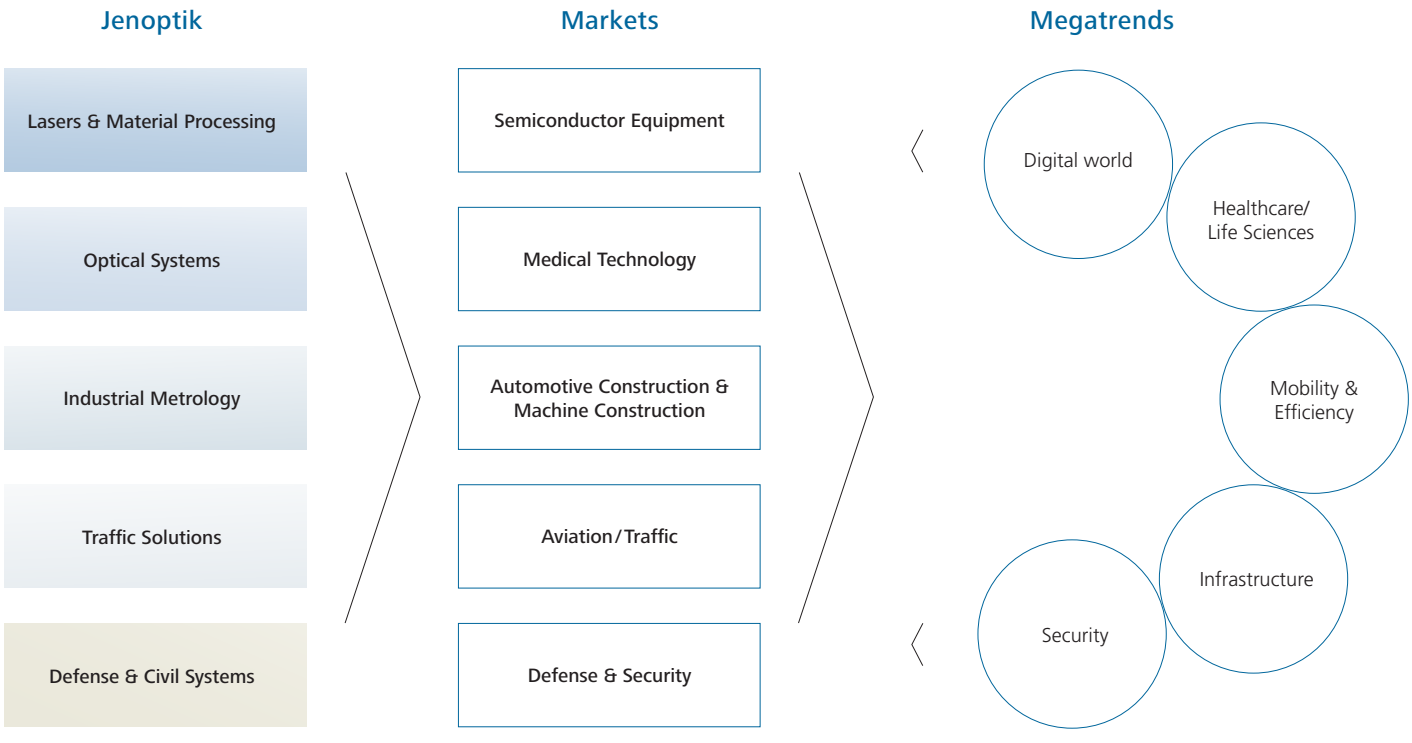
Despite a challenging environment, Jenoptik made significant progress on its medium-term strategy of going "From good to great" in 2014 too. We made progress, not only with our internationalization strategy but also in the ongoing improvement of our processes and systems. The purchase of the British company Vysionics, a leading supplier of traffic safety technology was successfully completed; it was our first major acquisition in many years. New in the current year is a group-wide Market Excellence program to boost sales and further improve access to customers. In 2015 we will continue along our track with determination; the actions scheduled for the present fiscal year will help us to return, economically and otherwise, into our target range.

Lasting Profitable Growth as a Photonics Expert

Photonics is a key technology for the 21st century with a high leverage effect on many industries. An enabling technology, it already occupies a central role in the new and ongoing development of products and solutions in a wide range of sectors. Photonics also greatly contributes to increasing the efficiency of technological processes. Within this dynamic environment, we want to continue sustainable profitable growth as an expert in photonics and gradually become a global player.

Our objective, today and in the future, is to support our customers in the international markets as a systems partner with excellent solutions. In this process, we preferably target sectors serving the digital world, healthcare, mobility, safety and infrastructure megatrends. Our mid-term planning on the principle of growing "From good to great" charts our path to this future.

INTELLIGENTLY MEETING MARKET DEMAND



Strategic Growth Levers optimized in a Challenging Environment

Following a good start to the year, we were forced to contend with a range of adverse circumstances from the middle of 2014. Persistently weak markets in other European countries, unexpected and tangible customer reluctance to invest in the machine construction, automotive and semiconductor equipment markets and project postponements all had a noticeable impact on our business, which was further dampened by the tightened export restrictions issued by the German government.

While this did adversely affect our operational targets for 2014, it was not enough to knock us off our adopted course: on the contrary, the key figures for the year convincingly demonstrate Jenoptik's competitiveness and strength to stay on target, even in a challenging environment. As a result, we made excellent progress on the core strategic topics of "internationalization", "innovation" and "operational excellence" in 2014.

Internationalization

We stepped up our focus on the Asia-Pacific and US markets in 2014. At the same time and in line with our strategy, we invested specifically in companies which can sustainably assist our growth plans. In April 2014, we increased our stake in Robot Nederland, a Dutch supplier of traffic safety technology, from 30 to 100 percent, and integrated the company within our Group structure. This move is consistent with our strategy to drive forward the internationalization process from within the regional markets.

In June, we increased our stake in the Indian joint venture HOMMEL-ETAMIC Metrology India from 51 to 100 percent. The new company will in future be available not only to Industrial Metrology but also all our other Group divisions. Moving forward, this means that alongside the automotive industry and its supplier companies we will also be targeting the markets served by the Traffic Solutions, Optical Systems and, for civil applications, the Defense & Civil Systems divisions.

In November, we acquired a 92 percent stake in Vysionics, a leading supplier of traffic safety technology in the United Kingdom. This company not only gives us access to the important British growth market but also expands our product range with cutting-edge technologies for key forward-looking solutions to ensure better traffic safety around the world.

The share of revenue generated abroad in the past year rose to 64.2 percent of overall Group revenue.

In the current year 2015, we are focusing on growing our market coverage in the established regions and continuing to invest in the international expansion of sales structures. In Asia, we want to keep growing following excellent progress in 2014. Americas and Asia remain at the heart of our internationalization strategy; we want to generate around 40 percent of revenue in these regions by 2018. We expect to secure further international customer projects in 2015. Alongside organic development, we will continue to buy in products and services wherever we see worthwhile prospects.

Innovation

In line with our aspiration, we selectively added innovative products to our range in 2014. For example, in the Lasers & Material Processing division we expanded the product range to include high-power laser systems for applications in micromaterial and macromaterial processing and in medical technology. We augmented our outstanding expertise in optical systems, in particular with micro-optics and the development of high-end lenses for semiconductor production. In the Metrology segment we actively developed new products: new standardized measuring systems were launched which are easy to integrate within the automated production processes of the automotive industry.

In total, we invested almost 50 million euros in research and development in 2014. The number of patent registrations, at 43, was at a high level, with particular importance accorded to registrations in dynamic growth markets such as China, Korea and the US.

Our expertise in systems development is helping us to successfully complete our desired transformation from being a supplier of components to becoming a systems supplier – with deeper integration in our customers' value-added chains. We expect to forge more intensive relationships and develop more profitable products and services from the systems partnerships.

In 2015, our capital expenditure in research and development will again be substantial.

Operational excellence

In 2014, successful progress was made on the initiatives launched over three years ago for harmonized and excellent processes, both in the operating business and in systems and commercial processes.

The activities planned for 2014 on the JOE project (Jenoptik One ERP), which aims to efficiently standardize processes and settlement systems across all organizational units in the Group, were successfully completed. Following the Industrial Metrology division's switchover to the new system in Germany, successfully implemented in January, the German locations of the Lasers & Material Processing and Optical Systems divisions followed in July.

We also succeeded in further optimizing our purchasing activities in 2014. Key initiatives here are the Global Sourcing Project, the Purchasing Academy and Material Group Purchasing, which is being further centralized. The strategic and operational purchasing structures in Asia and the US were further expanded over the last year.

Implementation of the Go Lean program, geared toward integrated process improvements and an increase in operational performance, also made good progress: we achieved marked improvements in both our cost structures and processes, reflected in the quality of earnings for 2014. Go Lean focuses on tailoring our production processes to boost efficiency: It cuts operating costs, shortens production lead times, improves quality and leverages synergies thanks to optimized processes.

Our excellence program remains a key priority for 2015, and once again one ongoing topic will be the harmonization of our ERP systems. Go Lean, Global Sourcing and the other Group development programs will yield further cost savings.

Since the start of this year a new excellence component is "Market Excellence", a group-wide program to optimize the sales organizations and processes. It combines key projects in sales, after-sales service and pricing, and aims to ensure that the organization is consistently geared toward market requirements. The Market Excellence program will in part provide minimum standards for operational sales and ensure the best practice transfer of successful and established methods and tools in the sales and service area.

On Track for Success

Regular status analyses provide us with information on whether we are basically on the right path to achieving our mid-term objectives. We anticipate that the various measures will only take real effect over a certain period of time. Short-term market influences, that we as a company can only predict to a limited extent, must also be considered in this context. The past year, with its many political and economic surprises, demonstrated this all too clearly, and these difficult conditions are not likely to be fully eliminated for a number of years.

According to our plans our activities will result in the following economic indicators by 2018: 800 million euros annual revenue – organic growth including smaller, valuable acquisitions – and a 9 to 10 percent EBIT margin over the market cycles.

We expect business to develop favorably in 2015, with a clear rise in revenue and earnings. Our operational focuses remain on expanding sales structures, further internationalization, ongoing development of our product range and optimization of internal processes.

OUR MEDIUM-TERM TARGETS

Internationalization
Innovation
Operational Excellence

800

approx. 800 million euros revenue in 2018

9/10

9 to 10 percent EBIT margin over the market cycles

Key Figures of Jenoptik by Segment

		2014	2013	Change in %
Revenue	million euros	**590.2**	**600.3**	**–1.7**
Lasers & Optical Systems	million euros	231.3	224.7	3.0
Metrology	million euros	185.0	187.4	–1.3
Defense & Civil Systems	million euros	170.8	185.1	–7.7
Others[1)]	million euros	3.1	3.1	–0.3
EBITDA	million euros	**76.1**	**74.8**	**1.7**
Lasers & Optical Systems	million euros	36.0	34.0	5.8
Metrology	million euros	26.9	25.2	7.0
Defense & Civil Systems	million euros	7.2	16.7	–57.1
Others[1)]	million euros	6.0	–1.0	
EBIT	million euros	**51.6**	**52.7**	**–2.2**
Lasers & Optical Systems	million euros	27.0	24.6	9.6
Metrology	million euros	22.5	22.6	–0.3
Defense & Civil Systems	million euros	2.1	11.6	–81.5
Others[1)]	million euros	0.0	–6.0	99.5
EBIT margin	%	**8.7**	**8.8**	
Lasers & Optical Systems	%	11.7	10.9	
Metrology	%	12.2	12.0	
Defense & Civil Systems	%	1.3	6.2	
R+D output	million euros	**49.7**	**51.1**	**–2.7**
Lasers & Optical Systems	million euros	20.8	19.4	7.4
Metrology	million euros	20.0	19.4	2.9
Defense & Civil Systems	million euros	9.0	12.2	–26.6
Others[1)]	million euros	–0.1	0.0	–479.3
Order intake	million euros	**589.2**	**575.3**	**2.4**
Lasers & Optical Systems	million euros	240.1	221.4	8.4
Metrology	million euros	174.7	172.5	1.3
Defense & Civil Systems	million euros	170.2	179.2	–5.0
Others[1)]	million euros	4.3	2.2	97.4

		31/12/2014	31/12/2013	Change in %
Order backlog	million euros	**422.5**	**411.4**	**2.7**
Lasers & Optical Systems	million euros	100.8	94.3	6.9
Metrology	million euros	77.2	72.8	6.1
Defense & Civil Systems	million euros	245.9	246.9	–0.4
Others[1)]	million euros	–1.4	–2.6	46.0
Employees		**3.553**	**3.433**	**3.5**
Lasers & Optical Systems		1.377	1.391	–1.0
Metrology		1.030	907	13.6
Defense & Civil Systems		885	907	–2.4
Others[1)]		261	228	14.5

1) including consolidation

Lasers & Material Processing division

In the Lasers & Material Processing division, Jenoptik has expertise along the entire value-added chain of laser material processing – from individual components to complete systems. In the area of lasers, we specialize in high-quality semiconductor lasers, reliable diode lasers and innovative solid-state lasers, such as thin-disk and fiber lasers. We are also acknowledged worldwide as a leader in quality high-power diode lasers. In the area of Laser Processing Systems, we develop laser systems and machines that are integrated into production lines for our customers as part of their process optimization and automation. These systems are used for processing plastics and metals with maximum efficiency, precision and safety. Our portfolio is rounded off with energy-efficient and environmentally friendly exhaust cleaning systems for residue-free removal of pollutants during laser material processing and other industrial processes.

BUSINESS UNITS:
- Lasers
- Laser Processing Systems

LOCATIONS:
Germany, Brazil, China, Japan, Korea, Russia, USA

MARKETS:
- Automotive/machine construction/ metal processing industry
- Medical technology
- Show and entertainment
- Security and defense technology

CUSTOMERS:
- Manufacturers and integrators of OEM laser products
- Manufacturers, users, and integrators of laser processing systems
- Institutes, universities and research institutions

FUTURE DEVELOPMENT

With the production of semiconductor lasers for the manufacture of diode laser modules at the Berlin location, the Lasers business unit is responding to rising demand for highly-efficient light sources. Further areas of focus are the business with medical lasers for ophthalmology and ultra-short pulsed lasers for micro material processing. The Laser Processing Systems business unit focuses on laser perforations for the break lines of passenger airbags and on 3D metal and plastics processing in the automotive sector.

GROWTH TRENDS

- Highly-efficient diode lasers as a pump source for solid-state and fiber lasers
- Diode-direct applications for efficient and cost-effective material processing
- Diode-pumped fiber laser technology in the multi-kW range
- Ultrashort pulse laser for “cold” and thus thermally non-destructive micro material processing with highest precision
- Megatrend toward healthcare/life sciences: medical technology applications in ophthalmology, cosmetics and dermatology are rapidly gaining in significance
- Laser systems for 3D metal processing and welding of plastics

Optical Systems division

With its Optical Systems division Jenoptik is one of the few manufacturers in the world to produce precision optics and integrated systems designed to meet the highest quality standards. Besides optomechanical and optoelectronic systems, modules and assemblies the division is a development and production partner for optical and micro-optical components – made of optical glass, infrared materials as well as plastic. We possess outstanding expertise in the development and manufacture of micro-optics for beam shaping used in the semiconductor industry and laser material processing. The product portfolio also includes components and systems in the areas of defense and security, life sciences and lighting as well as for digital image capture and processing.

BUSINESS UNITS:
- Optics
- Microoptics
- Optoelectronic Systems

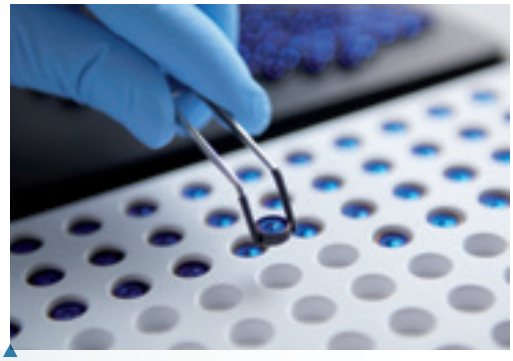
LOCATIONS:
Germany, China, Israel, Japan, Korea, USA

MARKETS:
- Semiconductor equipment industry
- Medical technology
- Security and defense technology
- Automotive/machine construction
- Others: laser material processing, digital imaging, lighting, optical metrology

CUSTOMERS:
- Companies in the semiconductor and flat-panel display equipment industries, defense technology and medical technology sectors
- Automotive suppliers, machinery engineering companies
- Suppliers of lighting solutions, manufacturers of laser and material processing systems, of digital image recording and projection systems

FUTURE DEVELOPMENT

The division continues to expand its share of the value-added chain and instead of separate components is increasingly supplying international customers with integrated systems comprising optical and electronic components. Jenoptik has established itself as a long-term partner and uses optical systems to support megatrends such as the increasing digitization of the world as well as health and security. The key target markets remain the semiconductor equipment industry, applications for healthcare and life sciences as well as security and defense technology. Continued internationalization, especially in Asia and America, the focus on the systems business and key customers, and the use of economies of scale and synergies form the basis for further profitable growth.

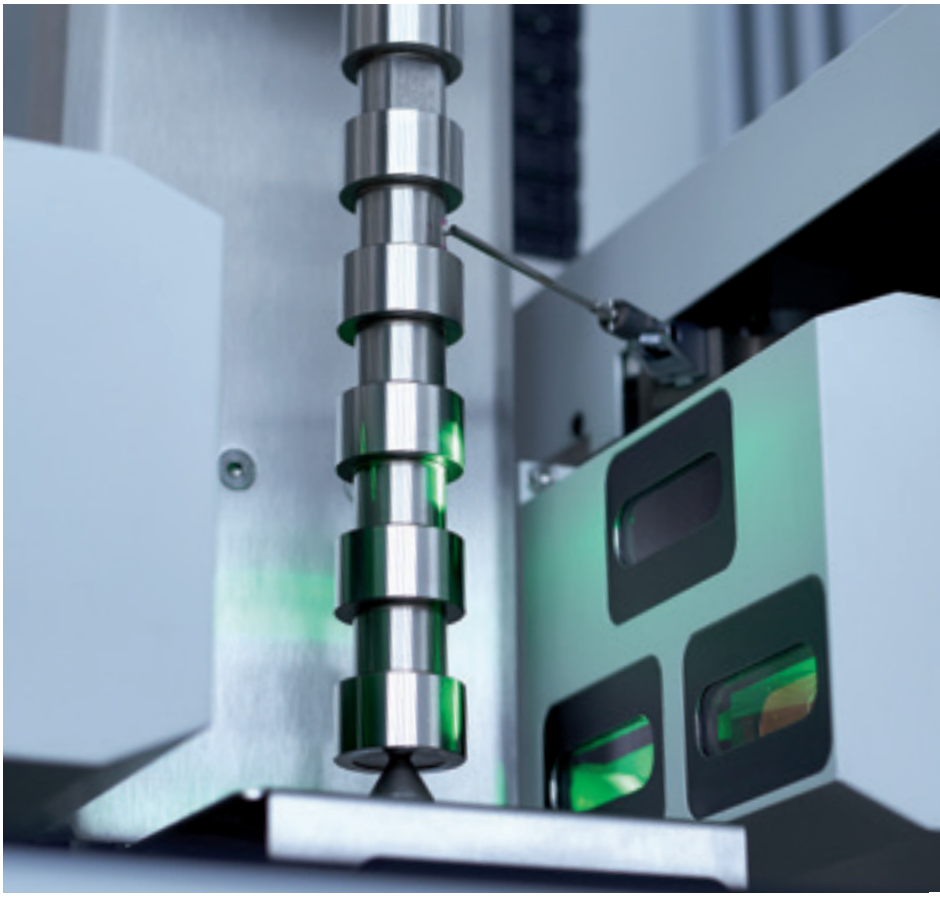


GROWTH TRENDS

- Rising demand for integrated optoelectronic modules and systems
- Megatrends such as increasing global digitization are driving demand for semiconductor equipment used to manufacture ever smaller microstructures
- Optical solutions for innovative applications in the manufacture of flat panel displays
- Efficient laser optics enable rising laser powers
- Increasing prevalence of point-of-care diagnostics in medical technology, based on efficient optoelectronic systems
- Growing demand for driver assistance systems in the automotive sector
- Energy-saving LED lighting solutions

Industrial Metrology division

In the field of Industrial Metrology Jenoptik is one of the leading manufacturers of high-precision, contact and non-contact production metrology. Our range of products covers total solutions for a wide range of measurement tasks such as the pneumatic, tactile or optical testing of roughness, contour and form, as well as determining dimensions throughout all phases of the production process and in the metrology lab. The product range is complemented by a comprehensive service offering advice, training and customer service, as well as long-term maintenance agreements.



BUSINESS UNITS:

- Roughness and contour metrology
- Form metrology
- Optical shaft metrology
- Dimensional metrology
- In-process metrology
- Service

LOCATIONS:

Germany, Brazil, Czech Republic, China, France, India, Korea, Mexico, Switzerland, Singapore, Spain, USA

MARKETS:

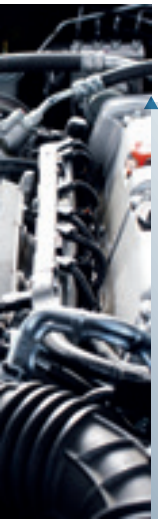
- Automotive
- Machine construction/machine tool manufacturers
- Medical technology
- Electrical engineering
- Aerospace
- Research and Development
- Optical industry

CUSTOMERS:

- Globally leading automotive manufacturers and suppliers to the automotive industry
- Manufacturers of machine tools, medical technology and aircraft engines, etc.

FUTURE DEVELOPMENT

As a supplier of a complete product range from optical via tactile to pneumatic metrology, Jenoptik's development of measuring systems for engines and gears will in future support trends in the automotive industry toward reducing fuel consumption and CO_2 emissions, smaller engine sizes with no loss in performance (downsizing) and the rising number of hybrid vehicles. There is considerable global interest in more efficient drive systems, powering the demand for ultra-precise metrology, also in the production environment. As a partner of major car manufacturers and their suppliers, Jenoptik works with international customers at production plants around the world and is thus globally represented with its products. The objective is to further expand its position as a global market leader in optical shaft metrology for engine and gear parts. Furthermore, Jenoptik opens up new growth markets, for example in medical technology.



GROWTH TRENDS

- Megatrend toward greater efficiency: fuel-saving engines, downsizing
- Increased demand for metrology in complex hybrid engines
- Globalization and consolidation of metrology market
- Increased relevance of flexible and high-precision measuring systems
- Standardized, automated customer solutions

Traffic Solutions division

The Traffic Solutions division develops, manufactures and distributes components, systems and services which contribute towards greater road traffic safety throughout the world. Based on the proven Robot Technology, our market-leading product portfolio comprises comprehensive systems relating to all aspects of road traffic, such as speed measurement and red light monitoring systems, OEM (Original Equipment Manufacturer) products and systems for the detection of traffic violations. Thanks to the integration of Vysionics our competencies include measuring average speed over a defined section of road (section speed control) and automatic number plate recognition (ANPR). In the service field we cover every aspect of the traffic safety process chain – from system development, production and installation of the monitoring infrastructure, image capture and automated processing, through to issuing penalty notices and collecting fines as the system operator.

BUSINESS UNITS:

- Equipment
- Service Provision

LOCATIONS:

Germany, Algeria, Australia, Austria, Canada, China, Great Britain, Malaysia, Netherlands, Switzerland, USA

MARKETS:

- Traffic safety and monitoring technology

CUSTOMERS:

- Public authorities, countries, cities and municipalities worldwide
- Companies in the private sector (system integrators, operators and distributors)

FUTURE DEVELOPMENT

In addition to the stable equipment business in the core European markets, there is a sustained continuing trend towards major international projects with a combination of the equipment business and services, known as Traffic Service Provision. Jenoptik is responding to the associated increase in lead times and fluctuations in capacity utilization with flexible manufacturing and standardization of the product range. The global trend of rising mobility, especially in emerging countries, is enabling Jenoptik to tap into new regions. Expansion on international markets, cooperations, as well as new technologies and services will secure future growth.

GROWTH TRENDS

- Large-scale projects primarily arise from the previously neglected need of many countries to improve their traffic safety
- Increase in traffic safety reduces accident figures and thus consequential costs for society
- Strong demand for associated services through to turnkey solutions with services (Traffic Service Provision)

Defense & Civil Systems division

The Defense & Civil Systems division develops, produces and distributes mechatronic and sensor systems for civilian and military applications. The portfolio ranges from individual assemblies, which customers then integrate into their systems, through to complete systems and end products. The division's areas of competence are energy systems, optical sensor systems, stabilization systems, aviation subsystems as well as radomes and composites. Top-quality customer service ensures that the products are supported over their useful lives, which generally extend over many years. The mechatronic products are used in drive, stabilization and energy systems for military and civilian vehicle, rail and aircraft equipment. The sensor systems include infrared camera systems and laser rangefinders and are primarily used in automation technology, security technology and military reconnaissance. The division's competencies also extend across the technical focus areas of software development, metrology and control systems.

BUSINESS UNITS:
- Energy & Drive
- Aviation
- Sensors
- Power Systems

LOCATIONS:
Germany, USA

MARKETS:
- Security and defense technology
- Aviation
- Rail and vehicle construction
- Environmental engineering

CUSTOMERS:
- System companies
- Aircraft manufacturers
- Railway engineering manufacturers


Flughafen München GmbH

FUTURE DEVELOPMENT

The division operates in a largely stable market environment characterized by long-term orders with long lead times. With its energy and security systems, Jenoptik is meeting trends such as increased safety and the growing demand for energy in modern vehicles. Despite shrinking budgets in Europe and America, growth in orders and sales is expected for security and defense technology. In order to achieve growth, the division is expanding its international sales and service structures, especially in America and Asia, and focusing on the increase in its share of civilian systems as well as the measures already taken to improve efficiency. Its electrical systems solutions such as the Last Mile Diesel genset help meeting the growing demand of rail operators for efficient and environmentally friendly drive systems for railway vehicles.

GROWTH TRENDS

- Megatrend toward greater safety: thermal imaging systems for monitoring national borders (homeland security)
- Monitoring devices for military and civilian use
- New energy-saving and environmentally-friendly drive solutions for remotorization of diesel locomotives
- Modern hybrid energy supply systems based on starters/generators for increased energy demand in military vehicles, e.g. for air conditioning and communication
- Optoelectronic systems for monitoring of industrial processes

Jenoptik on the capital market 2014/2015

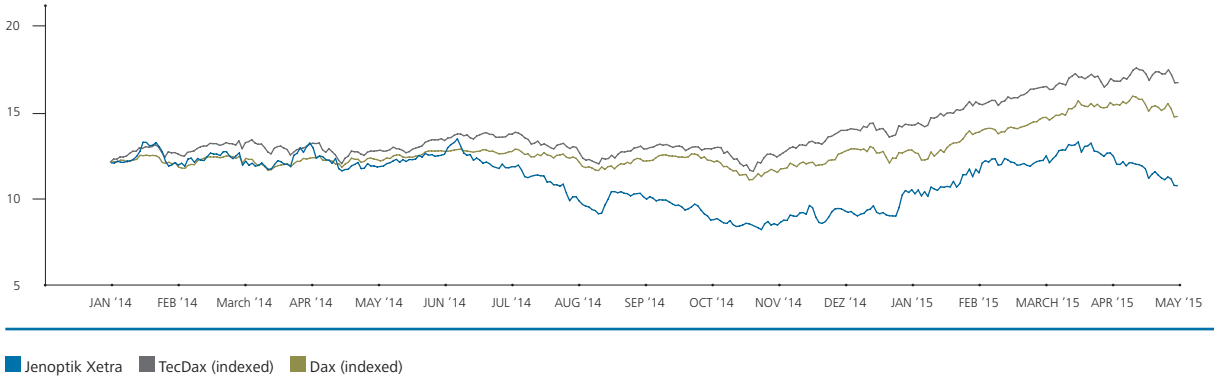
The stock markets were rather volatile in 2014. Compared to the indices, the Jenoptik share diminished markedly in value until the end of the year 2014. In the context of mainly positive stock markets, the share saw an upswing in the first quarter 2015 in accordance with the overall development of the market. From the start of the year until the end of March 2015, the share price increased by 19 percent to 12.60 euros. The development of the Jenoptik share was thus better than the TecDax. The share's closing price sank to the lowest level in the current year on January 7, 2015, with 10.22 euros. The highest Xetra closing price of 13.43 euros was reached on March 16. On April 30, 2015, the Jenoptik share ended the Xetra trade with a price of 10.85 euros, a rise of about 2 percent in the current year. For the fiscal year 2014, a dividend of 0.20 euros per share will be paid to shareholders, depending on the consent of the Annual General Meeting.

JENOPTIK SHARE KEY FIGURES

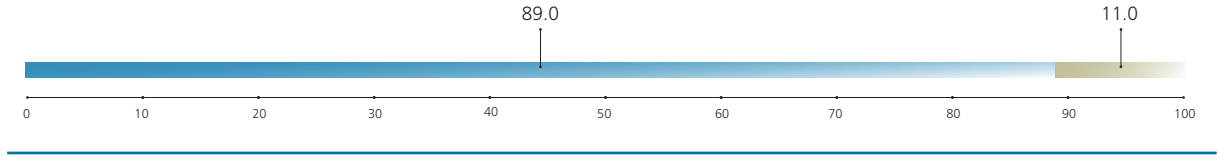
	2014	2013	2012	2011	2010
Closing price (Xetra end-year) in euros	10.37	12.35	7.38	4.56	5.40
Highest/lowest price (Xetra) in euros	13.61/8.26	13.84/7.46	7.99/4.50	6.58/4.30	5.70/3.85
Issued no-par value bearer shares (31/12) in millions	57.24	57.24	57.24	57.24	57.24
Market capitalization (Xetra end-year) in million euros	593.6	706.9	422.5	261.0	309.1
Average daily trading volume (shares)[1)]	167,876	135,827	121,486	120,407	174,627
P/E ratio (based on highest price/based on lowest price)	18.64/11.32	16.88/9.10	9.09/5.12	10.61/6.93	35.63/24.062[2)]
Operating cash flow per share in euros	0.90	1.17	1.41	1.07	0.74[2)]
Group earnings per share in euros	0.73	0.82	0.88	0.62	0.16[2)]

1) Source: Deutsche Börse; all German stock exchanges
2) Adjusted for discontinued business unit

JENOPTIK SHARE PRICE DEVELOPMENT JANUARY 1, 2014 TO APRIL 30, 2015 (in euros)



SHAREHOLDER STRUCTURE (in %)



(As of April 30, 2015)

Jenoptik 1990 – 2014 ▶

Our path – Jenoptik 1990 to 2014


B 01


B 02


B 03


B 04


B 05

1990 – 1993

The German privatization agency Treuhandanstalt Berlin takes over the VEB Carl Zeiss Jena combine with 13 locations at this time and a staff of around 30,000.

In 1991, the original Jena company becomes Carl Zeiss Jena GmbH and, as a state-owned company, JENOPTIK GmbH. Jenoptik becomes the legal successor of the combine and takes over the business units of Optoelectronics, System Esngineering, and Precision Manufacturing.

1994 – 1995

In 1994, automation, medical, and micromanufacturing technology as well as specialized technology are bundled together in JENOPTIK Technologie GmbH. One year later this company is divided into JENOPTIK Automatisierungstechnik GmbH, JENOPTIK Laser, Optik, Systeme GmbH, and JENOPTIK Microfab GmbH.

In order to expand business, joint enterprises were founded and companies with established distribution channels and an international presence were acquired: In 1994, Jenoptik takes over the Stuttgart company MEISSNER + WURST (later M+W Zander). The leading equipment manufacturer for the electronics industry will play a major role in shaping Jenoptik in the next ten years. B 01

1996 – 1997

Starting in January 1996, Jenoptik has been trading as a public limited company and is now divided into the four business units of Clean Systems, Photonics, Telecommunications, and Asset Management.

In 1997, Jenoptik acquires ESW-Extel Systems Wedel, today an essential component of the Defense & Civil Systems division. B 02

1998 – 2000

In June 1998, JENOPTIK AG is listed on the Frankfurt stock exchange. The stock advances to the MDax in December of the same year. B 03

In 1999, Jenoptik acquires Robot Foto und Electronic GmbH (now part of the Traffic Solutions division) located in Monheim and, in the following years, develops into one of the leading providers worldwide in the area of traffic safety technology.

One year later, Jenoptik takes over metrology specialist Hommelwerke GmbH (today the Industrial Metrology division). B 04

2001 – 2003

Jenoptik opens a new production building in Jena, thus considerably expanding its capacity for series manufacturing of high-power diode lasers.

The photonics area is expanded: In 2002, Jenoptik partners with Hilti to establish a production partnership for laser distance measuring devices. This cooperation gives rise to HILLOS GmbH in 2003.

At the end of 2003, Jenoptik acquires Wahl Optoparts GmbH (now part of the Optical Systems division), a specialist for optomechanical and electronic assemblies made of polymer material. B 05

B 06

B 08

B 07

B 09

2004 – 2006

Jenoptik becomes the main shareholder of PHOTONIC SENSE GmbH, Eisenach, and gains knowledge concerning the manufacture of optical basic components from germanium and silicon.

With the conclusion of selling the Clean Systems business, Jenoptik parts with around 85 percent of its revenue in 2006 and concentrates on the original traditional business of lasers, optics, sensor systems, and mechatronics.

The acquisition of the French Etamic S.A. complements the Jenoptik business in industrial metrology.

With the opening of production facilities, the best conditions are created for the manufacture of raw material for high-power diode lasers in Berlin and for lenses made of polymer materials in Triptis. B 06

2007 – 2008

Hommelwerke and Etamic are merged. This gives rise to an industrial metrology systems provider with a global presence.

Jenoptik's new structure is established in 2008. With considerable orientation towards customers and markets, the operating business is organized into five divisions: Lasers & Material Processing, Optical Systems, Industrial Metrology, Traffic Solutions, and Defense & Civil Systems.

Jenoptik dedicates itself to providing a family-friendly environment and supports daycare facilities close to the workplace – starting 2007 at the Jena location, 2012 in Wedel near Hamburg, and now also at the Monheim location. B 07

2009 – 2010

Jenoptik expands its international presence with joint ventures notably in China, Korea, Japan, and Israel.

In 2009, Jenoptik opens a laser application center in South Korea. B 08

The optics business in the USA is consolidated into JENOPTIK North America Inc. in 2010.

2011 – 2012

With a successfully placed syndicated loan, Jenoptik secures mid- to long-term financing.

In Altenstadt Jenoptik expands and optimizes manufacturing for energy systems.

Jenoptik initiates its largest company-wide program to harmonize operating and commercial processes and systems (Project JOE).

Jenoptik bundles all of its activities on the Chinese market in a new representative office in Shanghai.

With the foundation of Jenoptik do Brasil, Jenoptik bolsters its activities in South America.

At the Berlin-Adlershof location the company inaugurates expanded manufacturing for high-quality semiconductor lasers and doubles production capacity.

2013 – 2014

Jenoptik concentrates its optics manufacturing in the USA in two locations.

The business in Asia is concentrated in a holding company in Singapore.

With the acquisition of an Australian provider of traffic safety technology and several projects from the Asia/Pacific region, Jenoptik strengthens its leading role in this market. B 09

In the area of traffic safety technology, Jenoptik increases its stake in the company Robot Nederland to 100 percent. It also boosts its stake in a joint venture in India. The future subsidiary of the Asian Jenoptik holding company will be open to all operational units within the Group.

Jenoptik acquires Vysionics Ltd., a leading supplier of traffic safety technology in the United Kingdom.

Dates

AUGUST 11, 2015

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