



# CORPORATE SUSTAINABILITY REPORT

2014



## — Foreword of the Executive Board



Dr. Michael Mertin  
President and CEO

Ladies and Gentlemen,  
dear readers,

As a globally active technology Group, innovation is our driving force and the foundation for our success. It is in this context that we seek to perform the best we can for our stakeholders in all places and at all times. This is what we mean by our motto of “Sharing Excellence”.

We also hold ourselves up to the same expectations of excellence when it comes to fulfilling our corporate responsibility. This is indeed not only a matter of managing risk. Following principles of sustainability also entails numerous opportunities and contributes to the long-term value created by our company as well: The social and ecological change all around us and our customers also provides a new basis for innovation and a need for more efficient solutions.

Optoelectronics, a hub technology – and our core area of business – serves as a support for a number of growth sectors. Together with our customers, we are able to form future trends in energy efficiency, the environment, health, mobility, and safety. With our innovative products, we are able to make an important contribution to the protection and more efficient use of resources in all of these areas.

You are now reading the Jenoptik Group’s second Sustainability Report, with information on our economic, ecological, and social work. As we move from being a global seller to a global player, we continue to meet the demands of our corporate responsibility. It is only on this basis that we can create value in the long term and develop profitably. I hope you find the information provided here to be of great interest!

A handwritten signature in blue ink, appearing to read 'M. Mertin'.

Dr. Michael Mertin  
President and Chief Executive Officer

## About this report

Jenoptik's 2014 Sustainability Report is the company's second report of its kind. Together with the Annual Report, this report provides a comprehensive overview of our company's performance on the basis of both financial and non-financial information. The non-financial performance indicators provided in this report involve ecological and social matters in particular. Relevant economic topics are also included here or else addressed by alluding to the 2013 Annual Report.

The content of the present report emerged from the materiality matrix that we defined together with different stakeholder groups, and on the basis of measures and projects implemented over the past two years.

The reporting period spans fiscal years 2013 and 2014. The data provided are valid as of the end of fiscal year 2013 and only involve our German sites. The information on the projects and initiatives named in the report is valid until September 30, 2014.

The Sustainability Report is guided by the principles of the fourth generation (G4) of the Global Reporting Initiative, concentrating on those aspects that are of relevance to Jenoptik's value-added chain. The Jenoptik Sustainability Report appears every two years. The Optical Systems division has also published an environmental report for its Jena site since 1999.

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Further information in  
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Sustainability Report

# MOVING FORWARD – SUCCESS THROUGH EXCELLENCE

## Structure and business model: Integrated and global

Jenoptik is an integrated and globally active optoelectronics Group. Our customers include, in particular, companies representing the semiconductor industry, the automobile and automotive supply industry, medical technology, security and defense equipment technology, and the aerospace industry. In 2013, we generated approximately 600 million euros in sales with our 3,433 employees at 80 locations around the world. [T 01](#) JENOPTIK AG is listed on the Frankfurt Stock Exchange and included in the TecDax index.

### T 01

#### KEY FIGURES OF JENOPTIK (in million euros)

	2013	2012	Change in %	Oct.–Dec.2013	Oct.–Dec.2012	Change in %
<b>Sales</b>	<b>600.3</b>	<b>585.0</b>	<b>2.6</b>	<b>167.8</b>	<b>161.9</b>	<b>3.6</b>
Domestic	228.4	208.1	9.7	71.1	58.0	22.6
Foreign	371.9	376.9	-1.3	96.7	103.9	-7.0
<b>EBITDA</b>	<b>74.8</b>	<b>77.7</b>	<b>-3.6</b>	<b>21.1</b>	<b>18.9</b>	<b>11.6</b>
<b>EBIT</b>	<b>52.7</b>	<b>54.8</b>	<b>-3.9</b>	<b>15.2</b>	<b>12.7</b>	<b>19.6</b>
<b>EBIT margin (EBIT in % of sales)</b>	<b>8.8</b>	<b>9.4</b>		<b>9.1</b>	<b>7.9</b>	
<b>Earnings before tax</b>	<b>47.2</b>	<b>46.1</b>	<b>2.4</b>	<b>13.6</b>	<b>9.7</b>	<b>40.7</b>
<b>Earnings after tax</b>	<b>47.2</b>	<b>50.2</b>	<b>-6.1</b>	<b>18.1</b>	<b>20.2</b>	<b>-10.6</b>
<b>Free cash flow (before income taxes)</b>	<b>47.0</b>	<b>43.7</b>	<b>7.6</b>	<b>41.8</b>	<b>17.0</b>	<b>145.6</b>
<b>Investments in property, plant and equipment and intangible assets</b>	<b>24.4</b>	<b>31.2</b>	<b>-22.0</b>	<b>6.0</b>	<b>14.0</b>	<b>-56.8</b>
<b>Order intake</b>	<b>575.3</b>	<b>587.2</b>	<b>-2.0</b>	<b>160.0</b>	<b>150.1</b>	<b>6.6</b>
in million euros	31/12/2013	31/12/2012	Change in %			
<b>Order backlog</b>	<b>411.4</b>	<b>446.8</b>	<b>-7.9</b>			
<b>Employees</b>	<b>3,433</b>	<b>3,272</b>	<b>4,9</b>			

G 01

THE JENOPTIK GROUP

Corporate Center

Segments	Lasers & Optical Systems		Metrology		Defense & Civil Systems
Divisions	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 devise custom solutions for the widest range of measuring tasks – at every stage of the production process and in the inspection 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

With its state-of-the-art investment goods – from standard components and modules through to complex solutions – Jenoptik is primarily a partner for industrial companies and the public sector. Research and development plays a key role in this, as cooperation and contract developments often lead to business relationships that span the entire value-added chain.

With its strong umbrella brand, Jenoptik can cooperate with major customers on the same level. A large and increasing number of functions are being organized at the Group level, such as procurement and international distribution. The Group’s Shared Service Center and Corporate Center act in this regard as “strategic architects”. The Jenoptik innovation process is steered and geared toward its markets and trends along the lines of its development and technology roadmaps. [G 01](#)

Jenoptik centers its production on Germany. Its headquarters in Jena in the state of Thuringia is home to its optoelectronics activities in particular, from laser technology and optics to sensorics and digital imaging. Other sites include Wedel near Hamburg, Essen, and Altenstadt (Defense & Civil Systems), Monheim near Düsseldorf (Traffic Solutions), Villingen-Schwenningen and Ratingen (Industrial Metrology), Triptis, Dresden, and Eisenach (Optical Systems), and Berlin (Lasers & Material Processing).

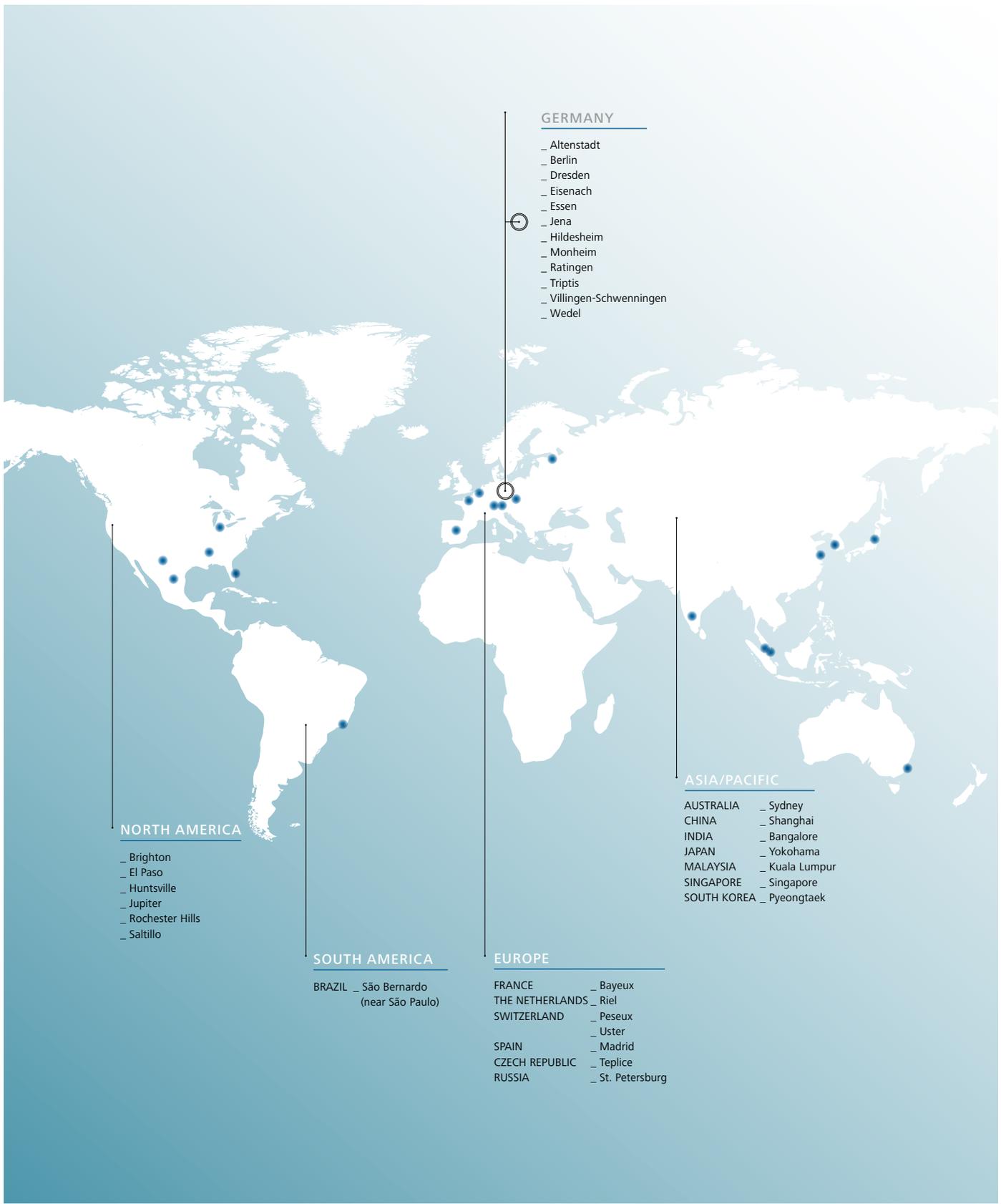
The [Jenoptik Group](#) is present in over 80 countries, with production and assembly sites in the United States, France, China, and Switzerland, and other subsidiaries in Australia, Brazil, India, Japan, Korea, Malaysia, Mexico, Russia, Singapore, the Netherlands and the Czech Republic. [G 02](#)  
Jenoptik is aiming for further growth in the North American and Asia-Pacific markets, and is expanding its infrastructure at certain sites to this end.



Information on the Group’s legal structure can be found in the Annual Report, page 52.

G 02

JENOPTIK: KEY LOCATIONS (AS AT MAY 2014)



## Corporate strategy: Market growth through excellence

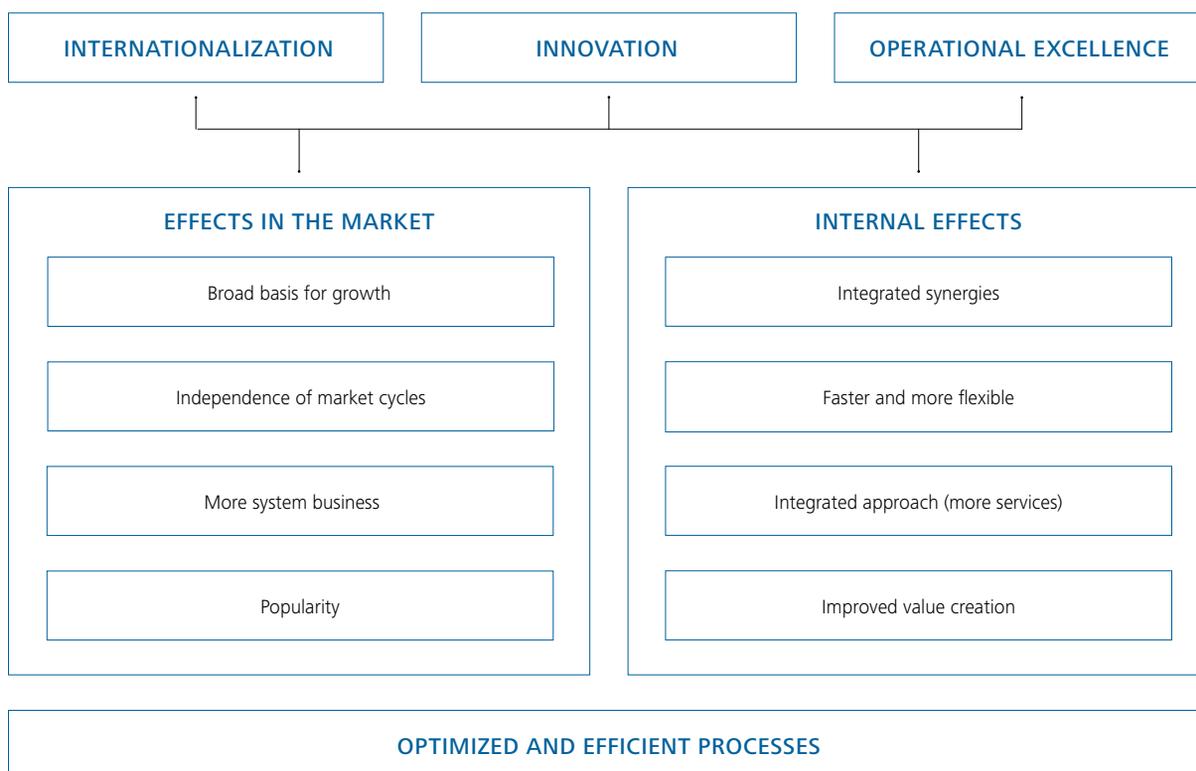
Photonics is a key 21<sup>st</sup>-century technology, and a market that promises sustainable and profitable growth for Jenoptik. As a partner involved in all aspects of our customers' business, we will continue to support and accompany our international customers with our excellent solutions – following our motto of "Sharing Excellence". We will also continue to focus our business on fields that cater to major global trends in health, mobility and efficiency, security, infrastructure, and the digital world.

Internationalization, innovation, and operational excellence are our main strategic areas of concentration. To make all this possible, Jenoptik is investing in innovative products, expanding its distribution structures internationally, and optimizing its internal processes. This will lead to a stronger, more integrated, and service-oriented, but also versatile

and flexible Group. [G 03](#) Jenoptik strives for profitable growth in all of its divisions. Annual sales are planned to reach 800 million euros by 2018, with around 10 percent annual growth and an EBIT margin of 9 to 10 percent.

### G 03

#### THE GROWTH MODEL



## Our understanding of sustainability: Achieving a solid basis through the creation of long-term value

Jenoptik consequently gears its activities toward its motto of “Sharing Excellence”. With its excellence program, Jenoptik is striving for more efficient processes, greater productivity, and comparable figures across the Group and down the value-added chain. The Group’s strategic goal is to secure the company’s creation of value in the long term, while laying a solid basis for continual profitable growth. Our focus lies here in further expansion and success on the global market and a greater focus on distribution.

Our strategic vision has led to an understanding of sustainability founded on two basic views: We can only reach our economic goals by treating the environment and society responsibly; and we need a sustainable approach to all of the company’s areas of activity. Jenoptik is meeting this challenge in a variety of ways. We have, for example, tailored various measures that will firmly anchor sustainability in all of our segments all along the value-added chain, in environmental and quality management, and in connection with our commitment to our employees and society.

### MATERIALITY MATRIX

In order to ascertain the most important issues for us that involve sustainable development, we began by collecting a number of sustainability topics that have emerged from our strategic orientation and our understanding of sustainability. We then weighted these topics in line with a survey of analysts in 2013 as well as direct discussions with stakeholders as part of our customer relations, at trade fairs and events and with people from the media. We derived our materiality matrix from all of this, which shows how these topics are viewed by our employees, on the one hand, and our external stakeholders, including shareholders, suppliers, partners, and customers, on the other. Their influence on our business and Jenoptik’s future success were of the greatest importance in weighting these topics.

The analysis shows what financial and non-financial topics will be of strategic importance to Jenoptik’s development into the future. Topical areas are viewed as particularly relevant when they are seen both by our stakeholders and by the company itself as very important, with the respective point appearing in the upper right quadrant of our materiality matrix. [G 04](#)

Four areas of activity emerge from the matrix and the thematic focal points: We seek to create value in the long term, involve people and their strengths, interact responsibly with resources and the environment, and act transparently and with foresight. This new knowledge was taken into account in putting together the present report as well.

The top priorities here are our sustainable yield and the creation of value, which together form the basis of Jenoptik’s future. Also of great importance are our market penetration with distribution concepts and products that are tailored to the market as well as customer-oriented, innovative solutions that contribute to sustainable development while conserving resources. The company’s further internationalization, operative excellence, and its reliable supplier management are yet other decisive factors when it comes to laying a solid basis for the long-term and sustainable creation of value.

Our employees are the heart and soul of the company. They are a significant factor for our success, providing us with the ideas and expertise we need to do what we do.

Beyond any economic success, however, we remain ever mindful of environmental concerns, the responsible use of resources, and our social commitment at our company sites.

The careful weighing of risks and opportunities is an important part of our responsible corporate governance. This provides a basis for the business decisions that we make, as we remain continually sure that our actions comply with regulations and laws as well as our values.

G 04

MATERIALITY MATRIX





# LONG-TERM VALUE – SUSTAINABLE GROWTH

## Customers/market penetration: Supporting global megatrends

Jenoptik has continued to expand its global distribution and service network to meet the demands of our customers and to meet our growth goals. The continued adaptation of the organization to current market requirements allows us not only to minimize the risks that emerge in domestic and foreign markets, but also to make use of opportunities that arise this way.

We are active in a number of sectors and are therefore better able to balance out the weak points of particular markets. Jenoptik competes with both a large number of internationally active market participants and with smaller, regional companies. The long-term development of our business areas often affords us a higher level of stability in the midst of competition.

We recognize particular potential in those markets that support current global megatrends: The digitization of the world, the growing need for health, mobility and efficiency, security, and the global expansion of infrastructure. [G 05](#)

In terms of B2B business, this involves improving the effectiveness and production yield of our customers with our products. The automotive industry, for example, requires that fuel consumption and carbon emissions and pollutants be reduced. Jenoptik meets this need with a new generation of industrial metrology systems that can analyze the finest of surface structures of cylinder bores and linings with speed and precision. This results in more precise surfaces for engine components and cars with lower emissions and fuel use. Jenoptik's precision metrology is also used to develop and coordinate complex

transmissions and new components for environmentally friendly hybrid vehicles.

The defense and security market is another of our target markets, served by our Defense & Civil Systems division. Without exception, Jenoptik follows strict political stipulations as ensured by both internal and external examination. We are also redoubling our efforts involving the transfer of technical expertise from military applications to civil uses. One such example is the ground power supply at the Munich Airport: The stationary 400-hertz systems transform the frequency of the public power network into the alternating current that is standard for aircraft.

### FORGING NEW PATHS AS A SYSTEM PARTNER

Jenoptik pursues a double strategy when it comes to market penetration: We market our products and individual components ourselves or in cooperation with distribution partners. But we also act as system partners, developing custom system solutions together with our customers. This both serves to solidify our customer relations and enables innovations with new products. And this has proved a success as key customers involve us from the very beginning



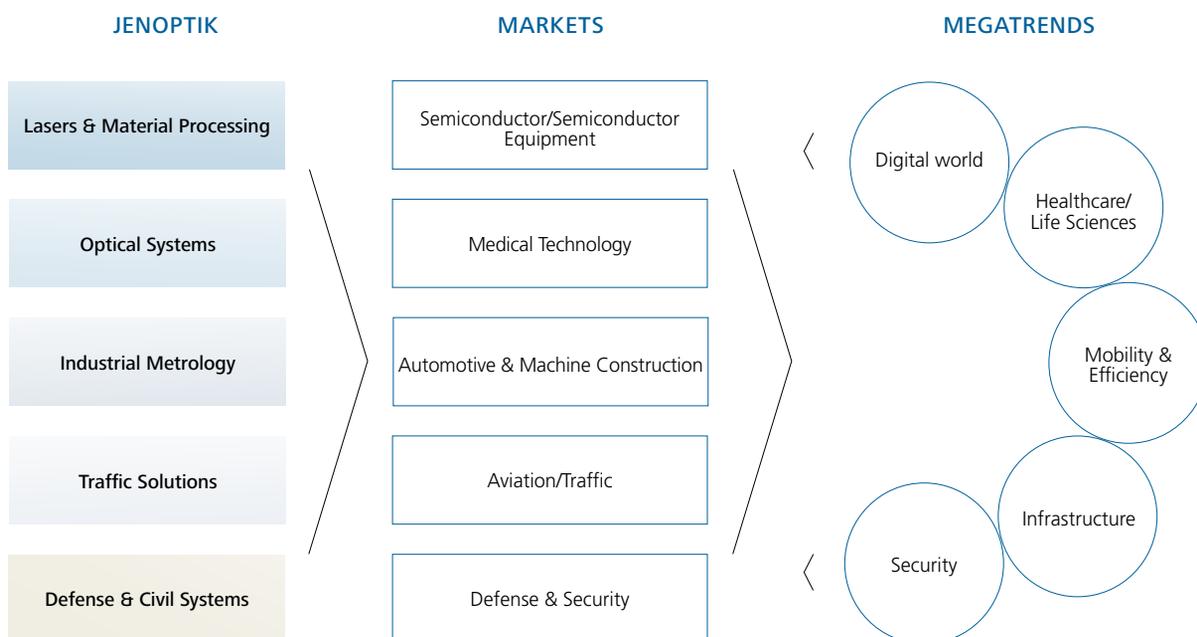
The JenLas® femto 10, introduced in 2014, is the result of an ongoing commitment to the development of femtosecond lasers in the Lasers & Material Processing division. Enhanced to 10 watts, the device is perfect for the processing of micro-materials for medical technology and industrial use, perfect for our customers in these fields.

in their developmental road maps and work with us on the next generation of new systems. Customers can benefit from this as well in terms of shorter processing times and more cost-efficient processes. In the Optical Systems division, for example, our systems are often found at the core of our customers' products. As the global market leader, we can create innovative microoptics systems for them with

completely new optical qualities, and solutions all through the integration of hardware and software. Our customers then benefit from being able to focus on their own core competences.

**G 05**

**INTELLIGENTLY MEETING MARKET DEMAND**



## From global seller to global player: Jenoptik on the path to internationalization

Jenoptik's technological solutions are popular beyond the boundaries of both Germany and Europe. We now achieve 62 percent of our sales abroad, especially in the growth markets of the Asian-Pacific and North American regions. Our success in these markets is necessary as a means of continuing to maintain our future and jobs in Germany as well.



For an overview of our company sites, see page 6.

Jenoptik is active in a wide variety of often volatile markets such as the semiconductor and automotive markets. Internationalization – along with diversification – is a means of balancing out the fluctuations of individual markets. Market development is therefore both a risk and an opportunity: Changes in key regions and sectors can have an effect on Jenoptik's Group figures. We do, however, see it chiefly as an opportunity to further enlarge our global presence by expanding in the Asian and American regions, coming closer to our goal of developing from a global seller to a global player. In addition to the expansion of our distribution network, resources are available for procurement, while our production and research activities are to be expanded abroad in the intermediate term as well. The continual protection of knowledge and patents will be given the high-

est priority in this process. We are [creating organizational structures abroad](#) as a means of firmly establishing our technical distribution and service network in both current and new markets. The lack of experts in Europe and the competition for qualified staff, especially in Asia, are major, but not insolvable challenges in this regard. Following on the modest development this past year, we wish to achieve around 40 percent of our sales by 2017 in the Asian and American regions combined.

## REINFORCED EFFORTS IN ASIA AND AMERICA

It is our goal to develop from within the various regions and to penetrate the markets there – not least as a means of securing our market share in competition with local players. [T 02](#) We founded our Asian and U.S. holding companies in 2012 and 2013 as strategic architects with the task of shaping opportunities for growth and coordinating actions in these regions.

Since 2013, JENOPTIK Asia-Pacific Pty. Ltd. in Singapore has incorporated our entire Asian business and moved ahead with its development. Solutions are in demand there in the automotive and auto supply industry, in particular, which has a strong presence in the region, as well as in metrology. We acquired DCD Systems in 2013, a supplier of traffic safety technology based in Sydney, Australia. Jenoptik Australia provides us with direct access to that country's market for traffic safety technology. It has now received its first major contract in the low eight-figure euro range.

The United States, in a current phase of “re-industrialization”, has seen a rise in demand for laser systems, optics, and metrology. We are able to serve the North American market from our Jupiter, Florida, site. From design to production, we can develop new precision optics on site, and in large quantities. We have also built up our second Shared Service Center there, following our first in Shanghai, which serves, in particular, to bring together our procurement, human resources, IT and finance in the United States.

We also had new international customer projects in 2014, just as we continue with work in established regions as well. In May 2014, Jenoptik acquired the rest of its joint venture, HOMMEL-ETAMIC Metrology India Pvt. Ltd., of which it had previously controlled 51 percent. The Bangalore-based company, with a staff of 16, has been fully integrated into the Group structure as a subsidiary of Jenoptik's Asian holding, and now serves all of the Group's divisions. Robot Nederland B. V., in which Jenoptik had previously held a 30-percent share, has also been a 100-percent Group subsidiary since April 2014. The company, based in Riel, Netherlands, has now also been integrated into the Group structure.

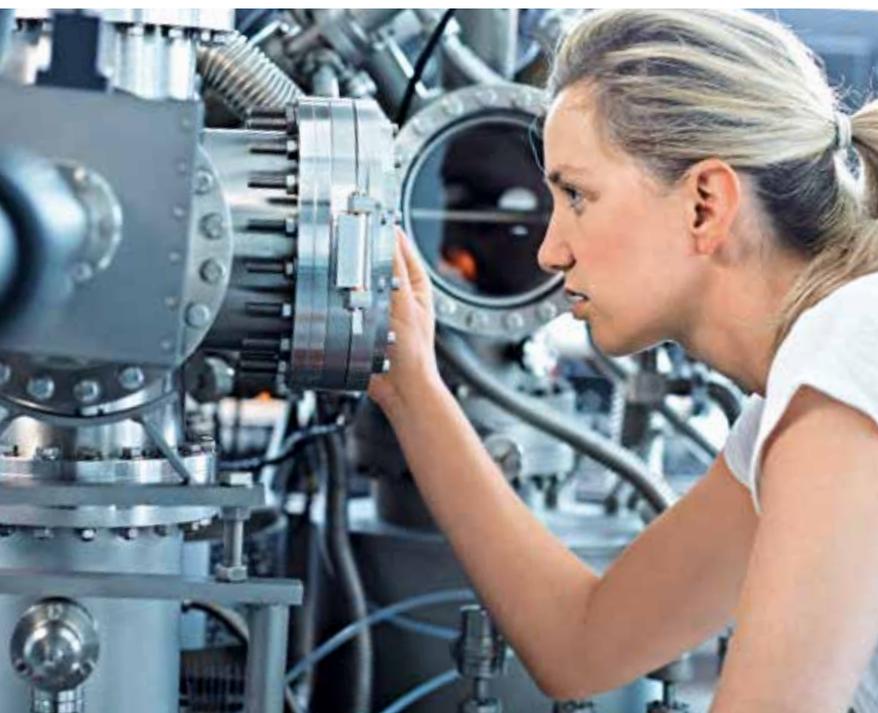
### T 02

REVENUE BY REGION (in million euros and as % of total revenue)

	2013		2012		Change in %
	Revenue	% of total revenue	Revenue	% of total revenue	
Group	600.3	100.0%	585.0	100.0%	2.6
Germany	228.4	38.0%	208.1	35.6%	9.7
Europe	150.8	25.1%	150.7	25.8%	0.1
Americas	117.2	19.5%	110.0	18.8%	6.6
Asia/Pacific	59.8	10.0%	69.1	11.8%	-13.5
Middle East/Africa	44.1	7.3%	47.1	8.0%	-6.3

## Innovation: Strengthening the industries of the future with intelligent solutions

Innovations are key to Jenoptik's future success and are crucial to the Group's ability to prosper into the future. Predefined "road maps" are necessary in order to move forward with our divisions' strategic orientation. Research and development entails costs but also provides great opportunity, as successful new developments can lead to important competitive advantages.



[B 01](#)

Jenoptik has been developing Group resources while working together with suppliers and cooperative partners to introduce innovation to the market efficiently and quickly. Research and development came to over 51 million euros in 2013, above the average for the past four years and, at a rate of 4.1 percent, somewhat outpacing the rise in sales. The two figures will be similarly high in 2014. The number of patent applications reached a new high of 59 in 2013. [T 03](#) Our central innovation management is working together with our intellectual property managers to ensure our protection, including in growth markets such as the United States, China, and Korea.

With our research and development activities, we strive to shore up or expand our innovative power in our various segments. In 2013, 427 employees were active in Jenoptik research and development, or 12.2 percent of our staff. With their knowledge and experience, they form the heart of our ability to innovate, and in recognition of this, Jenoptik established a [specialized career track](#) for qualified employees in the R&D field, beginning in 2012. Jenoptik

[T 03](#)

R & D OUTPUT (in million euros)

	2013	2012
<b>R &amp; D output</b>	<b>51.1</b>	<b>49.1</b>
R & D expenses	39.8	36.0
Capitalized development costs	0.2	1.2
Depreciation and impairment losses on capitalized development costs	-1.2	-1.4
Developments on behalf of customers	12.2	13.3
<b>R &amp; D ratio 1 (R &amp; D output/revenue) in %</b>	<b>8.5</b>	<b>8.4</b>
<b>R &amp; D ratio 2 (R &amp; D expenses/revenue) in %</b>	<b>6.6</b>	<b>6.2</b>

researchers can make use of their knowledge both in individual tasks and in development projects across division lines.

Jenoptik solutions provide cost savings in the production process, require little service efforts, and stand up in the long term. In 2013, we were able to expand our product portfolio, and were particularly active in the development of innovative products for the medical technology and life sciences markets. We were also able to continue to improve on our high level of competence in optics, and in microoptics [B 01](#) and optoelectronics in particular.

Each year, Jenoptik has a Group-internal innovation prize for the best new ideas. Our innovation events, several days in length, are an important part of our innovation culture, and establish a platform for the exchange of external and internal experience and approaches. The Optical Systems division won the prize in 2013 for an optoelectronic reader made up of miniaturized fluorescence microscopes with novel high-performance objectives made of plastic lenses. The integrated digital image processing provides for extremely high-resolution images for complex life science analyses. This can lead to new optical technology solutions, paving the way for revolutions on the life science market.



For further information on our specialized career track please turn to our Annual Report, p.62

### BOOSTING FUTURE INDUSTRIES WITH INTELLIGENT SOLUTIONS:

In 2013, we sold our 200<sup>th</sup> JENOPTIK-VOTAN® A laser-perforation system, which replaces predetermined breaking points for airbags into car dashboards.

The Federal Metrology Institute certified the TraffiStar S350 laser scanner system for the German market. Jenoptik is now the only manufacturer in the world that provides all major sensor technologies for traffic monitoring: Lasers, radar, piezoelectric sensors, and induction loops.

We developed an innovative new last-mile diesel aggregate for the rail market together with our customer Bombardier Transportation. The aggregate makes it possible for electric locomotives [B 02](#) to be used over the “last mile”, allowing for entirely new operational possibilities.

In autumn 2013, Jenoptik introduced its robot-based 3D cutting system, JENOPTIK-VOTAN® BIM (Beam in Motion), for the rapid and cost-efficient processing of metals and plastic. The machine’s strength lies in the processing of highly complex 3D components, chiefly from the automotive industry – with precision and within seconds.



[B 02](#)

**T 04****JENOPTIK MEMBERSHIP OF COMMITTEES AND ASSOCIATIONS (SELECTION)**

- Association of Laser Users
- Bundesverband der Deutschen Luft- und Raumfahrtindustrie e. V. (BDLI)
- Deutsche Gesellschaft für angewandte Optik e. V.
- Deutscher Industrieverband für optische, medizinische und mechatronische Technologien e. V. (SPECTARIS)
- Deutsches Institut für Normung e. V.
- European Optical Society
- European Technology Platform Photonics 21
- International Society for Optical Engineering (SPIE)
- Max-Planck-Gesellschaft zur Förderung der Wissenschaften e. V.
- Optonet e. V./CoOptics
- Semiconductor Equipment and Materials International (SEMI)
- Verband Deutscher Maschinen- und Anlagenbau e. V. (VDMA)
- Verein Deutscher Ingenieure (VDI)
- Wirtschaftsrat der CDU e. V.
- Zentralverband Elektrotechnik- und Elektronikindustrie (ZVEI)

**DEVELOPING NEW EXPERTISE WITH PARTNERS**

Our motto of “Sharing Excellence” stands for cooperation as partners in the development of the expertise necessary to complement our entrepreneurial innovation efforts and to bring about new solutions. Jenoptik therefore cooperates with research centers and university institutes as well as with key customers, and is active in a number of associations. [T 04](#)

Jenoptik’s Scientific Advisory Board provides the company with expert support, helping to follow and evaluate long-term technological trends so that we can draw the appropriate strategic conclusions for our business in the future. By bringing partners into the process at an early stage, we can focus our efforts on the needs of the market, make use of specialist expertise, and ultimately lower our costs for research and development.

**OUR MAJOR PARTNERS AT SCIENTIFIC INSTITUTES INCLUDE:**

- Fraunhofer Institute for Applied Optics and Precision Engineering (IOF), Jena
- Fraunhofer Institute for Laser Technology (ILT), Aachen
- Ferdinand Braun Institute, Leibniz Institute for Highest-Frequency Technology (FBH), Berlin
- German Aerospace Center (DLR), Institute of Transportation Systems, Braunschweig
- Technical University of Kaiserslautern
- Christian Albrechts University (CAU), Kiel
- Leibniz Institute of Photonic Technology (IPHT), Jena
- Technical University of Ilmenau
- Friedrich Schiller University, Jena
- Ernst Abbe University, Jena
- Fraunhofer Institute for Production Technology (IPT), Aachen, including the Laboratory for Machine Tools at RWTH Aachen

## Operative excellence and quality: Getting better every day

We set a goal to turn Jenoptik into one single, powerful unit, and have remained steadfast in pursuing this goal: All of the Group's processes are regularly reevaluated to make them more efficient, to harmonize them, and to save costs. Quality management indeed has a long tradition at Jenoptik.



### B 03

We launched our excellence program back in 2009, and have continued to make it a priority in 2014: This includes the consolidation of the procurement process and the optimization of the supply chain, as well as the improvement of our logistics and the streamlining of production. The goal of the program is to save around 1 percent each year in our ongoing processes and around 1 percent in procurement. The success of these measures can already be seen in the current improvements in the gross margin.

With the Go Lean Program that we launched in 2012, we have trimmed our production for greater efficiency. [B 03](#) This has served to lower operative costs, to shorten manufacturing throughput times, to improve quality, and to make use of synergies through the interlinking of processes. Our employees are introduced to the program at our Lean Cam-

pus, as it is part of their job to discover weak links in the working process, and to remedy the situation themselves, if possible. In the first year alone, we were able to optimize our processes in this way through 25 different projects. Throughput times were reduced by up to 40 percent, material stocks were reduced by over 30 percent at times.

The goal of our JOE (Jenoptik One ERP) Program is the creation of a harmonized ERP (enterprise resource planning) system. This Group-wide and worldwide standardized software is to make processes and data more transparent, thereby ensuring more efficient operative functions and simplified processes. We are able to develop harmonized standards through standardized controlling methods. From the start of 2014, the Industrial Metrology division has been operating with a new SAP system in Germany, and has

been joined in this regard by the German sites of the Lasers & Material Processing and Optical Systems divisions since July 2014.

### QUALITY MANAGEMENT WITH TRADITION

Quality management has a long tradition in our Group. Our divisions have often taken on additional management systems in line with their markets and segments, emerging from their relations with customers and suppliers.

Quality management systems are evaluated each year according to EN ISO 9001, and again fulfilled all requirements completely in 2013. The quality management also oversees, among other things, the independent evaluation of equipment, determines product liability processes, and provides for the process leading to CE certification and authorization by the Federal Metrology Institute in Braunschweig. All guidelines were complied with during the reporting period with regard to the certification of products.

In 2014, the German and French sites of Jenoptik's Industrial Metrology division were certified together for the first time in accordance with EN ISO 9001. The division also received its first certification in accordance with OHSAS 18001 for occupational health and safety management systems, and was certified by the German Accreditation Body (DAkkS) [B 04](#) for the calibration of roughness, contours, and shapes. The calibration laboratory in the Industrial Metrology division has also been certified by the International Laboratory Accreditation Cooperation (ILAC)

since 2012. [B 05](#) This provides for greater international acceptance of the company's products and services. [T 05](#)

The Defense & Civil Systems division has been certified at its Wedel site both as a manufacturing facility for the European Aviation Safety Agency (EASA) and as a repair facility in accordance with the respective regulations of the European, U.S., Canadian, and Chinese aviation authorities. The division also follows the International Railway Industry Standard (IRIS) as a means of gaining access to the international rail markets.



[B 04](#)



[B 05](#)

### [T 05](#)

#### CERTIFICATION WITHIN THE GROUP (SELECTION)

ISO 9001	Certification of Quality Management Processes
EN 9100	Certification of Quality Management Processes especially for the aerospace and defense industry
ISO 13485	Certification of management systems across the board for the design and manufacture of medical products
ISO 14001	Certification of the environmental management system
ISO/TS 16949	Certification for the automotive industry
EC 1702/2003	Certification as a manufacturer for the civil aviation industry
EC 2042/2003	Certification as a maintenance company for the civil aviation industry
IRIS	International Railway Industry Standard
ILO-OSH-2001	Certification of occupational safety and health management

# 3 INVOLVING INDIVIDUALS – CONNECTING STRENGTHS

## Employees: Providing support and guidance

Our goal of “Sharing Excellence” does not only pertain to aspects of technology but also to our employees. By supporting, accompanying, and promoting the best minds in their particular areas of expertise, we are able to ensure the quality of our products and processes, our innovative potential, and thus also our ability to create value in the long term. We are convinced that only in this way will we be able to fulfill our understanding of sustainability and the expectations of our stakeholders – all while joining together with our employees each day to take new steps towards our ideals of excellence.



Heike Hüttenrauch supervises the Optical Systems and Lasers & Material Processing divisions when it comes to controlling issues.

The expertise and experience of our employees, their efforts and commitment to the company are all important immaterial assets for us. As a means of involving our employees even more closely, we conducted an employee survey in 2012 on the topics of working conditions, cooperation, and internal communication. Based on the results, around 50 projects were begun in 2013 at the Group and division levels to pursue both short-term and long-term goals. A second Group-wide survey was carried out in late September 2014. We also conduct structured employee dialogues as a means of strengthening communications and the exchange of information. The low staff fluctuation rate, falling to 2.9 percent in 2013 from 3.2 percent in 2012, reflects a high level of employee satisfaction with Jenoptik.

The number of Jenoptik employees (including trainees) rose by the end of 2013 by 4.9 percent to 3,433. The number of employees outside Germany rose by 42 to 475, with 13.8 percent of Jenoptik employees now based abroad.

Marianne Pohlers oversees the Group's uniform corporate design, while Mario Jandeck programs workflows all across the Group.



[T 06](#) [T 07](#) The disproportionate increase outside of Germany reflects the Jenoptik strategy. Our internationalization is a high priority; and we have been building up the required structures with the staff that are needed, especially in the American and Asia-Pacific regions. [T 08](#)

The age structure of our staff is generally well balanced, with an average age of 42. [T 09](#) In 2013, 33 employees made use of partial retirement schemes in Germany, down by 21.4 percent from the previous year. Women made up 26.6 percent of the Group's employees as of December 31, 2013, reflecting a slight increase. [T 10](#)

#### [T 06](#)

EMPLOYEES AS AT DECEMBER 31 BY SEGMENT  
(incl. trainees and academy students)

	2013	2012	Change in %
Group	3,433	3,272	4.9
Lasers & Optical Systems	1,391	1,349	3.1
Metrology	907	814	11.4
Defense & Civil Systems	907	913	-0.7
Other	228	196	16.3

#### [T 08](#)

EMPLOYEES AS AT DECEMBER 31 BY REGION  
(incl. trainees and academy students)

	2013	2012	Change in %
Domestic	2,958	2,839	4.2
Abroad	475	433	9.7
Europe (without Germany)	95	101	-5.9
Americas	249	243	2.5
Asia/Pacific	131	89	47.2

#### [T 07](#)

NEWLY HIRED AND RESIGNED EMPLOYEES (Number)

	2013	2012
New employees	223	290
Resigned employees	171	202

#### [T 09](#)

AGE STRUCTURE (in %)

	2013	2012
< 30 years	15.3	16.2
30-55 years	63.4	63.2
> 55 years	21.2	20.5

**T 10**

**EMPLOYEE STRUCTURE BY GENDER**

	2013		2012	
	Number	in %	Number	in %
Employees	3,433	100	3,272	100
Women	914	26.6	858	26.2
Men	2,519	73.4	2,414	73.8

Sick leave has also risen slightly among Jenoptik employees in Germany from 4.5 percent in 2012 to 4.9 percent in 2013. In 2013, 3.31 workplace accidents and 7.62 commuting accidents were registered per 1,000 employees.

**SEEKING OUT THE BEST MINDS**

In order to position itself as an international employer, Jenoptik has developed its own employer brand, which, while globally uniform, also takes cultural differences into account. Jenoptik again made the list of top 100 engineering employers among graduates and students close to graduation in the annual survey conducted by Trendence

Institute of Berlin. Jenoptik was 87th of 820 companies in Germany in Focus Magazine’s employer ranking, making the top 15 in mechanical engineering and numbering among the region’s best employers.

In 2013, Jenoptik’s recruitment focused especially on professionals in the engineering sciences (35 percent), business and economics (25 percent), and the natural sciences (10 percent). One of nine of Jenoptik’s employees with a leadership role were recruited from the particular region in 2013 – while their qualifications were the decisive factor in the process.

At the end of 2013, the Group had 137 trainees and Career Academy students, up from 130 a year before. 133 of them were located at sites within Germany, while four were being trained abroad. In August 2014, 29 new trainees and Career Academy students were employed at Jenoptik sites in Germany. In the state of Thuringia, this involved careers in optics, precision mechanics, electronics, and business at the [Jena training center](#) (Jenaer Bildungszentrum gGmbH) maintained by Schott, Carl Zeiss, and Jenoptik. In addition to the regular curriculum, trainees and students are active in supplementary external courses and language classes. [B 06](#)



**B 06**

By means of preparing for a possible future traineeship at Jenoptik, Mike Ehinger has taken a trial training course at the Jena training center.



#### B 07

Dr. Markus Besenbeck, graduate of the Jenoptik Junior Leadership Program, now runs the Optical Systems division's business development unit.

## SCHOLARSHIPS FOR STUDENTS

Our expertise strategy also involves specific support for students and graduates with high potential. Jenoptik cooperates internationally with selected universities to find top students at an early stage, through actions such as recruitment events at universities and company tours. In 2013, six graduates were accepted into the trainee program that Jenoptik has had on offer since 2011. They are employed in different areas, and are also sent to a Jenoptik site outside of Germany, if possible.

We extend "Germany Scholarships" to top students at the Ernst Abbe University in Jena and the Technical University of Ilmenau. Students are short-listed who have studied subjects that are of technological and thematic relevance to Jenoptik, and who have also been involved in social issues. We are also active participants in the donor-recipient network at the Technical University of Ilmenau, providing, in addition to all financial support, the opportunity to develop a network within Jenoptik. Scholarship recipients ideally remain true to Jenoptik, and move on to show what they can do in an internship, write their degree thesis with us, and sign a trainee contract upon graduation, which would then turn into a full employee contract at a later date.

In 2012-2013, three students of laser and optical technology and technical physics received a Germany Scholarship, the cost of which was shared equally between Jenoptik and the German government. In 2013-2014, four students were again supported in laser and optical technology as well as mechanical engineering. For 2014/2015, Jenoptik has also offered a Germany Scholarship at Jena's Friedrich Schiller University.

In addition to the Germany Scholarships, three doctorate scholarships were offered between 2010 and 2013. The dissertation topics, which, as a matter of course, are not always applicable for business applications, ranged from innovative high-power fiber laser components to photon correlation in waveguide arrays and scanner-based laser microwelding.

## SUPPORTING EMPLOYEES

The company's need for staff development is evaluated once a year within the framework of an assessment of training needs. Employees and supervisors exchange views over their goals, working situation, leadership, and cooperation, and agree on the next training measures to be taken. In 2013, Jenoptik invested 1.9 million euros in training, with its focus placed on personal and professional skills, project management, and English-language training. A total of 1,747 employees benefited from the program. [T 11](#)

#### T 11

##### TRAINING AT GERMAN SITES

	2013	2012
Employees benefiting from a training program	1,747	1,744
Training costs in million EUR	1.9	1.5

A new leadership program began in 2013 for division heads and deputies, and was expanded to the next level of leadership in 2014. The program focuses on leadership and change management, and contributes toward the harmonization of the Group's leadership tools.

Since 2006, potential leaders from within the organization have been supported in the Jenoptik Junior Leadership Program (J<sup>2</sup>LP). Currently, 19 participants are taking part in the ninth and tenth generations of the program, with the goal of preparing them for their future carriers while also promoting a uniform culture of leadership within the company. [B 07](#)

The pilot project for the careers program that began in 2012, was completed by 13 participants in the Optical Systems and Defense & Civil Systems divisions in 2013. The participants' personal and professional skills are supported for a

year in the program. There are now preparations to expand the program Group-wide.

## WAGES AND SALARIES

Personnel costs (wages, salaries, social fees, retirement funds) rose by 4.9 percent in 2013 to 211.0 million euros, in line with the increase in staff size. Women and men receive the same pay, which Jenoptik bases solely on the area of activity, job description, and the respective wage agreements. Due to the application of wage agreements, Jenoptik does not provide figures on the relationship between standard starting wages and the local minimum wage.

Wages and salaries are based on in-house and industry-wide wage agreements. The in-house agreement was renegotiated in the 1st quarter of 2014 and is valid through the end of January 2016. The new version provided for a wage increase of 3 percent as of April 1, 2014, with a further increase of 2.8 percent planned for January 1, 2015. It was agreed in September 2014 that the Optical Systems division's Triptis and Berlin sites would adopt the Jenoptik in-house wage agreement. There are now negotiations on the adoption of the agreement for the Berlin site of the Lasers & Material Processing division as well. The industry-wide agreements for the metal and electrical industries have been followed in the Industrial Metrology and Defense & Civil Systems divisions, with a 3.4 percent increase in wages, beginning July 1, 2013, agreed with the IG Metall union throughout Germany. Wages increased another 2.2 percent as of May 1, 2014. On August 29, 2013, a long-term wage agreement was concluded with IG Metall for the employees of ESW GmbH at the Essen and Wedel sites. Remuneration for Jenoptik management is based on both a fixed salary and variable compensation.

In accordance with the Works Constitution Act, Jenoptik informs relevant employees as soon as possible about changes within the company, without fixed information deadlines.

## HEALTH AND SAFETY

Health and safety are firmly anchored priorities in the operating processes of all of our company units. There are working protection committee meetings at all Jenoptik companies each quarter, where two employee representatives, a safety expert, and safety administrators meet with an employer representative. All employees also receive instruction at least once a year on topics involving labor and environmental protection with a focus on aspects of current importance.

Five employees are nominated as internal safety experts within the Group. It is their role to advise leaders and staff representatives and to train safety administrators. Around ten percent of the employees at all German sites have received training in first aid. Two percent of employees are qualified as safety administrators for labor and environmental protection. Two Jenoptik companies also have labor protection management systems integrated into their daily workplace.

Our measures in this area have paid dividends. We have been able, for example, to strongly reduce the number of workplace accidents from 7.58 per 1,000 employees in 2012 to only 3.31 in 2013. This places Jenoptik well under the average of 15.8 in the ETEM trade association. T 12 Jenoptik has had no work-related deaths in 2012 and 2013. There are no data available on endangered employees or high illness rates for the Group as a whole, and no occupational illnesses are known. Nearly all operating sites have automated external defibrillators (AED) to respond rapidly to heart attacks.

### T 12

#### WORKPLACE AND COMMUTING ACCIDENTS

(per 1,000 employees at German sites)

		2013	2012
Jenoptik	Workplace accidents	3.31	7.58
	Commuting accidents	7.62	4.11
BG ETEM*	Workplace accidents	15.8	16.3
	Commuting accidents	3.5	3.5

\*Data for all member companies of the trade association Berufsgenossenschaft Energie Textil Elektro Medienerzeugnisse (BG ETEM).



Further information on wages and salaries can be found in the Annual Report, pages 68f.



Further information on the remuneration of the Executive Board can be found in the Annual Report, pages 45f.



B 08

We provide regular medical examinations by a company physician for the sake of the health and performance of our employees. The staff attends regularly held health events featuring topics such as back and eye health, nutrition and vaccinations, providing them with new ideas on health that are easy to apply to the everyday workplace.

**BALANCING CAREER AND FAMILY**

Parental leave, flexitime, and part-time work all make it easier for our employees to strike their own balance between family and working life. In 2013, 105 employees made use of parental leave – 60 percent of whom were men. In 2012, only 88 employees took parental leave, with equal numbers of men and women. 159 employees had part-time contracts in 2013, more than three quarters of whom were women and around 23 percent men. [T 13](#) [T 14](#)

One of the most important preconditions for balancing career and family is the availability of childcare. A childcare center was opened in 2007 next door to the Jena site, which is financially supported by Jenoptik. [B 08](#) At the site in Wedel, the company has had a cooperation agreement with a preschool so that the children of employees can be cared for in the immediate vicinity.

The company has been focusing on children and family life in other places as well. In 2013, for example, the Jenoptik Executive Board launched a 25,000-euro competition for new ideas. And the winning idea for a childcare center at the Traffic Solutions division site was translated into reality. The City of Monheim, together with Jenoptik and other Monheim companies, joined forces in opening a childcare facility for 50 children in August 2014. The project competition had a second run in 2014. This time support was given for a holiday camp for the children of Jenoptik employees and for a refurbished elementary school playground in Triptis.

[T 13](#)

**EMPLOYEES ON PARENTAL LEAVE (Number)**

	2013	2012
Parental leave	105	88
of which men	63	44

[T 14](#)

**PART-TIME EMPLOYMENT (Number)**

	2013	2012
Part-time employment	159	161
of which men	37	40

## Our social commitment: Bearing responsibility where we work and live

Sustainable success in business requires a functional social environment. Jenoptik therefore sees itself to be obliged to play a part in the process of actively forming its surroundings – reliably and in the long term. Founded in our basic values and company goals, we have reframed our commitment in 2008, while our historical activities continue to bear fruit as well.



[B 09](#)

Jenoptik has an impact on society: Supporting young people in their education and scientific activities as well as in social projects – this all forms part of the core of our social commitment. Jenoptik has also been an active supporter of art and culture from the very beginning. While this has focused on projects within Germany in the past, as part of our internationalization process, we have now begun to become active in the social life at our foreign sites as well.

### SCIENCE AND EDUCATION

Jenoptik accompanies young people throughout their educational process and supports them in their interdisciplinary work, international exchanges, and social competence. Skills involving creativity and teamwork, and an awareness of values, are all at least as important as a solid technical education when it comes to one's career.



B 10

Art and culture can be inspiring even to students of the sciences. At the workshop “BEGEGNUNGEN Kultur Technik Wirtschaft” students at Jena’s Ernst Abbe University grapple with a Jenoptik cultural project once each semester, and in doing so expand their horizons and come into direct contact with our employees active in the creative side of the company. In May 2013, for example, students were able to get to know the world of theater, while in January 2014 they became involved in the technical and esthetic aspects of art. The most recent workshop in May 2014 focused on Peter Halley’s “Prisons” exhibition.

Our commitment as long-term reliable partners in the region is especially apparent in the “Jugend forscht” competition for young researchers between the ages of 15 and 21. Right after the company’s founding in 1991, Jenoptik took on the sponsorship of the competition in the company’s home state of Thuringia. To this was added a competition „Schüler experimentieren“ for 10 to 14-year-olds in 2012. Both competitions focus on the natural sciences, technology, and mathematics, with over 100 students taking part in 2013. [B 09](#). Each year, Jenoptik awards special prizes for ideas with entrepreneurial potential. It is our goal to support young people with particular talents in their scientific curi-

osity, to nurture new ideas in areas of particular importance to Jenoptik, and thus to raise interest in becoming active within the company in the future.

## ART AND CULTURE

From its very beginnings, Jenoptik has promoted art and cultural projects in Jena, and is one of the few eastern German members of the national cultural sponsoring working group. In connection with our company activities, light, optics, and perception form the focus of our support of the arts.

We have been celebrating this long tradition this year with a special „Kunst ans Licht“ (“Bringing Art to Light”) exhibition to mark the 20th anniversary of our “tangente” art exhibition series [B 10](#), which has been bringing people in contact with the visual arts since 1994. The series can be regularly seen in the lobby of the Group’s headquarters, and workshops are held regularly for children to get to know more about art. Jenoptik’s art collection, which began in 1994, now includes over 400 works of art, around two thirds of which add a touch of creativity to our employees’ offices.

## SOCIAL PROJECTS

When help is needed, we try to make use of our position in the region to help. We have, for example, maintained long-term cooperative relationships with social organizations and institutions, which we support either financially or through the efforts of our employees. Since 2008, this has been true for Group sites outside of Jena as well, just as we grow as a company beyond the local region. This includes a childcare center in Triptis, a music school in Monheim, and the Off-Road Kids Foundation in Villingen-Schwenningen. We are also supporting two projects in the United States. In Rochester Hills, Michigan, employees of the Industrial Metrology division help young people from disadvantaged family backgrounds with their educational and career choices. Jenoptik employees in Jupiter, Florida are active with “Habitat for Humanity”, [B 11](#) working for affordable and livable housing – both through financial assistance and their own physical efforts. In the project, employees and their family members helped renovate houses for needy families in March 2013.



[www.jugend-forscht.de](http://www.jugend-forscht.de)

As part of the Jenoptik New Year's reception each year, the company raises money for children with special needs. In 2013, the 16,200 euros raised went to Kindersprachbrücke, a Jena institution that uses play to help children to express themselves through language, especially among those whose native language is not German and who come from socially disadvantaged family backgrounds. The 2014 New Year's reception donations went to the Sternbrücke children's hospice in Hamburg, which accompanies children with a shortened life expectancy and their families, making it possible for the children to live out their lives in dignity.

Since 1996, Jenoptik has also assumed the patronage of [Elterninitiative für krebskranke Kinder Jena e. V.](#) The organization helps the parents of children with cancer in their time of need, lending them support and hope. Jenoptik sponsors the organization directly but also with personal contributions as well. This is also tied into Jenoptik's support for the International Youth Orchestra Academy, a group dedicated to understanding among people of different nations and an openness to other cultures. Proceeds from the concert in 2014, in which 110 young musicians from 41 countries participated, went to the parental initiative for children with cancer as well as Kinderhilfestiftung Jena e. V., another foundation for the support of children.



[www.ekk-jena.de](http://www.ekk-jena.de)

#### JENOPTIK AS A SUPPORTER OF THE ARTS IN AND AROUND JENA

Jenoptik supports the arts beyond our own projects: The company supported the cooperative efforts of 16 international artists at the European Pleinair Symposium, which was hosted in June 2013 by GLASHAUS im Paradies e.V. in Jena.

In 2014, Jena's Friedrich Schiller University brought Peter Halley, yet another major U.S. artist, to Jena, as it had done Frank Stella before. Jenoptik was again one of the main sponsors of the "Prisons" exhibition at Jena's old tram depot.

Since 1993, Jenoptik has been the patron of a concert summer at the Thalbürgel monastery church near Jena. A portion of the proceeds is used for social work with young people. With its sponsorship, Jenoptik is also paying tribute to all those who work voluntarily to maintain and to provide music at the cultural treasure.

Jenoptik has also been active in its support for Jena's Tanztheater (dance theatre) since 1992. Around 150 young people learn to dance there, along with self-discipline and self-esteem, endurance and team spirit, dealing with stage fright, and with success and failure.



B 11

# 4 SAVING RESOURCES – IMPROVING EFFICIENCY

## Environmental management: Profiting from efficiency

Environmental protection is an established part of our corporate activities, as anchored in the Group guidelines: A number of Jenoptik companies are certified in accordance with the ISO 14001 environmental management standards, and we hold our suppliers and contractual partners responsible for complying with environmental laws.

The companies of Jenoptik certified in accordance with ISO 14001 also have their own traditional environmental management program, which was revised in 2014. JENOPTIK Optical Systems GmbH also published its own [environmental report](#) in 2014, which appears every other year. The figures and management systems detailed there reflect the German sites only. Jenoptik is working on comparable data sets for its international sites, where other legal regulations and standards apply. Since environmental considerations are taken into account for all processes and investments, related costs are not listed separately. There have been no fines or penalties due to non-compliance with environmental laws and regulations.



Environmental Report  
JENOPTIK Optical  
Systems GmbH 2014

### T 15

#### CONSUMPTION IN GERMANY (in MWh)

	2013	2012
Electricity	33,478	31,857
Gas	12,861	11,179
Wooden pellets	1,192	1,058
District heating	9,095	7,195
Heating oil	194	611

The environmental management department submitted its fifth carbon balance report in 2013, which included consumption statistics for electricity, district heating, wooden pellets, gas, and heating oil at the German sites. [T 15](#) The report showed that resource consumption increased less rapidly than did the expansion of business: Carbon emissions in fact fell by 3,000 tons to 16,686 tons in 2013. [T 16](#)



This decrease reflects, in particular, the increased use of renewable resources for both electricity and heating. All of the company’s Jena sites receive their electricity from renewable energy sources. Jena’s municipal utility provider completely switched over to green electricity in July 2013 without passing on added costs to consumers. We also make use of district heating as one of the most environmentally friendly sources of energy. Our Berlin production facility also uses green electricity. In Monheim, a new heating facility using condensing boilers has led to savings of approximately 250 megawatt hours, and in Villingen-Schwenningen, a heating facility was put in place in 2012 using gas and wooden pellets – also with a positive effect on carbon emissions. We are now also planning a second phase in which we will evaluate our products with regard to their carbon balance, taking the entire supply chain into the equation. It is Jenoptik’s goal to put a monitoring system in place, which is to reduce its ecological tax burden beginning in 2015.

**EMISSIONS**

The emissions of volatile organic solvents that indirectly act as greenhouse gases, and which are emitted through exhaust, come to 15 tons a year. Jenoptik generally strives to replace these substances with water-based industrial

cleaning products, and to use water-soluble paints and varnishes. Jenoptik uses no other greenhouse gases, with industrial emissions, sulfur and nitrous oxides, and ozone depleting substances of equally little significance.

**T 16**

CO<sub>2</sub>-EMISSIONS AT THE GERMAN SITES (in tons)\*

	2013	2012
CO <sub>2</sub> emissions, total	16,686	19,976
CO <sub>2</sub> emissions/1 million EUR in sales	27.81	34.15

\* through the use of electricity, district heating, gas, heating oil, wooden pellets, and carbon dioxide

The criteria for the choice of service vehicles are established in a Group guideline, with preference given to diesel engines and the most efficient models of each class of vehicle. The vehicles have to have the best carbon rating at their time of registration.

Jenoptik has placed more importance on its employees taking public transportation to get to work each day. Since March 2013, Jena-based employees can choose whether the company provides them with a parking card or pays for part of an annual local transportation ticket.



[B 12](#)

Jenoptik employees traveled 557,264 kilometers in total on the long-distance trains of Deutsche Bahn, which is completely fueled by green electricity, rendering the journeys carbon-neutral.

**WASTE**

Types of waste have been systematically determined and recorded at all our German sites since 2011, although this is not yet possible at the international level. All the waste generated in Germany is also disposed of in Germany so that no waste is exported across borders. There were no significant cases of pollution. Hazardous substances are unavoidable in the production processes of a technology company. All employees who come into contact with such substances are provided with the necessary training.

At our German sites, 242 tons of hazardous waste were generated in 2013, which was then hauled away by specialists and brought to recycling or disposal plants; this figure came to 225 tons in 2012. The minor increase in waste

coincides with the growth of the company. The volume of non-hazardous waste decreased precipitously from 960 tons in 2012 to 779 tons in 2013. [T 17](#)

**WATER USE AND WASTE WATER**

Jenoptik uses ground and surface water, partially supplied at the Jena site by a deep well, and partially obtained from the municipal utility service. Waste water is treated but not reused. Green and gravel roofs atop Jenoptik buildings [B 12](#) have the effect that water can evaporate better, and thus the charges for drainage come to just 40 percent of the normal prizes. Unbuilt areas are either green spaces or covered with grass pavers, gravel, or ecological paving stones to allow as much water as possible to pass through.

There was a total of 55,216 cubic meters of waste water at our German sites in 2012, and 57,633 cubic meters in 2013, not including water from precipitation. Internal and external monitoring has shown that prescribed discharge limits were complied with everywhere. Nowhere were bodies of water or nearby living quarters significantly affected by sewage discharges or surface runoff. [T 18](#)

[T 18](#)

**WATER USE IN GERMANY (in cbm)**

	2013	2012
Water	57,633	55,216

[T 17](#)

**WASTE ACCORDING TO TYPE AND DISPOSAL AT GERMAN SITES (in tons)**

Waste type	Waste volume	Disposal method	
	2013	2012	
Hazardous	242	225	Strict separation by type and disposal by specialists. Material reuse is preferred to thermal reuse.
Non-hazardous waste	779	960	

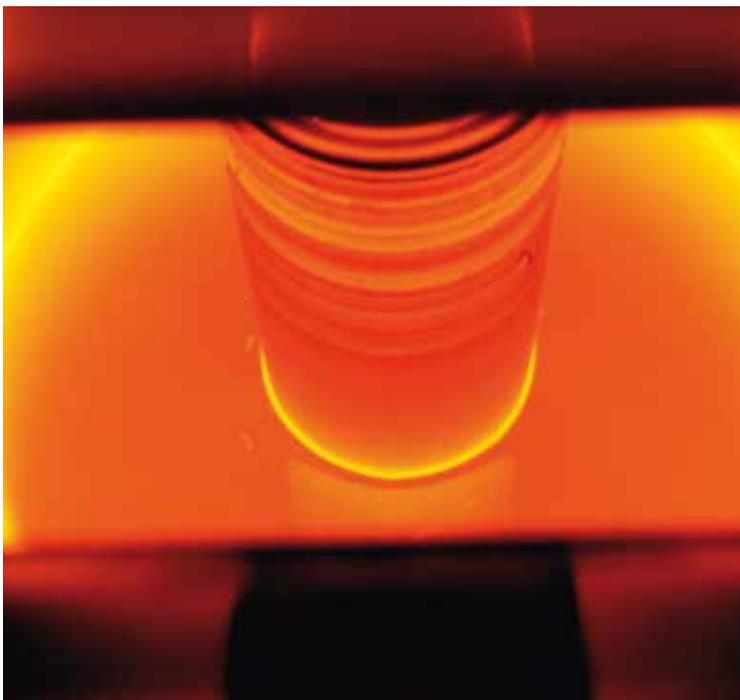
## Energy: As much as necessary but not more

We review our energy use in regular intervals, and take into account how energy can be saved when it comes to new investments in buildings and facilities. A cost-benefit analysis was carried out a second time in 2013 for all Jenoptik buildings in Germany, based on energy certifications that have been available since 2011. These data were used to determine how we can continue to improve our energy efficiency through 2017 – with long-term measures as well as small, short-term activities. Jenoptik complies with legal regulations at sites outside of Germany.

In 2013, we laid the basis for an improved energy management at our Jena site. The current situation was first evaluated and it was determined how losses in heat, water, and electricity could be minimized. Processes were made more straightforward by, for example, automatizing monitoring systems for the measurement, regulation, and control of energy use. It is our goal to have the first buildings certified for their energy management systems in 2015, in accordance with DIN EN 50001. Following this pilot project, similar systems are to follow for all of Jenoptik's other buildings in Germany.

### BUILDING WITH THE ENVIRONMENT IN MIND

Energy efficiency is a planning goal from the very beginning of all our construction projects in Germany. Examples have included the roof renovations carried out in Jena and the building renovations and new buildings in Wedel. Around 30 percent of the energy used will be able to be saved in the future in this way. Modern cold-water generators optimize the cooling systems while new electronic valves add additional efficiency.



A new heat shield in the furnaces used for the growing of germanium crystals reduces the loss of heat and thus the furnace's use of electricity from 30 to around 28 kilowatts an hour. An average five-day operating period per week of four furnaces would thus see a savings of nearly 50,000 kilowatt-hours a year. The furnace's frequency-controlled pump means that the cooling circuit pumps are not operating permanently at full throttle but are controlled in accordance with the situation, allowing for some 150,000 kilowatt-hours of savings a year.

At our Jena-Göschwitz site, the external air had previously been drawn in from outside by the air conditioner and then either heated or cooled, depending on the season, with humidity irregularly being added by spray humidifiers. The building control system will now be adjusted so that all facility rooms and areas can be separately controlled, depending on their use, and can be turned on or off as necessary. In the future, two thirds of the ventilation will be recirculated and only one third taken from fresh air from outside. This will allow for the reuse of residual heat and cooling. In another production building, cooling had been previously provided by two cooling towers [B 13](#) with three refrigeration units each. These will be replaced by two novel cooling systems, reducing the number of refrigeration units to two. Water usage will be reduced by over three quarters – from 6,500 to 1,460 liters an hour, and electricity by 73 percent from 58.2 to 16 kilowatts. The yearly operation expenses could thus be reduced from 86,000 euros to 11,000 euro.

#### LOW-ENERGY LIGHTING FROM OUR OWN PRODUCTION

Our LED lighting systems help save energy – our “Lucid power high bay”, for example, which is equipped with special optics and which, due to its great lighting power, is in particularly high demand among logistics companies for their high-bay warehouses. The industrial LED light “Lucid arena pro” can provide precision and lossless lighting for tall buildings and large spaces with high ceilings.

Traditional fluorescent tubes are now being replaced by LEDs from our own production at our optics production facility in Jena. This saves eight kilowatts per hour, which means that the investment will pay for itself within two years. We are currently evaluating whether the change to LED lighting is now a good economic choice for other buildings such as our underground parking lot.

In the production facilities of the Defense & Civil Systems division, the fluorescent tube voltage has been reduced from 230 to 190 volts. This reduces the perceived light intensity by five percent, which is nearly unnoticeable to the eye, while reducing electricity use by 35 percent. At electricity savings of a calculated 30 percent each year, the investment of approximately 20,000 euros will pay off within around a year and a half.

[B 13](#)



## Production: Making careful use of resources

It is our goal at all Jenoptik sites to reduce the use of resources in our production processes. Whenever our production is modernized, we always prefer more environmentally friendly options. We are also convinced of the need for the careful and economical use of the resources that go into our production processes.

As a technology company, we require a wide variety of resources as preliminary products in our production chain. Since we purchase these materials both as individual resources and as components, there are no specific figures on weight and volume or the percentage of secondary resources as a part of the overall materials. The increasing scarcity of resources has made it necessary for us to use them with care, not only for ecological reasons but also so that they remain available in the long term. It also makes economic sense to save due to rising global market prices connected to increased scarcity. Germanium is, for example, an important substance in the production of optical systems.

The Optical Systems division has introduced a new closed cooling-lubricant circuit for production machinery, which will ensure that some 98 percent of germanium waste will be recovered. At a market price of around 1,950 U.S. dollars per kilogram, the four to ten kilograms of leftover dust per germanium crystal [B 14](#) adds up to considerable savings. Six ultrasonic cleaning systems clean optical components and instruments for high-performance optics. This makes it possible to strongly dilute the cleaning concentrate, which does not use chlorinated and fluorinated hydrocarbons. This can partly replace volatile solvents, with use of solvents falling from 10,316 liters in 2012 to 9,724 liters in 2013.

We comply with regulations and are active in relevant associations to ensure that we are using our resources responsibly. We therefore also observe the stipulations of the EU's [REACH regulation](#) (Registration, Evaluation, Authorisation and Restriction of Chemicals) and standardize the relevant processes. In accordance with the regulation, which went into effect as of June 1, 2007, qualities of materials and their applications need to be determined across the entire value-added chain. Materials with a particular potential to be hazardous need to be registered separately. We therefore participate actively in the "innovative materials" working group of the German engineering association Verband Deutscher Maschinen- und Anlagenbau e. V.

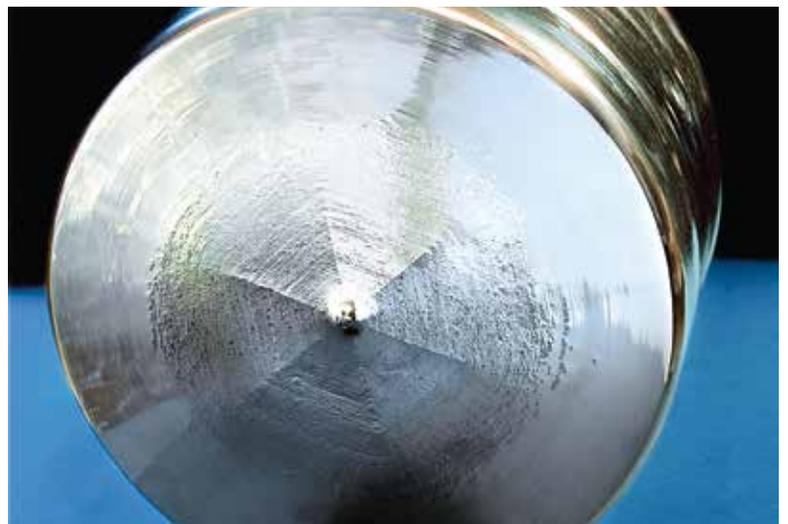


[www.reach-info.de](http://www.reach-info.de)



Further information on dealings with minerals from conflict regions can be found on page 39.

[B 14](#)





# FULFILLING COMMIT- MENTS – PROTECTING INTERESTS

## Our values:

### The things that connect us make us stronger

We worked intensively on our basic attitudes and values in 2013, as we strive to reach our corporate goals. The Executive Management Board has set a goal of achieving a common Jenoptik identity across national borders and throughout all of the Group's divisions.

The September 2013 leadership event was therefore entitled "Vision and Values". At the event, 72 of our colleagues from 10 different countries discussed which common values should be shared by all Jenoptik employees. With a view to the Aspiration Statement that we published in 2008, we first defined a vision that we can pursue into the future. The two following elements can both be connected with our motto of "Sharing Excellence".

In a discussion process the Executive Management Board determined six values, which now play a part in our corporate identity together with the Vision and Aspiration Statement. [B 15](#) These three elements are closely intertwined, and provide Jenoptik not only with strategic objectives but with cultural aims as well. [G 06](#)

Our six corporate values should serve to improve our daily work together, and to help fulfill our aspirations and vision in the long term. The performance and success of each individual is just as important in this regard as is their personal integrity and their openness toward their colleagues. Trust and responsibility form the basis both for interpersonal cooperation and corporate activity. And, not less importantly,

change itself remains a constant on Jenoptik's path forward toward being an excellent, globally active company.

It is our aim for the various Jenoptik companies that make up the Group to grow beyond their different cultural and legal systems into a complete whole through their common values. Unity of this kind leads to strength and sustainable corporate success.

Beginning in 2014, our executives have been working on these values in workshops and via training platforms so that they can then turn them into reality with the rest of the staff in the everyday workplace. This includes anchoring these values firmly in the company and in personal discourse, but also determining consequences for when these values are disregarded.



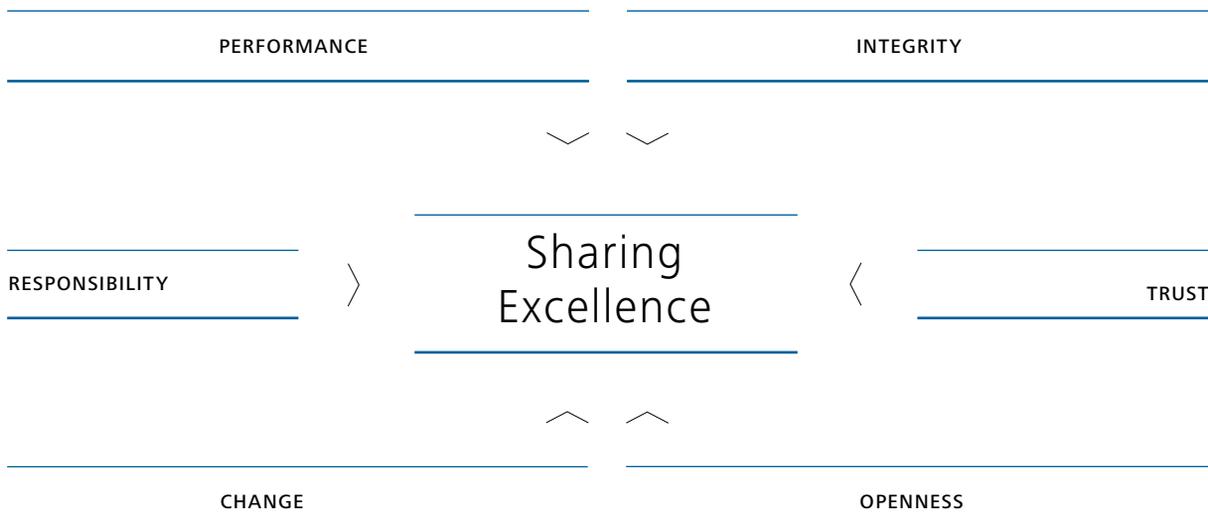
**THE VISION STANDS FOR THE FUTURE ORIENTATION OF JENOPTIK:**

“We are a vital driver of a brighter future. As the leading photonic company, we take ownership for your success.”

This connects with the 2008 Aspiration Statement, which states: “As an attractive, global high-tech partner creating added value for our customers thanks to rapid and consistent actions, our Jenoptik enjoys sustained financial success.”

B 15

G 06



## Risk and compliance management: Acting responsibly and reducing risk

Compliance with regulations and balancing out corporate risks and opportunities – this is all part of Jenoptik's principles when it comes to responsible corporate governance. We therefore focused on Risk & Compliance Management in late 2012 to lay the foundations needed to achieve the growth we seek at the strategic and implementational level.

The Risk & Compliance Management sets standards and defines processes. It is dedicated to the management of risks and opportunities, providing information on risk management requirements, advising on the efficient implementation of required measures, and observing and evaluating the results. The relevant guidelines geared toward the ISO 31000 standard, which are compiled in a risk manual, were revised comprehensively in 2013, reflecting increased internationalization and complexity. Employees were also trained in compliance matters. In this way, possible company deficits can be recognized, minimized, and eliminated. And this has proven successful: There have yet to be any fines due to a lack of compliance with laws, nor have there been any suits due to behavior detrimental to competition or due to the formation of monopolies or cartels. Furthermore, any potential for corruption can be recognized and eliminated in this way.

The anti-corruption guidelines were revised and expanded in 2013. Screenings (third-party due diligence) have been centralized and expanded to guarantee that all our business partners comply with the Jenoptik compliance requirements. Our employees in Asia also have been trained in matters involving fighting corruption. No cases of corruption have been discovered at any business site.

Jenoptik has also introduced an internal monitoring system that includes all regulations and measures, principles and processes that serve our corporate goals. This is meant to ensure that business is conducted securely and efficiently and that financial reporting meets all expectations. As an internationally active Group, we are aware of our responsibility that is connected to German, European, American, and other national regulations. Business for which the mon-



## G 07

## RISK CATEGORIES

## OPERATIONAL RISKS

Supply Chain Management  
 Production & occupational safety and environmental protection,  
 Quality management  
 Marketing and sales  
 Research and development (Intellectual Property)  
 Human resources  
 IT (incl. JOE project)  
 Compliance  
 Legal affairs  
 Real estate  
 Organizational development

## STRATEGIC RISKS

Market development  
 Product development  
 Corporate development

## FINANCIAL MANAGEMENT RISKS

Accounting information  
 Finance management  
 Controlling information  
 Taxes

1 year

2 years

3 years

itoring of exports is of relevance is examined and completed within the framework of applicable regulations or else stopped with an embargo. Our employees are supported to this end by specialized staff.

The goal of risk and opportunity management is to find the optimal balance between growth and profits, on the one hand, and connected risk, on the other. This ultimately increases the value of the Jenoptik Group for its shareholders. It becomes clear in the [classification of risk](#) that topics such as research and development, supplier management, quality management, and market penetration all entail both risk and opportunity for Jenoptik. [G 07](#) They are decisive for the strategic orientation of the Group in terms of sustainable development and are therefore included as important matters into our [materiality matrix](#).

## IMPLEMENTING STANDARDS OF COMPLIANCE

As a means of implementing the same standards across the Group, all employees both within and outside Germany are provided training on anti-corruption regulations, cartel law, and other compliance topics. Employees can also find information and submit inquiries regarding compliance requirements via the intranet help desk.

In addition to the Group regulations, the Jenoptik Code of Conduct is relevant to compliance as well, which sets minimum standards, provides guidance for ethical and legal issues in the everyday workplace, helps to avoid conflicts of interest and to create transparency, and helps to master situations of conflict.

The internal revision ensures compliance with the code of conduct, which is equally valid for everyone in the company – Executive Board, Supervisory Board, and all executives and employees. A copy of the code is given to every newly hired employee. All members of staff can submit complaints or report on situations where there is reason to believe that the code of conduct, laws, or regulations are being violated. Possible transgressions are investigated and their causes are eliminated.



Comprehensive information on risk evaluation can be found in the Annual Report, pages 96f.



Materiality matrix, pages 8f.



## Supplier management: Global and reliable

Jenoptik maintains business relations in a number of countries, with both public and private partners. This entails a need for strict compliance requirements for Jenoptik's supplier management. It is our goal to achieve an overview of and control over the entire path taken by our products and solutions, from suppliers to final consumers. Jenoptik has therefore expanded its strategic procurement process in 2013 to secure and expand a stable basis of qualified suppliers in the intermediate to long term.

Our customers' individual solutions often involve complex modules and systems – and our procurement system needs to be organized in a manner similarly specific to their needs. Our technical standards are set so high that Jenoptik can often only use one single manufacturer for certain components. This has a major impact on our development and production processes when the sole supplier is not able to meet demands or when changed specifications cannot be implemented in time.

Our procurement processes were tailored, in 2009, toward using the procurement power and potential of the Group as a whole to reduce costs and to find additional suitable suppliers in the intermediate term. Suppliers are now systematically evaluated according to their technical competence, the quality of the products and logistics, corporate

potential, and price-performance-ratio, i.e. in accordance with the TQLC(E) principle (technical quality, logistics, costs, and environment), although environmental criteria have yet to be included in the supplier evaluation. The results of the evaluation will form the basis for the supply source determination process.

It is our goal to have a globally uniform procurement process. Partners who have met these criteria over time are given preferred supplier status, to be incorporated into strategies and development projects early on. This provides them with the opportunity to prepare for requirements and deadlines. All Jenoptik facilities are to be able to make use of these preferred suppliers in the future. This status is to be reevaluated in regular intervals.

Our strategic procurement has been building up regional procurement structures together with the Shared Service Center in Asia and the U.S. This makes access to markets easier while allowing for synergy effects to emerge. Materials are examined with regard to their sources, especially in the American and Asia-Pacific regions. Material groups and supplier strategies are presented and approved each month by the purchasing agents. Preferred suppliers are determined and Group-wide framework agreements concluded on this basis. The individual project purchasing agents take the Group's materials strategy into account in their customer projects.

No working practices in the current supply chain have been seen to contradict our supplier code of conduct, and no complaints have been reported nor are any negative effects to be expected in this regard.

## DEALING WITH MINERALS FROM CONFLICT REGIONS

The U.S. Dodd-Frank Act has been legally binding for companies listed on U.S. stock exchanges since July 2010. The law requires the disclosure of the use of particular minerals from the Democratic Republic of Congo and neighboring countries, which are plagued by conflict. In order to be able to maintain supplier status with important customers, Jenoptik strategic procurement has been working together in our project on dealing with minerals from conflict regions with our Risk & Compliance Management department, Jenoptik research and development, and those responsible for quality and procurement in the various divisions.

The goal of the project is to identify, systematically analyze, and document relevant supply chains connected to minerals from conflict regions such as tantalum, tin, gold, and tungsten. Jenoptik does not only purchase individual resources but also finished components, which makes documentation especially complex. We are working on a process that will coordinate these issues at the Group level in order to avoid redundant work and additional costs.

## CODE OF CONDUCT FOR SUPPLIERS

The code of conduct for suppliers, which Jenoptik revised in accordance with international standards such as the **UN Global Compact**, takes into account human rights, working standards, and the fight against corruption. Since early 2014, this is been part of the general procurement conditions, committing suppliers to ensure, among other things, that no child labor has gone into their products and that a careful risk assessment was carried out on minerals from conflict regions in accordance with the **Dodd-Frank Act**.



[www.unglobalcompact.org](http://www.unglobalcompact.org)



[www.cftc.gov](http://www.cftc.gov)

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The contents of this publication address men and women equally.  
For better readability, the masculine forms are used normally.  
In case of differences of opinion the German text shall prevail.

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