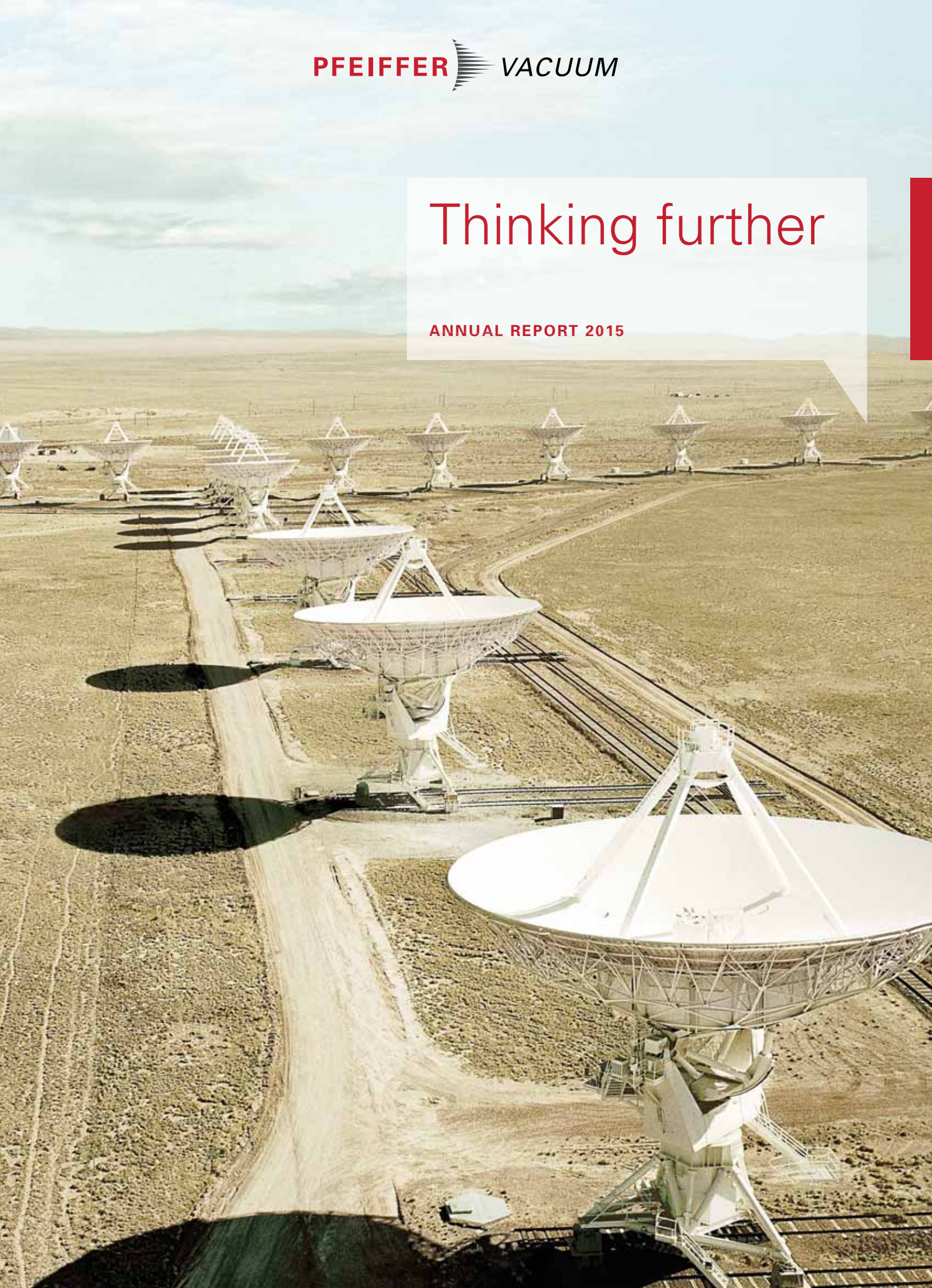
PFEIFFER VACUUM

Thinking further

ANNUAL REPORT 2015



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Radio telescopes are used for astronomical observations and research such as the search for earth-like planets. They work with infrared detectors which are based on semiconductor components. These are produced using vacuum technology. Additionally, radio telescopes require a vacuum insulation to ensure the needed temperature of – 269° C at the detectors for minimizing the image noise. The tightness of the insulation containers are tested with helium leak detectors.

Key Figures

		2015	2014	Change
Sales and profit				
Total sales	K€	451,521	406,642	11.0 %
Germany	K€	75,846	75,743	0.1 %
Other countries	K€	375,675	330,899	13.5 %
Operating profit	K€	60,759	44,744	35.8 %
Net income	K€	41,916	32,419	29.3 %
Return on sales	%	9.3	8.0	1.3 Pp
Operating cash flow	K€	59,653	52,327	14.0 %
Balance sheet				
Total shareholders' equity and liabilities	K€	453,527	429,078	5.7 %
Cash and cash equivalents	K€	115,397	101,468	13.7 %
Shareholders' equity	K€	305,024	279,728	9.0 %
Equity ratio	%	67.3	65.2	2.1 Pp
Return on equity	%	13.7	11.6	2.1 Pp
Capital expenditures	K€	11,655	10,012	16.4 %
Workforce				
Workforce (average)		2,324	2,261	2.8 %
Germany		872	847	3.0 %
Other countries		1,452	1,414	2.7 %
Personnel costs	K€	151,996	134,391	13.1 %
Per employee	K€	65	59	10.2 %
Sales per employee	K€	194	180	7.8 %
Per share				
Earnings	€	4.25	3.29	29.2 %
Dividend	€	3.20 [1]	2.65	20.8 %

[1] Subject to the consent of the Annual General Meeting

All percentages in this Annual Report were derived on the basis of amounts in thousands of euros. Rounding differences might result from their presentation in millions of euros.

Corporate Profile

Pfeiffer Vacuum – a name that stands for innovative solutions, high technology and dependable products, along with first-class service. For more than 125 years we have been setting standards in vacuum technology with these attributes. One very special milestone was the invention of the turbopump at our Company more than 50 years ago. Thanks to our know-how, we continue to be the technology and world market leader in this field. To no small degree, this also manifests itself in our strong profitability. Our extensive line of solutions, products and services ranges from vacuum pumps, measurement and analysis equipment right through to complex vacuum systems. And quality always plays a key role in this connection: Products from Pfeiffer Vacuum are constantly being optimized through close collaboration with customers from a wide variety of industries, through ongoing development work and through the exceptional enthusiasm and commitment of our people. These are virtues that we will continue to embrace!

- **Headquarters:** Asslar, Germany
- **Established:** 1890
- **Purpose of the Company:** To develop, manufacture and market components and systems for vacuum generation, measurement and analysis as well as for leak detection
- **Manufacturing sites:** Asslar, Germany; Göttingen, Germany; Annecy, France; Asan, Republic of Korea; Cluj, Romania
- **Workforce worldwide:** 2,374 people

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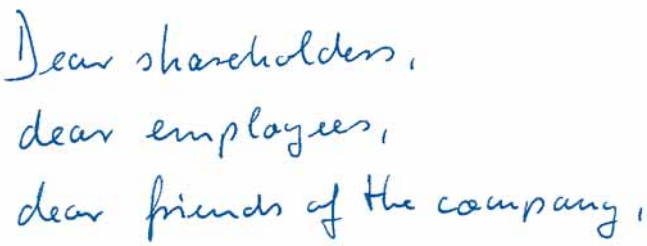
Letter from the Chief Executive Officer



The year 2015, our anniversary year, was successful in every respect for Pfeiffer Vacuum.

A possible indicator of this success was the respectable volume of incoming orders recorded in the fourth quarter of the previous year, and sales then indeed went on to develop very positively. By the end of 2015, with a figure of € 451.5 million, we were able to report that sales were up 11.0 % against 2014. All market segments contributed to this growth. The main growth drivers, however, were the semiconductor and analytics markets.

In the semiconductor market, capital expenditure by our customers rose again following three years of restraint. In analytics, we benefitted from the continued high demand for analyzing equipment, the products into which our customers incorporate our pumps. We have been able to consolidate and sustain our large market share. We are proud of the fact that numerous manufacturers of high-quality analyzers put their trust in the quality and performance capability of our pumps. As a result of this high demand, we produced more turbopumps and rotary vane pumps than ever before. It was an enormous challenge to achieve this with our existing capacities – particularly at the start of the year. In its further course, our production increasingly picked up speed. This high momentum has also continued into the beginning of 2016.

Our earnings – from gross profit and operating profit to net income – followed this positive trend and increased disproportionately.

This was the result of volume effects, the product mix, and initial successes notched up by our cost-saving measures, which are part and parcel of the GAP 2017 program. The aim of our GAP 2017 program (Growth and Profitability 2017) is to get Pfeiffer Vacuum into good shape for the future. No matter how elated we are at the excellent year we had in 2015, it would not do to close our eyes to the fact that the world we live and work in is in a constant state of change. Growing volatility is something we particularly need to take in our stride in view of ever shortening cycles.

We were able to well and truly celebrate the occasion of our anniversary against the backdrop of the company's good performance. A wide variety of activities took place throughout the year under the banner of *"125 years of Pfeiffer Vacuum – Nothing is better"*. This included added trade fair appearances, a customer day, a staff day with several thousand visitors, a charity campaign, and a big party. 125 years were celebrated in style and in spite of this, or perhaps because of this, record production figures were attained. The fact that our share price also reached a record high speaks for itself.

Shareholders appreciate the great stability of our company – even in less positive years, Pfeiffer Vacuum has always been highly profitable – and, not least of all, the high dividend. Our proposal for 2015 will be in keeping with this tradition. At € 3.20 per share, we once again wish to distribute 75 percent of our net income, under the proviso that this proposal is approved at the Annual General Meeting.

By the time of the Annual General Meeting at the end of May, we will be in a position to assess whether 2016 will be equally successful. The staff and management of our company are certainly pulling out all the stops to achieve this.

In addition to our business figures, this Annual Report also gives numerous examples of the trends we anticipate for the future and the role that vacuum technology is expected to play.

I wish you an enjoyable time reading this report.

Manfred Bender
Chairman of the Management Board

Manfred Bender, Chief Executive Officer
Dr. Matthias Wiemer, Member of the Management Board

Vacuum technology is essential to help shape our future. To promote green energy and electromobility, to safeguard our food supply and maintain our life quality at home and at work. To secure a dependable standard of living for tomorrow. Thinking further to the future is what our business is.

Report of the Supervisory Board

Dear Shareholders,

The 2015 fiscal year in the central European and American region was marked by a robust economy, while in other parts of the world, particularly in China, it was plagued by concern over an economic slowdown.

In this situation, Pfeiffer Vacuum was able to get back on track for success after a weak previous year. Fortunately, this positive development could be observed in all market segments.

Irrespective of this, the company's "GAP" (Growth and Profitability) 2017 program of optimization encompassing all areas of the company was systematically advanced. At the same time, the unexpectedly strong volume of new orders for some turbopumps resulted in production bottlenecks which made it necessary to expand capacities.

The overall performance of the Pfeiffer Vacuum Group during the 2015 fiscal year was extremely gratifying. Nevertheless, the Supervisory Board is convinced that systematic implementation of the "GAP" 2017 program of optimization may achieve further improvements.

During the 2015 fiscal year, the Supervisory Board was informed about the current position of the Company and the Corporate Group in nine meetings and discussed this in detail with the Management Board. The Supervisory Board meetings took place in Asslar on February 18, March 16, May 4, May 21, August 3, October 5, October 13, November 2, and November 9. In addition to the information provided at its meetings, all members of the Supervisory Board received detailed monthly and quarterly reports on the Company's position, with the Chairman of the Supervisory Board additionally being provided with the minutes of all Management Board meetings. Aside from the meetings of the Supervisory Board, its Chairman was constantly kept abreast of all major business matters through discussions with the Management Board. All members of the Supervisory Board attended every meeting.

The Supervisory Board has a Management Board Committee, an Administration Committee, a Nomination Committee, and an Audit Committee.

The Management Board Committee met on March 16 and November 1. Meetings of the Audit Committee took place on March 16 and November 2. Moreover, the Audit Committee maintained regular contact with the independent auditor, discussing and deciding the course of the audit, its main focuses as well as particular questions relating to the audit with him.

In addition to the general development of business and the Company's strategic alignment, the Supervisory Board meetings focused on measures to boost the profitability and efficiency of the entire Company within the framework of the GAP 2017 project. Further key areas were the optimization and expansion of capacity in the areas of production, the IT infrastructure of the Pfeiffer Vacuum Group, the new market segment-oriented organizational structure of the Group, and the definition of targets for the proportion of women in the Management Board and Supervisory Board. Finally, other key areas were the potential, but not implemented, acquisition of a company and the voting rights notifications by the Busch Group from Maulburg.

The Supervisory Board fulfilled all the duties vested in it by law, the Articles of Association, and the German Corporate Governance Code ("DCGK") and diligently and fully supervised the management of the Company.

The requirements with respect to risk management mandated under the German Control and Transparency in Business Act ("KonTraG") of 1998 were discussed extensively together with the Management Board. The Supervisory Board repeatedly satisfied itself that sufficient insurance coverage is in force for insurable risks and that operational, financial, and contractual risks are monitored through organizational processes and approval procedures. A detailed reporting system exists for the Company and the Corporate Group and is subject to ongoing review, update, and development. All employees in the operating units are sensitized to potential risks and are instructed to conduct appropriate reporting. Current issues in connection with risk management were explained to the Audit Committee as well as to the entire Supervisory Board.

The Supervisory Board deliberated in detail on the German Corporate Governance Code. The Management and Supervisory Board recognize the German Corporate Governance Code – with one exception – as definitive for the Company and its management. The statement of compliance pursuant to § 161 of the German Stock Corporation Act ("AktG") was submitted by the Management and Supervisory Boards sufficiently in advance of the close of the fiscal year. In connection with good corporate governance, the Supervisory Board also dealt in detail with its own efficiency, coming up with positive overall results.

At the meetings of the Supervisory Board and in individual discussions, the Supervisory and Management Boards deliberated at length regarding the Company's strategic alignment and planning. The Supervisory Board then discussed the budget for the 2016 fiscal year with the Management Board and adopted it.

In accordance with the resolution of the Annual General Meeting on May 21, 2015, Ernst & Young GmbH, Wirtschaftsprüfungsgesellschaft, Eschborn, Germany, was commissioned to audit the Annual Financial Statements of the Company and the Company's Consolidated Financial Statements, with the latter being prepared in accordance with International Financial Reporting Standards ("IFRS"), as well as the financial statements of the Company's subsidiaries where prescribed by law. Pursuant to § 315 a of the German Commercial Code ("HGB"), consolidated financial statements presented in accordance with the rules of the German Commercial Code were not prepared.

The focuses of the audit defined by the Audit Committee with the independent auditor included:

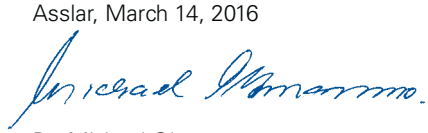
- Certain items of the Annual Financial Statements, in particular
  - recognition and valuation of accounts receivable and inventories
  - the completeness and valuation of provisions (in particular warranty provisions and pensions)
  - revenue recognition; periodic accruals for net sales
  - recoverability of goodwill
  - recoverability of shareholdings in the individual Financial Statements
  - capitalization of development costs in accordance with IAS 38
  - Recognition and valuation of deferred taxes
- Consolidation entries
- Reconciliation to IFRS, the Notes to the Financial Statements and the Management's Discussion & Analysis

The Annual Financial Statements together with the Management's Discussion & Analysis as well as the Consolidated Financial Statements presented in accordance with IFRS together with the Management's Discussion & Analysis, all for the 2015 fiscal year and all of which prepared by the Management Board, were audited by the independent auditor and received his unqualified endorsement.

The Annual Financial Statements, Management's Discussion & Analysis for the Company and the Corporate Group as well as the audit reports from the independent auditor were submitted to all members of the Supervisory Board in a timely fashion. They were discussed in detail at the Audit Committee meeting relating to the financial statements as well as at the Supervisory Board meeting relating to the financial statements on March 14, 2016. The independent auditor attended both meetings, reported on the major findings of his audit — in particular relating to the internal controlling and risk management system – and was available to answer additional questions from the Supervisory Board. On the basis of its own thorough review, the Supervisory Board concurred with the results of the audit conducted by the independent auditor. Given the concluding results of its review, the Supervisory Board raised no objections to the Annual and Consolidated Financial Statements. It has approved the Annual and Consolidated Financial Statements, with the Financial Statements thus being formally adopted. The Supervisory Board discussed in detail with the Management Board its proposal regarding the distribution of a dividend and then concurred with the Management Board's proposal regarding approprivation of the Company's retained earnings.

The Supervisory Board would like to sincerely thank the Management Board, the Employee Council and the entire staff of the Group for their dedication and commitment in the 2015 fiscal year.

Asslar, March 14, 2016



Dr. Michael Oltmanns
Chairman of the Supervisory Board

Helmut Bernhardt
Dr. Wolfgang Lust
Götz Timmerbeil
Dr. Michael Oltmanns (Chairman)
Wilfried Glaum
Manfred Gath
(from left to right)

Thinking further

In 2015, Pfeiffer Vacuum celebrated a major anniversary: The Company was founded 125 years ago. This was an occasion to look back on the impressive history of a company whose products and workforce have made a lasting impression on the vacuum industry as well as on our everyday lives. The anniversary year was not just an occasion to reflect but more particularly to look ahead. After all, the future is what counts. Pfeiffer Vacuum makes it its business to use the expertise it has built up over more than a century to find solutions for future applications – for the next 125 years with all the demands that vacuum technology will be expected to meet.

This is also the theme of this year's Annual Report. It begins with a short outline of some of the milestones in our 125-year corporate history and then addresses the future. Continued success is not the result of just resting on the laurels of past achievements but more importantly comes from focusing on future challenges. The megatrends of the future will call for vacuum technology. Without it, our everyday lives and technological progress would just not work. That's why the Annual Report 2015 stands under the banner of "Thinking further" – looking beyond the here and now at future trends, developments, expectations, and challenges.

Our future needs vacuum: for generating and using green energy, for preventing natural disasters and the effects of climate change, to safeguard our transportation systems and to feed the growing global population. Thinking further – for a secure standard of living for tomorrow.

125 years – and still thinking further

For 125 years now, Pfeiffer Vacuum has been setting standards in vacuum technology. The Company looks back on a success story marked by pioneering spirit and passion – an enterprise which contributed to technological progress in industry and science right from the start.

Against the background of our anniversary year 2015, the following selection of milestones invites you to look back with us on achievements from over a century of corporate history. To find out more detailed information on the history of Pfeiffer Vacuum, please visit our vacuum solutions website at http://www.pfeiffer-vacuum-solutions.com/history.html.

1890

The young precision mechanic Arthur Pfeiffer founds the company in Wetzlar

1910

Development of the rotary mercury pump, the first vacuum pump by Pfeiffer Vacuum

1958

Invention of the turbopump by Pfeiffer Vacuum, one of the most significant milestones in vacuum technology

1996

Pfeiffer Vacuum designs the first rotary vane pump with magnetic coupling

2000

Pfeiffer Vacuum presents the first completely digital line of vacuum gauges on the market, the DigiLine

2008

Pfeiffer Vacuum launches the HiPace 10 – 2,000 turbopump series with increased pumping speed, throughput, compression, and backing pressure

2009

Today´s French subsidiary of Pfeiffer Vacuum launches the ASM 310, the first portable leak detector on the market

The APR 4300 is the first highly-effective contamination management system for the semiconductor industry

With the ASM 340, Pfeiffer Vacuum presents a new generation of leak detectors – powerful, durable, and efficient

2010

Pfeiffer Vacuum acquires the vacuum technology unit "adixen", headquartered in Annecy, France, as well as Trinos Vakuum-Systeme GmbH, Göttingen. With these acquisitions, Pfeiffer Vacuum significantly extends its product range and finally becomes a provider of complete vacuum solutions

2013

2014

The pumps of the OktaLine ATEX range are the world's first ATEX certified Roots pumps with a magnetic coupling. They are ideal for processes in explosive areas or for evacuating explosive gases according to the ATEX directive (94/9/EC)

With the AMI 120, Pfeiffer Vacuum presents a patented system solution for high sensitivity leak tests of pharmaceutical blister packs

The new Duo 3 DC is especially designed for applications with 24 volt direct current. It is the only rotary vane pump that can be used in a temperature range between – 20° C and + 60° C

2015

The HiPace 30 is currently the smallest turbopump on the market with a pumping speed of 30 l/s

125 YEARS NOTHING IS BETTER

We have made it our mission to use the know-how and expertise gained over a period of 125 years to shape our future: Pfeiffer Vacuum solutions are used in manufacturing processes to create products that affect our everyday lives. The big issues of the future in particular – the megatrends – are unthinkable without vacuum technology. The following pages will focus on the role of vacuum in the most diverse areas of life. We are certainly thinking further – to the next 125 years of vacuum technology.

The most valuable and important raw material of our planet: water.

Thanks to vacuum solutions from Pfeiffer Vacuum, the power of water can be converted into electrical energy. This allows for the environmentally friendly generation of energy from renewable sources.

Megatrend energy

The demand for energy in our modern lives is ever increasing. In the last 20 years, the worldwide need for energy has risen about 40 %. Experts estimate that it will increase by 1.4 % every year until 2035. To satisfy this enormous demand in times of climate change, a push towards renewable, environmentally friendly energy production is crucial. In this context, hydroelectric power plants have already established themselves as an important source of renewable energy.

In hydroelectric power plants, the kinetic energy of the water is converted into electrical energy and harnessed. In water-retaining installations such as dams or reservoirs, running water is stored. The kinetic energy of the water is transferred to a turbine. This turbine drives an electric generator, which transforms the mechanical into electrical energy and feeds a connected high-voltage network or transformer station. For testing the tightness of these turbines, leak detectors such as the ASM 340 and the ASM 310 by Pfeiffer Vacuum are used.

Hydroelectric power plants provide around 4.000 tera watt hours (TWh) of electrical energy worldwide (1 TWh = 1 billion KWh). Therewith, 16.5 % of the worldwide need for energy can be satisfied. Furthermore, these plants also provide ¼ of the complete energy production of renewable energies. Especially with regard to the ever increasing significance of alternative, re-usable energy sources, hydroelectric power plants play an important role for future energy supply.

Protection against the forces of nature.

Early warning of earthquakes or tsunamis with highly technological seismometers saves the lives of humans and animals. These systems are equipped with electronic semiconductor elements of an incredibly large amount. These elements could not be produced without vacuum technology.

Megatrend safety

The sheer incomprehensible magnitude of natural disasters shocks us over and over. Earthquakes, tsunamis, and hurricanes endanger the lives of many people and cause chaos and destruction. To keep the damages as limited as possible, fast action is imperative. The sooner natural disasters are detected, the more time remains to evacuate people and save their property. Consequently, highly reliable early warning systems are essential.

These extremely sensitive and technologically demanding systems are used for the early detection of catastrophes. They work with semiconductor components, which are used by the sensitive sensor and measurement technology inside the systems. These sensors are able to detect the tiniest impulses and shocks. Early warning systems for tsunamis, for example, are able to detect seismic waves which spread much faster than the tsunami itself. By registering the seismic and GPS data and by analyzing them in an online computer system, the strength and location of a seaquake can be identified within minutes. This allows for assessing the potential danger of a tsunami and for taking measures to evacuate the affected areas immediately. For the manufacture of these sensors and evaluation systems, vacuum technology is used. Only with vacuum can the components utilized for the early warning systems be manufactured at the needed quality level.

In addition, supercomputers that are used, for example, in climate research and in meteorology for weather forecasts, are based on highly sensitive semiconductor components. They conduct demanding simulations and require a massive amount of data to make reliable weather predictions. The semiconductor components produced under vacuum allow for the manufacture of these extremely powerful computers that provide the most reliable weather forecasts.

Air traffic control systems work on this principle as well. Here, information and weather data are collected and evaluated with the same highly sensitive sensor and measurement technology. Thanks to this technology, weather data and corresponding flight information can be provided to air traffic control and pilots. With these systems, a continuous observation of in-flight weather is guaranteed and early warnings can be issued.

Electric mobility: transport technology of the future.

More than one billion cars worldwide – and increasing. Environmentally friendly transportation becomes ever more important and electric cars are regarded as a promising answer. The portfolio of Pfeiffer Vacuum offers the components needed for their production.

Megatrend electric mobility

Mobile, flexible, independent – the transportation industry has to fulfill the demands of our modern life. Therefore, cars are especially important. In 2015, more than one billion cars were registered worldwide. Regarding the issues of climate change and environmental protection, the automobile industry is thus highly relevant. It offers significant potential for cost saving and optimization in terms of emissions and energy consumption. Consequently, the automotive sector shows great interest in alternative engine technologies such as electronics or hybrid as well as in flywheel mass storage. For all of them, vacuum technology is required.

The power supply of electric vehicles is mainly provided by lithium-ion batteries. They have a high energy density and are perfectly suited for applications with high energy demands such as electric cars. In the production processes of these batteries, vacuum technology is used for drying the coated electrodes as well as for filling the batteries with electrolyte, for example. These processes ensure that the residual moisture in the battery remains at a minimum. To prevent moisture from entering into the battery and avoiding early aging, the batteries and their shafts are also leak tested with helium leak detectors.

Furthermore, a promising, new energy and cost-saving hybrid drive, the flywheel mass storage, has been establishing itself more and more in the last few years. This technology uses the energy generated when braking, converts it, and then transfers it into a flywheel mass storage system. As soon as the vehicle accelerates, the mass storage serves as a generator and supplies an electrical drive train, which supports the conventional drive. The fast rotating flywheel is positioned in vacuum conditions so the losses through air friction are diminished and the heat development is reduced. The demands set on the vacuum pumps used in this application are high: they have to be compact, and should ideally be supplied by the DC power circuit inside the vehicle.

In Formula 1 racing cars, flywheel mass storages have already been used for many years. More and more passenger car manufacturers are implementing this technology as the savings in propellants are extraordinarily high. This technology is thus especially interesting for city traffic with its frequent braking and accelerating cycles.

The sun – a natural power plant without lasting impact on posterity.

Optimal efficiency rate of solar power plants thanks to vacuum coating. Achieved by coating systems that work with Pfeiffer Vacuum solutions.

Megatrend regenerative energy

With the ever increasing demand for energy worldwide and the simultaneously rising environmental awareness, regenerative energies become more and more relevant. Besides the use of wind and water power, solar energy is crucially important here. Solar energy is one of the most gentle and sustainable ways to generate energy and is also suitable for the private customer, who wants to sustainably generate his own electricity.

Without vacuum technology, it would not be possible to produce solar energy with solar cells. More than 95 % of the produced solar cells are made of silicon. The light absorbed by this material emits load carriers, which are tapped via metallic contacts at the backside and transparent contacts at the frontside. The optical characteristics of the solar cell are improved by an anti-reflection coating, which protects the frontside with an anti-scratch layer. Contacts and protection layers are deposited with highly technological coating processes such as CVD (Chemical Vapor Deposition) or PVD (Physical Vapor Deposition) from the solar silicon. Also a direct vapor deposition of the silicon layer to produce flexible or specially designed solar cells is possible. With these layers, the sunlight that meets the solar cell can be converted into electrical energy and either be used directly or be fed into power grids.

The coating processes are carried out in clean room conditions because even the smallest pollutants can impact the layers´ conductivity and make the cells useless. These extremely clean conditions can only be provided by vacuum. Highly technological systems are needed for these coating processes, which deposit the active layers of the solar cell under well-controlled vacuum. Here, dry backing pumps as well as turbopumps are used.

Also in thermic solar systems, vacuum technology is crucial for the coating of absorbers or for thermic insulation. Consequently, vacuum technology provides the basis for generating and using sun energy. Without it, the use of environmentally friendly, sustainable energy supply would not be possible.

Food for an ever-increasing population.

An ever increasing population size means also rising needs for food. High demands are thus not only set on the production but also on the shelf-time and the quality of food. To fulfill these requirements, vacuum technology is used.

Megatrend population growth

Supplying the ever increasing population of the Earth with food and water is one of the greatest challenges of our future. Vacuum is crucial for the efficient production, the quality analysis and assurance as well as for the packaging and for the storage of food. When examining food quality and shelf-time, mass spectrometers based on vacuum technology are used. Their areas of applications are, for example, analyzing residues of pesticides, veterinary drugs or metabolites of molds.

In this context, detecting dioxins is enormously important: dioxins are side products of chemical reactions. They result, for example, from manufacturing processes of chemicals, from steel degassing, from bleaching paper or pulp as well as from combustion processes or volcanic eruptions. They get into our food via the air, the water or the soil and then into our bodies. Dioxins are extremely toxic. Exceeding the allowed maximum quantities can have serious impact on the human body: they damage the neural and immune system, may lead to deformity and even cancer. To make sure that the maximum quantities are not exceeded in eggs, fish, meat, and milk, vacuum technology is needed. It is used in mass spectrometry, for example, as well as for the analysis of food composition.

Furthermore, vacuum technology is also used for the packaging and durability of our food. Food packaging such as foils and bags are coated under vacuum and supplied with so-called permeations barricades. These layers prevent oxygen and moisture from entering the packaging to enhance the shelf-time of the food. By evacuating the food packaging, bacteria and germs are also diminished.

For ensuring the quality and cleanliness of our drinking water, vacuum technology is mandatory as well. Similar to food, water is also analyzed with mass spectrometers.

Consequently, the high standard of our food supply could not be realized without vacuum.

Glass towers provide quality of life.

Pleasant living and working environments thanks to coated glass surfaces with glare, sight, and climate protection. The systems used for coating these glass surfaces need vacuum. The portfolio of Pfeiffer Vacuum offers optimal solutions.

Megatrend quality of life

Glass facades shape the skylines of cities like New York, Dubai or Hong Kong. Also in many private houses, the percentage of glass facades is ever increasing – architects and builders equally regard them as a guarantee for brightness, modernity, and aesthetics. The demands set on the features of the architecture glass are enormous at every level: even with extreme outside temperatures, the temperatures inside the building are supposed to be pleasant. The architecture glass has to regulate temperature influences – no matter if cold or warm. Furthermore, the glass must provide privacy from the outside. For achieving all these features, vacuum technology is needed.

Architecture glass is coated under vacuum with layers of heat and sun protection as well as coatings influencing light permeability to provide privacy. Therefore – just as with solar cells – highly technological coating processes are used. The mostly functional layers are applied under vacuum. This is the only way to make sure that the modern multiple layer systems on architecture glass are applied in the required homogeneity and reproducibility.

Also in building automation as well as in the automatic control of heating systems, vacuum technology plays an important role: for the underlying computer processes, semiconductor elements are needed. They are also manufactured under vacuum.

The indoor and outdoor illumination of modern houses is provided by LED lighting. It, too, is manufactured under vacuum.

A vacuum solution is created by combining our strengths

What is the perfect vacuum solution? Our customers' needs are as diverse as our product portfolio. The complex demands on vacuum significantly differ from case to case. For some clients, it is important to continuously maintain a certain pressure. For others, it is important to evacuate a vacuum chamber particularly quickly.

Up to 5,000 backing pumps and 1,000 turbopumps are required to manufacture some 100,000 wafers per month in a modern semiconductor factory. In contrast, a research laboratory may be sufficiently equipped with a single backing pump. Other applications involve quality assurance in manufacturing processes, where the purpose is often to test the tightness of vessels and components or to analyze the composition of process gases.

With every vacuum solution we design, our objective is to focus on delivering products of the highest quality which meet our customers' specific requirements. From the development stage right through to commissioning, our solutions for evacuating, measuring, and analyzing vacuum stand for technological excellence matched with the highest standards of quality. Consultation and service are not forgotten. Our qualified employees are always on hand to provide reliable support for our customers with science-based expertise and many years of experience.

Further information concerning our vacuum solutions as well as various application examples can be accessed at www.pfeiffer-vacuum-solutions.com

Key factors for compiling a vacuum solution:

- Number and types of gases in one container
- Pressure and flow velocity
- Intended final pressure and base pressure
- Pumping speed and throughput

Application examples for vacuum solutions:

- Analysis technology
- Chemical industry
- Coating of glasses, architectural glass, tools, flat screens, Blu-ray discs
- Drying processes
- Food and beverage industry
- Leak detection systems for the automotive industry
- Manufacturing solar cells
- Paper manufacturing
- Pharmaceutical industry
- Semiconductor production
- Solar thermal plants
- Space simulation
- Steel degassing

Backing pumps

Low and medium vacuum

Rotary vane, diaphragm, Roots, side channel, and piston pumps in addition to pumping stations

Vacuum chambers

Depending on process conditions

Low, medium, and high vacuum chambers in individual shapes and sizes

Measurement and analysis equipment

For all pressure ranges

Leak detectors, gas analyzers, gauges, and mass spectrometers

Turbopumps

High and ultra-high vacuum

Magnetic and hybrid bearing turbopumps and turbo pumping stations

Elements of vacuum solutions

Components

Valves and components

Gaskets, filters, valves, flanges, electrical feedthroughs, manipulators, bellows components, and other accessories

Systems

Individual technologies

Multi-stage vacuum systems, special pumping stations, helium leak detection systems, helium recovery units, and decontamination systems

Consultation

Absolute customer orientation

Needs assessment, design, and calculation of vacuum systems as well as product consultation

Service

Flexible service module

Technical training and seminars, on-site service, comprehensive service contracts, regional service centers, replacement products, and original replacement parts

Product Portfolio

Manufacturing many high-tech products and items for everyday life is only possible in special vacuum chambers under pressure conditions comparable to those in outer space.

We cover the full spectrum with our product range and are therefore able to offer the perfect vacuum solution from one source for each customer and for each application. The Pfeiffer Vacuum product portfolio is divided into the areas of vacuum generation, vacuum measurement and analysis, installation elements, vacuum chambers, and vacuum systems. It includes a complete range of hybrid and magnetically levitated turbopumps, oil-lubricated and dry-compressing low and medium vacuum pumps, leak detectors, mass spectrometers, and gauge heads. We manufacture vacuum chambers in cubical, cylindrical, and bell-shaped designs. Our chamber program covers low, medium, and high vacuum applications.

In order to connect the different vacuum components with each other or to shut them off, we offer a wide range of installation elements such as flanges, fittings, seals, and valves.

In addition, Pfeiffer Vacuum develops and manufactures complete vacuum systems for customer specific processes, such as testing components for the automotive and electronics industries, testing pressure vessels or packaging in the food industry. This range includes systems for leak detection and contamination management as well as multi-stage vacuum systems and systems for testing pharmaceutical blister packs.

Vacuum generation – turbopumps

Hybrid bearing turbopumps

Magnetically levitated turbopumps

Turbo pumping stations

SplitFlow turbopumps

Vacuum generation – backing pumps

Rotary vane pumps

Multi-stage Roots pumps

Dry process pumps

Roots pumping stations

Vacuum measurement and analysis

Leak detectors

Gas analysis equipment

Gauge heads

Mass spectrometers

Installation elements

Feedthroughs

Valves

Components

Manipulators

Vacuum chambers

Cylindrical, horizontal, and vertical

Cubical

Modular

Vacuum systems

Leak detection systems

Contamination management solutions

Multi-stage vacuum systems

Share Performance

Pfeiffer Vacuum shares were listed on the New York Stock Exchange in 1996, initially in the form of an ADR program, and have been traded on the German Stock Exchange in Frankfurt since April 15, 1998. The ADR program was discontinued in 2007 to focus on the German listing.

Pfeiffer Vacuum satisfies the high transparency requirements of the Prime Standard and since its inception has been included in the TecDAX – the index of the 30 most prominent technology companies measured by free-float market capitalization and liquidity – without interruption, traded on the stock exchange in Frankfurt. All trading prices indicated in this Annual Report are Xetra trading prices.

Basic Information about Pfeiffer Vacuum Shares

Deutsche Börse Symbol	PFV
ISIN	DE0006916604
Bloomberg Symbol	PFV.GY
Reuters Symbol	PV.DE
Further indices	HDAX, Mid Cap Market, CDAX, Prime Industrial, Prime All Share, Technology All Share

The stock market in 2015

In 2015, the prominent German stock indices essentially continued the positive development experienced in the past two years, and at least intermittently reached new record highs. The TecDAX was able to show above-average growth as compared to the other German indices and also to reach new heights.

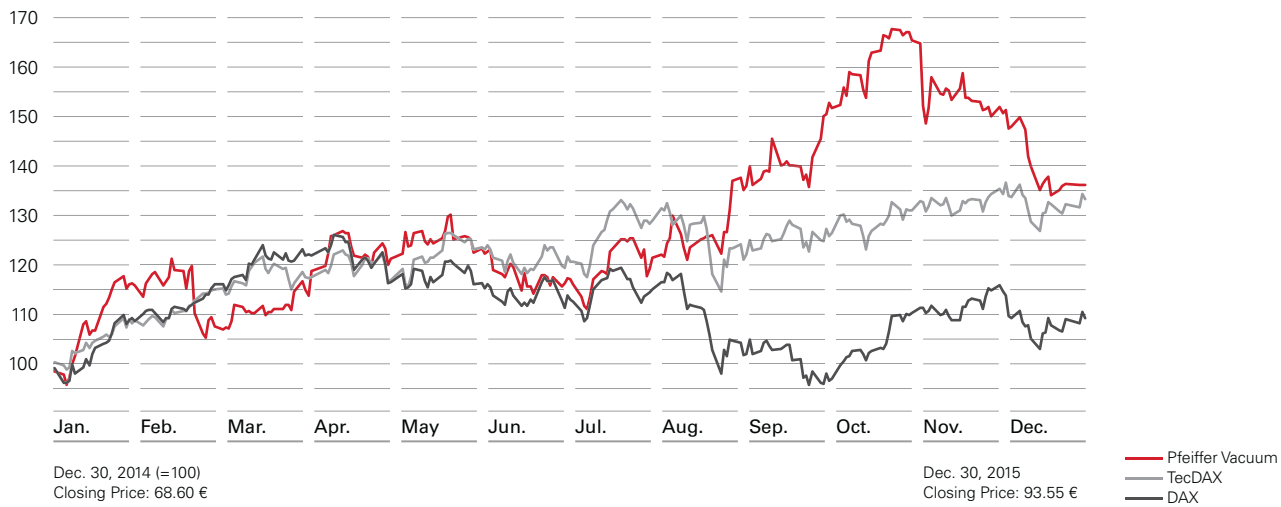
The German stock index (DAX) – the performance index of the 30 largest listed German companies, according to free-float market capitalization and liquidity – marked the high for the year at 12,374.73 points based on the closing prices on Friday, April 10. This market strength in the first half-year was largely due to a European Central Bank (ECB) bond buying program, the sharp fall in the euro exchange rate, and a strong Ifo index performance. After this positive market environment, a lengthy downward trend began, fueled by factors including concerns about Greece remaining in the eurozone, fears of hikes in key lending rates in the USA, as well as disappointing statistics and stock exchange prices in China. Germany's lead index reached its low on September 24 at 9,427.64 points. Low unemployment figures in the USA and the extension of bond purchasing by the European Central Bank (ECB) helped the DAX to achieve a strong fourth quarter and a year-end level of 10,743.01 points. Overall, the DAX rose as a result by 10% in 2015 compared to the 2014 year-end level of 9,805.55 points. The TecDAX made much greater strides again in 2015. Over the course of the year, the index increased disproportionately by 33 % to 1,830.74 points. The TecDAX recorded its annual high of 1,873.66 points based on closing prices on December 2.

Pfeiffer Vacuum share performance in 2015

Over the year, Pfeiffer Vacuum shares rose by 36 % to € 93.55. This performance was better than that of the TecDAX. The share price was 3 percentage points higher than the TecDAX and 26 percentage points higher than the DAX. The share soon bounced back from its annual low of € 65.69 during trading on January 6 and went on to record its annual high of € 115.60 during trading on October 20. In the following weeks, the share price declined and closed at a price of € 93.55 during trading on December 30. In 2015, the trading volume was an average of 47,161 shares per day (2014: 25,045 shares).

Relative Share Price Development of Pfeiffer Vacuum, TecDAX and DAX in 2015

in %

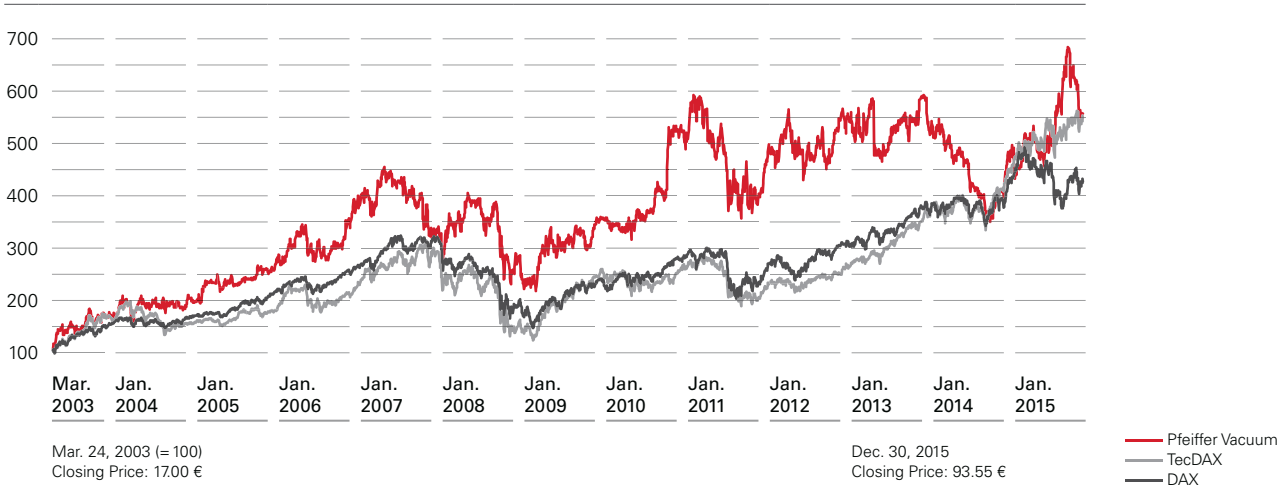


Dec. 30, 2014 (=100)
Closing Price: 68.60 €

Dec. 30, 2015
Closing Price: 93.55 €

Relative Share Price Development of Pfeiffer Vacuum, TecDAX and DAX between 2003 and 2015

in %



Mar. 24, 2003 (=100)
Closing Price: 17.00 €

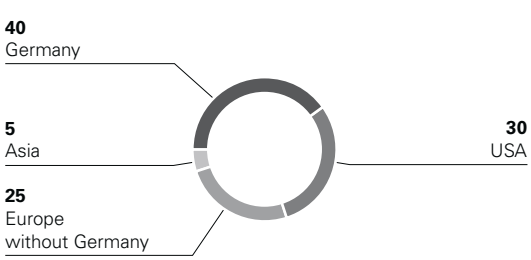
Dec. 30, 2015
Closing Price: 93.55 €

Shareholder structure

In September, Pangea GmbH/Busch Holding GmbH announced that they had acquired 15.0005 % of Pfeiffer Vacuum shares. In October, this stake was increased again to 27.19 % and declared a strategic investment.

The remaining shareholder structure was subject to only the usual minor changes in the past year. Based on voting rights notifications, talks with investors, and internal analyses, we estimate that North American mutual investment and pension funds hold approximately 30 % of outstanding shares. We estimate that European funds, first and foremost in Great Britain, as well as in Switzerland, France, and Scandinavia, account for around 25 % of outstanding shares. Allianz Global Investors, based in Frankfurt, is among the largest shareholders here. Approximately 40 % of the outstanding shares are held by German investment funds. At least 5 % of Pfeiffer Vacuum shares are held by Asian investors. A good 3 %-points of these shares are attributed to our long-term Japanese trading agency Hakuto.

Estimated Regional Distribution of the Pfeiffer Vacuum Shareholder Structure
in %



Overview of Holdings according to Voting Rights Notification

in %	Dec. 31, 2015
Pangea GmbH / Busch-Holding GmbH, Maulburg	27.19
Hakuto, Tokyo	3.48
Allianz Global Investors, Frankfurt	3.08

Earnings per share

Pfeiffer Vacuum's annual earnings of € 41.9 million represented an increase of 29.3 % over the previous year's figure of € 32.4 million. The earnings per share therefore amounted to € 4.25. This also represents an increase of 29.2 % compared to the figure of € 3.29 for the previous year. Based on the year-end closing price of € 93.55 on December 30, 2015, this results in a price/earnings ratio of 22.0 (December 30, 2014: 20.9).

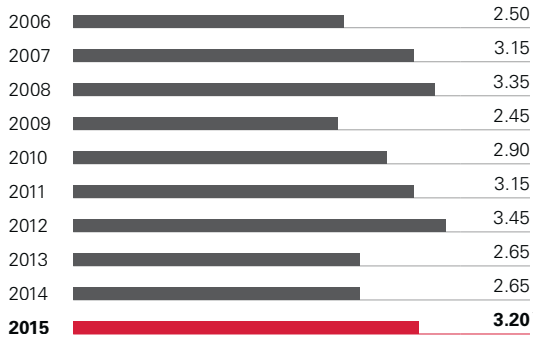
Earnings per Share

		2015
Net income	in K €	41,916
Number of shares (weighted average)	in units	9,867,659
Earnings per share	in €	4.25

Dividend

For over ten years, the Company has been enabling its shareholders to participate in its business success by paying a dividend. The annual dividend development is typically based upon the development of profitability. The Management and Supervisory Boards will propose to the Annual General Meeting on May 24, 2016, that a dividend be distributed for fiscal 2015 in the amount of € 3.20 per share of no-par stock entitled to receive dividends. This represents a total payout ratio of around 75 % of consolidated net income and a total payout amount of € 31.6 million. Subject to the consent of the Annual General Meeting and on the basis of the year-end closing price on December 30, 2015, this represents a dividend yield of 3.4% (previous year: 3.9%).

Dividend development per Share for the last 10 financial Years
in €



[1] Subject to consent of the Annual General Meeting

Investor Relations

Consistently competent, professional, and reliable communication on all financial and corporate matters has always been of utmost importance to us in our dealings with private and institutional investors, and research analysts. This is a contributing factor for ensuring that Pfeiffer Vacuum continues to be regarded as an attractive investment. With this, we would like to strengthen the confidence in our share and obtain a realistic and fair assessment.

At 12 roadshows (previous year: 11) in all major financial centers in both Europe and the United States, the members of the Management Board presented our business model, explained our Company's strategy, and answered questions. Moreover, we showcased our Company at a total of 12 investor conferences (previous year: 12). We also conducted some of the conferences with two people in parallel one-on-one sessions to meet the high interest in personal interaction. Further activities included tradeshow visits and regular interaction with private shareholders. Numerous institutional investors and analysts from around the world frequently visited our Corporate Headquarters. A press and analyst conference on our financial figures, four conference calls relating to announcements of our financial results as well as frequent and regular exchanges with analysts, institutional investors, and private shareholders have characterized the work of investor relations. At least 14 analysts regularly follow our Company. According to Bloomberg, there was 1 "Buy" recommendation, 9 "Hold" and 4 "Sell" recommendations at year-end 2015.

Last year's Annual General Meeting was attended by around 300 shareholders and guests. Shareholder presence was 55 % compared with 54 % the year before. The shareholders adopted all items on the agenda with sweeping majorities.

Prior to that, the shareholders were able to download all relevant documents, as well as the ballot sheet, from the broad information offerings on the Internet at group.pfeiffer-vacuum.com/agm

Pfeiffer Vacuum Share Data

		2015	2014	2013	2012	2011
Share capital	in € millions	25.3	25.3	25.3	25.3	25.3
Number of shares issued	in units	9,867,659	9,867,659	9,867,659	9,867,659	9,867,659
Highest trading price	in €	115.60	102.05	99.55	95.00	104.50
Lowest trading price	in €	65.69	56.21	76.50	66.31	58.53
Trading price at year-end	in €	93.55	68.60	98.93	91.57	67.62
Market capitalization at year-end	in € millions	923	677	976	903	667
Dividend per share	in €	3.20[1]	2.65	2.65	3.45	3.15
Dividend yield	in %	3.4[1]	3.9	2.7	3.8	4.7
Earnings per share	in €	4.25	3.29	3.53	4.64	4.19
Price/earnings ratio		22.0	20.9	28.1	19.7	16.1
Free float	in %	72.81	100.0	100.0	100.0	100.0

[1] Subject to consent of the Annual General Meeting

Financial Reporting

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Management's Discussion and Analysis

2015 Course of Business

Profitability

- Net sales rose noticeably by € 44.9 million or 11.0 % to € 451.5 million
- The gross margin increased substantially due to economies of scale and product mix from 35.3 % to 38.9 %
- Operating profit at € 60.8 million noticeably higher than the figure for the previous year; +35.8 %
- Operating profit margin also rose noticeably from 11.0 % to 13.5 %
- Net income stands at € 41.9 million, earnings per share at € 4.25
- Management Board and Supervisory Board propose a considerably higher dividend payout of € 3.20 per share

With a rise of 11.0 % to € 451.5 million, sales in the past fiscal year stood noticeably over the level of the previous year (€ 406.6 million). Particularly as a result of the growth in demand of our semiconductor customers, of the improved sales momentum in analytics, and of the positive exchange rate effects, the noticeable sales growth that was formulated as a goal in the previous year's outlook was achieved. The substantiation of this forecast at the last shareholders' meeting with an expected sales volume of between € 430 and € 450 million was, in fact, slightly surpassed due to the reasons stated above.

The economies of scale accompanying the rise in sales and also the composition of products sold in 2015 – the product mix – exerted a strong positive influence on the profitability situation at Pfeiffer Vacuum. As a result, the gross profit in the previous year increased significantly from € 143.4 million to € 175.5 million in the past fiscal year. The gross margin increased accordingly from 35.3 % to 38.9 %. With an increase in the selling and administrative expenses by € 13.0 million, the research & development costs by € 1.6 million lay higher than the previous year's level (€ 23.9 million). In view of the slightly lower total of € 1.6 million for other operating income and expenses, the operating profit of € 60.8 million in 2015 was noticeably higher, by some 35.8 %, than the previous year's figure of € 44.7 million. The operating profit margin, the ratio of operating profit to sales, also rose appreciably by 2.5 %-points from 11.0 % to 13.5 %. The noticeable improvement in the margin situation formulated in the outlook in fiscal 2014 was therefore achieved.

Essentially as a result of the drop in interest rates, the financial result improved slightly to € – 0.3 million (previous year: € – 0.5 million). Accordingly, income before income taxes noticeably increased from € 44.3 million to € 60.5 million, which also meant that the previous year's outlook was achieved. Taking a slightly higher tax rate into account (30.7 % after 26.8 % in the previous year) and thereby arriving at tax expenses of € 18.5 million (previous year: € 11.9 million), net income rose significantly to € 41.9 million (previous year: € 32.4 million). This corresponds to an increase of € 9.5 million or 29.3 %. At the same time, earnings per share rose from € 3.29 to € 4.25.

Liquidity and financial position

As a consequence of the increase in the volume of business, the balance sheet total as at December 31, 2015, rose by € 24.4 million to € 453.5 million (previous year: € 429.1 million). The development of liquidity on the asset side of the balance sheet was characterized in particular by the increase in inventories by € 13.5 million to € 77.7 million and the decline in property, plant, and equipment as well as in intangible assets (€ – 7.3 million, mainly due to scheduled depreciation/amortization totaling € 20.7 million). The increase in cash and cash equivalents of € 13.9 million to € 115.4 million also contributed to the rise in the balance sheet total. On the liabilities side of the consolidated balance sheet, besides the increase in equity, it was the increase in provisions and other payables totaling € 8.0 million that had the biggest influence on the development of the balance sheet total. Equity rose significantly by a total of € 25.3 million to € 305.0 million (previous year: € 279.7 million). The previous year's already above-average equity ratio of 65.2 % was successfully raised again to 67.3 % by the end of the past fiscal year. The financial liabilities developed counter to this, declining by

€ 10.5 million to a total of € 20.7 million due to repayments.

As in the previous year, the development of cash and cash equivalents was influenced considerably by the significant rise in the operating cash flow (€ 59.7 million, previous year: € 52.3 million) and the dividend payout of € 26.1 million, as well as the repayment of financial liabilities totaling € 10.5 million. Capital expenditures of € 11.7 million were as scheduled slightly over the level of the previous year and thereby correspond to the forecast formulated in last year's outlook. With cash holdings of € 115.4 million and financial liabilities of € 20.7 million, the Company again recorded no net indebtedness (previous year: € 101.5 million cash and € 31.2 million financial liabilities). With the results achieved, Pfeiffer Vacuum has further improved last year´s already excellent position in comparison to the industry average. The projects initiated in the previous year are therefore starting to bear fruit and foster our belief that we were right to place the focus there. Nevertheless, we continue to strive for further growth in sales while reducing costs at the same time. The improvements we have achieved so far, in conjunction with our globally unique experience in the vacuum industry, allow us to look ahead to the future with even greater confidence.

The Management Board and Supervisory Board propose that shareholders should participate in this very positive development of business in 2015 in the form of a dividend payout of € 3.20 per share.

Economic Conditions 2015

Overall economic development

World economy

Global economic momentum remained weak in 2015. As in the previous years, the expectations relating to economic development were not met. Forecasts were therefore successively adjusted downwards – both in respect of the overall economic picture as well as in key industries. While the international monetary fund (IMF) still projected nominal global growth of 3.8 % in October 2014, actual growth is likely to have reached not more than 3.1 % (previous year: 3.3 %).

In the emerging and developing countries, growth weakened to an anticipated 4.0 % (previous year: 4.4 %). In the industrialized countries, the gross domestic product increased by an average of 1.9%.

Europe

The economy within the eurozone continued to recover in the course of the year 2015. The gross national product rose by 1.5 % (previous year: 0.8 %). The economy benefitted in particular from increased consumer spending. Despite historically low interest rates and a slight improvement in business confidence, investments remained weak. Exports experienced a light tailwind due to the weaker euro exchange rate. The macroeconomic recovery process continued to progress in Ireland, Portugal, Spain, and Italy. The renewed worsening of the crisis in Greece was a dominant theme in 2015. The Greek economy once again slipped into recession.

The German economy got off to a stable start in the year 2015. Economic growth remained steady up to the end of the year, and so the GDP grew by an average of 1.7 % in total (previous year. 1.4 %) over the year. The strongest impetus once again came from domestic spending in 2015. Private households increased spending by 1.9 %, while public spending was 2.1 % up on the previous year. In an historical comparison, capital investment with an increase of 3.6 % showed very little momentum in view of the good economic situation and the low interest rates. The number of persons in employment rose again to a new record high with an annual average of 43 million people (rise of 0.8 %) due to immigration and slightly reduced unemployment.

USA

The U.S. economy continued to develop soundly in 2015. The growth in economic performance of 2.5 % in real terms was again driven largely by consumer spending (previous year: 2.2 %). The unemployment rate fell to 5.0 % (previous year: 5.8 %). Towards the end of the year, the U.S. central bank raised the base interest rate slightly for the first time in seven years.

Asia

Japan's economic performance brought only a 0.6 % increase despite an expansionary fiscal policy (previous year: 0.9 %). Consumer spending was weak and exports placed additional strain on the overall economic situation. The weakening economy in China was repeatedly a cause for concern in 2015. The "new normal" process pursued by the Chinese government, i.e. less export and investment-driven growth and more growth driven by consumer spending and services, was continued and again led to slight macroeconomic growth. According to official figures, the Chinese economy expanded by 6.9 % (previous year: 7.4 %). This is still distinctly higher than the global average, but far below earlier growth rates and is accompanied by a considerably shallower rise in industrial production. A far more dynamic development took place in India (+ 7.3 % compared to 5.8 % in the previous year), which is experiencing an upturn under the new government leader.

Mechanical engineering and the vacuum industry

The year 2015 lagged behind the expectations originally harbored for German mechanical engineering and plant engineering. Instead of the real production growth of 2 % forecast by the Association of German Machinery and Plant Manufacturers' (VDMA) economists in the fall of 2014, production was only able to match its previous year's level, which corresponds to the revised outlook formulated in summer 2015. The nominal production value for 2015 amounts to some € 199 billion.

Exports of machinery and plant reached a volume of € 155 billion. This corresponds to a nominal increase of 2.5 % over the previous year. There was a significant increase in exports to EU partner countries (+ 6 %), to Central and South Asia (+ 10 %) and to North America (+ 12 %). However, exports of machinery to the rest of Europe, to Africa, to East Asia, to Southeast Asia, and to Australia declined.

The number of persons employed in December 2015 amounted to some 1,010,000 people. This corresponds to an increase of 0.2 %, or growth of some 2,000 employees, compared to December 2014.

The level of incoming orders in 2015 exceeded that of the previous year by 1 % (previous year: also 1 %). This growth applies for both domestic and foreign demand. There was a strong differentiation where foreign orders were concerned: Whilst orders from countries outside the eurozone failed to meet their previous year's level by 3 %, orders from the eurozone countries rose by 15 %.

Vacuum technology is used in many industries. Accordingly, the vacuum industry must be considered against the backdrop of global economic development. During the reporting period, this once again resulted in a slight overall downward trend. Significant differences, however, were revealed within the vacuum industry's most important market segments. Thus, the strongly cyclical semiconductor industry recorded an increasing willingness to invest again, following a downward trend in the years 2012 and 2013 and tentative positive indications for the first time in 2014. A similar positive development was recorded in the analytics sector in 2015. The situation in the areas of industry and coating was comparatively positive while the area of research & development remained constant compared to the previous year.

The Pfeiffer Vacuum Group

Operations

Pfeiffer Vacuum is a leading supplier of vacuum solutions. The product portfolio is marketed under the Pfeiffer Vacuum and adixen product brands and includes all components and systems for vacuum generation, measurement, analysis, and leak detection. The products of both brands complement each other perfectly so that we can offer clients customized vacuum solutions that are tailored to their individual requirements.

The name Pfeiffer Vacuum stands globally for innovative and customized vacuum solutions as well as for superior engineering, expert consultancy, and reliable service. With our technologically advanced turbopumps and backing pumps, we set the standards in our industry. This claim to leadership will continue to be our driving force in the future.

The overall corporate structure as at December 31, 2015, was as follows:

Corporate Group Structure as at December 31, 2015

	Home state	Share (in %)	
Pfeiffer Vacuum Technology AG	Germany	100.0	
Pfeiffer Vacuum GmbH	Germany	100.0	
Pfeiffer Vacuum Austria GmbH	Austria	100.0	
Pfeiffer Vacuum (Schweiz) AG	Switzerland	99.4	
Pfeiffer Vacuum (Shanghai) Co., Ltd.	China	100.0	
Pfeiffer Vacuum Ltd.	Great Britain	100.0	
Pfeiffer Vacuum Scandinavia AB	Sweden	100.0	
Pfeiffer Vacuum Inc.	USA	100.0	
Pfeiffer Vacuum Singapore Ltd.	Singapore	100.0	
Pfeiffer Vacuum Taiwan Corporation Ltd.	Taiwan	100.0	
Pfeiffer Vacuum Benelux B.V.	The Netherlands	100.0	
Pfeiffer Vacuum (Xi'an) Co., Ltd.	China	100.0	
Pfeiffer Vacuum Holding B.V.	The Netherlands	100.0	
Pfeiffer Vacuum Italia S. p. A.	Italy	100.0	
Pfeiffer Vacuum (India) Private Ltd.	India	73.0	27.0
Pfeiffer Vacuum Korea Ltd.	Republic of Korea	75.5	24.5
Trinos Vakuum-Systeme GmbH	Germany	100.0	
Pfeiffer Vacuum SAS[1]	France	100.0	
adixen Vacuum Technology (Shanghai) Co., Ltd.	China	100.0	
adixen Manufacturing Romania S. r. l.[2]	Romania	100.0	
adixen Vacuum Technology Korea Co., Ltd.	Republic of Korea	100.0	

[1] Renamed, formerly adixen Vacuum Products SAS
[2] Renamed in January 2016 to Pfeiffer Vacuum Romania S.r.l.

Our products cover a wide range of pumps including pumps for vacuum generation, vacuum chambers, vacuum measurement and analysis equipment, installation components as well as complete vacuum systems. With the help of our products, vacuum pressure conditions similar to those in outer space are created which are essential for research, various industrial processes, and for manufacturing many everyday objects.

We are a mechanical engineering company that designs high-tech products of the highest quality and manufactures them predominantly for export markets. Besides the two main design and production sites in Asslar, Germany, and in Annecy, France, the Pfeiffer Vacuum Group has an extensive network of its own sales and service companies. The Company's primary markets are in Europe, Asia, and the USA.

Corporate Group structure and organization

As of December 31, 2015, a total of 21 companies are part of the Pfeiffer Vacuum Group. In 2015, the subsidiary in Brazil was closed. A Korean production company was merged with adixen Vacuum Technology Korea Co., Ltd.

Pfeiffer Vacuum GmbH, Asslar, and Pfeiffer Vacuum SAS (renamed in the reporting year; formerly adixen Vacuum Products SAS), Annecy, France, play a central role in the Corporate Group.

Pfeiffer Vacuum GmbH organizes the development and production of all Pfeiffer Vacuum products, is the distributor for Germany, and also manages central equity investments for the Corporate Group. As of December 31, 2015, the Company employed a total of 725 employees. Pfeiffer Vacuum SAS is, in a sense, the French equivalent of Pfeiffer Vacuum GmbH. The Company employed 630 employees at year end, is the main development and production facility for adixen products, and is responsible for

sales in France. A total of 1.355 employees works in these two companies. This represents more than half of all workers employed in the entire Corporate Group (2.374 at the end of 2015).

The other Corporate Group companies are legally independent corporations that are primarily active in sales and service tasks. In addition, Trinos Vakuum-Systeme GmbH, adixen Vacuum Technology Korea Co., Ltd., and adixen Manufacturing Romania S. r. l. (renamed in January 2016 to Pfeiffer Vacuum Romania S.r.l.) are entrusted with the manufacture and assembly of various types of products. Essentially all companies are legally organized in a form that can be compared to a German limited liability company (GmbH).

Information pursuant to § 315 Sub-Para. 4 HGB

The subscribed capital of Pfeiffer Vacuum Technology AG as of December 31, 2015, is unchanged at K € 25,261 and consists of a total of 9,867,659 no-par value shares. There are no different classes of shares currently or previously existent, so all shares have the same rights, in particular the same voting and dividend entitlement rights. Accordingly the calculated share of the subscribed capital amounts to € 2.56.

As of December 31, 2015, a total of 27.19 % of the shares of the Company were held by Dr. Karl Busch, Ms. Ayhan Busch, Ms. Ayla Busch, Mr. Sami Busch and Mr. Kaya Busch, all Germany. The shares are held indirectly through Pangea GmbH, Maulburg, Germany, and further independent legal entities belonging to the family-run Busch Group and are deemed to be held by the persons named. To our knowledge, there were no further shareholders with a holding of more than 10 % as of December 31, 2015.

Amendments can be decided at the Annual General Meeting by a simple majority of voters present at the meeting unless the law mandates a larger majority. To our knowledge there are no restrictions with regard to voting rights or with regard to the transfer of shares. Management Board members, according to the Articles of Association and §§ 84, 85 German Stock Corporation Act ("AktG"), are appointed by the Supervisory Board for a maximum term of five years. Reappointments or extensions to the tenure period are permitted for a maximum of five years in each case.

Through a resolution of the Annual General Meeting on May 26, 2011, the Management Board was authorized to increase the subscribed capital by € 12,630,603.24 or 4,933,829 shares, in exchange for cash or contributions in kind (authorized capital). This authorization is valid until May 25, 2016 and requires the consent of the Supervisory Board.

According to the resolution of the Annual General Meeting on May 22, 2014, the Management Board is authorized to issue fractional bonds with option or conversion rights or conversion obligations, profit participation rights or participating bonds (or combinations of these instruments) with an aggregate nominal value of up to € 200,000,000.00 and to grant the holders conversion rights for up to 2,466,914 no-par bearer shares of the Company having a pro-rata amount of up to € 6,315,299.84 of the share capital. This authorization is valid until May 21, 2019, and requires the consent of the Supervisory Board.

At the Annual General Meeting on May 21, 2015, the shareholders authorized the Management Board to buy back treasury shares in accordance with § 71 Sub-Para. 1, No. 8, German Stock Corporation Act ("AktG"). This authorization covers the buyback of a proportionate amount of the Company's share capital of up to € 2,526,120.70 (986,766 shares, representing 10 % of the share capital at the time the resolution was adopted), requires the consent of the Supervisory Board for excecution and is valid through May 20, 2020. The Corporate Group does not own treasury shares as at December 31, 2015 and 2014.

There are no further aspects that would require discussion within the context of § 315, Sub-Para. 4 HGB.

Application Examples

Semiconductor	Industry	Analytics	R&D	Coating
Lithography	General applications	Mass spectrometers	Renewable energies	Solar cell technology
Metrology	Electron beam welding	Electron microscopy	Nanostructures	Display coating (LED, OLED)
CVD (chemical Vapor Deposition)	Freeze drying	Surface analysis	Particle accelerator technology	Data storage
PVD (physical Vapor Deposition)	Vacuum drying	Gas analysis	Space simulation	Glass coating
Etching	Steel degassing	Biotechnology	Plasma technology	Surface protection
Ion implanter	Leak detection	Life science	Particle physics	Tool coating

Markets and market position

Sales by markets

Products from Pfeiffer Vacuum are employed in numerous industry markets. Over 14,000 customers trust in the reliability of our products. Pfeiffer Vacuum divides these customers into the following markets: Semiconductor, Industry, Analytics, Research & Development, and Coating.

As far as the positioning of these markets is concerned, only a limited amount of data is available regarding the size of the entire market and individual market segments. Based on surveys conducted by the German Engineering Federation (VDMA) as well as our own estimates, we expect to take the leading market position in the market segments of Industry, Coating, Analytics, and Research & Development. In the semiconductor market segment, we should rank second.

Without vacuum technology, a number of innovative processes would be inconceivable, such as in nanotechnology, in producing LEDs or in scientific research. Many of these new technologies create innovative products and production processes. Strong advances in people's personal and professional communication patterns, for example, are bringing forth ever more new technologies in the semiconductor industry. The rising demand for energy coupled with the need to conserve resources is leading to a steadily increasing amount of new developments in the field of energy supply. These, and further social and industrial trends, are typically producing additional marketing opportunities for Pfeiffer Vacuum. Our strengths include the ability to serve all markets, which makes us largely independent of developments in individual market segments.

Semiconductor

Our vacuum pumps are required in the semiconductor industry for the production of microprocessors and handling systems. Customers in this industry predominantly require a large number of medium-sized and large backing pumps, but also turbopumps, as well as measurement equipment. Chip manufacturers can significantly increase their yield with our decontamination systems. The semiconductor industry itself particularly benefits from the changes in communication technology. New fields of application for vacuum arise, for example, in nanotechnology. Our customers are increasingly located in Asia, and also in the United States, as well as – to a lesser extent – in Europe.

Industry

In this segment, we combine a heterogeneous category of industrial customers who require our vacuum solutions for specific production steps. Industrial trends such as quality improvement, energy supply, and conservation, mobility or environmental protection are currently leading to new fields of application. Examples include applications such as metallurgy, tube production, as well as air conditioning and refrigeration technology. We provide the automotive supplier industry with leak detection systems for fully automated quality assurance in the production of fuel tanks, aluminum rims, airbag cartridges or air conditioning lines, for example. A further field of application is solar thermal energy. The absorber tubes needed for this technology are evacuated by using our pumping stations as well as continuously being tested for leaks with our leak detectors. Our customers in the industrial segment primarily come from Europe, as well as from the United States, and increasingly from Asia.

Analytics

Our largest customers in this market are so-called OEM (Original Equipment Manufacturer) customers, i.e. manufacturers of industrial systems or analytical instruments. Complex analytical devices such as scanning electron microscopes are primarily employed for industrial quality control. This industry is characterized in particular by megatrends such as Life Science, Biotechnology, and Security. Ever smaller and lighter portable analyzers are required in environmental technology, in security technology or for doping analyses. The analytical industry therefore typically requires small and medium-sized turbopumps along with backing pumps and measurement equipment. Our major customers in this market are located in the United States, Japan, the United Kingdom, and Germany.

Research & Development

Collaboration with research facilities enjoys a long tradition at Pfeiffer Vacuum. Whether in physics or chemistry laboratories at universities, prominent research institutions like the Fraunhofer and Max Planck Institutes or in large multinational research facilities – all of them rely upon the quality and dependability of our mass spectrometers, leak detection systems, and vacuum solutions. Working in close cooperation with research facilities in Europe, the United States, and Asia, new applications arise continuously in the fields of energy supply or healthcare technology.

Coating

Without vacuum, many things that are used in daily life could not be produced in the desired quality. The anti-reflective coatings on eyeglass lenses, the coatings within flat screen manufacturing, the coatings on Blu-ray discs or on high-quality bathroom faucets and fittings as well as the coatings on solar cells or architectural glazing are produced in vacuum chambers, for example. High-quality tools are coated and fortified under vacuum to make them even more durable. One significant megatrend in this segment is the orientation towards regenerative energies, such as solar energy, for example. What is predominantly required in the coating industry are medium-size and large backing pumps and turbopumps as well as measurement equipment and complete vacuum systems. Our customers are located in all industrial nations.

Strategy and control

Strategy

Pfeiffer Vacuum develops, produces, and distributes vacuum solutions that are highly challenging in terms of technology, quality, reliability, service life, and performance; all are attributes that our customers associate with products from Pfeiffer Vacuum. The company's long-term strategic objectives include selling its products on the basis of quality, not price. The sales strategy also included stressing the long-term total cost of ownership advantages over the life of a Pfeiffer Vacuum product ("Total Cost of Ownership"). These stem, among other things, from lower maintenance and repair costs, longer service intervals, and lower energy consumption in comparison with rival products.

A further strategic objective is to always be close to the customer. We live up to this objective through our worldwide presence, and we assure that everything we do always focuses squarely on our customers.

Corporate Management

The Management Board of Pfeiffer Vacuum Technology AG assumes responsibility for the strategic leadership of the Corporate Group. In 2015, a business unit structure was put in place below the Management Board level with the goal of meeting the specific requirements of customers in the Semiconductor and Coating market segments, on the one hand, and those of the Analytics, Industry, and Research & Development market segments on the other. The "Semiconductor & Coating" and "Analytics & Industry" (including Research & Development) business units formed in this way are managed by a business unit head who reports directly to the Management Board and is responsible for the business unit concerned in all operative and also strategic matters.

The local sales and service companies were allocated to the business units according to the focus of their operations and the market potential. They are directly subordinated to this business unit, and their comprehensive regional responsibility for all market segments continues to apply unchanged.

All subsidiaries in the Group therefore have self-directed managements and basically make their own decisions within central guidelines on how to attain the targets that have been defined by Corporate Headquarters and the business unit (sales, EBIT margin, and earnings before taxes).The supervisory bodies of the subsidiaries, whose composition also includes members of the Management Board of Pfeiffer Vacuum Technology AG, the heads of the business units as well as the Headquarters in Asslar, Germany, must be involved in the case of major decisions.

Steering instruments

All subsidiaries are steered by Corporate Headquarters in Asslar through the stipulation of annual sales and profitability targets ("Management by Objectives"). In alignment with the overall group targets, these sales and profitability objectives will be determined also by the business units.

The achievement of these targets is monitored by means of detailed target/actual comparisons and variance analyses within the framework of monthly reporting, which was adjusted effective January 1, 2016, to reflect the requirements of the new business unit structure. This ensures that undesirable trends will continue to be identified and corrected early on. Monthly conference calls with the management of the subsidiaries additionally ensure that all business development questions are discussed. In addition, face-to-face meetings with staff at the local site are held by Group and business unit management.

For countries in which Pfeiffer Vacuum is not represented directly through a subsidiary, the sales targets are agreed with the local distribution partner. Here, too, the achievement of sales targets is measured by means of target/actual comparisons. A further steering instrument consists of the variable remuneration of the local management of the non-German subsidiaries and of the sales staff. This sensitizes employees to cost structures, and so to the Company's long-term success, even if they do not work in areas of the Company which have a direct influence on sales.

Profitability, Financial Position, and Liquidity

Development of sales in 2015

After € 406.6 million in 2014, we recorded a positive increase in sales to € 451.5 million in the past fiscal year. This corresponds to an increase of € 44.9 million or 11.0 %. This satisfactory development is broadly based but, as was to be expected, is particularly pronounced in the semiconductor and analytics industries in Asia and America.

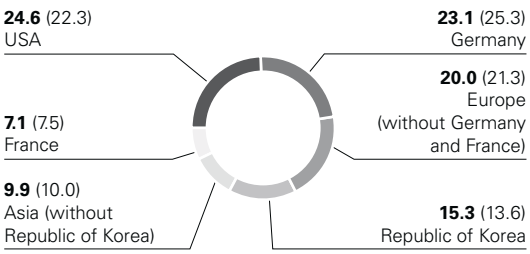
Presented below are net sales by segment, region, product, and market for 2015. It should be noted with respect to net sales by segment that the sales shown in this presentation are allocated on the basis of the registered office of the company that invoiced the sales. Therefore, the segment-based presentation shows net sales by subsidiary. On the other hand, net sales by region include all sales in a specific region, regardless of which subsidiary within the Pfeiffer Vacuum Group invoiced the sales. Net sales by segment and net sales by region will differ from each other to a greater or lesser extent. Net sales in the Asia segment, for example, differ significantly from those recorded for the Asia region, since the Asia segment includes only the direct sales of our Asian subsidiaries. In contrast, the Asia region additionally contains sales that the manufacturing companies generate directly with Asian customers – for example, with customers in Japan or India. In the case of net sales by segment, the sales generated by the German company through direct deliveries to agents and/or customers outside Germany were significantly higher than German sales by regions. The sales in the USA region and the USA segment, on the other hand, are nearly identical because virtually all sales in this region are handled by our American subsidiary.

Sales by segment

USA

Following an already positive development in the USA in 2014, we again recorded disproportionate growth in 2015. With a gratifying increase of € 20.2 million, the greatest absolute increase, in fact, occurred here. The percentage increase was also a very high 22.3 %. All market segments contributed to this development, but the increase in sales with our analytics customers had the greatest impact on business performance. This was accompanied by a substantial rise in sales with turbopumps. Very positive sales increases were also achieved with customers from industry. Overall, the increase in sales in the USA in 2015 was positively impacted by the development of the USD exchange rate.

Sales by Segment
in %, (previous year)



With a 24.6 % share of sales, nearly a quarter of sales in 2015 was invoiced by our American sales subsidiaries (previous year: 22.3 %). Due to this positive development, the U.S. segment now ranks first place ahead of Germany.

Germany

With an increase of € 1.4 million or 1.4 %, sales in Germany were virtually at the previous year's level. With regard to the development of market segments, slight increases in the Industry segment were partly offset by declining tendencies in relation to our customers in the semiconductor industry.

Europe (without Germany and France)

Based on an already positive level in fiscal 2014, the last fiscal year again recorded an upturn here. At € 3.6 million or 4.1 %, a disproportionate increase was achieved overall in comparison with the general economic development in this economic area. Of positive note, our sales subsidiary in Great Britain achieved a sales increase of € 2.1 million.

Republic of Korea

The substantially improved momentum of demand in the semiconductor industry in fiscal 2015 particularly impacted the development of sales of the Republic of Korea segment, since the companies managed in this segment have a special focus on precisely this market. At 25.2 %, this segment showed the greatest relative increase. Currency effects positively influenced the development in 2015.

Asia (without the Republic of Korea)

After a decline in momentum was perceived in the sales subsidiaries in the rest of Asia in 2014, a positive overall development was recorded here in 2015. This development was fueled by the local business units in Singapore and Taiwan who together attained an increase in sales of € 4.3 million. The stronger demand was predominately attributable to the analytics and semiconductor market segments.

Sales by Segment

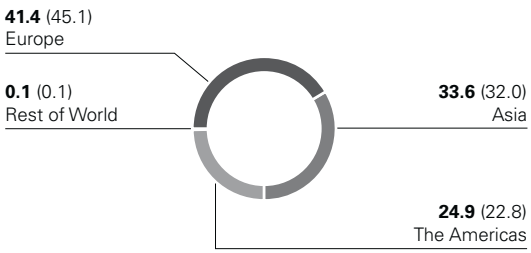
	2015	2014	Change	
	in € millions	in € millions	in € millions	in %
USA	110.9	90.7	20.2	22.3
Germany	104.4	103.0	1.4	1.4
Europe (without Germany and France)	90.2	86.6	3.6	4.1
Republic of Korea	69.1	55.2	13.9	25.2
Asia (without Republic of Korea)	44.6	40.5	4.1	10.2
France	32.3	30.6	1.7	5.3
Total	**451.5**	406.6	44.9	11.0

France
Sales in France in 2015 were € 1.7 million over the previous year's figure. Whereas the sales volume in France itself was largely constant, the direct business with foreign customers developed more positively. In France, the sustained weak demand resulting from the ongoing difficult overall economic situation of the second largest economy in the eurozone remains the decisive factor.

Sales by region

Europe
Despite the restrained development in Europe already referred to in the analysis of sales by segment, with € 187.0 million, this region remains the area with the highest sales. The increase totaling € 3.8 million was the result of a gratifying development in Great Britain and the Netherlands, while in the remaining countries in Europe, almost all were able to reach the level of sales attained in the previous year.

Sales by Region
in %, (previous year)



Asia
The volatility in demand from the semiconductor industry particularly impacted the development of sales in the Asian region. Following a substantial decline of € 13.6 million in the previous year, this region showed a significant growth in demand of € 21.2 million or 16.3 %. This positive development was not restricted to individual countries within the region but was recorded virtually everywhere with the exception of Japan. This development was driven predominantly by the Semiconductor and Analytics market segment.

The Americas
The development of sales in the Americas continues to be affected essentially by the development in the USA. Since there is virtually no direct business by the German or French units in this region, this development largely conforms to the previously explained course of sales according to segments. Along with the positive sales development in North and South America, the share of total sales improved significantly from 22.8 % in the previous year to 24.9 % in 2015.

Sales by product

Turbopumps
With an increase of € 20.1 million or 16.1 %, sales of turbopumps in fiscal 2015 recorded the best development, both in absolute and relative terms. This encouraging result came from an overall extremely positive development in the individual target markets, with the Analytics and Industry market segments deserving positive mention in this regard. The share of total revenue was 32.0 % (previous year: 30.7 %), which means the turbopumps again represented the strongest product group in 2015.

Backing pumps
In addition to turbopumps, sales from backing pumps also showed a very encouraging development. With an increase of € 13.0 million or 14.5 %, this product group moved up into second place again ahead of instruments and components. In regional terms, the increase resulted particularly from the USA and Asia, while Europe recorded a largely constant development.

Sales by Region

	2015	2014	Change	
	in € millions	in € millions	in € millions	in %
Europe	187.0	183.2	3.8	2.1
Asia	151.5	130.3	21.2	16.3
The Americas	112.4	92.6	19.8	21.3
Rest of World	0.6	0.5	0.1	18.5
Total	**451.5**	406.6	44.9	11.0

Sales by Product

	2015	2014	Change	
	in € millions	in € millions	in € millions	in %
Turbopumps	144.8	124.7	20.1	16.1
Backing pumps	102.4	89.4	13.0	14.5
Instruments and components	98.8	96.9	1.9	1.9
Service	96.7	85.0	11.7	13.8
Systems	8.8	10.6	– 1.8	– 17.0
Total	**451.5**	406.6	44.9	11.0

Instruments and components

With an increase of 1.9 %, sales of instruments and components only slightly exceeded the level of the previous year. Representing a share of 21.9 % of total sales, however, this product group remains an important pillar of Pfeiffer Vacuum and contributes substantially to the very well-balanced distribution of sales according to product groups.

Service

The installed basis of products from the Pfeiffer Vacuum Group creates a sound foundation for our service activities. The partly aggressive and corrosive process conditions under which the pumps are used, particularly in the semiconductor industry, make regular maintenance an absolute necessity. Similarly to the previous year, the very good development in 2015, with an increase of 13.8 %, also resulted primarily from increased sales to our semiconductor customers.

Systems

Sales in this project-driven sector fell slightly from € 10.6 million in the previous year to € 8.8 million in the past fiscal year.

Sales by Product

in %, (previous year)

Sales by market

Semiconductor

The very positive development in the semiconductor industry in the USA from 2014 continued into 2015, although its momentum was somewhat dampened. The predominant impetus in this market in 2015, however, came from Asia, particularly from the Republic of Korea. Overall, we recorded a significant increase in sales of € 21.5 million to € 139.9 million (previous year: € 118.4 million).

Industry

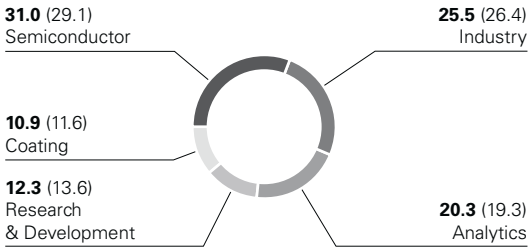
Our most heterogeneous market segment includes a broad range of customers from the automotive and the metalworking up to the food industry. It recorded a very positive increase in sales of 7.3 %

Sales by Market

	2015	2014	Change	
	in € millions	in € millions	in € millions	in %
Semiconductor	139.9	118.4	21.5	18.1
Industry	115.0	107.2	7.8	7.3
Analytics	91.7	78.7	13.0	16.6
Research & Development	55.6	55.2	0.4	0.6
Coating	49.3	47.1	2.2	4.7
Total	**451.5**	406.6	44.9	11.0

in fiscal 2015. In view of the heterogeneous nature of this market segment, positive and negative trends in individual areas are balanced out extremely well. The positive trend resulted particularly from the USA and Europe, where our largest customers in this market segment reside.

Sales by Market
in %, (previous year)



Analytics
With an increase of € 13.0 million, this market segment recorded a very encouraging trend. Our customers in this sector use the whole range of products, even if the focus is on turbopumps. Accordingly, the development of sales with turbopumps was impacted substantially by this market segment.

Research & Development
At € 55.6 million, sales in the Research & Development market segment – our most stable segment – were virtually on a par with the previous year's level (€ 55.2 million). Due to the high number of state-owned and partly state-owned research institutes, this segment developed largely independently of economic trends. Typical as well is the development within the fiscal year: slightly more restrained summer months and a much stronger fourth quarter, which was also observed in 2015.

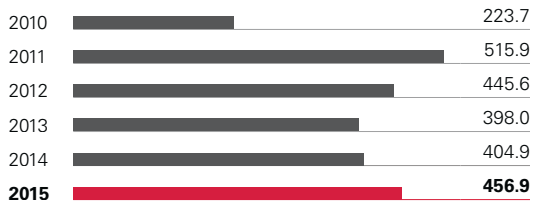
Coating
The Coating market segment again recorded a slight increase in 2015. The solar branch continues to have great potential for development in this segment, and we felt initial impulses from this industry, particularly at the beginning of the past fiscal year. However, the further course of the year showed a trend to more restraint here.

Order intake and order backlog

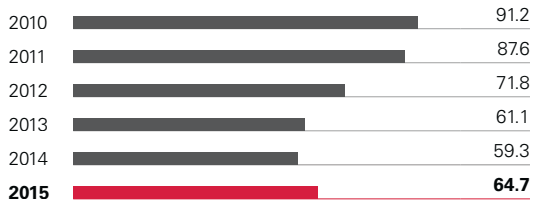
After an order intake of € 404.9 million in 2014, this figure amounted to € 456.9 million in 2015, which represents a considerable increase of € 52.0 million or 12.8 %. This pleasing development was recorded in all product areas. Of particularly positive note was the development of order intake in the first six months of the year, while the momentum slowed down somewhat in the second half of 2015. The volume of new orders in the current year is looking better, according to present information. After 1.00 in the previous year, the book-to-bill ratio, the ratio between order intake and sales, stood at 1.01 in 2015.

The order backlog as of December 31, 2015, totaled € 64.7 million, and was 9.1 % over the previous year's figure of € 59.3 million. The visibility of orders on the basis of the average sales in 2015 remains unchanged at about two months.

Development of Order Intake
in € millions



Development of Order Backlog
in € millions



Earnings development

Gross profit and Cost of sales

The cost of sales in 2015 increased to € 276.0 million – predominantly due to the growth in sales. After € 263.3 million in fiscal 2014, this represents an increase of € 12.7 million or 4.8 %. By means of economies of scale and the parallel improvement of the product mix in favor of higher-margin products, the development of the cost of sales was notably and disproportionately low compared to the development of sales.

Accordingly, we were able to achieve a significant improvement in the gross profit and the gross margin, the ratio of gross profit to sales.

After € 143.4 million in the previous year, the gross profit in the past fiscal year was a superb € 175.5 million, and the gross margin rose substantially from 35.3 % in the previous year to currently 38.9 %. This means that the gross profit increased by an impressive € 32.1 million and the gross margin by 3.6 % points. In addition to the positive effects referred to previously from the product mix and the economies of scale, the euro, which remained weak during the course of the year, impacted the development of the gross profit and the gross margin favorably.

Gross Profit
in € millions

Gross Margin
in %

Selling and administrative expenses

After € 82.6 million in fiscal 2014, the total figure for selling and administrative expenses amounted to € 95.7 million in 2015. This marked a noticeable increase of € 13.1 million. Viewed in isolation, the selling and marketing costs rose by € 7.1 million to 59.9 million (previous year: € 52.8 million), while the general and administrative expenses increased by € 6.0 million to € 35.8 million (previous year: € 29.8 million). Despite the higher sales basis, the ratio of selling and administrative expenses to sales increased from 20.3% in the previous year to 21.2 % in the fiscal year under review. In addition to adverse exchange rate impacts, the reasons for the substantial increase were to be found particularly in one-time effects in connection with the 125-year anniversary of the Company and also in a strategic consulting project in the second half of the year.

Research and development expenses

We are continuously committed to advancing the development of vacuum technology through our own research projects as well as by rigorously fostering teaching and science. We view research and development expenses as an indispensable investment in the future. Accordingly, a high share of sales was expended for research and development activities again in 2015. After 5.9 % in the previous year, this percentage share still amounted to 5.6 % despite the good development of sales. In absolute terms, the research and development expenses totaling € 25.5 million in the past fiscal year were € 1.6 million over the previous year's figure of € 23.9 million. Adjusted for funds obtained through grants for research and development activities with an amount of € 4.4 million (previous year: € 4.0 million), the net research and development expenses totaled € 21.1 million (previous year: € 19.9 million).

Other operating income and other operating expenses

Other operating income and other operating expenses principally include the Group's foreign exchange gains and losses. The other operating income of € 13.3 million (previous year: € 10.2 million) in addition includes subsidies for expenses in an amount of € 4.4 million (previous year: € 4.0 million). In 2015, too, the other operating expenses of € 6.9 million (previous year: € 2.2 million) included virtually only the foreign exchange losses recorded. The net foreign exchange results in 2015 at € + 2.0 million were slightly below the previous year's figure of € +3.9 million.

Operating profit

The gross profit, which had grown strongly by € 32.1 million through positive economies of scale and a favorable product mix, was partially diluted by € 14.7 million due to the increase in the selling and administrative expenses and the research and development costs. Added to this is the slightly lower balance from other operating income and other operating expenses (€ – 1.6 million). Nevertheless, we are very pleased with the development of business in 2015, since the operating profit at € 60.8 million is an impressive € 16.1 million or 35.8 % over the previous year's figure of € 44.7 million. This corresponds to an equally noticeable improvement in the operating profit margin, or EBIT margin, of 13.5 % (previous year: 11.0 %). The amount of depreciation and amortization (for tangible and intangible assets) included in this figure was recorded at € 20.7 million

(previous year: € 20.5 million) for 2015, which results in operating profit before depreciation and amortization (earnings before interest, taxes, depreciation, and amortization, EBITDA) of € 81.5 million. After € 65.2 million in 2014, this also means a significant increase of € 16.3 million or 24.8%.

Operating Profit
in € millions

EBIT Margin
in %

Operating Profit per Employee
in K€

Financial income

As a result of the continued decline in interest rates and the redemption of financial liabilities undertaken again in 2015, both financial income and financial expenses decreased once again in the past fiscal year. The result was a slight improvement in the financial income from € – 0.5 million in the previous year to € – 0.3 million in 2015.

Income taxes

As a consequence of the higher earnings before taxes, the tax expenses also rose in 2015 to € 18.5 million. After € 11.9 million in the previous year, this means an increase of € 6.6 million. The relative burden in the form of the tax ratio also increased. After a very low 26.8 % in the previous year, this ratio stood at 30.7 % in 2015. This increase is caused particularly by payments of tax arrears for previous years.

Net income

Despite higher burdens from the increased tax rate for the Group, the net income in fiscal 2015 showed a very pleasing increase to € 41.9 million. After € 32.4 million in the previous year, this corresponds to a growth of € 9.5 million or 29.3 %.

The net return on sales, i.e. the ratio of net income to sales, also rose significantly from 8.0 % in the previous year to 9.3 %.

Income before Taxes
in € millions

Net Income
in € millions

Earnings per share

The earnings per share at € 4.25 were also substantially above the recorded figure of the previous year (€ 3.29). The relative change of € 0.96 also corresponded to the change in net income, since as in the year before, there continued to be no dilutive effects in fiscal 2015.

Earnings per Share
in €

Financial position

After € 429.1 million as of December 31, 2014, the balance sheet total of the Pfeiffer Vacuum Group as of December 31, 2015, rose to € 453.5 million. This increase of € 24.4 million on the asset side of the balance sheet is substantially due to the rise in inventories (€ + 13.5 million) and the renewed increase in cash and cash equivalents. The largest balance sheet item, taken together, of cash and cash equivalents increased from € 101.5 million at the end of fiscal 2014 to € 115.4 million on December 31, 2015, and so rose by € 13.9 million. A detailed analysis of the development of cash and cash equivalents is given in the section "Liquidity and cash flow". The fixed assets in particular developed contrary to the rise in inventories and cash and cash equivalents. As in the previous years, the decrease in intangible assets here was again almost exclusively the result of scheduled amortization relating to items recorded within the framework of the adixen

Change in Net Working Capital

	Dec. 31, 2015	Dec. 31, 2014	Change
	in € millions	in € millions	in € millions
Inventories	77.7	64.2	13.5
Trade accounts receivable	58.6	53.6	5.0
Trade accounts payable	– 21.2	– 19.4	– 1.8
Net working capital	**115.1**	98.4	16.7

acquisition. Tangible fixed assets decreased by a net € 2.8 million. This development was primarily influenced by capital expenditures of € 10.3 million and scheduled depreciation of € 13.5 million (previous year: € 9.0 million or € 13.5 million). With regard to the development of the items on the liabilities side of the balance sheet, the redemption-based decrease in financial liabilities by € 10.5 million is particularly noteworthy. In contrast, the provisions and other liabilities recorded increases (€ +8.0 million in total).

Equity rose significantly by € 25.3 million from € 279.7 million to € 305.0 million. This noticeable change is primarily the result of net income after taxes earned in the year under review (€ 41.9 million) and the dividend payment to Pfeiffer Vacuum Technology AG shareholders (€ 26.1 million) as well as the net € 9.5 million increase in other equity components. The equity ratio increased from 65.2 % to 67.3 %. Pfeiffer Vacuum has improved the already above-average capital base compared to the volume of business, and with cash holding of € 115.4 million and financial liabilities totaling € 20.7 million again records no net debt position as at December 31, 2015. Due to the increase in the volume of business, net working capital also rose. The increase amounted to € 16.7 million.

Liquidity and cash flow

After € 52.3 million in fiscal 2014, the operating cash flow was € 59.7 million in 2015. This represents a pleasing increase of € 7.4 million. Contrary to the higher earnings before taxes (€ + 16.2 million), it was mainly the increase in inventories amounting to € 15.5 million that negatively impacted on the operating cash flow. In the previous year, positive effects of € 3.8 million were recorded here. A positive effect of payables and customer deposits amounting to € 6.6 million received was recorded in 2015, while in the previous year, burdens of € 7.4 million were reported. The cash flow per share of € 5.30 in 2014 increased markedly to € 6.05 in fiscal 2015. The again increased level of this figure shows the unchanged capacity of the Pfeiffer Vacuum Group to generate disproportionally high cash inflows within the framework of operational activities.

The net cash outflow from investing activities stood virtually unchanged against the previous year. Capital expenditures of € 11.7 million (previous year: € 10.0 million) were to be seen against proceeds from the sale of property, plant and equipment amounting to € 0.7 million (previous year: € 0.3 million), with the result that after € 9.7 million in 2014, the overall cash outflow totaled € 11.0 million. Further information on the composition of capital expenditure can be found in the section "Capital expenditures and financing".

Cash Flow Margin
in %

Cash Flow per Share
in €

As in the previous years, the cash flow from financing activities in 2015 was characterized solely by the dividend payment to Pfeiffer Vacuum Technology AG shareholders (€ 26.1 million) and the repayment of financial debt (€ 10.5 million). In 2015, the cash outflow therefore totaled € 36.6 million. In the previous year, the dividend payment of € 26.1 million and the repayment of financial debt (€ 10.5 million) resulted in a cash outflow from financing activities amounting to € 36.7 million.

In light of the currency effects, the cash inflow totaled € 13.9 million (previous year: € 6.3 million) and led to an increase in cash and cash equivalents by 13.7% to € 115.4 million. Thus, taking into account financial liabilities (€ 20.7 million, thereof € 10.5 million short-term), there are still no outstanding net liabilities. Furthermore, the Company had unused credit lines amounting to € 41.0 million (previous year: € 28.1 million).

The free liquidity is invested in interest-bearing financial instruments. A cash management system is in place in the German Group companies in Asslar in order to pool liquidity. Conservative and largely short-term investment vehicles, such as money market or time deposits at financial institutions, dominate where financial investments are concerned. Speculative transactions are not conducted. The loan in conjunction with the acquisition of the adixen business unit was taken out by the parent corporation. Both liquidity management as well as steering of the interest-rate change risk are thus primarily handled at Corporate Headquarters, taking into consideration all relevant matters within the Corporate Group.

Capital expenditures and financing

Operating business, capital expenditures, and dividend payments were financed as in previous years solely by internal funds of the Corporate Group. In addition, again in 2015, existing financial liabilities in the amount of € 10.5 million were repaid. Capital expenditures in the amount of € 11.7 million related predominantly to necessary reinvestments for machinery and plant and equipment. There were no major changes in the composition of capital expenditures.

The total amount and the allocation are within our expectations and also comply with the forecast provided for 2015 (€ 10–12 million).

The balance sheet total of the Pfeiffer Vacuum Group has long demonstrated a very solid capital base. After an equity ratio of 65.2 % at the end of the 2014 fiscal year, the equity ratio as of December 31, 2015, was able to be increased again and stood at an exceptionally high 67.3 % as at December 31, 2015. The current assets ratio, the ratio of current assets to current liabilities, amounted to 298 % (previous year: 308 %) and continues to reflect the sound financing concept and high credit rating of Pfeiffer Vacuum.

The above-mentioned capital expenditures of € 11.7 million and a depreciation/amortization volume of € 20.7 million in 2015 resulted in a depreciation expense ratio (ratio of capital expenditure to depreciation/amortization) of 56 %. As in previous years, new capital expenditures in 2015 continued to be below the level of the loss of value of fixed assets (previous year: 49 %). This is due to the continued high depreciation amounts resulting from the purchase price allocation (PPA).

Currents Assets Ratio
in %

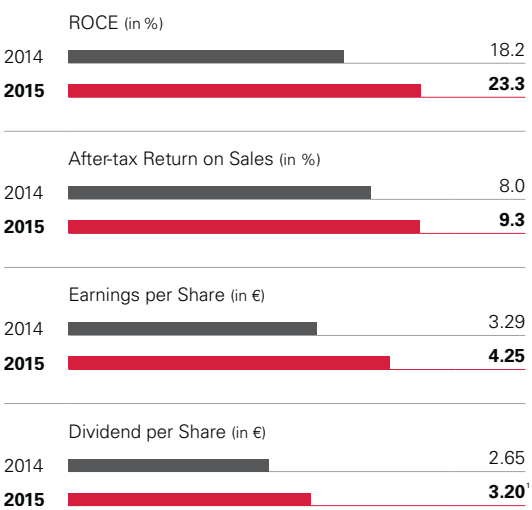
Depreciation Expense Ratio
in %

Value Reporting

The concept of value-based steering of the Company remains an integral element of the management approach that exists within the Pfeiffer Vacuum Corporate Group. All important decisions at Pfeiffer Vacuum are taken with due consideration of all material financial aspects. The following graphic provides an overview of various financial performance indicators which are of importance to us. In addition to ROCE (Return On Capital Employed; operating profit relative to the total of net assets and net working capital) as a parameter for the yield on capital employed, the Company's return on sales, earnings per share, and the paid or proposed dividend are also presented here. The ratio between the dividend and earnings per share serves as an indicator of the extent to which shareholders participate in the Company's economic success.

All previously mentioned success ratios in 2015 show a markedly positive trend compared to the previous year. Pfeiffer Vacuum therefore would like to maintain the high dividend payout ratio of net income. Accordingly, the Management Board and Supervisory Board will propose a dividend of € 3.20 per share at the Annual General Meeting. This would correspond to a dividend payout ratio of 75.3 % (previous year: 80.7 %).

Key Value Reporting Indicators



[1] Subject to approval by the Annual General Meeting

Overall Assessment of Business Performance

Due to the good to very good rates of increase in virtually all regions, product groups, and target markets, we are extremely satisfied with the development of sales in fiscal 2015. In view of positive exchange rate effects, we have even slightly exceeded the ceiling of our forecasted sales target corridor of between € 430 and € 450 million.

Against the background of a favorable product mix and sales-related economies of scale, the operating income has increased significantly and the operating profit margin rose from an already above-average 11.0 % in 2014 to 13.5 % in 2015. This strengthens our conviction that the projects initiated to maximize profits over the short to medium term have addressed the right issues and are already starting to bear fruits. There has been no change in the rock-solid financial position of Pfeiffer Vacuum. The Group remains without any outstanding net liabilities. The equity ratio has once again increased over the previous year.

The liquidity situation allows us, in addition to financing the operational activities, to significantly reduce the financial liabilities and to again distribute an above-average dividend to shareholders.

Non-financial Performance Indicators

Employees

Pfeiffer Vacuum employed a total of 2,374 employees at the end of fiscal 2015. This represents an increase of 5.1 % compared to the previous year's figure of 2,258 employees. This development mainly originated in Europe and Asia.

Composition of Workforce by Regions

	2015		2014	
		in %		in %
Europe	1,693	71	1,612	71
Asia	548	23	516	23
The Americas	133	6	130	6
Total	**2,374**	**100**	2,258	100

Diversity

Pfeiffer Vacuum has a global standing and so unites a multitude of people of different origin under one umbrella brand. Our employees are proud of the successful cooperation between different cultures and nationalities. For several years now, Pfeiffer Vacuum has belonged to the "Diversity Charter", an initiative by the German Federal Government. The "Diversity Charter" represents a fundamental commitment to fairness and appreciation of people in companies.

Of the 2,374 employees, 403 are female and 1,971 are male. Therefore, the proportion of women constitutes 17 % of the entire workforce. Vacuum technology is at home in a specific field of mechanical engineering in which there are generally only very few potential young females with adequate training. Nevertheless, it is the firm intention of company policy to increase the proportion of women in this traditionally male-dominated area of work. The French subsidiary of Pfeiffer Vacuum has concluded a formal agreement with all labor unions involved with the specific purpose of promoting women. The Supervisory Board of Pfeiffer Vacuum Technology AG does not include any women. In its subsidiary companies, however, several management and key positions in the areas of Purchasing, Finance, Communications, Marketing, Human Resources as well as Sales are occupied by female managers.

Training young talent

The promotion of young talent is of great importance at Pfeiffer Vacuum. At various locations, we offer company training courses as industrial mechanics, in the business administration area, as well as in warehouse logistics. In fiscal 2015, Pfeiffer Vacuum made a total of 90 apprenticeships available worldwide (previous year: 95).

In addition to the company apprenticeship, Pfeiffer Vacuum participates very successfully in the "Studium Plus" project in Germany, a dual degree program involving the cooperation of the Technical University of Mittelhessen and the Chamber of Industry and Commerce. Furthermore, a partnership exists with the Georg-August University Göttingen in relation to the company apprenticeships. In this way, we ensure our young talent in industrial and mechanical engineering as well as in the area of business informatics.

Also, many of our subsidiaries offer temporary internships for graduates and students and/or temporary positions for students who work during their vacation. This enables young people to gain an insight into operational processes and to qualify themselves as potential employees. In cooperation with different schools and universities, we perform guided tours of the Company and present ourselves to the public at career fairs. In France especially, several of our skilled workers give lectures on vacuum technologies and corporate governance at universities. In addition, the name recognition that Pfeiffer Vacuum enjoys among natural science graduates due to the presence of its products in research laboratories is not to be underestimated.

Qualifications of skilled workers and executives

The success of Pfeiffer Vacuum is decisively based on the expertise, the loyalty, and the high motivation of our employees. Particularly the expert knowledge of our service and sales employees plays an important role in the cooperation with our customers. They benefit from the many years of experience to which our experts can resort in relation to physical and chemical reactions of the most diverse molecules and substances under vacuum conditions.

Most projects are developed by our customers together with our Sales and Market teams, which in turn also consult the relevant experts from the areas of Research & Development as well as Production and Service as necessary. The skilled knowledge of our employees is also of major importance in the manufacturing and installation of our products. The ultimate goal is to offer each customer a perfect vacuum solution for his application.

Good training and the readiness to adapt to changes in market forces by continuous development are thus the best prerequisites for all employees, regardless of age, in order to secure jobs and sustain professional success. Further training plays a critical role in our Company in all locations. New employees complete an introductory course in the basic principles of Vacuum Technology, while sales and service employees receive advanced training courses about products and service measures.

Practical programs exist for the qualification of executives, and foremen and group leaders are trained in leadership and management techniques. Furthermore, the Company pays attention to specialized advanced training to transfer technical innovations into the Company. Chinese, German, English or French language courses are offered depending on location and need.

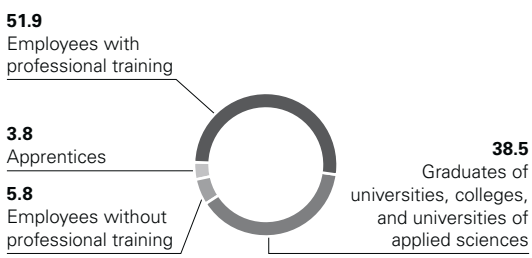
Professional Qualifications of the Workforce

	2015
Development and Production, Total	**1,183**
Graduates of universities, colleges, and universities of applied sciences	294
Employees with professional training	810
Employees without professional training	21
Apprentices	58
Administration, Service and Sales, Total	**1,191**
Graduates of universities, colleges, and universities of applied sciences	620
Employees with professional training	423
Employees without professional training	116
Apprentices	32

The provision of further training options is generally linked to the local conditions and requirements. For example, the French subsidiary fulfills the relevant statutory requirements with more than twice the expenditure as would be required by law. Here, the focus is on training and further training measures in the area of "quality". The management also operates a software system for competence management of the employees to better identify and implement existing expertise and to be able to match training courses specifically.

Proportional Distribution of Professional Qualifications of all Employees

in %



Remuneration and incentive schemes

The personnel costs in fiscal 2015 amounted to € 152.0 million compared with € 134.4 million in fiscal 2014. The incentive scheme of Pfeiffer Vacuum also differs according to local conditions and customs. The sales personnel basically receive performance-related incentives via a bonus scheme oriented to sales growth and profit. Added to that – depending on the location – are other bonus, incentive or employee participation schemes as well as bonuses for outstanding individual achievements.

Age Structure of the Workforce

	2015		2014	
		in %		in %
Under 30 years of age	398	17	519	23
30 to 50 years of age	1,312	55	1,203	53
Over 50 years of age	664	28	536	24
Total	**2,374**	**100**	2,258	100

Pension scheme

The pension scheme is similarly varied in the individual locations. Apart from a purely public scheme in France funded by the French subsidiary, the worldwide pension scheme includes additional measures and payments into pension funds, the offer of a pension plan, and direct insurance with the additional option of deferred compensation. For the employees in the head office in Asslar who had no employer-financed pension contribution up to 2008, voluntary payment into the company pension scheme has been agreed upon as part of the performance-related remuneration.

Social responsibility

We take our social responsibility towards our employees seriously. We therefore endeavor to ensure that the relevant quota of disabled employees in the various countries is met. We also believe that a family-friendly working environment is very important. Varying from region to region, this includes models for flexible working hours, provision of home office connections, models for re-entering the working world with flexible working hours and job sharing, specifically for young mothers and fathers.

The illness rates in Asslar and Göttingen amounted to 5.8 % and 7.7 %, respectively, compared to the regional industry average of 5.3 %. In Annecy, the illness rate was even lower at 3.5 %.

The rate of staff fluctuation also differed depending on the geographical location, with a figure of 3.4 % in Asslar in the past fiscal year and 5.6 % in Göttingen. In Annecy, the rate of staff fluctuation was very low at 3.2 %.

Workplace safety

Issues of workplace safety mainly relate to the production facilities of Pfeiffer Vacuum. In Asslar, there were 16 reported accidents in fiscal 2015 (previous year: 16). This is equivalent to 22.1 accidents per 1.000 employees (previous year: 23.0). With 9 reportable accidents in Göttingen, the ratio amounted to 56.9 accidents per 1,000 employees compared to 31.7 in the prior year. This figure is slightly higher than the corresponding average of 39.5 for 2014 sited by the German Workers' Compensation Insurance Company (numbers for 2015 were not yet available). The corresponding ratio for France was 36,5 with 23 reportable accidents.

Sustainability as a corporate policy

In order to fulfill our quality promise, we place the highest demands on our solutions. Energy efficiency also plays an important role. Our experts integrate efficient technologies and innovative ideas for energy saving into the development process of our products. The entire production process is then designed on the basis of these specifications. This results in sustainable solutions for our customers, which meet the high demands of different industries and applications and, in addition, provide real added value: The efficiency of our products leads to considerable energy savings during operation which, in turn, result in significant overall cost savings.

With its commitment to energy efficiency, Pfeiffer Vacuum also fulfills its environmental responsibility. The conscious use of limited resources and materials, the use of recyclable materials, sophisticated waste management, and the heightened environmental awareness and energy-consciousness of our employees show that protecting the environment and natural resources are of special concern to Pfeiffer Vacuum. All of our business activities are based on the requirements of the ISO 14001 standard.

Energy-efficient products by Pfeiffer Vacuum

Our products are the heart of our Company. We meet the highest standards with them and offer our customers a complete and customized program of solutions – for specific requirements from different industries. In addition, we deliver added value through energy-saving technologies that reduce costs and increase efficiency.

Realizing efficient products with the highest possible customer value and fulfilling our environmental responsibilities requires full commitment. We have made energy efficiency and the responsible use of natural resources a cornerstone of our Company by which we live and work – every single day. Pfeiffer Vacuum's philosophy is not only reflected in efficient solutions for our customers, but in every part of the value chain and in the minds of our employees.

Energy efficiency in development and production

Energy efficiency and resource conservation already play important roles during the planning phase of a new product. At Pfeiffer Vacuum, products are viewed in their entirety, from development to recycling, in terms of energy efficiency.

In this way, we ensure right from the start that our products offer our customers extensive advantages: additional added value is created through cost savings, space and time-saving processes, and the more efficient results that are entailed.

Production processes

The efficient structuring of our customer's operations with our energy-saving products is not our only priority. We also design our own production processes as efficiently as possible.

Throughout 2015, there were 24 internal audits conducted in Asslar (previous year: 24). In Annecy, 20 internal quality and environmental audits were performed (previous year: 22). The corresponding number of internal audits which took place in Göttingen was 8 (previous year: 16). Where applicable, elements of ISO 14001 were integrated into all audits.

The resource consumption of our key production facilities is displayed as follows:

We can substantiate our quality promise through sustainable production, and guarantee our customers maximum efficiency from manufacturing to service. With all the resources at our disposal, we also contribute directly to energy and resource conservation.

Environmental protection is an important part of our corporate policy

With precisely coordinated processes, we not only ensure that our products, their development, and production allow for energy saving and resource conservation but that sustainability is provided throughout the entire organization and at all locations. An integral part of our corporate strategy is an ISO 14001 certified environmental management which is concerned with the holistic view and the monitoring of all environmental areas. Here, all environmental impacts are documented by Pfeiffer Vacuum and guidelines are identified for the prevention and reduction of environmental pollution.

The most important asset of any company is its employees – the same goes for Pfeiffer Vacuum. Their dedication and work is crucial for enabling us to fulfill the high standards we set for ourselves. This also applies to energy and environmental awareness. We therefore provide our employees with regular information about current policies on energy and environmental issues, the management of hazardous materials, and efficiency aspects of our products.

Ecological Indicators

	2015		2014	
	Absolute consumption	CO_2 emissions in t	Absolute consumption	CO_2 emissions in t
Yield of photovoltaic plant (in MWh)	– 59	– 35	– 73	– 43
Power consumption (in MWh)	28,642	16,899	28,074	16,564
Gas consumption (in MWh)	22,739	5,708	21,917	5,502
Total		**22,572**		22,023
Gasoline (in l)	178,008	413	162,784	378
Diesel (in l)	245,644	640	228,500	595
Total		**1,053**		973
Water consumption (in m^3)	31,819	—	28,656	—

Corporate Governance Report and Declaration on the Corporate Governance

The recommendations and suggestions contained in the German Corporate Governance Code ("DCGK") have been a firm element of our corporate governance and corporate culture for many years. The close, trustful cooperation between the Management and Supervisory Boards, in addition to a high degree of transparency for corporate communication and in financial reporting, have always been fundamental principles. The members of the Management and Supervisory Boards conduct their activities according to these principles. Significant changes to the Code were and are therefore not necessary.

In November 2015, the Management and Supervisory Boards of Pfeiffer Vacuum Technology AG submitted the Statement of Compliance for the year 2015 required pursuant to § 161 of the German Stock Corporation Act. It was made permanently accessible to shareholders on the Corporation's website (group.pfeiffer-vacuum.com).

Pfeiffer Vacuum Technology AG complies with all recommendations of the Code, as amended in May 2015, with the following exception:

The German Corporate Governance Code recommends that a ceiling is established for the length of time that members may serve on the Supervisory Board (Paragraph 5.4.1). The Supervisory Board does not consider that a particular length of service as a member of the Supervisory Board constitutes a criterion which disqualifies a candidate from reelection to the Supervisory Board, and therefore does not take this criterion into account when selecting candidates.

Shareholders and Annual General Meeting

The Annual General Meeting is the supreme body of the Corporation. At the Annual General Meeting, shareholders may exercise their voting rights themselves, through a proxy of their choice, or a proxy nominated by the corporation who is bound to act on their instructions. The shareholders make key decisions at the Annual General Meeting about the allocation of profits, amendments to the Articles of Association, or the approval of share repurchase programs. All information and documents essential for the Annual General Meeting will be provided to the shareholders in a timely manner. The agenda and an explanation of the conditions of participation in addition to the shareholders' rights will generally be announced one and a half months before the Annual General Meeting date. All documents and information for the Annual General Meeting are also available on our website. In addition, it is possible to electronically direct questions to the employees of our Investor Relations Department. Using our financial calendar, which is made public in the Annual Report, quarterly reports, and on our website, we inform shareholders and interested parties about key dates, publications, and events throughout the year. In addition, we maintain close ties with our shareholders through our active Investor Relations activities. Moreover, it is also possible to contact the Company with questions at any time.

Management Board

Since the end of 2014, the Management Board consists of Manfred Bender (CEO), Diploma in Business Administration, and Dr. Matthias Wiemer, Diploma in Mechanical Engineering.

The responsibilities of the Management Board are as follows:

Pfeiffer Vacuum Technology AG Management Board

Manfred Bender Chairman	**Dr. Matthias Wiemer**
Controlling/Finance	Research & Development
IT	Marketing
Purchasing	Training & Service
Investor Relations	Sales
Organization/Logistics	
Human Resources	
Production	

The members of the Management Board are responsible for the further development and strategy of the Company. They are also involved in the day-to-day running of the Company and are even responsible for operations.

The four-eyes principle applies in exercising the duties and responsibilities of the Management Board. Major decisions are always made jointly. Personal expenditures, such as travel and entertainment expenses, require the approval of another Management Board member. In addition to close cooperation and reciprocal information on a daily basis, board meetings are held every two weeks. Minutes are kept of these meetings and the Chairman of the Supervisory Board receives a copy of these.

The members of the Management Board work exclusively for Pfeiffer Vacuum. In addition, Manfred Bender is a member of the supervisory board of the Volksbank Heuchelheim eG, Heuchelheim, Germany, and moreover was elected to the supervisory board of Schunk GmbH, Heuchelheim, Germany, in December 2015 (start of the term in March 2016).

Supervisory Board

Pursuant to the statutory requirements and the Articles of Association of Pfeiffer Vacuum Technology AG, the Supervisory Board consists of a total of six persons. Four persons represent the shareholders and two persons represent the employees of the Company.

In 2015, there were no personnel changes to the Supervisory Board. The members are as follows:

- Dr. Michael Oltmanns (Chairman), Attorney at Law and Tax Advisor
- Götz Timmerbeil (Vice Chairman), Certified Public Accountant and Tax Advisor
- Helmut Bernhardt (Employee Representative), Development Engineer
- Manfred Gath (Employee Representative), Chairman of the Employee Council
- Wilfried Glaum, Business Administrator
- Dr. Wolfgang Lust, Entrepreneur

All Supervisory Board members representing the shareholders were re-elected in May 2011 during the Annual General Meeting for a term of five years. For the election, the nominating committee submits a nomination suggestion to the Supervisory Board. When selecting the candidates, care is taken to ensure that members of the Supervisory Board at all times possess the requisite expertise, skills, and professional experience and are sufficiently independent. The international activities of the Group and potential conflicts of interest are also taken into account.

The Supervisory Board has determined the following specific objectives of its composition: occupational diversity (at least in the areas of business, technology, and law), internationality gained during overseas professional experience, avoidance of potential conflicts of interest by excluding close relationships with competitors, and an age limit at the beginning of the term which is the same as the statutory retirement age. These objectives have been taken into consideration in the past, and this is also intended for future nominations.

No compensations or benefits for personal service rendered, especially consultation and brokerage services, were paid or granted to the members of the Supervisory Board during the period under review. There were no conflicts of interests for Management and Supervisory Board members requiring immediate disclosure to the Supervisory Board. Finally, the Rules of Procedure for the Management Board provide that the Supervisory Board must grant its approval for significant business transactions.

According to the recommendations of the German Corporate Governance Code, no more than two previous Management Board members should hold seats on the Pfeiffer Vacuum Supervisory Board. Furthermore, the Supervisory Board reviews the independence of its members. It has established standards for assessing this independence, which are based on the Code, in particular. According to these principles, the majority of current Supervisory Board members is considered independent, thus assuring independent advice and monitoring of the Management Board.

The establishment of an Audit Committee is a long-standing practice at Pfeiffer Vacuum. As a certified public account, the Chairman of the Audit Committee, Götz Timmerbeil, is eminently qualified to bear responsibility for the activities of the Audit Committee, in particular in connection with questions relating to financial accounting, compliance, and the risk management system.

The task of the Nominating Committee is to suggest suitable candidates to the Supervisory Board who can then recommend them for nomination to the Annual General Meeting. Additional committees of the Supervisory Board are the Management Committee and the Administration Committee. In the past, the Management Committee has deliberated the personnel matters of the board members in detail before – in accordance with the requirements of the German Corporate Governance Code – being resolved by the full Supervisory Board.

The determination of the Management Board compensation is subject to the provisions of the German Management Board Compensation Appropriateness. The Administrative Committee is particularly concerned with transactions requiring approval from the Supervisory Board and with contracts with Supervisory Board members.

The committee memberships of the Supervisory Board members can be seen in the following overview:

Composition of the Supervisory Board Comittees

	Nomination Committee	Audit Committee	Management Committee	Administration Committee
Dr. Michael Oltmanns	Chairman	Yes	Chairman	Chairman
Götz Timmerbeil	Yes	Chairman	Yes	Yes
Helmut Bernhardt	—	—	—	Yes
Manfred Gath	—	—	—	—
Wilfried Glaum	Yes	Yes	Yes	—
Dr. Wolfgang Lust	—	—	—	—

The following members exercised further mandates. These are Supervisory Board mandates unless otherwise indicated:

- Dr. Michael Oltmanns:
  Becker Mining Systems AG, Friedrichsthal (Chairman), HPC AG, Mannheim (Chairman), from October 1, 2014, Jetter AG, Ludwigsburg (Chairman), and Scholz AG, Essingen (Chairman), until May 22, 2014
- Götz Timmerbeil:
  VfL Handball Gummersbach GmbH, Gummersbach (Chairman of the Advisory Board) and Arena Gummersbach GmbH & Co. KG, Gummersbach (Vice Chairman)

The Company has taken out pecuniary loss liability insurance (so-called D&O insurance) for the members of the Management and Supervisory Boards.

Collaboration between the Management and Supervisory Boards

Close and trustful collaboration between the Management and Supervisory boards is an essential prerequisite for good corporate governance and serves the good of the Company. Quarterly Supervisory Board meetings are held in this context, for which the directors report on the course of business operations in detail.

If necessary, other executives also explain the current issues in their respective areas of responsibility. If needed, additional special meetings are held. The Management Board reports to the Supervisory Board on the general condition of the Company, including the risk situation, through a monthly reporting system.

Compensation report

In the following section, the compensation for members of the Management and Supervisory Boards is detailed.

Compensation for the Management Board

The Management Board's compensation has been approved by the entire Supervisory Board. The compensation consists of a fixed and a variable element as well as payment in kind (company car, accident insurance). The variable component is essentially dependent on the Group´s earnings before taxes.

The fixed remuneration paid and expensed in fiscal 2015 amounted to K€ 380 for Manfred Bender and K€ 290 for Dr. Matthias Wiemer. The variable component recorded in the Income Statement for Manfred Bender was K€ 550 and for Dr. Matthias Wiemer K€ 370 in fiscal 2015. Payments in kind of K€ 16 and K€ 24, respectively, were effected. This amounted to total compensation in 2015 of K€ 946 for Manfred Bender (previous year: K€ 792) and K€ 684 for Dr. Matthias Wiemer (previous year: K€ 569). The total compensation for the aforesaid active members of the Management Board amounted to to K€ 1,630

in the year under review after K€ 1,361 in fiscal 2014. Short-term variable remunerations paid in 2015 for fiscal year 2014 totaled K€ 383 for Manfred Bender and K€ 255 for Dr. Matthias Wiemer. These amounts were paid out in 2015 charging a provision recorded in 2014.

The variable component is a bonus, which the Supervisory Board determines. The discretion of the Supervisory Board shall prevent extraordinary developments from leading to undue fluctuations in the variable compensation. The development of the bonus shall be based on the development of the Group's success and shall henceforth be based on the profits before taxes. However, the bonus shall be subject to a condition of sustainability. This means that if the success of the Group during the assessment year increases in comparison to the average of the two previous years, the success during the assessment year will be proven to be sustainable only in the amount of the average of both previous years' successes; the bonus in this respect has therefore been earned and is payable. However, the sustainability of the portion in excess of this has not yet been proven. Therefore, only a small part of the bonus, to the extent that the bonus is based upon the surplus element, will be due when the annual financial statements of the assessment year are approved (so-called short term incentive). The larger part (so-called long-term incentive) will not be due until two years later and only in its fullest amount if the average profits of these two following years are at least as high as the average profits of the previous two years. Should it be less than the average, the long-term incentive will be correspondingly reduced. The purpose of this sustainability proviso is to avoid rewarding so-called "straw fires" at the expense of sustainable profitability.

Manfred Bender has received pension commitments in the unchanged amount of 60 % of the last fixed salary elements. Matthias Wiemer has received pension commitments in the unchanged amount of 40 % of the last fixed salary elements. In this connection, total net pension expenses in accordance with IFRS of K€ 281 (Manfred Bender) and K€ 227 (Dr. Matthias Wiemer) were recorded in the Consolidated Statements of Income in fiscal 2015 (previous year: K€ 209 and K€ 170 respectively).

In addition, there are pension commitments for former board members. The net pension expenses attributable to these individuals for the year amount to K€ 60 (previous year: K€ 64). After K€ 140 in 2014, a total of K€ 267 was paid to the Pfeiffer Vacuum Trust e.V. The total net pension obligations for current and former members of the Management Board therefore amount to K€ 4,675 (previous year: K€ 5,660). Current pensions in fiscal 2015 again amounted to K€ 345.

Up to the time that Ms. Nathalie Benedikt was relieved, she received fixed remuneration of K€ 183 and remuneration in kind of K€ 15. No particular benefits were granted or commitments entered into in connection with the termination of office.

Compensation for the Supervisory Board

The members of the Supervisory Board received a fixed compensation determined by the Annual General Meeting. In 2011, the Annual General Meeting approved an increase in the Supervisory Board's compensation. The total compensation paid to the Supervisory Board and its distribution between the individual members has not therefore changed in comparison with fiscal 2014. In fiscal 2015, Dr. Michael Oltmanns received compensation of K€ 75, while Götz Timmerbeil received K€ 50. Helmut Bernhardt, Manfred Gath, Wilfried Glaum, and Dr. Wolfgang Lust each received K€ 25. The total compensation paid out to the Supervisory Board in fiscal 2014 and 2015 therefore amounted to K€ 225, respectively.

Should Supervisory Board members be newly elected or retire during a fiscal year, the compensation will be paid on a pro rata basis.

Negative statement

No further benefits were paid to Management or Supervisory Board members over and above the listed compensation components. In particular, no stock options were granted, no loan entitlements were established, and no liability commitments were pronounced. In addition, no special agreements were made in connection with the termination of the activities of the Management or Supervisory Boards.

Transparency

The claim to provide all target groups promptly with the same information at the same time is a high priority in our corporate communications. One of the ways that this is manifested is that all relevant information is published in German and in English. Shareholders and interested parties can directly obtain information on current developments within the Group on the internet. All ad-hoc releases by the Pfeiffer Vacuum Technology AG shall be made available on the Company's website.

The purchase and sale of Pfeiffer Vacuum shares by members of the Management and Supervisory Boards will be published immediately pursuant to § 15 a of the Securities Trading Act ("Wertpapierhandelsgesetz"), in Europe and on the Company's website at group.pfeiffer-vacuum.com.

In this connection, Mr. Manfred Bender (Chief Executive Officer) purchased a total of 1,700 shares while Dr. Matthias Wiemer (member of the Management Board) purchased 1,000 shares and Mr. Götz Timmerbeil (Vice Chairman of the Supervisory Board) purchased 100 shares of the Company during fiscal 2014. In fiscal year 2015, no transactions were made concerning this matter. The holdings of Board members in the Company as of December 31, 2015 amounted to unchanged 0.1 %.

Equality

According to § 111, Sub-Para. 5, German Stock Corporation Act ("AktG"), the Supervisory Board has established a women's quota of 0–30 % for the Supervisory Board and the Management Board respectively. The implementation of this quota is envisaged until June 30, 2017. The Supervisory Board still considers that belonging to a particular gender is not an attribute which specifically qualifies a candidate for any position and therefore does not take this criterion into account when selecting the most suitable candidate. As a result, a wide bandwidth was selected for this quota. The provision contained in § 76, Sub-Para. 4, German Stock Corporation Act ("AktG"), refers to the management level solely at Pfeiffer Vacuum Technology AG. Due to its function as a finance holding, this company has only very few employees and there are no further management levels.

Accounting and auditing

Pursuant to statutory provisions, the Consolidated Financial Statements of Pfeiffer Vacuum and the Quarterly Financial Reports are prepared in accordance with the current International Financial Reporting Standards (IFRS) as applicable in the European Union.

The Annual Financial Statements of Pfeiffer Vacuum Technology AG as the parent corporation are prepared pursuant to the provisions of the German Commercial Code ("HGB"). This Consolidated Financial Statement was audited pursuant to the resolution of the Annual General Meeting on May 21, 2015, by Ernst & Young GmbH, Wirtschaftsprüfungsgesellschaft, Eschborn, Germany. Ernst & Young GmbH also audits the Annual Financial Statements of Pfeiffer Vacuum Technology AG.

It was agreed with the auditors that the Chairman of the Audit Committee shall be immediately informed about any reasons for exclusion or prejudice arising during the audit, unless these are eliminated immediately. The auditor must also immediately report all findings and events of importance to the Supervisory Board that arise during the audit. In addition, the auditor must inform the Supervisory Board and note in the audit if the auditor determines facts during the course of the audit that are not compatible with the Statement of Compliance submitted by the Management and Supervisory Boards pursuant to § 161 of the German Stock Corporation Act ("AktG").

Risk and Opportunities Report

The purpose of entrepreneurialism is to specifically utilize opportunities that have been identified in order to increase the value of the Company. However, this intrinsically involves taking risks. The opportunity and risk management system that we employ serves to optimize the relationship between risks and opportunities with a view to sustainable business success. To assure this, we use and evolve suitable instruments, such as an appropriate handbook and/or a risk inventory, to identify, analyze, assess, and control opportunities and risks. In the following, opportunities and risks are presented on a gross basis.

Risk management system

The Pfeiffer Vacuum risk management system includes all levels of the Corporate Group. The system is described in a risk handbook that is available to all employees and updated on an as-needed basis. Our flat hierarchy and fast communication channels aid in swiftly identifying risks at every level of the Company and using suitable measures to combat them. The risk coordinator monitors the proper implementation of risk management and the full risk inventory. The risk inventory is performed by the department heads at the large production sites and by the managing directors at the remaining subsidiaries. Consolidating all inventories at an aggregate level produces a differentiated overall picture of the Corporate Group's risk position.

During the year, risk inventories are updated if necessary; what we define, in addition to a concrete description of the risks, is the potential quantitative impact on operating profit, the likelihood of occurrence, and suitable countermeasures. At year end, a complete risk inventory is made, which is reviewed by both the risk coordinator as well as the Management Board. In addition, we have defined the areas of risk management within the individual market segments and have put in place the necessary processes as well as early-warning and monitoring systems. The monthly Corporate Group reporting system supports the risk management process with a variety of parameters and reports that serve as an essential basis for the Management and Supervisory Boards upon which to regularly deliberate on current business. The monthly meetings of senior executives and monthly conference calls are also firmly established institutions that enable the department heads and our subsidiaries to share with the Management Board information relating to potential risks and how to handle them.

In addition to monthly reporting, our internal controlling system (ICS) helps us to identify risks in daily processes and thus avoid potential errors. The processes reviewed in this connection are first and foremost ones that have a major impact on Pfeiffer Vacuum's financial position. Regularly conducted inspections protect against human error, system errors, and breaches of internal regulations.

Risk management as it relates to consolidated accounting pursuant to § 315, Sub.-Para. 2, No. 5, German Commercial Code ("HGB")

The purpose of an internal consolidated accounting control system is to ensure adequate certainty by implementing controls that – despite identified risks – enable consolidated financial statements to be prepared in accordance with applicable standards. The Management Board bears overall responsibility for the internal control and risk management system in respect to the consolidated accounting process. All companies included in the Consolidated Financial Statements are covered by a strictly defined management and reporting organization. The principles, the organizational and procedural structures as well as the processes of the individual control and risk management systems relating to consolidated accounting, are stipulated throughout the entire Corporate Group in guidelines and organizational procedures. They are adapted at regular intervals to reflect current external and internal developments. Our internal experts also work together with external counterparts on a case-by-case basis. This enables us to ensure that our accounting is in compliance with IFRS accounting and valuation regulations.

In respect to the consolidated accounting process, we consider those characteristics of the internal control and risk management system to be major in nature that can have a decisive influence on consolidated accounting and on the overall view presented in the Consolidated Financial Statements. In particular, these are the following elements:

- Identification of the major fields of risk and areas of control that are relevant to the consolidated accounting process,
- Monitoring controls for enabling the consolidated accounting process to be supervised by the Management Board,
- Preventive control measures in the finance and accounting systems of the Corporate Group and the companies included in the Consolidated Financial Statements, as well as in operational corporate processes that generate key information for drawing up the Consolidated Financial Statements, including Management's Discussion and Analysis for the Corporate Group (including separation of functions),
- Measures that assure proper IT-based processing of facts and data that relate to consolidated accounting.

Opportunity management system

The Pfeiffer Vacuum opportunity management system is closely linked to the risk management system, as many risks also offer opportunities that should be utilized where appropriate. This is why the risks identified in the risk inventory are simultaneously examined with a view to potential opportunities, which produces a correlation. In extensive decision-making processes, we analyze the question of whether the potential opportunities or risks predominate, which means that we only engage in risks that appear to be manageable and are compensated for by the opportunities they offer.

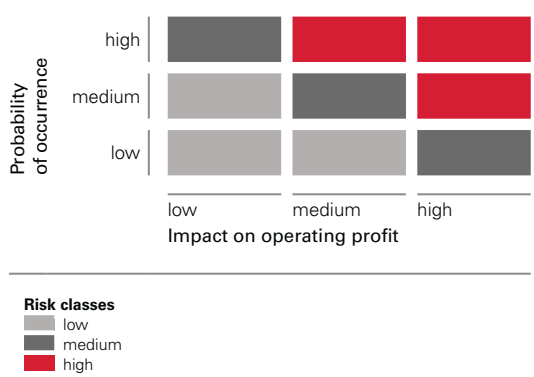
We conduct market and competition analyses in order to be able to explicitly make optimum use of industry and overall economic opportunities. This provides us with a good overview to further broaden our market share by specifically utilizing our potential. Close contact with our customers additionally aids us in identifying trends early on, thus enabling us to actively shape changes in the marketplace.

With variance analyses and development forecasts, our highly refined reporting system also identifies opportunities in our regional structure. Our global sales and marketing network enables us to swiftly and purposefully take advantage of these opportunities.

Risk classification

The risk classification of the risks presented below was effected according to a matrix taking into consideration the probability of occurrence and the potential impact on the operating profit.

Risk Classification



Risks

Overall economy (risk class: low)

As a globally operating company, we are dependent upon global economic developments. Nor can Pfeiffer Vacuum avoid the effects of a decline in world economic growth, and would have to expect a direct impact on our sales and profitability. However, the regional and market-segment mix of sales is very balanced at Pfeiffer Vacuum, and its overall structure compensates for revenues in economically weak and economically growing markets and industries. Because it is seldom that all regions and market segments are equally affected by a deteriorating economic development. Despite the overall compensating developments, there may be an impact on the economic success of individual segments. The semiconductor market represents a significant share of sales and Pfeiffer Vacuum is therefore exposed to a greater extent to the fluctuations of this market now. Managing the economic risk essentially involves steering capacities and costs. Flexible working time

models enable us to swiftly and easily adapt production capacities to reflect the development of the order situation.

Market segments (risk class: medium)

Sales in Pfeiffer Vacuum's individual market segments are closely linked to global economic developments. The research & development market, for example, is dependent upon government spending and focuses in connection with research projects. The semiconductor market follows its own cycles, which offers enormous opportunities during boom phases and involves major risks during phases of weakness. The coating market is closely linked to developments in the photovoltaic industry and did not recover again after the crisis in 2011. The heterogeneous industrial market segment followed overall economic trends in its general development. And development work in the product categories goes hand in hand with the trends in the individual market segments. This means that smaller turbopumps and analysis instruments are more likely to be required in the analytical industry, which tends to respond on an early-cyclical basis. Large quantities of backing pumps are employed in the semiconductor market, but also in other industries whose developments generally conform to those in mechanical engineering.

In order to combat the risks stemming from dependence upon individual market segments and products, Pfeiffer Vacuum places a great deal of value on its broad based alignment. At the same time, a disproportionately high share of revenue derives from the semiconductor industry, which presents both an opportunity as well as a risk due to the cyclical nature of this industry's development. Pfeiffer Vacuum's strategy for lowering this risk is to increasingly market adixen products also in other industries through our distribution channels, thus lowering the share of total revenues accounted for by the semiconductor industry. Moreover, we estimate that the semiconductor market will grow strongly beyond the cycles.

Acquisition and integration (risk class: low)

The integration of acquired companies into the purchaser's corporate group always poses a special challenge. In order to preclude as far as possible the risk that the expectations which are placed upon the acquisition might not fully materialize, we conduct detailed due diligence reviews in advance of a corporate acquisition. Analyzed in particular in this connection are the legal situation, technical equipment, production planning, and the current and expected financial position of the company to be acquired. To minimize legal and financial risks in particular, we draw upon the counsel of reputable law firms and tax advisors with substantial experience of acquisitions on this scale during the period of preparing and realizing the acquisition. Taken as a whole, these measures ensure that all aspects of a corporate acquisition are taken into consideration, and enables conclusions to be drawn regarding the potential synergies that will result from an acquisition. This significantly reduces the risk of unanticipated developments. However, this risk can never be entirely excluded because a successful acquisition depends upon many other additional factors. This also applies for the integration which follows after acquisition.

To restrict integration-related risks, proven Pfeiffer Vacuum guidelines, which ensure structured and successful business operations, are implemented within newly acquired companies. Directly after acquisition, newly acquired companies are also integrated into the reporting system of the Pfeiffer Vacuum Group, to allow targeted management of the individual companies. Besides extensive reporting, this also includes monthly conference calls and regular meetings on site in the countries concerned. The standardized risk management system is also put in place in all new Group companies. The risk of intransparency is therefore eliminated.

Technology (risk class: medium)

Products and services that do not meet customer expectations directly lead to declining sales, and thus to a loss of market share and reputation. Thus, the key risk factors for Pfeiffer Vacuum include a lack of innovative strength and the loss of quality of products and services. We combat these risks through ongoing customer contact and the resulting market intimacy. The information thus obtained about the needs of our customers enables us to develop and offer products that are suited to their needs. This allows us to expand both our competitive position as well as our name recognition. We will continue to combat the risk of a lack of innovation through our development investments. In addition, maintaining high standards of quality is a top priority for us. We received certification to ISO 9001:2008 for the first time in 1995, and this has since been sustained without interruption.

Purchasing and manufacturing (risk class: low)

The risks in the sourcing market occur, in particular, in the form of supply bottlenecks and dependency upon individual vendors. Downtimes are viewed as a key risk from a production standpoint. We primarily combat the risk of supply bottlenecks and vendor dependence by continuously reviewing alternative supplier options. Anticipated market shortages of raw materials, such as steel and aluminum, and the price risks which these entail, are combated through long-term framework contracts. In general, however, it can be said that the effects of changes in the price of raw materials do not have any significant influence on profitability. Business interruption insurance is in force to cover the effects of downtimes resulting from fire, storm or flood damage, for example. Qualified technicians and modern production machinery keep technically related downtimes to a low level. Regular servicing and preventive maintenance for our machinery and equipment also help to avoid downtimes.

Human resources (risk class: low)

As a provider of vacuum solutions, i. e. a subset of mechanical engineering, we are dependent upon the high level of education, training, and commitment of our employees. We use various measures to combat the risk of losing these people and/or insufficient recruiting possibilities for suitable new talent. An attrition rate that continues to be low documents the acceptance of this on the part of our people.

Information technology (risk class: low)

Because our business processes are mapped by means of software support, Pfeiffer Vacuum's corporate data is subject to a general information technology risk. This includes, first and foremost, the risks of system outages, data losses, virus or hacker attacks that could lead to an interruption of business operations.

We keep the risk of data losses at a minimum by performing daily backups of our complete enterprise data. Our enterprise database, in particular, with which manufacturing operations, materials management, order handling, financial, and cost accounting are handled, is subject to a high security standard. All files created by our employees within the server environment are also backed up on a daily basis. Our backup tapes are stored in secure, fire-proof locations. The activities of our in-house support team reduce system outages to a low level. The Company also uses regularly updated virus scanners and modern firewalls to protect its hardware and software against the risk of computer viruses and hacking.

Exchange rates (risk class: low)

As a result of our pronounced international operations and the high percentage of export business that this involves, we are subject to a foreign exchange risk. A distinction must be made with respect to the way foreign exchange risks are controlled: the Company engages in active currency management for the (intercompany) U.S. dollar sales. The objective is to enter into options and futures contracts in order to minimize the effects of exchange rate influences on future sales denominated in U.S. dollars. Moreover, there is a valuation risk in some companies at the close of the fiscal year that stems from intercompany accounts receivable denominated in foreign currencies. Both gains and losses from realized options and futures contracts, as well as the valuation results stemming from accounts receivable denominated in foreign currencies, can be controlled to a certain extent. These manifest themselves in the Consolidated Statements of Income. Aside from the exchange rate risks from the U.S. dollar, there are lower foreign exchange rate risks for Pfeiffer Vacuum from developments in the exchange rate of the Korean Won.

In addition to this, the Consolidated Statements of Income also include the income and expenses of the non-German sales subsidiaries that do not report in euros, which therefore have to first be translated into euros. This procedure and the resulting effects will be portrayed below using the U.S. sales subsidiary by way of example. However, these comments also apply analogously to all foreign-currency subsidiaries, such as those in the United Kingdom or the Republic of Korea. The line items in the Statements of Income are converted into euros at the annual average exchange rate and then adjusted for intercompany sales and services. Leaving selling and general administrative expenses out of consideration, it is possible to achieve a correlation within the Corporate Group between sales in U.S. dollars and the cost of sales in euros. In this connection, sales invoiced in U.S. dollars are subject to a foreign exchange rate (conversion risk), while the cost of sales are incurred mainly in euros and are not subject to any exchange rate influences. The magnitude of sales and gross profit are therefore influenced directly by the exchange rate and are externally

stipulated and non-hedgeable. A certain degree of compensation for this effect results from the fact that the subsidiary in the U.S. records its own selling and general administrative costs, which change counter to sales (natural hedge). In this connection – as a function of the development of the euro relative to the respective foreign currency – there can be both positive as well as negative effects on sales and operating profit.

Liquidity position (risk class: low)

The risk of a customer's insolvency always exists, independently of the economic situation (default risk). There are general liquidity risks of being unable to satisfy required payment obligations in a timely manner. The rigorous system of accounts receivable management that has long been practiced at Pfeiffer Vacuum, along with monitoring of our customers' payment patterns, minimizes creditworthiness risks and thus accounts receivable losses. Moreover, our dependence upon individual customers is limited. At year-end 2015, unchanged from previous years, there was no net indebtedness at year end, which means that there continue to be sufficient reserves to assure the survival of the Company, even in difficult economic times. Our operative business generates sufficient liquid assets to enable the Company to continue to grow from within.

Legal risks (risk class: low)

As a result of Pfeiffer Vacuum's international business operations, the Company is subject to a variety of legal risks. National and international contract law and taxation are of particular significance in this connection. These areas can have a direct bearing on the Company's earnings and financial position. Standardized terms and conditions of contract and business are always employed to minimize the risk stemming from contracts entered into for products and services. In the case of special contracts, the contract instrument is first reviewed in-house and then by external legal counsel, if necessary. The expertise required for assessing the Company's daily business is provided by our qualified staff. We draw upon the assistance of external tax advisors in connection with complex issues that relate to national and international taxation. Product liability risks are covered by appropriate insurance. No legal disputes are currently pending whose outcome could have a material impact on the Company's earnings or financial position.

Opportunities

Macroeconomic and sector-specific opportunities

The global economic development in the past fiscal year was marked by moderate growth. In contrast, the Chinese economy recorded slightly lower growth rates that nevertheless remained at a far higher than average level. Positive growth trends are anticipated in the United States, which will also improve our position here. Being well placed here gives us the opportunity to lock into this trend as well. A similar situation applies for Germany, too, where a slight economic upturn is currently anticipated for 2016. The cyclical nature of the semiconductor industry, which has been referred to a number of times, is both an opportunity and a risk.

Technology

Through its many years of experience, Pfeiffer Vacuum is highly successful in developing viable, high-quality products and bringing them to market. The foundation for this consists of our close collaboration with our customers in a spirit of trust, which enables us to anticipate their needs and thus gain a head start over our competitors. With innovative products and by steadily broadening our product portfolio, there are opportunities for better satisfying the demands of existing markets and generating opportunities for additional sales volumes by gaining market shares. This enables us to offer our customers a broader spectrum of products.

Sales and marketing

One of the Company's key competitive advantages has always been its lack of dependence upon individual regions, products or markets. We therefore view the expansion of our sales and marketing network as representing an opportunity to increase our market share. The globally active sales teams are interlinked, and uniform Pfeiffer Vacuum sales rules have been put in place. Regular training is also given on the permanently expanding spectrum of products, to enable sales staff to make use of opportunities for increasing sales to existing and prospective customers.

Production and logistics

Through the optimization of our production and logistics processes, we have laid the foundation in recent fiscal years for further improving our profitability. We therefore see this as an opportunity for being even faster in offering high-quality solutions to our customers in the future as well. We have rigorously aligned the flows of materials in manufacturing towards our modern logistics processes. Reorganizing and fundamentally modernizing manufacturing operations has led to additional productivity gains. As a solutions provider, we focus squarely on the needs of our customers. And through the reorganization of our manufacturing processes, we are now being guided even more by the needs of our customers rather than by rigid planning dictates. Moreover, a cutting-edge warehouse system and a standardized system of product shipping increase efficiency. We are confident that the interplay between these modernization measures will help us to reduce throughput times in the future. Pfeiffer Vacuum has a total of three major production sites in Asslar, Göttingen, and Annecy.

Human resources

The development of viable new products, the ongoing improvement of our existing product portfolio, the high level of precision of the production processes, the sale and distribution of our products in a technologically challenging competitive environment, and the administration of an internationally operating, publicly traded Corporate Group necessitate a highly qualified and motivated workforce. We therefore utilize the opportunity of assuring the long-term loyalty of the Company's existing talent while simultaneously being an attractive employer for new people. Attractive pay concepts have been in place for years at Pfeiffer Vacuum. We therefore view ourselves as being well equipped to cover our future needs for qualified skilled labor and university graduates in the future and to assure the loyalty of our talent to the Company – both are absolute prerequisites for the Company's successful ongoing development.

General comments on the risk management system and the presentation of the risk situation

We are of the opinion that the risk management system is suitable for identifying, analyzing, and quantifying existing risks in order to adequately steer them. Our auditor has reviewed the risk management system that is in place in connection with the audit of the Annual Financial Statements. This review did not result in any objections. Despite the number of risks disclosed being higher than the number of identified opportunities, Pfeiffer Vacuum considers the allocation if risks and opportunities as balanced overall. This particularly applies as the Group's economic success is based on a broad number of products for various industries. As those industries vary in terms of structure and economic cycles, this diversification contributes to a risk reduction. No risks are identifiable that could endanger the Company's survival, neither for the year covered by this Report nor for the following years.

Rating

Pfeiffer Vacuum Technology AG is not subject to any official rating by Moody's, Standard & Poor's or similar agencies.

Subsequent Events

Significant changes to the business conditions or the branch environment have not occurred since the beginning of the 2016 fiscal year.

Outlook

General economic development

The International Monetary Fund (IMF) expects moderate global economic growth of 3.4 % in 2016. The corresponding figure for 2015 amounted to 3.8 %. Slightly higher overall growth is forecast for the emerging and developing countries – despite the continuing slowdown in China. Hopes here are pinned on India, Southeast Asia (ASEAN), and Africa. Russia and Brazil are unlikely to emerge from the recession during 2016. However, a far smaller decline is forecast for Russia compared to last year. Only a marginal improvement is expected for Brazil's economy.

In the industrialized countries, however, moderate growth is likely to continue at a slightly accelerated rate. This will be made possible by a slight recovery in Japan, the Eurozone, and Canada. Both the USA and the United Kingdom are anticipated to maintain the sound rate of growth begun in 2015.

The German Council of Economic Experts predicts that the price-adjusted gross domestic product (GDP) in Germany will exhibit a growth rate of 1.6 % in 2016. A strong continuing level of consumer spending is anticipated that will help to fuel an increase in the gross domestic product. Employment is expected to rise by 300,000 people in 2016. The development of gross fixed capital investments is anticipated to be on the low side at 2.7 %.

In total, we expect the economic conditions of our business segments to develop regionally differently.

Mechanical engineering

The economists from the German Engineering Federation (VDMA) forecast that the production level of the previous year can be maintained in 2016 despite the negative influences of global demand. Although the decline in the price of many raw materials stimulates the economy in consumer countries, prices have meanwhile fallen to an extent that creates problems for certain producer countries and is causing them to cut back on investments. The strong devaluation of the euro initially had the effect of a stimulus package for the eurozone. However, the flow of goods has meanwhile adjusted to the altered exchange rate conditions. A downside of this development is becoming evident: The manufacturing industry in the USA is suffering from pressure due to the high dollar exchange rate. This affects not just their exports, but also sales on the American market. It furthermore dampens the willingness of local industry to invest. The VDMA expects that the continuing low interest rates will not bring any further significant expansive effects for investments. Geopolitical unrest and trouble spots and the lack of a clear growth trend result in many potential global investors adopting a cautious stance. Growth is likely to exhibit a slight downturn in a number of key developing and emerging countries that were decisively responsible for high export growth in German mechanical and plant engineering in recent years. Negative growth rates are to be expected in part. For BRIC countries, for example, the VDMA anticipates that only India will increase imports of machinery from Germany.

The OECD leading indicator is considered a reliable indicator for the mechanical engineering sector in the EU and, in contrast, paints a more optimistic picture. With a lead-time of about six months, it tends to predict the future development of machine production. It currently signals positive developments as it averaged out at values of around 100.6 (previous year: 100.5) for the eurozone in late 2015, thus indicating a slight expansion. This positive trend should strengthen its beneficial impact on EU machine production during the first half of 2016.

In 2015, production in the "Compressors and Vacuum Pumps" sector lay 1 % over the previous year's level. In comparison, the overall orders and sales for mechanical engineering only slightly exceeded the previous year's level. For 2016, the federation expects that sales across the entire industry will stagnate.

Development in the markets

Pfeiffer Vacuum divides its customers into the semiconductor, industrial, analytics, research & development, and coating market segments. The semiconductor market segment is regarded as cyclical in nature and, after a conservative development in the past three years, began to make a strong recovery in the past year. Signals from the market and from our customers point to a favorable level. While some large semiconductor companies have increased investments again, other chip manufacturers are still busy with the next generations of their product lines.

In the current fiscal year, the course of this market segment will therefore yet again depend on how quickly and extensively these customers invest in new production facilities and technologies. Pfeiffer Vacuum strongly believes that the demand for products from the semiconductor industry will generally grow at an above-average rate in view of the increasing complexity of digital innovations in almost all areas of everyday life – even if this development is typically characterized by a strong cyclical nature.

In the industrial market segment, the order growth will primarily be determined by new product developments as well as the general trend towards energy efficiency and resource conservation. Here, Pfeiffer Vacuum expects a relatively stable development in the medium term as well. Pfeiffer Vacuum expects a very dynamic development in the analytical market segment and to a certain extent also in the research & development market segment. Analytical instruments are used in research and quality assurance applications in general industry and, in particular, in the semiconductor sector. The research & development market segment is dependent on political decisions on the funding of projects, and on research institutes.

The coating market segment includes customers from sectors such as displays (LED, OLED), architectural glass, solar, and many other areas of surface treatment. The solar industry continues to suffer from certain overcapacities, which resulted in the fact that only a certain amount of investments in building up new capacities took place in the past fiscal year. Nevertheless, slight positive impetus has been recorded again. For 2016, Pfeiffer Vacuum anticipates a stable or slightly increasing development of the solar market – albeit far from the high level of some years ago.

Development of sales in 2016

Increased sales to customers from the semiconductor industry and protracted strength in Analytics were the primary reasons for the 11.0 % growth in sales to € 451.5 million in the year 2015. To date, there have been customer-specific and industry-specific signs of a sustained strong level in 2016. The visibility of orders again is approximately two months. Therefore, no conclusions should be drawn regarding the expected total annual sales on the basis of the incoming orders at the end of 2015. Due to the above reasons, and also in view of the macroeconomic growth predicted – for the global economy as well as the engineering industry – Pfeiffer Vacuum is expecting a noticeable increase in sales in 2016.

Earnings development

Since the acquisition of adixen with effect from December 31, 2010, we have continued to write off certain amounts, as scheduled, as a consequence of purchase price allocation. This financial burden amounted to € 7 million in the 2015 fiscal year, and is expected to be € 7 million again in 2016. Operational optimization measures as well as economies of scale related to the expected sales improvement should contribute to a noticeable improvement in the operating profit and the EBIT margin situation in 2016. As a result of our low financial liabilities, and therefore low financial expenses, we expect the development of our earnings before taxes to progress parallel to the development of our operating profit. Capital expenditures currently planned for 2016 for the entire Group amount to some € 18–20 million, following € 12 million in the previous year.

Dividends

Pfeiffer Vacuum is specifically known as a dividend yielding stock on the German stock market. The Company wishes to remain faithful to this tradition. The Management Board and the Supervisory Board will therefore propose at the Annual General Meeting to distribute a dividend of € 3.20 per share for fiscal 2015 (previous year: € 2.65 per share). This would correspond to an increase of € 0.55 per share or 20.8 %. With a distribution volume of some € 31.6 million, this would result in 75.3 % of the net profit of the Group being paid out to shareholders (previous year: 80.7 %).

Dividend Figures

		2015	2014
Payout ratio[1]	in %	75.3	80.7
Dividend per share	in €	3.20[2]	2.65
Dividend yield	in %	3.4[2]	3.9

[1] (Proposed) dividend distribution in relation to the net income for that year
[2] Subject to approval by the Annual General Meeting

Foreward-looking statements

The statements, estimations, and other information in this outlook are based upon assumptions about future macroeconomic and sector-specific developments. The assumptions are based upon the latest information available at the time of publication. Due to the inherent risk and uncertainty relating to the probability of the statements and estimations made here, actual developments may differ significantly.

We wish to remain a highly profitable company and expect a noticeably positive development of profitability, financial position and liquidity for fiscal 2016. Overall, we are confident that we can achieve this goal on the basis of the development of business at the end of 2015, the strategic focus on clearly defined target markets, and the ongoing conversations with our customers. With our highly trained and motivated employees, we are excellently positioned to achieve this.

Consolidated Financial Statements

Consolidated Statements of Income
Pfeiffer Vacuum Technology AG

in K €	Note	**2015**	2014
Net sales	31	451,521	406,642
Cost of sales	7, 15	– 276,010	– 263,259
Gross profit		**175,511**	143,383
Selling and marketing expenses	7	– 59,850	– 52,789
General and administrative expenses	7	– 35,838	– 29,853
Research and development expenses	7	– 25,479	– 23,936
Other operating income	8	13,297	10,176
Other operating expenses	8	– 6,882	– 2,237
Operating profit	31	**60,759**	44,744
Financial expenses	9, 32	– 691	– 978
Financial income	9, 13, 32	383	507
Earnings before taxes	24, 31	**60,451**	44,273
Income taxes	24	– 18,535	– 11,854
Net income		**41,916**	32,419
Earnings per share (in €):			
Basic	34	4.25	3.29
Diluted	34	4.25	3.29

Consolidated Statements of Comprehensive Income Pfeiffer Vacuum Technology AG

in K€	Note	2015	2014
Net income		**41,916**	32,419
Other comprehensive income			
Amounts to be reclassified to income statement in future periods (if applicable)			
Currency changes	21	7,781	8,083
Results from cash flow hedges	21, 32	96	– 96
Related deferred income tax effects	21	– 32	32
		7,845	8,019
Amounts not to be reclassified to income statement in future periods			
Valuation of defined benefit plans	21, 25	2,269	– 14,916
Related deferred income tax effects	21	– 585	4,345
		1,684	– 10,571
Other comprehensive income net of tax		**9,529**	– 2,552
Total comprehensive income net of tax		**51,445**	29,867

Consolidated Balance Sheets Pfeiffer Vacuum Technology AG

in K €	Note	Dec. 31, 2015	Dec. 31, 2014
ASSETS			
Intangible assets	10	73,396	77,857
Property, plant and equipment	11	82,311	85,135
Investment properties	12	496	520
Shares in associated companies	13	1,618	1,600
Deferred tax assets	24	23,267	22,202
Other non-current assets	14	4,211	4,819
Total non-current assets		**185,299**	192,133
Inventories	15	77,743	64,245
Trade accounts receivable	16	58,556	53,649
Income tax receivables		5,291	6,325
Prepaid expenses		1,863	1,230
Other accounts receivable	17, 32	9,378	10,028
Cash and cash equivalents	18	115,397	101,468
Total current assets		**268,228**	236,945
Total assets	31	**453,527**	429,078
SHAREHOLDERS' EQUITY AND LIABILITIES			
Share capital	19	25,261	25,261
Additional paid-in capital	19	96,245	96,245
Retained earnings	20	195,968	180,201
Other equity components	21	– 12,450	– 21,979
Equity of Pfeiffer Vacuum Technology AG shareholders		**305,024**	279,728
Financial liabilities	23	10,222	20,697
Provisions for pensions	25	43,497	44,203
Deferred tax liabilities	24	4,832	7,614
Total non-current liabilities		**58,551**	72,514
Trade accounts payable	26	21,245	19,414
Customer deposits		4,860	3,029
Other accounts payable	27	21,931	18,544
Provisions	28	26,982	22,367
Income tax liabilities		4,431	2,974
Financial liabilities	29	10,503	10,508
Total current liabilities		**89,952**	76,836
Total shareholders' equity and liabilities		**453,527**	429,078

Consolidated Statements of Shareholders' Equity Pfeiffer Vacuum Technology AG

in K€	Note	Share Capital	Additional Paid-in Capital	Retained Earnings	Other Equity Components	**Equity of Pfeiffer Vacuum Technology AG Shareholders**
Balance as at January 1, 2014		**25,261**	**96,245**	**173,931**	**-19,427**	**276,010**
Net income		—	—	32,419	—	32,419
Earnings recorded directly in equity	21, 32	—	—	—	– 2,552	– 2,552
Total comprehensive income		—	—	**32,419**	**– 2,552**	**29,867**
Dividend payment	20	—	—	– 26,149	—	– 26,149
Balance as at December 31, 2014		**25,261**	**96,245**	**180,201**	**– 21,979**	**279,728**
Net income		—	—	41,916	—	41,916
Earnings recorded directly in equity	21, 32	—	—	—	9,529	9,529
Total comprehensive income		—	—	**41,916**	**9,529**	**51,445**
Dividend payment	20	—	—	– 26,149	—	– 26,149
Balance as at December 31, 2015		**25,261**	**96,245**	**195,968**	**– 12,450**	**305,024**

Consolidated Statements of Cash Flows Pfeiffer Vacuum Technology AG

in K €	Note	**2015**	2014
Cash flow from operating activities:			
Earnings before taxes	31	60,451	44,273
Adjustment for financial income/financial expenses		308	471
Financial income received		317	425
Financial expenses paid		– 451	– 750
Income taxes paid		– 16,847	– 17,236
Depreciation/amortization	10, 11, 12, 31	20,677	20,492
Gain/loss from disposals of assets		91	– 23
Changes in allowances for doubtful accounts	16	178	212
Changes in inventory reserves	15	3,439	3,876
Other non-cash income and expenses		15	446
Effects of changes in assets and liabilities:			
Inventories		– 15,471	3,836
Receivables and other assets		– 726	3,484
Provisions, including pension and income tax liabilities		1,029	206
Payables, customer deposits		6,643	– 7,385
Net cash provided by operating activities		**59,653**	52,327
Cash flow from investing activities:			
Capital expenditures	10, 11, 12, 31	– 11,655	– 10,012
Proceeds from disposals of fixed assets		649	352
Net cash used in investing activities		**– 11,006**	– 9,660
Cash flow from financing activities:			
Dividend payments	20	– 26,149	– 26,149
Redemptions of financial liabilities		– 10,483	– 10,548
Net cash used in financing activities		**– 36,632**	– 36,697
Effects of foreign exchange rate changes on cash and cash equivalents		1,914	369
Net increase/decrease in cash and cash equivalents		**13,929**	6,339
Cash and cash equivalents at beginning of period		101,468	95,129
Cash and cash equivalents at end of period	18	**115,397**	101,468

Notes to the Consolidated Financial Statements

Remarks relating to the Company and its Accounting and Valuation Methods

1. General remarks relating to the Company

The parent company within the Pfeiffer Vacuum Group ("the Company" or "Pfeiffer Vacuum") is Pfeiffer Vacuum Technology AG, domiciled at Berliner Strasse 43, 35614 Asslar, Germany. Pfeiffer Vacuum Technology AG is a stock corporation organized under German law and recorded in the Register of Companies at the Local Court of Wetzlar under Number HRB 44. The Company is listed in the Prime Standard of Deutsche Börse Stock Exchange in Frankfurt am Main, Germany, where it is included in the TecDAX index.

Pfeiffer Vacuum is one of the leading full-line vacuum technology manufacturers, offering custom solutions for a wide range of needs in connection with the generation, control, and measurement of vacuum. The products developed and manufactured at the Company's production facilities in Asslar and Göttingen, Germany, as well as in Annecy, France and Asan, Republic of Korea, include turbopumps, a range of backing pumps, such as rotary vane, Roots and dry pumps, complete pumping stations, as well as custom vacuum systems, leak detectors, and components.

Pfeiffer Vacuum markets and distributes its products through its own network of sales companies and independent marketing agents. Moreover, there are service support centers in all major industrial locations throughout the world. The Company's primary markets are located in Europe, the United States, and Asia.

2. Basis for preparing Consolidated Financial Statements

Statement of compliance with IFRS

The Consolidated Financial Statements of Pfeiffer Vacuum Technology AG for the fiscal year from January 1 to December 31, 2015, have been prepared in accordance with International Financial Reporting Standards (IFRS) and the interpretations of the IFRS Interpretations Committee (IFRS IC) as applicable in the European Union (EU). This includes the International Accounting Standards (IAS), which continue to retain their validity, the interpretations of the Standing Interpretations Committee (SIC) and the interpretations of the International Financial Reporting Interpretations Committee (IFRIC). Those standards that have been published but whose application is not yet mandatory have generally not been adopted at an earlier stage. The Notes to the Consolidated Financial Statements additionally include the information required by § 315 a, Sub-Para. 1, of the German Commercial Code ("HGB").

Basic valuation principles

The Consolidated Financial Statements are prepared essentially in accordance with the acquisition cost principle. However, this does not include derivative financial instruments, which are carried at fair values. Pfeiffer Vacuum prepares its Consolidated Financial Statements in euros (€). Unless otherwise indicated, the presentation is in thousands of euros (K €). For mathematical reasons, the numbers presented in the Consolidated Financial Statements may include rounding differences.

Consolidated companies and principles of consolidation

All companies which Pfeiffer Vacuum directly or indirectly controls are consolidated. The Company is considered to control an entity if it is exposed to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

Associated companies are accounted for using the equity method. Companies are considered to be associated if Pfeiffer Vacuum Group has significant influence. Significant influence is the possibility to participate in financial or operational decisions but excluding control or joint decisions.

Inclusion in the Consolidated Financial Statements is made on the basis of individual financial statements prepared in accordance with consistent accounting and valuation principles. The balance sheet date of the individual financial statements of the included companies is the same as the balance sheet date of the Consolidated Financial Statements.

There were no investments in joint ventures or joint operations as at December 31, 2015, or in previous years. Nor were there any investments in unconsolidated structured entities.

Consolidation of investments is effected at the acquisition date in accordance with the acquisition method. In this connection, all assets (including, if applicable, intangible assets to be recognized additionally) and liabilities are first valued at their attributable fair values. The acquisition costs of the equity investment, i.e. the total compensation transferred, valued in accordance with attributable fair values, are then offset against the acquired, newly valued shareholders' equity. Any resulting positive difference is recognized as goodwill and written down only in the event of an impairment (impairment-only approach).

All intercompany receivables and liabilities, gains and losses, revenues and expenses are eliminated in connection with the consolidation process.

Foreign currency translation

The annual financial statements of subsidiaries domiciled outside the European Currency Union have been translated into euros (€) in accordance with IAS 21, "The Effects of Changes in Foreign Exchange Rates." Each company within the Corporate Group stipulates its own functional currency. The functional currency of the subsidiaries is the respective local currency. When translating financial statements presented in foreign functional currencies, year-end exchange rates are applied to assets and liabilities, while average annual exchange rates are applied to income statement accounts. The resulting translation adjustments are recorded in other equity components.

In the consolidated financial statements, foreign-currency transaction gains and losses from regular operations of consolidated companies are recorded as other operating income and expenses in the income statement.

3. Application of amended or new standards

The accounting and valuation principles used are essentially the same as those used the year before. In variance thereto, the Company in 2015 has applied the following new or amended standards for the first time, if application was mandatory. Basically, this did not have any impact on the Consolidated Financial Statements.

The following standards were issued by the IASB and partly endorsed by the EU. Currently, the impact on the Consolidated Financial Statements from future application is being analyzed. The option of voluntarily applying standards ahead of time has not been utilized.

Application of amended or new Announcements	Issued by IASB/IFRIC	Applicability [1]
Mandatory application fiscal year 2015		
IFRIC 21 – Levies	May 2013	June 17, 2014
Improvements to IFRS 2011 – 2013	December 2013	January 1, 2015
Voluntary applicability in fiscal year 2015		
Changes to IAS 19 – Employee Benefits – Employee's Contributions	November 2013	February 1, 2015
Improvements to IFRS 2010-2012	December 2013	February 1, 2015
Changes to IAS 16 and IAS 41 – Bearer Plants	June 2014	January 1, 2016
Changes to IFRS 11 – Accounting for Acquisitions of Interests in Joint Operations	May 2014	January 1, 2016
Changes to IAS 16 and IAS 38 – Clarification of Acceptable Methods of Depreciation and Amortisation	May 2014	January 1, 2016
Changes to IAS 27 – Equity Method in Separate Financial Statements	August 2014	January 1, 2016
Changes to IAS 1 – Presentation of Financial Statements	December 2014	January 1, 2016
Improvements to IFRS 2012-2014	September 2014	January 1, 2016
Issued, but not yet endorsed until fiscal year 2015		
IFRS 9 – Financial Instruments	July 2014	January 1, 2018
IFRS 15 – Revenue from Contracts with Customers	May 2014	January 1, 2018
Changes to IFRS 10 and IAS 28 – Sale or Contribution of Assets between an Investor and its Associate or Joint Venture	September 2014	open
Changes to IFRS 10, IFRS 12 and IAS 28 – Investment Entities: Applying the Consolidation Exception	December 2014	January 1, 2016
IFRS 16 – Leases	January 2016	January 1, 2019
Changes to IAS 12: Recognition of Deferred Tax Assets resulting from unrealized Losses	January 2016	January 1, 2017
Changes to IAS 7: Disclosure Initiatives	January 2016	January 1, 2017

[1] Fiscal years beginning on or after the indicated date according to EU regulation

4. Accounting and valuation methods

Income recognition

Sales are recognized when the material risks and rewards relating to the ownership of the products sold passes to the purchaser, which is essentially the case when the goods are shipped. Should product sales be subject to customer acceptance, revenues are not recognized until customer acceptance has occurred. Service revenues are recognized when the underlying services are performed. These revenues include the invoiced working hours of the service personnel, as well as spare parts and replacement products. Rebates are recorded as a reduction of sales. Interest income is recorded when the interest originates. Rental income from investment properties is recorded on a straight-line basis over the term of the leases.

Construction contracts

Construction contracts are accounted for under IAS 11, "Construction Contracts." The percentage of completion method is used for revenue recognition, with the stage of completion being calculated as the ratio between contract costs incurred and expected total contract costs (cost-to-cost method). Receivables from construction contracts are presented under trade accounts receivable on the assets side of the balance sheet, net of partial clearings.

Cost of Sales

Cost of sales include the manufacturing costs for the products sold as well as the costs for the services rendered. This includes all directly attributable material and production costs as well as indirect costs including depreciation/amortization on production buildings and machines. In addition, freight costs, expenses for inventory valuation, and warranty expenses are included in here. Based on historical experience, warranty provisions for recognized revenues are recorded as at year-end.

Research and development expenses

Research and development costs are expensed as incurred. Development costs are not capitalized, since the capitalization prerequisites in IAS 38, "Intangible Assets," are not fully satisfied.

Property, plant and equipment and intangible assets

Property, plant and equipment and intangible assets are stated at cost and depreciated/amortized on a straight-line basis over the customary useful lives of the assets. At the close of each fiscal year, the useful lives and depreciation/amortization methods, as well as the residual values in the case of property, plant and equipment, are reviewed and adjusted where necessary. The following useful lives are assumed:

Estimated useful Life	
Production halls, production and administration buildings and similar facilities	20 – 40 years
Machinery and equipment (including IT equipment)	3 – 15 years
Intangible Assets[1]	2 – 5 years

[1] With the exception of goodwill and a trademark recognized in connection with a purchase price allocation, there are no intangible assets with indefinite useful lives.

Scheduled depreciation and amortization are allocated to the expense lines in the income statement on the basis of the input involved.

The Company reviews long-lived assets for impairment whenever events or changes in circumstances suggest that the carrying amount of an asset may not be recoverable. Should impairment indicators exist, the Company performs the analyses required under IAS 36, "Impairment of Assets," with the carrying amount of the asset being compared to the recoverable amount. The recoverable amount of an asset or a cash-generating unit is the greater of the fair value less its selling costs and value in use. The resulting amount must be determined for each individual asset, unless an asset generates cash flows that are dependent upon those from other assets or other asset groups. Should the carrying amount of an asset be higher than its recoverable amount, the asset is viewed as being impaired and is written down to its recoverable amount. To determine the value in use of an asset, the anticipated future cash flows are discounted to their cash value, taking into consideration a before-tax discount rate that reflects current market expectations with respect to the interest rate effect and the specific risks of the asset in question.

An appropriate valuation model is employed to determine the fair value less selling costs. This model is based on valuation multiples and other available indicators for the fair value. Any required reversals of impairment losses are recorded in future-period income statements up to the amount of the impairment loss reversal limit. This limit is determined by the amount that would have resulted at the close of the respective fiscal year given scheduled depreciation of the asset. Repair and maintenance costs are expensed as incurred.

At least once a year, the Company reviews goodwill for possible impairments. For the purpose of the impairment test, goodwill acquired within the context of a corporate merger is allocated at the acquisition date to those cash generating units of the Corporate Group that can be expected to be able to benefit from the corporate merger. This review is also made whenever events or changes in circumstances suggest that the carrying amount may not be recoverable. In this case, the above described process for impairments under IAS 36, "Impairment of Assets," is applied. Any resulting impairment loss is recorded in the income statement. A reversal of goodwill impairment losses in future periods is not permissible.

A fixed or intangible asset is derecognized either at the time of disposal or at such time as no economic benefit can any longer be expected from the further utilization or sale of the asset. Gains and losses from disposals of assets are determined and recorded in the income statement on the basis of the difference between selling costs and carrying amount, less any directly attributable selling costs, where applicable.

Investment properties

Real estate properties are allocated to the portfolio of investment properties if they are held for the purpose of generating rental income. They are stated at cost and depreciated on a straight-line basis over their estimated useful lives (cost model). Assessment of their residual values, useful lives and depreciation methods, as well as any impairment losses, is performed analogously to the procedure described in connection with property, plant and equipment. Investment properties are derecognized upon disposal or when they are no longer being permanently used and they are no longer expected to produce any further future economic benefit.

Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or an equity instrument of another entity. Accounting for financial instruments in the case of usual and customary purchase or sale is performed on the settlement date, i.e. the day on which the asset is delivered. According to IAS 39, "Financial Instruments: Recognition and Measurement," financial instruments are allocated to the following categories upon initial recognition:

- Financial assets at fair value through profit and loss (financial assets held for trading),
- Financial assets held-to-maturity,
- Loans and receivables,
- Financial assets available-for-sale,
- Financial liabilities at fair value through profit and loss (financial liabilities held for trading) and
- Financial liabilities measured at amortized cost.

Accounts receivable, in particular trade accounts receivable, are categorized as "loans and receivables" and are measured at (amortized) cost. They typically do not bear interest. Costs of acquisition are recorded at the invoiced amount (including any value added tax). The Company continuously assesses the adequacy of the allowances for doubtful accounts receivable and makes appropriate adjustments on the basis of both specific probability and aging distribution. Any subsequent reversal is recorded in the income statement in an amount not to exceed its carrying amount (net of amortization or depreciation). Receivables are derecognized after all means of collection have been exhausted.

The Company uses derivatives only to manage foreign currency exchange rate risks. Around 59 % (2014: 56 %) of total consolidated sales are invoiced in foreign currencies (non-euro, predominantly in U.S. dollars). The Company enters into forward exchange and option transactions to hedge its future sales invoiced in foreign currencies against exchange rate fluctuations. Derivative financial instruments are acquired exclusively for this purpose. Pfeiffer Vacuum does not engage in speculative hedging transactions. Derivative financial instruments employed for hedging purposes are recorded at their fair values both at the time they are first recorded as well as in subsequent periods. Derivative financial instruments are recorded as assets if their fair value is positive and as liabilities if their fair value is negative. Changes in the fair value of these derivatives are recorded in equity without any impact on the income statement if the hedging is classified as a cash flow hedge according to IAS 39 and is effective. The derivative is reclassified into other operating income and expenses as foreign exchange gains/losses at the time of realization of the underlying transaction that has been hedged. Ineffective hedging elements of the change in the fair value of derivatives are recorded in the income statement. If derivatives were purchased for hedging purposes but do not formally qualify for hedging under IAS 39, they are recorded at fair value through profit and loss. The fair values of derivatives are determined on the balance sheet date using current reference quotations and taking into account forward premiums and discounts. Please refer to Note 32 for further information relating to financial instruments.

Trade accounts payable are categorized as financial liabilities and are measured at amortized cost. They are recorded at the higher of their notational value or their redemption amount at the close of the fiscal year, including any value added tax.

Bank loans are also categorized as financial liabilities and are measured at fair value upon first recognition and in future periods at amortized costs using the effective interest method. This takes into consideration all components of the effective interest rate. Interest income and expenses resulting from the application of the effective interest rate method are shown under financial results.

Shares in associated companies

An associate is an entity over which the Company has significant influence. In distinguishing between significant influence and control, the Company considers all factors categorized substantial according to judgment. Associated companies are valued in accordance with the equity method, with the book value of the company being adjusted annually by the percentage of results, dividend distributions, and other changes to shareholders' equity. Any goodwill in connection with an associated company is included in the book value of the shareholdings, and is subjected to neither scheduled depreciation nor any special impairment test. If there are indications of an impairment, the equity investment valuation is reduced, with the change being charged to income.

Cash and cash equivalents

Cash and cash equivalents consist of cash on hand, bank balances, and all highly liquid bank investments having original maturities of three months or less. Due to the short investment period, this line item is only subject to minor value fluctuations. Cash and cash equivalents are defined accordingly in the consolidated cash flow statements.

Inventories

Inventories are valued at the lower of net realizable value and acquisition or manufacturing costs. Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated selling costs. Acquisition or manufacturing costs comprise all costs for acquisition or manufacturing as well as all costs incurred for bringing the inventories to their current place and to the current status. With regard to work in process and finished products, the manufacturing costs include besides directly attributable material and production costs also production related indirect costs. Removals from inventory are determined on a weighted average cost basis. Interests on borrowed capital are not considered as part of acquisition or manufacturing costs for inventories. Valuation adjustments on excess inventories are determined on the basis of internal procedures in accordance with the ratio between inventory turnover and future sales or usage. Excess inventories are stocks of individual inventory items that exceed anticipated sales or usage. Management utilizes its judgment in forecasting sales or usage.

Other accounts receivable and other assets

Other accounts receivable and other assets are recorded at amortized cost and less allowances, where applicable. Noncurrent receivables and assets are valued using the effective interest method.

Provisions

Provisions are formed when the Corporate Group presently has a legal or constructive outside obligation as a result of a past event and it is likely that settlement of the obligation will lead to an outflow of economic resources and the amount of the obligation can be reliably determined. The valuation is made on the basis of the best estimate of the extent of the obligation.

Pensions

Valuation of pension obligations under defined benefit plans is based upon the projected unit credit method in accordance with IAS 19 "Employee Benefits." According to the new IAS 19 actuarial gains and losses from changes in the amount of either the defined benefit obligation (under pension plans), the actuarial present value of earned entitlements (under other plans) as well as those variances between actual returns and returns calculated with the discount rate or from changes in other actuarial assumptions are recorded directly in the other equity components since the beginning of the 2013 fiscal year. The pension provision thus shows the net benefit obligation resulting from the difference of the defined benefit obligation and the plan assets measured at fair value. Additionally, the return on plan assets is considered with the discount rate. The accounting for obligations under defined benefit plans is based upon actuarial reports calculated as per the close of the fiscal year. The existing pension plans are detailed in Note 25.

Expenses for defined contribution plans are recorded as expense in the income statement when the premium obligation is incurred. Provisions are formed only if the payment is not made in the year the premium was incurred.

Other accounts payable

Other accounts payable are measured at amortized costs. Thus, they are recorded at their notational value or at their higher redemption amount at the close of the fiscal year, including any value added tax.

Income taxes

Current income taxes are stated as a liability to the extent to which they have not yet been paid. General tax risks within the Group are additionally considered. Should the amounts already paid for income taxes exceed the amount owed, the difference is stated as an asset. Calculation of the amount is based upon the tax rates and tax legislation applicable at the close of the fiscal year.

Under IAS 12, "Income Taxes," deferred tax assets and liabilities are formed in the consolidated and taxation financial statements for temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases or for unused tax loss carry-forwards (liability method). In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some or all of the deferred tax assets will not be realized.

The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. In making this assessment, management considers the scheduled reversal of temporary differences, projected future taxable income, and tax planning strategies. Valuation of deferred tax assets and liabilities is performed using the local tax rates expected to be in effect at the time of realization of the asset or satisfaction of the liability, with the tax rates applicable at the close of the fiscal year being employed. The effects of changes in tax laws are recognized in the results of operations in the period in which the new tax rates go into effect. Deferred taxes that relate to line items recorded directly under shareholders' equity are recorded directly under equity and not in the income statement. An adjustment is recorded for deferred tax assets if it is unlikely that future tax advantages will be realized. Deferred tax assets and liabilities are offset if the entitlements and obligations relate to one and the same tax authority.

Leases

In accordance with IAS 17, "Leases," leasing contracts are classified as either finance or operating leases. Assets that are subject to operating leases are not capitalized. Lease payments are charged to income statement in the year they are incurred.

Under a finance lease, substantially all of the risks and rewards related to the leased asset are transferred. Assets that are subject to a finance lease are recorded at the present value of the minimum lease payments, with a leasing liability being recorded in the same amount. The periodic lease payments are divided into principal and interest components. While the interest component is recorded as an interest expense, the principal component reduces the outstanding liability. Assets recognized are depreciated over the useful life of the respective asset.

Pfeiffer Vacuum is only acting as a lessee in this regard.

Government grants

Government grants which compensate the Group for expenses (expense subsidies) are recorded in the income statement in other operating income in the same period the underlying expenses are incurred.

Determination of fair value

IFRS 13 "Fair Value Measurement" includes uniform regulations for fair value measurement and rules the determination of fair value in cases where other standards allow or require measurement at fair value. Pfeiffer Vacuum Group did not apply any fair value measurement options.

Use of estimates

The process of preparing financial statements requires the use of estimates and assumptions on the part of the management. These estimates are based upon management's historical experience, are verified regularly, and adjusted if necessary. Certain of the Company's accounting policies are considered critical, as they can have a major impact on the profitability, financial position, and liquidity of the Corporate Group and necessitate significant or complex judgment on the part of management. These estimates and assumptions could differ from the actual results. As at December 31, 2015, based on current estimate, no judgment uncertainties existed that could lead to the significant risk of the need for a material adjustment of book values in the 2016 fiscal year.

Material forward-looking estimates and assumptions exist, among others, in estimating the cash flows in connection with the goodwill impairment test, with regard to the formation of pension and warranty provisions, in forecasting the useful lives of fixed assets, or in connection with deferred tax assets. The major assumptions are detailed in the Notes relating to the individual line items of the balance sheet or in the accounting principles. With regard to the assumptions the goodwill impairment test is based on, please refer to Note 10. The parameters underlying the pension accounting are detailed in Note 25. Information concerning the estimated useful life of tangible and intangible assets is included in Note 4, section "Property, plant and equipment, and intangible assets". Further details for provisions are described in Note 28.

Notes to the Scope of Consolidation

5. Composition of consolidated companies

In addition to Pfeiffer Vacuum Technology AG, again two German and 18 (2014: 20) foreign subsidiaries are fully consolidated in the Company's Consolidated Financial Statements as at December 31, 2015.

Pfeiffer Vacuum Group as at December 31, 2015

in %	Location	Holdings
Pfeiffer Vacuum Technology AG	Germany	
Pfeiffer Vacuum GmbH	Germany	100.0
Pfeiffer Vacuum Austria GmbH	Austria	100.0
Pfeiffer Vacuum (Schweiz) AG	Switzerland	99.4
Pfeiffer Vacuum (Shanghai) Co., Ltd.	China	100.0
Pfeiffer Vacuum (India) Private Ltd.	India	27.0[1]
Pfeiffer Vacuum Ltd.	Great Britain	100.0
Pfeiffer Vacuum Scandinavia AB	Sweden	100.0
Pfeiffer Vacuum Inc.	USA	100.0
Pfeiffer Vacuum Singapore Ltd.	Singapore	100.0
Pfeiffer Vacuum Taiwan Corporation Ltd.	Taiwan	100.0
Pfeiffer Vacuum Benelux B.V.	The Netherlands	100.0
Pfeiffer Vacuum (Xi'an) Co., Ltd.	China	100.0
Pfeiffer Vacuum Holding B.V.	The Netherlands	100.0
Pfeiffer Vacuum Italia S.p.A.	Italy	100.0
Pfeiffer Vacuum (India) Private Ltd.	India	73.0[1]
Pfeiffer Vacuum Korea Ltd.	Republic of Korea	75.5[1]
Trinos Vakuum-Systeme GmbH	Germany	100.0
Pfeiffer Vacuum SAS[2]	France	100.0
adixen Vacuum Technology (Shanghai) Co., Ltd.	China	100.0
adixen Manufacturing Romania S.r.l.[3]	Romania	100.0
adixen Vacuum Technology Korea Co. Ltd.	Republic of Korea	100.0
Pfeiffer Vacuum Korea Ltd.	Republic of Korea	24.5[1]

[1] Total Group holdings: 100.0 %
[2] Renamed; formerly adixen Vacuum Products SAS
[3] Renamed to Pfeiffer Vacuum Romania S.r.l. in January 2016

6. Changes in consolidated companies and purchase of non-controlling interests

In fiscal 2015, Pfeiffer Vacuum Brasil Ltda. was liquidated and was thus excluded from the scope of consolidation. In addition, adixen Manufacturing Korea Co. Ltd. was merged into adixen Vacuum Technology Korea Co. Ltd. There was no material impact on the Company's net worth, financial position or profitability.

Notes to the Consolidated Statements of Income

7. Functional expenses

Cost of Sales

Cost of sales predominantly include the manufacturing costs for the products sold as well as the costs for the services rendered. This includes all directly attributable material and production costs as well as indirect production costs (including depreciation on production buildings and machines). In addition, freight costs, expenses for inventory valuation, and warranty expenses are included here.

Selling and marketing expenses

Selling and marketing expenses predominantly include wages and salaries, marketing and advertising costs, costs relating to trade shows and conventions, as well as other merchandising costs (such as catalogs, brochures, etc.).

General and administrative expenses

General and administrative expenses predominantly include wages and salaries, expenses related to allowances for doubtful accounts, audit and other general consulting fees, as well as all costs relating to the Company as a whole.

Research and development expenses

Research and development expenses include personnel and material expenses allocated to this functional section. Amortization expenses for developed technology recognized in connection with the adixen purchase price allocation totaled € 3.0 million in 2015 and 2014 and are also included in research and development expenses.

For further analysis of operating expenses, please refer to Note 15 (relating to cost of sales), to Note 25 (relating to the development of pension expenses), and to Note 37 (relating to development of personnel expenses).

8. Other operating income and other operating expenses

Other operating income and expenses are comprised as follows:

Composition of Other Operating Income and Expenses

in K€	**2015**	2014
Foreign exchange gains	8,914	6,095
Government grants	4,383	3,958
Other	—	123
Other operating income	**13,297**	10,176
Foreign exchange losses	– 6,863	– 2,237
Other	– 19	—
Other operating expenses	**– 6,882**	– 2,237

9. Financial expenses and financial income

Financial expenses and financial income as recorded in 2015 and the previous year comprises as follows:

Composition of Financial Income and Financial Expenses

in K€	**2015**	2014
Interest expenses and similar	– 691	– 978
Total financial expenses	**– 691**	– 978
Interest income	365	507
Income from associated companies	18	–
Total financial income	**383**	507
Financial result	**– 308**	– 471

Notes to the Consolidated Balance Sheets

10. Intangible assets

The intangible assets item mainly includes software purchased within the consolidated Group and intangible assets recognized in connection with the adixen acquisition (amongst others developed technology, customer base, trademark right) as well as goodwill. The development of intangible assets in 2015 and 2014 was as follows:

Development of Intangible Assets in 2015

in K€	Software	Goodwill	Other intangible assets	**Total**
Acquisition cost				
Balance as at January 1, 2015	5,496	55,155	46,889	107,540
Currency changes	11	1,475	1,056	2,542
Additions	1,279	—	80	1,359
Disposals	– 496	—	– 30	– 526
Balance as at December 31, 2015	6,290	56,630	47,995	110,915
Amortization				
Balance as at January 1, 2015	3,532	—	26,151	29,683
Currency changes	6	—	978	984
Additions	767	—	6,441	7,208
Disposals	– 338	—	– 18	– 356
Balance as at December 31, 2015	3,967	—	33,552	37,519
Net book value as at December 31, 2015	**2,323**	**56,630**	**14,443**	**73,396**

Development of Intangible Assets in 2014

in K€	Software	Goodwill	Other intangible assets	**Total**
Acquisition cost				
Balance as at January 1, 2014	5,446	53,404	45,243	104,093
Currency changes	73	1,751	1,502	3,326
Additions	630	—	416	1,046
Disposals	– 653	—	– 272	– 925
Balance as at December 31, 2014	5,496	55,155	46,889	107,540
Amortization				
Balance as at January 1, 2014	3,514	—	19,182	22,696
Currency changes	65	—	863	928
Additions	576	—	6,352	6,928
Disposals	– 623	—	– 246	– 869
Balance as at December 31, 2014	3,532	—	26,151	29,683
Net book value as at December 31, 2014	**1,964**	**55,155**	**20,738**	**77,857**

Impairment losses or respective reversals did not have to be recorded for intangible assets in fiscal 2015 and 2014. Scheduled amortization of intangible assets was allocated to the functional sections according to their actual origin and reason.

For the purpose of testing the recoverability, goodwill and trademark rights with indefinite useful life recognized in connection with acquisitions were allocated to cash generating units. Recoverability was tested on December 31, 2015 by means of an impairment test.

The trademark right "adixen" recognized in connection with the acquisition (net book value € 3.3 million; 2014: € 3.2 million) has an indefinite useful life and was allocated to the business segments based on sales portions. Here, amongst others, € 0.8 million related to France, € 1.0 million to the Republic of Korea, and € 0.6 million to the USA. No impairment was determined under the impairment test conducted on December 31, 2015.

The recoverable amount (value in use) for impairment testing of the goodwill was determined as at December 31, 2015. Bases were cash flow forecasts for the years 2016 through 2018. These forecasts are developed from the yearly sales and cost planning and the corresponding operating results. In doing so, the current operating results as well as the expected market, economic, and competitor developments are considered and checked against the historical results. The cash flows expected after the detailed forecast 2016 through 2018 were extrapolated using individual growth rates. Discounting of cash flows is carried out using weighted average cost of capital (WACC) that also reflect country specific risks.

The recoverable amount (value in use) for impairment testing of the goodwill recognized in connection with the adixen acquisition (€ 48.2 million; 2014: € 46.7 million) was determined as at December 31, 2015, based on cash generating units. The adixen goodwill allocation to the cash generating units and the major assumptions used in calculating the recoverable amount are detailed in the following table.

Allocation of adixen Goodwill and Major Valuation Assumptions

	December 31, 2015			December 31, 2014		
	Goodwill	Pre-tax discount rate	Long-term growth rate	Goodwill	Pre-tax discount rate	Long-term growth rate
	€ in millions	in %	in %	€ in millions	in %	in %
Germany	3.4	8.7	1.5	3.4	9.2	1.5
France	22.9	10.3	1.5	22.9	10.6	1.5
Rest of Europe	2.8	11.2	1.5	2.8	11.4	1.5
USA	8.1	10.0	1.5	7.3	10.7	1.5
Republic of Korea	4.3	9.3	1.5	4.1	9.6	1.5
China	4.5	9.5	1.5	4.2	9.9	1.5
Rest of Asia	2.2	10.3	1.5	2.0	10.6	1.5

The determination of the adixen goodwill, too, did not result in any impairment loss.

The recoverable amount (value in use) for impairment testing of the goodwill recognized in connection with the Trinos acquisition (again € 8.2 million) was also determined as at December 31, 2015. The cash flows expected for this separate cash generating unit after the detailed forecast for 2016 through 2018 were extrapolated using a growth rate of 1.5 % (unchanged). The pre-tax discount rate employed was 9.0 % (2014: 9.5 %). The determination of this value did not result in an impairment.

An increase in discount rate by 1.0 %-point with all other assumptions kept constant would cause the recoverable amount (value in use) of the goodwill allocated to the Italy region to match its net book value (2014: 1.0 %-point). The same situation would result from a 0.9 %-point to 5.9 % reduction of the sustainable EBIT margin used for the cash flow extrapolation or a 1.2 % point reduction in the sustainable sales growth rate used for the cash flow extrapolation (2014: 1.0 %-point and 1.1 %-points, respectively). An increase in discount rate by 0.6 %-points with all other assumptions kept constant would cause the recoverable amount (value in use) of the goodwill allocated to the China region to match its net book value (2014: 0.5 %-points). The same situation would result from a 0.7 %-point to 5.3 % reduction of the sustainable EBIT margin used for the cash flow extrapolation or a 0.7 %-point reduction in the sustainable sales growth rate used for the cash flow extrapolation

(2014: 0.6 %-points and 0.6 %-points, respectively). As of December 31, 2015, the amount by which the value in use exceeded the respective unit's net book value for the said two cash generating units in Italy and China totaled € 0.8 million and € 1.6 million, respectively. In the previous year, an increase in discount rate by 0.5 %-points with all other assumptions kept constant would have caused the recoverable amount (value in use) of the goodwill allocated to the Republic of Korea region to match its net book value. For the previous year, the same situation would have resulted from a 0.3 %-point to 3.2 % reduction of the sustainable EBIT margin used for the cash flow extrapolation or a 1.0 %-point reduction in the sustainable sales growth rate used for the cash flow extrapolation.

11. Property, plant and equipment

Development of Property, Plant and Equipment 2015

in K€	Land and Buildings	Technical Equipment and Machinery	Other Equipment, Factory and Office Equipment	Construction in Progress	**Total**
Acquisition or manufacturing cost					
Balance as at January 1, 2015	68,341	70,596	24,983	3,815	167,735
Currency changes	336	409	387	125	1,257
Additions	1,163	3,869	3,085	2,179	10,296
Disposals	– 122	– 1,327	– 1,274	—	– 2,723
Reclassifications	2,102	752	120	– 2,974	—
Balance as at December 31, 2015	71,820	74,299	27,301	3,145	176,565
Depreciation					
Balance as at January 1, 2015	26,819	41,448	14,333	—	82,600
Currency changes	8	134	220	—	362
Additions	3,802	6,850	2,793	—	13,445
Disposals	– 122	– 945	– 1,086	—	– 2,153
Balance as at December 31, 2015	30,507	47,487	16,260	—	94,254
Net book value as at December 31, 2015	**41,313**	**26,812**	**11,041**	**3,145**	**82,311**

Development of Property, Plant and Equipment 2014

in K€	Land and Buildings	Technical Equipment and Machinery	Other Equipment, Factory and Office Equipment	Construction in Progress	**Total**
Acquisition or manufacturing cost					
Balance as at January 1, 2014	67,247	67,156	24,055	2,338	160,796
Currency changes	715	619	321	50	1,705
Additions	1,188	2,960	2,730	2,088	8,966
Disposals	– 1,107	– 468	– 2,157	—	– 3,732
Reclassifications	298	329	34	– 661	—
Balance as at December 31, 2014	68,341	70,596	24,983	3,815	167,735
Depreciation					
Balance as at January 1, 2014	24,014	34,329	13,556	—	71,899
Currency changes	190	225	205	—	620
Additions	3,680	7,309	2,551	—	13,540
Disposals	– 1,065	– 415	– 1,979	—	– 3,459
Balance as at December 31, 2014	26,819	41,448	14,333	—	82,600
Net book value as at December 31, 2014	**41,522**	**29,148**	**10,650**	**3,815**	**85,135**

In fiscal 2015, buildings and machinery having a net book value of K€ 3,275 (2014: K€ 3,148) were used as collateral to secure the Group's financial liabilities.

Neither in 2015 nor in the previous year there were any impairment losses or related reversals for property, plant, and equipment.

12. Investment properties

Development of Investment Properties		
in K€	**2015**	2014
Acquisition or manufacturing cost		
Balance as at January 1	861	861
Additions	—	—
Disposals	—	—
Reclassifications	—	—
Balance as at December 31	861	861
Depreciation		
Balance as at January 1	341	317
Additions	24	24
Disposals	—	—
Reclassifications	—	—
Balance as at December 31	365	341
Net book value as at December 31	**496**	520

The real estate shown in this line item was rented out in fiscal 2015 and 2014. Unchanged to the previous year, rental revenues amounted to K€ 51 and direct operating expenses amounted to K€ 26. Impairment losses or related reversals did not have to be recorded in 2015 and 2014.

The fair value of investment properties remains unchanged at € 0.5 million as per December 31, 2015 and 2014. Fair values were derived on the basis of the Company's own calculations by discounting expected net rental revenues during the estimated remaining life by an appropriate discount rate (level 3 of the fair value hierarchy according to IFRS 13).

13. Shares in associated companies

Since 2010, Pfeiffer Vacuum holds a total of 24.9 % of the shares of Dreebit GmbH, Dresden, Germany. This company is active in the field of service for vacuum pumps and systems, and additionally conducts developments in the field of medical technology.

Composition of Equity Value		
in K€	**2015**	2014
Current assets	1,475	1,337
Non-current assets	6,388	6,751
Current liabilities	– 613	– 1,211
Non-current liabilities	– 751	– 450
Total Equity	**6,499**	**6,427**
Holdings quota	24.90 %	24.90 %
Equity Value	**1,618**	**1,600**
Dec. 31		

With sales of K€ 6,510 (2014: K€ 5,441) Dreebit GmbH generated a net income of K€ 74 (2014: balanced bottom line). The impact of the change in the investment book value is shown in the financial income (please refer to Note 9).

14. Other non-current assets

Other non-current assets include non-current financial assets, for example deposits (K€ 886, 2014: K€ 1,220).

15. Inventories

Composition of Inventories		
in K€	**2015**	2014
Raw materials	30,573	23,205
Work in process	20,112	15,262
Finished products	27,058	25,778
Total inventories, net	**77,743**	64,245
Dec. 31		

Materials consumption in fiscal 2015 amounted to € 171.9 million (2014: € 166.1 million) and is included in cost of sales.

In 2015, an amount of K€ 3,439 (2014: K€ 3,876) from the valuation of inventories at net realizable value was recorded as expense. This expense was shown under cost of sales.

16. Trade accounts receivable

In connection with its normal course of business, the Company extends credit to a wide variety of business customers. The Company performs ongoing credit evaluations of its customers and establishes adequate allowances for identified credit risks. Trade accounts receivable do not bear any interest and have a remaining term of less than one year.

Composition of Trade Accounts Receivable

in K€	2015	2014
Trade accounts receivable	59,752	54,888
Allowance for doubtful accounts	– 1,196	– 1,239
Trade accounts receivable, net	**58,556**	53,649

Dec. 31

Summary of Activity in the Allowance for Doubtful Accounts

in K€	2015	2014
Balance as at January 1	1,239	1,347
Currency changes	50	87
Additions	178	212
Utilization	– 271	– 407
Balance as at December 31	**1,196**	1,239

Composition of Unreserved Trade Accounts Receivable

in K€	Net Book Value	Thereof: Unreserved and not Overdue	Thereof: Unreserved and Overdue in the Following Periods					
			< 30 Days	30–60 Days	61–90 Days	91–180 Days	181–360 Days	> 360 Days
2015	**58,556**	**46,072**	**8,145**	**2,171**	**658**	**401**	**455**	**358**
2014	53,649	43,967	6,081	1,685	763	292	127	239

Dec. 31

As at December 31, 2015 receivables with a nominal value of K€ 1,492 were subject to allowances for doubtful accounts (December 31, 2014: K€ 1,734).

In 2015, expenses for derecognition of receivables amounted to K€ 37 (2014: K€ 145).

Trade accounts receivable as of December 31, 2014 included receivables from construction contracts totaling K€ 764 that were recorded according to the percentage of completion. These receivables resulted from sales recognized in 2014 totaling K€ 3,113 less partial clearings of K€ 2,349. The total costs incurred and recognized profits until then amounted to K€ 3,113. In 2015, there were no amounts to disclose in this regard.

17. Other accounts receivable

This line item totals K€ 9,378 as at December 31, 2015 (December 31, 2014: K€ 10,028). As in the year before, this position was characterized by expense subsidies of K€ 3,110 (December 31, 2014: K€ 2,934) and VAT claims of K€ 1,117 (December 31, 2014: K€ 823).

In addition, there are asserted indemnity claims in connection with a former acquisition which have not yet been recorded. Additional information is not disclosed at this point to avoid negative impact on the ongoing dispute.

18. Cash and cash equivalents

The cash and cash equivalents item consists of cash at banks and cash on hand. Additionally, the Company records all bank deposits having an original maturity of three months or less as cash equivalents. The fair value of cash and cash equivalents corresponds to their net book value.

19. Share capital and additional paid-in capital

Unchanged compared to the previous year end, the share capital of Pfeiffer Vacuum Technology AG (parent company) consisted of 9,867,659 issued and outstanding no-par ordinary shares.

The Annual Shareholders Meeting on May 26, 2011, authorized the Management Board to increase the Company's share capital by K€ 12,631, or 4,933,829 shares, in consideration for contributions in cash and/or kind (authorized capital). This authorization is valid through May 25, 2016, and is subject to the consent of the Supervisory Board. Authorized capital as at December 31, 2015, totaled K€ 9,186.

According to the resolution of the Annual Shareholders Meeting on May 22, 2014, the Management Board is authorized to issue fractional bonds with option or conversion rights or conversion obligations, profit participation rights or participating bonds (or combinations of these instruments) with an aggregate nominal value of up to € 200,000,000.00 and to grant the holders conversion rights for up to 2,466,914 no-par bearer shares of the Company having a pro-rata amount of up to € 6,315,299.84 of the share capital. This authorization is valid until May 21, 2019, and requires the consent of the Supervisory Board.

There were no changes of the additional paid-in capital in 2015 or 2014.

20. Paid and proposed dividends

The Annual Shareholders Meeting on May 21, 2015, resolved to pay a dividend of € 2.65 per share (Annual Shareholders Meeting on May 22, 2014: € 2.65 per share). The dividend payment carried out thereunder amounted to K€ 26,149 in 2015 (2014: K€ 26,149).

At the Annual Shareholders Meeting, the Management and Supervisory Boards will propose that the shareholders participate in the Company's success in the form of a dividend in the amount of € 3.20 per share. This proposal is subject to the approval of the Annual Shareholders Meeting. Because the proposal must be approved by the Annual Shareholders Meeting, the resulting payment of K€ 31,577 has not been recorded as a liability in the balance sheet for the fiscal year ended December 31, 2015.

21. Other equity components

Other equity components comprise unrealized gains/losses on hedges and actuarial gains/losses resulting from valuation of defined benefit obligations and plan assets at fair value. Furthermore this position comprises foreign currency translation adjustments.

Development of Other Equity Components

in K€	Actuarial Gains/Losses	Unrealized Gains/Losses on Hedges	Foreign Currency Translation Adjustments	**Total**
Balance as at January 1, 2014	– 16,116	—	– 3,311	**– 19,427**
Changes in actuarial gains/losses (net of tax)	– 10,571	—	—	– 10,571
Changes in fair value of cash flow hedges (net of tax)	—	– 64	—	– 64
Changes in foreign currency translation	—	—	8,083	8,083
Balance as at December 31, 2014	– 26,687	– 64	4,772	**– 21,979**
Changes in actuarial gains/losses (net of tax)	1,684	—	—	1,684
Changes in fair value of cash flow hedges (net of tax)	—	64	—	64
Changes in foreign currency translation	—	—	7,781	7,781
Balance as at December 31, 2015	– 25,003	—	12,553	**– 12,450**

Due to the fact that the terms of all cash flow hedges are less than one year, the reported year-end balances as at December 31 of the respective years will be reclassified to the income statement the next year. The new year-end amounts result form changes during the respective year and thus not from prior years.

Tax Effect on Other Comprehensive Income

	2015			2014		
in K€	Gross Amount	Tax Effect	Net Amount	Gross Amount	Tax Effect	Net Amount
Actuarial gains/losses	2,269	– 585	1,684	– 14,916	4,345	– 10,571
Cash flow hedges	96	– 32	64	– 96	32	– 64
Currency changes	7,781	—	7,781	8,083	—	8,083
Total other comprehensive income	**10,146**	**– 617**	**9,529**	– 6,929	4,377	– 2,552

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22. Treasury shares

At the Annual Shareholders Meeting on May 21, 2015, the shareholders authorized the Management Board to acquire treasury shares pursuant to § 71, Sub-Para. 1, No. 8, German Stock Corporation Act. This authorization allows the Company to acquire treasury shares representing up to € 2,526,120.70 of the capital stock (986,766 shares equal to 10 % of capital stock at the time of the resolution), requires the consent of the Supervisory Board for execution, and is valid through May 20, 2020.

23. Long-term financial liabilities

In connection with the acquisition of the adixen entities, long-term financial liabilities having a net cash inflow of € 67.0 million were taken out as at December 31, 2010. These liabilities have a Euribor-based variable interest rate including a margin. Interest clearing is made quarterly. For the fiscal year 2015, interest expenses totaling € 0.3 million were recorded (2014: € 0.6 million). Taking into account the loan costs to be recognized over the duration of the liabilities, the amount recorded in the balance sheet on December 31, 2015, stands at € 10.0 million (December 31, 2014: € 20.0 million). Guarantors of the credit agreement are Pfeiffer Vacuum Technology AG and Pfeiffer Vacuum GmbH. Under the loan agreement, the Group has committed to comply with a determined financial ratio. The Company has complied with this ratio in 2015 and 2014. Further long-term financial liabilities totaling € 0.2 million (December 31, 2014: € 0.7 million) are due to the partial external funding of some Group entities. For the time being, redemption of this line item can be assumed in the year 2017. Cash outflows from interests will presumably total € 0.1 million in 2016 and € 0.1 million in 2017.

Pfeiffer Vacuum and its subsidiaries have various lines of credit available to them for operating purposes, totaling approximately € 41.0 million (December 31, 2014: € 28.1 million).

24. Income taxes

Under current German corporate tax law, taxes on the income of German companies comprise corporate taxes, trade taxes, and an additional surtax.

Income Before Tax was Taxable in the Following Jurisdictions

in K€	**2015**	2014
Germany	38,901	34,094
Outside Germany	21,550	10,179
Total	**60,451**	44,273

Composition of Income Tax Expense

in K€	**2015**	2014
Current taxes		
Germany	12,992	9,627
Outside Germany	9,670	6,586
	22,662	16,213
Deferred taxes		
Germany	– 801	– 128
Outside Germany	– 3,326	– 4,231
	– 4,127	– 4,359
Income tax expense	**18,535**	11,854

K€ 21,258 of current tax expense relate to earnings in 2015 (2014: K€ 16,426). This line item additionally contains tax expenses for prior years amounting to K€ 1,404 (2014: tax refunds of K€ 213).

Reconciliation from Expected to Actual Income Tax Expense

in K€	2015	2014
Earnings before taxes	60,451	44,273
Expected tax expense using the tax rate of the parent company (28.81 %)	17,416	12,755
Tax credits/debits due to tax filings in prior years	1,404	– 213
Non-deductible expenses	1,187	289
Effects due to dividend payments	389	68
Higher foreign tax rates	151	341
Non-taxable income	– 1,843	– 1,247
Other	– 169	– 139
Income tax expense	**18,535**	11,854

As opposed to 26.8 % the year before, the tax ratio for the Pfeiffer Vacuum Group amounted to 30.7 % in 2015.

Deferred Taxes Relate to the Following Balance Sheet Items

in K€	2015	2014
Deferred tax assets		
Pensions	16,842	16,847
Inventories	6,226	5,191
Personnel and other provisions	2,714	2,897
Tax loss carry forwards	2,610	2,270
Property, plant and equipment	497	498
Receivables (including allowances for doubtful accounts)	291	267
Intangible assets	103	136
Derivatives	18	53
Other	162	153
Total deferred tax assets	**29,463**	28,312
Deferred tax liabilities		
Property, plant and equipment	– 6,000	– 6,622
Intangible assets	– 4,369	– 6,329
Receivables (including allowances for doubtful accounts)	– 243	– 255
Inventories	– 207	– 186
Tax-privileged reserves of a Swedish subsidiary	– 49	– 126
Personnel and other provisions	—	– 4
Other	– 160	– 202
Total deferred tax liabilities	**– 11,028**	– 13,724
Total deferred taxes, net	**18,435**	14,588

Dec. 31

Amounts Recorded in the Balance Sheet

in K€	2015	2014
Deferred tax assets	23,267	22,202
Deferred tax liabilities	– 4,832	– 7,614
Total deferred taxes, net	**18,435**	14,588

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Deferred Taxes Recorded in the Income Statement

in K€	2015	2014
Intangible assets	– 1,927	– 1,858
Inventories	– 908	– 353
Property, plant and equipment	– 601	– 550
Pensions	– 590	– 653
Tax loss carry forwards	– 254	– 1,037
Tax-privileged reserves of a Swedish subsidiary	– 79	– 75
Receivables (including allowances for doubtful accounts)	– 30	139
Personnel and other provisions	263	19
Derivatives	2	– 75
Financial liabilities	—	83
Other	– 3	1
Total deferred taxes (income)	**– 4,127**	– 4,359

As at December 31, 2015, the total deferred tax assets included income taxes recorded directly in equity of K€ 9,568 (December 31, 2014: K€ 10,179). The total deferred tax liabilities included income taxes recorded directly in equity of K€ – 874 (December 31, 2014: K€ – 880). The amount recorded in 2015 only related to actuarial gains/losses (2014: actuarial gains/losses).

For tax losses totaling K€ 829 (thereof K€ 635 deductible until 2019 and K€ 194 deductible until 2020), no deferred tax assets have been recorded as these losses will presumably not be offset against taxable gains until the expiration.

Provisions have not been established for additional taxes on the undistributed earnings of non-German subsidiaries. These earnings are considered to be permanently reinvested and could become subject to additional tax if remitted or deemed remitted as dividends. Under current German law, dividends from non-German and German subsidiaries are 95 % tax-exempt, i.e. 5 % of dividend income is not deductible from income for corporate tax purposes. The management estimates that the effects of this rule in Germany will be negligible.

25. Pensions and similar obligations

Defined benefit pension plans

Composition of the Net Liability Recorded in the Balance Sheet

in K€	2015	2014
Present value of funded defined benefit obligation	93,160	92,589
Present value of unfunded defined benefit obligation	9,347	8,820
Total present value of defined benefit obligation	102,507	101,409
Fair value of plan assets	– 59,010	– 57,206
Net defined benefit liability	**43,497**	44,203

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Regional Split of the Net Liability Recorded in the Balance Sheet

in K€	2015	2014
Germany	30,723	33,694
Europe (excluding Germany)	8,433	8,023
Rest of world	4,341	2,486
Net defined benefit liability	**43,497**	44,203

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For Pfeiffer Vacuum GmbH, there are plans in place consisting of old-age, invalidity, and surviving dependents benefits. These obligations are based upon plans reflecting period of service and final salary. However, these plans are closed for new employees since many years. For new employees, there is a retirement arrangement in place since December 31, 2007 which has been implemented as a direct commitment on a period of service and funded basis. Accordingly for all employees of Pfeiffer Vacuum GmbH an employer funded pension scheme is in place which is partially funded via the Pfeiffer Vacuum Trust e.V. There are no legally binding minimum funding requirements for these plans.

For re-appointed members of the Pfeiffer Vacuum Technology AG Management Board there are individually agreed plans in place, consisting of old-age, invalidity, and surviving dependents benefits. These obligations are based on period of service as well as final salary commitments and are also largely funded via the Pfeiffer Vacuum Trust e.V. Again, there are no legally binding minimum funding requirements. These benefit obligations are detailed in the compensation report (an element of MD &A).

For Pfeiffer Vacuum Inc., USA, there is a plan in place consisting of old-age, invalidity, and surviving dependents benefits with the obligations being based upon period of service and final salary. These benefits are partially funded via a trust arrangement. There are no legally binding minimum funding requirements.

For Pfeiffer Vacuum SAS, France, and for adixen Vacuum Technology Korea Co., Ltd., Republic of Korea, there are plans in place with the obligations being based upon period of service and final salary to be paid as a one-time installment due at the beginning of the retirement. The plan of adixen Vacuum Technology Korea Co., Ltd. is partially funded. There are no legally binding minimum funding requirements in France or the Republic of Korea.

Composition of the Net Pension Expenses

in K€	2015	2014
Current service cost	3,605	2,980
Net interest expense	924	940
Net pension expenses	**4,529**	3,920

Net pension expenses were allocated to the functional expenses according to the input involved.

Development of the Defined Benefit Obligation

in K€	2015	2014
Present value of defined benefit obligation as at January 1	101,409	81,085
Current service cost	3,605	2,980
Interest cost on the defined benefit obligation	2,237	2,960
Actuarial gains/losses from changes in demographic assumptions	375	136
Actuarial gains/losses from changes in financial assumptions	– 2,431	16,827
Actuarial experience gains/losses	– 702	– 557
Benefits paid	– 3,148	– 2,939
Currency changes	1,162	917
Present value of defined benefit obligation as at December 31	**102,507**	101,409
Thereof attributable to:		
Active employees	60,513	59,165
Deferred employees	3,356	4,247
Pensioners	38,638	37,997

Development of Plan Assets

in K€	2015	2014
Fair value of plan assets as at January 1	57,206	53,144
Interest income	1,313	2,020
Experience gains/losses	– 392	1,598
Company contributions	3,142	2,685
Benefit payments	– 3,148	– 2,939
Currency changes	889	698
Fair value of plan assets as at December 31	**59,010**	57,206

Actuarial Assumptions

in %	2015	2014
Germany		
Discount rate	2.20	2.05
Wage and salary trend	3.00	3.00
Pension trend	2.00	2.00
United States		
Discount rate	4.85	4.50
Wage and salary trend	2.00	2.00
France, Republic of Korea		
Discount rate (weighted average)	2.09	2.12
Wage and salary trend (weighted average)	3.51	3.60

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Composition of Plan Assets

	2015		2014	
	in K€	in %	in K€	in %
Equity securities	15,199	25.8	14,792	25.9
Debt securities	41,561	70.4	39,209	68.5
Cash and cash equivalents	374	0.6	789	1.4
Other	1,876	3.2	2,416	4.2
Total	**59,010**	**100.0**	57,206	100.0

Dec. 31

With the exemption of plan assets in the category "Other" totaling K€ 1,825 (December 31, 2014: K€ 1,495), all plan assets are traded on an active market.

Plan assets do not contain financial instruments issued by the Company or other assets owned by the Company.

Accounting for 88 % the vast majority of plan assets related to the funding of the German benefit plans. To invest these funded amounts fiducially and insolvency protected, Pfeiffer Vacuum Trust e.V. was founded. Pfeiffer Vacuum Trust e.V. issued a mutual fund with a pursued target equity allocation of up to 30 % as well as a pursued fixed-income securities and cash allocation of at least 70 %.

The fund is managed by an unrelated third-party asset management company with the major conditions regarding the asset allocation being given and adjusted when necessary. Funds are invested conservatively using also a value safeguarding approach. Underlying risks in connection with the investment of plan assets, for example fair value and default risks, are minimized accordingly.

The risks relating to the defined benefit plans within Pfeiffer Vacuum Group predominantly relate to the determination of discount rates. Changes to this parameter impact disproportionately the present value with the current relatively low interest rate level leading to a comparably high benefit obligation. In addition, benefit obligation is impacted by the other actuarial assumptions (for example life expectancy, wage and salary trend, pension trend). Depending on the elements of the pension plan life expectancy or pension trend are of subordinate importance. The following table shows the respective impact of an isolated adjustment of individual assumptions with all other parameters including the basic methodology kept constant compared to the original calculation.

Sensitivity Analysis as at December 31, 2015

	Change in actuarial assumption	Impact on defined benefit obligation	
		in K€	in %
Present value of defined benefit obligation as at December 31, 2015		102,507	
Discount rate	1.0 %-point increase	– 13,515	– 13.2
	1.0 %-point decrease	17,246	16.8
Pension trend	0.25 %-point increase	2,420	2.4
	0.25 %-point decrease	– 2,251	– 2.2
Wage and salary trend	0.5 %-point increase	2,146	2.1
	0.5 %-point decrease	– 2,018	– 2.0
Life expectancy	increase by 1 year	3,740	3.6
	decrease by 1 year	– 3,782	– 3.7

Sensitivity Analysis as at December 31, 2014

	Change in actuarial assumption	Impact on defined benefit obligation	
		in K€	in %
Present value of defined benefit obligation as at December 31, 2014		101,409	
Discount rate	1.0 %-point increase	– 12,989	– 12.8
	1.0 %-point decrease	17,824	17.6
Pension trend	0.25 %-point increase	2,595	2.6
	0.25 %-point decrease	– 2,441	– 2.4
Wage and salary trend	0.5 %-point increase	2,222	2.2
	0.5 %-point decrease	– 2,090	– 2.1
Life expectancy	increase by 1 year	4,237	4.2
	decrease by 1 year	– 4,269	– 4.2

Expected Maturity of Undiscounted Pension Payments

in K€	2015	2014
Less than 1 year	3,572	3,080
Between 1 and 2 years	3,452	3,225
Between 2 and 3 years	3,868	3,525
Between 3 and 4 years	4,058	3,848
Between 4 and 5 years	4,194	4,094
More than 5 until 10 years	24,801	23,258

Dec. 31

The weighted average duration of the defined benefit obligation at December 31, 2015 amounted to 16.1 years (December 31, 2014: 16.6 years). The expected contributions for defined benefit plans in 2016 will be approximately € 3.4 million.

Defined contribution plans

Employees of the Company in certain countries are covered by defined contribution plans. Generally, contributions are based upon a percentage of the employee's wages or salaries. The costs of these plans charged to operations amounted to K€ 9,974 in 2015 (2014: K€ 9,495).

26. Trade accounts payable

Trade accounts payable do not bear any interest and have maturities of less than one year.

27. Other payables

Other payables (K€ 21,931 as at December 31, 2015, and K€ 18,544 as at December 31, 2014) mainly consist of payroll taxes and VAT, as well as payables from social security contributions and legally binding participation programs. They do not bear any interest and have maturities of less than one year.

28. Provisions

Composition of Provisions

in K€	2015	2014
Warranty provisions	12,844	12,599
Personnel provisions	12,305	8,311
Other provisions	1,833	1,457
Total	**26,982**	22,367

Dec. 31

Warranty provisions include the amounts expected due to claims in connection with product warranties. They are recorded as per the close of the fiscal year for realized revenues based on management's estimates and experience.

Provisions for employee-related expenses primarily include provisions for profit-sharing obligations and bonuses.

Development of Provisions

in K €	Warranty	Personnel	Other	**Total**
Balance as at January 1, 2015	12,599	8,311	1,457	22,367
Currency changes	254	138	49	441
Additions	7,406	9,766	1,330	18,502
Utilization	– 7,382	– 5,657	– 974	– 14,013
Releases	– 33	– 253	– 29	– 315
Balance as at December 31, 2015	12,844	12,305	1,833	**26,982**

29. Short-term financial liabilities

As of December 31, 2015, short-term financial liabilities include a portion of the bank loan taken out in connection with the adixen acquisition again totaling € 10.0 million (please also refer to Note 23) and other bank liabilities in the amount of € 0.5 million maturing within one year (December 31, 2014: € 0.5 million).

30. Commitments and other financial obligations

The Company has entered into leases and maintenance agreements which expire on various dates, some of which are renewable. The tables below present the maximum amount of the contractual commitments as at year end, classified by the periods in which the contingent liabilities or commitments will expire.

Contractual Obligations as at December 31, 2015

		Payments Due by Period			
in K €	**Total**	< 1 Year	1 – 3 Years	3 – 5 Years	> 5 Years
Operating leases	10,363	3,823	4,001	1,641	898
Purchase obligations	17,384	12,837	4,547	—	—
Repair and maintenance	1,128	922	170	26	10
Total	**28,875**	17,582	8,718	1,667	908

Contractual Obligations as at December 31, 2014

		Payments Due by Period			
in K €	**Total**	< 1 Year	1 – 3 Years	3 – 5 Years	> 5 Years
Operating leases	11,245	3,596	4,186	1,881	1,582
Purchase obligations	13,976	10,619	3,357	—	—
Repair and maintenance	1,808	1,697	61	37	13
Total	**27,029**	15,912	7,604	1,918	1,595

Purchase obligations include long-term arrangements for future supplies of materials. Rental expenses amounted to € 3.9 million (2014: € 3.5 million) and mainly related to the local sales companies' rented premises.

31. Segment reporting

The Company's business operations include the development, manufacture, sale and service of vacuum pumps, vacuum components and instruments, as well as vacuum systems. The subsidiaries in the individual countries are independent legal entities with their own management, which distribute products and provide services. The entire product portfolio is offered by all sales subsidiaries.

Controlling of business development by corporate management is carried out on the level of the legal entities. Accordingly, the Company identifies its primary operating segments by legal entity. Due to the similarity of their economic characteristics, including nature of products sold, type of customers, methods of product distribution, and economic environment, the Company basically aggregates its European and Asian subsidiaries into one reporting segment, "Europe (excluding Germany and France)" and "Asia (excluding Republic of Korea)". In contrast, the companies in France and the Republic of Korea were presented separately each as an individual segment. This was caused by the different functions of the French entities, including research and development as well as production, and the production function of the Korean entities, respectively. Unchanged compared to previous year, all information is based upon the geographic location of the Group Company in question.

Transactions between segments are based upon the arm's length principle. The internal reporting on which the disclosures are based is IFRS. Segment sales and segment results in the primary reporting format initially include the effects of inter-segment transactions. These effects are eliminated in connection with the consolidation process.

Segment Reporting as at December 31, 2015

in K€	Germany	France	Europe (excl. G and F)	USA	Republic of Korea	Asia (excl. Korea)	Other / Consolidation	**Group**
Net sales	223,308	157,012	93,118	111,816	72,788	49,676	– 256,197	451,521
Third party	104,459	32,252	90,160	110,895	69,122	44,633	—	451,521
Intercompany	118,849	124,760	2,958	921	3,666	5,043	– 256,197	—
Operating profit	38,854	7,218	5,360	5,209	2,618	2,292	– 792	60,759
Financial results	—	—	—	—	—	—	– 308	– 308
Earnings before taxes	38,854	7,218	5,360	5,209	2,618	2,292	– 1,100	60,451
Segment assets	141,673	124,959	36,016	57,201	49,858	43,820	—	453,527
Thereof: Assets according to IFRS 8.33 (b)[1]	51,997	61,427	4,533	10,949	18,358	13,150	—	160,414
Segment liabilities	66,776	52,615	7,354	6,501	10,376	4,881	—	148,503
Capital expenditures:								
Property, plant and equipment[2]	3,835	3,887	468	239	951	916	—	10,296
Intangible assets	903	422	21	—	11	2	—	1,359
Depreciation[2]	4,376	5,745	582	320	1,396	1,050	—	13,469
Amortization	770	4,261	190	549	926	512	—	7,208

[1] Non-current assets other than financial instruments, deferred tax assets and prepaid pension cost
[2] Including investment properties

Segment Reporting as at December 31, 2014

in K€	Germany	France	Europe (excl. G and F)	USA	Republic of Korea	Asia (excl. Korea)	Other / Consoli-dation	**Group**
Net sales	201,307	146,067	89,065	91,825	60,217	44,640	– 226,479	406,642
Third party	103,056	30,623	86,590	90,674	55,195	40,504	—	406,642
Intercompany	98,251	115,444	2,475	1,151	5,022	4,136	– 226,479	—
Operating profit	33,759	3,934	6,215	3,984	– 6,085	2,744	193	44,744
Financial results	—	—	—	—	—	—	– 471	– 471
Earnings before taxes	33,759	3,934	6,215	3,984	– 6,085	2,744	– 278	44,273
Segment assets	136,053	111,047	35,322	51,682	55,078	39,896	—	429,078
Thereof: Assets according to IFRS 8.33 (b)[1]	52,709	67,136	4,817	10,496	19,827	13,346	—	168,331
Segment liabilities	75,541	47,787	6,985	4,258	10,814	3,965	—	149,350
Capital expenditures:								
Property, plant and equipment[2]	2,552	2,022	511	994	502	2,385	—	8,966
Intangible assets	465	575	—	6	—	—	—	1,046
Depreciation[2]	4,618	5,921	546	222	1,264	993	—	13,564
Amortization	672	4,014	191	619	923	509	—	6,928

[1] Non-current assets other than financial instruments, deferred tax assets and prepaid pension cost
[2] Including investment properties

Aside from directly allocatable assets, the "Other" segment contains all assets that can not be allocated on a reasonable basis (e.g. securities). Sales with one major customer (> 10 % of total sales) amounted to € 50.3 million in 2015 and were recorded in the Republic of Korea, USA and Asia (excl. Korea) segment. In 2014, these sales were less than 10 % of total sales.

Sales by Product

in K€	**2015**	2014
Turbopumps	144,777	124,693
Backing Pumps	102,381	89,419
Instruments and Components	98,777	96,899
Service	96,730	84,967
Systems	8,856	10,664
Group	**451,521**	406,642

32. Financial instruments

Fair value

The net book value of financial instruments (e.g. cash and cash equivalents, trade accounts receivable and trade accounts payable, other accounts receivable and payable) essentially equals their fair value.

Interest rate risks

The interest-bearing portion of cash and cash equivalents involves interest rate risks. All investment forms have variable interest rates and are invested on a short-term basis. There are no further investment forms that result in interest rate risks within the Pfeiffer Vacuum Group.

Due to the short investment period for cash and cash equivalents, the agreed interest rate equals the market rate. Even if the market rate should change significantly, there will be no material impact on the fair value of cash and cash equivalents because the interest rate can be adjusted after only a short period of time.

As at December 31, 2015, as in the year before, there were no more interest-sensitive financial assets. As a result of cash and cash equivalents as at December 31, 2015, an increase (decrease) in interest rate by 50 basis points would increase (decrease) earnings by K€ 577 (December 31, 2014: increase/decrease by K€ 507). As a result of financial liabilities shown as at December 31, 2015, an increase (decrease) in interest rate by 50 basis points would decrease (increase) earnings by K€ 104 (December 31, 2014: increase/decrease by K€ 156).

Credit risks

Due to the Company's vastly heterogeneous customer structure, there are no material credit risk concentrations within the Group. Credit risks are additionally minimized through rigorous accounts receivable management and by monitoring our customers' payment patterns. Furthermore, deliveries to new customers are essentially made only after credit assessment, against payment in advance or credit limit. As a result, Pfeiffer Vacuum is able to keep the level of its allowance for doubtful accounts low, even in difficult economic times.

Liquidity risks

Due to the above-average level of cash and cash equivalents, no liquidity risks can be identified.

Foreign exchange rate risks

Approximately 59 % (2014: 56 %) of the Company's net sales are denominated in currencies other than the euro, primarily in U.S. dollars. The Company enters into foreign currency forward contracts and options to hedge the exposure of its forecasted sales against currency fluctuations. All derivative financial instruments are entered into only within this scope.

The derivatives that qualify for cash flow hedges under IAS 39 are recognized either as assets or liabilities at their fair values. Changes in the values of these cash flow hedges are recorded in equity under other equity components, net of applicable taxes. These amounts are subsequently reclassified as earnings (foreign exchange gains/losses) in the same period as the underlying transactions affect operating income. For the fiscal years ended December 31, 2015, and 2014, there were no gains or losses that were recognized in earnings due to hedge ineffectiveness. For the same periods, no gains or losses had to be reclassified to earnings from other equity components as a result of the discontinuance of cash flow hedges. If derivatives are kept, these derivatives are marked to market at period end using quoted forward rates. As at December 31, 2015, there were no more contracts to be classified as cash flow hedges. Accordingly, no impact on other equity components had to be recorded as at this date. The negative fair values of the cash flow hedges recorded under other accounts payable for the period ended December 31, 2014, totaled K € 96. Because the changes in fair value for cash flow hedges are recorded directly in equity, other equity components decreased by K € 64, net of taxes of K € 32, as at December 31, 2014. The derivatives classified as fair value hedges totaled 54 K € as at December 31, 2015, were recorded through the income statement, and shown under other accounts payable (December 31, 2014: K € 61). The Company does not engage in speculative hedging for investment purposes. As at December 31, 2015, and at December 31, 2014, no contracts held by the Company had a maturity date greater than one year.

As at December 31, 2015, the Company has entered into foreign currency forward contracts (U.S. dollar) totaling € 3.5 million (December 31, 2014: € 5.8 million). Pfeiffer Vacuum performs ongoing credit evaluations of the parties to these contracts and enters into contracts only with well-established financial institutions. Currency risks as defined by IFRS 7 arise as a result of financial instruments being denominated in a currency that is not the functional currency and being of a monetary nature; differences resulting from the translation of financial statements into the Group's presentation currency are not taken into consideration. Relevant risk variables are generally all non-functional currencies in which Pfeiffer Vacuum has entered into financial instruments. The vast majority of non-derivative monetary financial instruments within the Pfeiffer Vacuum Group are directly denominated in functional currency. In variance thereto, exchange rate risks arise from the securities available-for-sale, from a portion of trade accounts receivable, and from derivative financial instruments. If derivative financial instruments classify as cash flow hedges, changes in the exchange rate do not impact the income statement but are recorded directly in equity. Exchange rate-based changes in securities available-for-sale are also recorded directly in equity.

Had the euro, as at December 31, 2015, depreciated 10 %, net income would have been higher by K € 1,470. A 10 % appreciation in the euro as at that balance sheet date would have decreased net income by K € 1,159. Had the euro, as at December 31, 2014, depreciated 10%, net income would have been higher by K € 832 and total equity higher by K € 579. A 10 % appreciaton in the euro as at December 31, 2014, would have decreased net income by K € 692 and total equity by K € 523. In all cases, net income and equity were affected mostly by the sensitivity of the U.S. dollar which is predominantly material for the Consolidated Financial Statements.

Composition of financial instruments

The following tables show the composition of financial instruments by balance sheet line item and valuation category and fair value as well as net results by valuation category.

Composition of Financial Instruments as at December 31, 2015

			Amounts Recognized According to IAS 39			
in K €	Category According to IAS 39	Net Book Value	Amortized Cost	Fair Value Recognized in Equity	Fair Value Through Profit and Loss	Fair Value
Assets						
Cash and cash equivalents	LaR	115,397	115,397	—	—	115,397
Trade accounts receivable	LaR	58,556	58,556	—	—	58,556
Other non-current assets	LaR	4,211	4,211	—	—	4,211
Derivative financial instruments (hedges)	n/a	—	—	—	—	—
Liabilities						
Trade accounts payable	FLAC	21,245	21,245	—	—	21,245
Financial liabilities	FLAC	20,725	20,725	—	—	20,725
Derivative financial instruments (excl. hedges)	n/a	54	—	—	54	54
Totals by valuation categories:						
Loans and Receivables (LaR)		178,164	178,164	—	—	178,164
Held-to-Maturity Investments (HtM)		—	—	—	—	—
Financial Assets Available for Sale (AfS)		—	—	—	—	—
Financial Assets Held for Trading (FAHfT)		—	—	—	—	—
Financial Liabilities Measured at Amortized Cost (FLAC)		41,970	41,970	—	—	41,970
Financial Liabilities Held for Trading (FLHfT)		—	—	—	—	—

Composition of Financial Instruments as at December 31, 2014

			Amounts Recognized According to IAS 39			
in K€	Category According to IAS 39	Net Book Value	Amortized Cost	Fair Value Recognized in Equity	Fair Value Through Profit and Loss	Fair Value
Assets						
Cash and cash equivalents	LaR	101,468	101,468	—	—	101,468
Trade accounts receivable	LaR	53,649	53,649	—	—	53,649
Other non-current assets	LaR	4,819	4,819	—	—	4,819
Derivative financial instruments (hedges)	n.a.	—	—	—	—	—
Liabilities						
Trade accounts payable	FLAC	19,414	19,414	—	—	19,414
Financial liabilities	FLAC	31,205	31,205	—	—	31,205
Derivative financial instruments (hedges)	n.a.	157	—	96	61	157
Totals by valuation categories:						
Loans and Receivables (LaR)		159,936	159,936	—	—	159,936
Held-to-Maturity Investments (HtM)		—	—	—	—	—
Financial Assets Available for Sale (AfS)		—	—	—	—	—
Financial Assets Held for Trading (FAHfT)		—	—	—	—	—
Financial Liabilities Measured at Amortized Cost (FLAC)		50,619	50,619	—	—	50,619
Financial Liabilities Held for Trading (FLHfT)		—	—	—	—	—

Net Results by Valuation Category

		From Subsequent Valuation				Net Results	
in K€	From Interest/ Dividends	At Fair Value	Currency Translation	Impairment/ Reversal of Impairment	From Derecognition	**2015**	2014
Loans and Receivables (LaR)	365	—	2,051	– 196	– 10	2,210	4,022
Held-to-Maturity-Investments (HtM)	—	—	—	—	—	—	—
Financial Assets Available-for-Sale (AfS)	—	—	—	—	—	—	—
Financial Assets Held for Trading (FAHfT)	—	—	—	—	—	—	—
Financial Liabilities Measured at Amortized Cost (FLAC)	– 673	—	—	—	—	– 673	– 958
Financial Liabilities Held for Trading (FLHfT)	—	—	—	—	—	—	—

Determination of fair values of financial instruments

Determination of the fair value of derivative financial instruments (K€ – 54 as at December 31, 2015; K€ – 157 as at December 31, 2014) was done according to level 2 of the fair value hierarchy as set out in IFRS 13 "Fair Value Measurement" using accepted valuation principles and directly obtainable and up-to-date market parameters.

Determination of fair value of financial liabilities with variable interest rates is based on the assumption that agreed interest rates equal the rates customary in the market. Accordingly, the net book values correspond to their fair values.

Due to the underlying short terms fair values of trade accounts receivable and payable, other accounts receivable and payable and cash and cash equivalents equal their respective net book values.

33. Management of financial risks

With an equity ratio of 67.3% as at December 31, 2015, Pfeiffer Vacuum still has an equity base that is far above average. Additionally, cash and cash equivalents totaled € 115.4 million as at December 31, 2015. Considering financial liabilities of € 20.7 million as at December 31, 2015 (December 31, 2014: € 31.2 million), the Group did not show any net financial liabilities as at December 31, 2015. This situation provides the Group with the required liquidity range to successfully develop.

Liquid assets are invested on a short-term conservative basis. Due to its high equity ratio and its superior liquidity, Pfeiffer Vacuum will not depend upon interest-bearing liabilities to fund its capital expenditures for replacement and expansion or the dividend payment. Moreover, there are sufficient liquidity reserves to respond to changes in the economic situation.

34. Earnings per share

Computation of Earnings per Share		
in K €	**2015**	2014
Net income (in K €)	41,916	32,419
Weighted average number of shares	9,867,659	9,867,659
Number of conversion rights	—	—
Adjusted weighted average number of shares	9,867,659	9,867,659
Earnings per share in € (basic/diluted)	4.25	3.29

There were no transactions with ordinary shares or ordinary shares issued during the period between the balance sheet date of December 31, 2015, and the preparation of the Consolidated Financial Statements.

Additional Notes and Supplemental Information

35. Related party disclosures

Related party transactions predominantly consist of all transactions with those companies included in the Consolidated Financial Statements. The amounts of these transactions are detailed in the segment reporting in Note 31, which also includes intercompany sales. All transactions are carried out at conditions that are usual and customary in the market and are entirely eliminated during the consolidation process. Therefore, there is no impact on financial position or results. Pfeiffer Vacuum does not have holdings in any jointly controlled entities. Furthermore, no factual control exists with respect to special purpose entities.

Following the purchase of 24.9 % of the share capital of Dreebit GmbH, Dresden, in fiscal 2010, this company is an associated company. There were no material transactions with this company in fiscal 2015 and 2014.

Please refer to Notes 39 and 40 regarding the compensation paid to members of the Management and Supervisory Boards, as well as regarding potential transactions with members of these corporate bodies. Aside from their activities on the Supervisory Board, the members of the Supervisory Board do not provide individual services for the Group or any of its companies. In contrast thereto, the employee representatives on the Supervisory Board receive salaries under the rules of the respective employment contracts for their work at the Company.

Members of the Management and Supervisory Boards held an aggregate total of 6,377 shares of the Company as at December 31, 2015 and 2014. The holdings of members of corporate bodies are thus negligible.

In 2015, the reimbursements from Pfeiffer Vacuum Trust e. V. amounted to € 2.8 million (2014: € 2.5 million). Contributions to Pfeiffer Vacuum Trust e. V. totaled € 3.0 million in 2015 (2014: € 2.7 million).

The law firm of Menold Bezler was contracted on the basis of usual and customary terms and conditions, to perform consulting projects. The expenses recorded in this context totaled € 0.4 million as at December 31, 2015 (2014: € 0.1 million). The Chairman of the Supervisory Board, Dr. Michael Oltmanns, is a partner in that firm.

As of December 31, 2015, Dr. Karl Busch, Ms. Ayhan Busch, Ms. Ayla Busch, Mr. Sami Busch, and Mr. Kaya Busch, all Germany, together had 27.19 % of the voting rights of the Company. The shares are held through Pangea GmbH, Maulburg, Germany, and further independent legal entities belonging to the family-run

Busch group. Based on unchanged arm's length conditions, goods in an aggregated purchasing value of a very low single digit million Euro amount were received from an operating company of the Busch group in the fiscal years 2015 and 2014.

36. Events after the balance sheet date

Since the beginning of the 2016 fiscal year, there have not been any significant changes in the Company's position or the industry environment.

37. Personnel expenses

Personnel expenses		
in K€	**2015**	2014
Wages and salaries	123,291	108,311
Social security, pension and other benefit cost	28,705	26,080
Thereof for pensions	14,503	13,415
Total	**151,996**	134,391

38. Number of employees

The number of employees was as follows as at December 31, 2015, and 2014:

Number of Employees		
	2015	2014
Annual average		
Male	1,922	1,873
Female	402	388
Total	**2,324**	2,261
Balance sheet date		
Male	1,971	1,872
Female	403	386
Total	**2,374**	2,258

39. Management Board

As at December 31, 2015, the Management Board of the parent company, Pfeiffer Vacuum Technology AG, consisted of:

- Manfred Bender (Chief Executive Officer), Diploma in Business Administration
- Dr. Matthias Wiemer (Member of the Management Board), Diploma in Mechanical Engineering

Total short-term benefits recorded in the income statement for the aforesaid members of the Management Board for fiscal 2015 were € 1.6 million, thereof € 0.9 million short-term variable benefits (2014: € 1.4 million, and € 0.7 million, respectively). Short-term variable benefits recorded in the income statement in 2014 were paid out in 2015. Total pensions expenses in 2015 were € 0.6 million (2014: 0.4 million). Pursuant to § 289, Sub-Para. 2, No. 5, or § 315, Sub-Para. 2, No. 4, German Commercial Code ("HGB"), the compensation paid to the members of the Management Board is detailed in the compensation report (an element of MD & A). Additionally, the distribution of responsibilities within the Management Board is shown in MD&A. Benefits to former members of the Management Board (pensions) again amounted to € 0.3 million.

With effect from November 3, 2014, the Supervisory Board has relieved Mrs. Nathalie Benedikt from her duties as board member. The fixed remuneration in 2014 totaled € 0.2 million. Short-term variable benefits recorded in the income statement in 2013 totaling € 0.2 million were paid out during 2014. In connection with the ending of the function no special benefits were granted. In 2015, no further compensation elements were recorded.

40. Supervisory Board

Pursuant to § 96, Sub-Para. 1, § 101, Sub-Para. 1, German Stock Corporation Act ("AktG"), § 4, German One-Third Participation Act ("DrittelbG") of 2004, and § 9, Sub-Para. 1, Articles of Association and Bylaws, the Supervisory Board comprises four members elected by the Annual Shareholders Meeting and two members elected by the Company's employees.

In 2015, the Supervisory Board comprised the following persons:

- Dr. Michael Oltmanns (Chairman), Attorney at Law and Tax Advisor
  Further supervisory board seats:
  - Becker Mining Systems AG, Friedrichsthal, Germany (chairman)
  - HPC AG, Mannheim, Germany, (chairman), since October 1, 2014
  - Jetter AG, Ludwigsburg, Germany (chairman)
  - Scholz AG, Essingen, Germany (chairman), until May 22, 2014
- Götz Timmerbeil (Vice Chairman and Chairman of the Audit Committee), Certified Public Accountant and Tax Advisor
  Further supervisory board seats:
  - VfL Handball Gummersbach GmbH, Gummersbach, Germany (chairman of the advisory board)
  - Arena Gummersbach GmbH & Co. KG, Gummersbach, Germany (vice chairman)
- Helmut Bernhardt (Employee Representative), Development Engineer
- Manfred Gath (Employee Representative), Chairman of the Employee Council
- Wilfried Glaum, Business Administrator
- Dr. Wolfgang Lust, Entrepreneur

Pursuant to § 289, Sub-Para. 2, No. 5, or § 315, Sub-Para. 2, No. 4, German Commercial Code ("HGB"), the compensation paid to the members of the Supervisory Board is detailed in the compensation report (an element of MD & A).

41. Exempting provision under § 264 Sub-Para. 3, German Commercial Code ("HGB")

Pfeiffer Vacuum GmbH, Asslar, Germany, is included in the Consolidated Financial Statements of Pfeiffer Vacuum Technology AG. Accordingly, this company has made use of the exempting provision under § 264, Sub-Para. 3, German Commercial Code.

42. Audit fees for independent auditors

The expenses for services rendered by the auditor of the Consolidated Financial Statements recorded in the statements of income were as follows for fiscal 2015 and 2014:

Audit Fees for the Auditor of the Consolidated Financial Statements

in K€	2014	2013
Fees resulting from:		
Audit services	813	837
Other certification and consulting services	13	—
Tax advisory services	17	12
Other services	2	44
Total	**845**	893

43. German Corporate Governance Code/Declaration pursuant to § 161, German Stock Corporation Act ("AktG")

The recommendations and suggestions contained in the Code have been a firm element of our corporate governance and corporate culture for many years. Pursuant to § 161 of the German Stock Corporation Act, the Management and Supervisory Boards issued the statement of compliance for the year 2015 in November 2015 and made it permanently available for shareholders and interested parties at the Company's homepage. With the following exception, this statement reflects compliance with the recommendations of the German Corporate Governance Code Government Commission as amended in May 5, 2015:

- The German Corporate Governance Code recommends a determined limit to the duration of a member's participation in the Supervisory Board (item 5.4.1). The Supervisory Board does not regard the duration of a member's participation as an attribute which specifically qualifies a candidate for any position and therefore disregards this criterion when selecting the most suitable candidate.

The full text of the Code is available at the following Internet address: www.corporate-governance-code.de.

44. Authorization for issuance of Consolidated Financial Statements

Through a resolution by the Management Board on February 29, 2016, the Consolidated Financial Statements were authorized for issuance.

Asslar, February 29, 2016

The Management Board

Manfred Bender

Dr. Matthias Wiemer

Certification of Legal Representatives

To the best of our knowledge, and in accordance with the applicable reporting principles, the Consolidated Financial Statements give a true and fair view of the assets, liabilities, financial position, and profit or loss of the Group, and the Group management report includes a fair review of the development and performance of the business and the position of the Group, together with a description of the principal opportunities and risks associated with the expected development of the Group.

Asslar, February 29, 2016

The Management Board

Manfred Bender

Dr. Matthias Wiemer

Independent Auditors' Report

We have audited the consolidated financial statements prepared by Pfeiffer Vacuum Technology AG, Asslar, comprising the income statement, the statement of comprehensive income, the balance sheet, the statement of changes in equity, the cash flow statement and the notes to the consolidated financial statements, together with the group management report for the fiscal year from January 1 to December 31, 2015. The preparation of the consolidated financial statements and the group management report in accordance with IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Sec. 315a (1) HGB are the responsibility of the parent company's management. Our responsibility is to express an opinion on the consolidated financial statements and on the group management report based on our audit.

We conducted our audit of the consolidated financial statements in accordance with Sec. 317 HGB and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer (IDW). Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position, and results of operations in the consolidated financial statements in accordance with the applicable financial reporting framework and in the group management report are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Group and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the consolidated financial statements and the group management report are examined primarily on a test basis within the framework of the audit. The audit includes assessing the annual financial statements of those entities included in consolidation, the determination of entities to be included in consolidation, the accounting and consolidation principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements and the group management report. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion, based on the findings of our audit, the consolidated financial statements comply with IFRSs as adopted by the EU, the additional requirements of German commercial law pursuant to Sec. 315a (1) HGB and give a true and fair view of the net assets, financial position and results of operations of the Group in accordance with these requirements. The group management report is consistent with the consolidated financial statements and as a whole provides a suitable view of the Group's position and suitably presents the opportunities and risks of future development.

Eschborn/Frankfurt am Main, February 29, 2016

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Bösser	Hillebrand
Wirtschaftsprüfer	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

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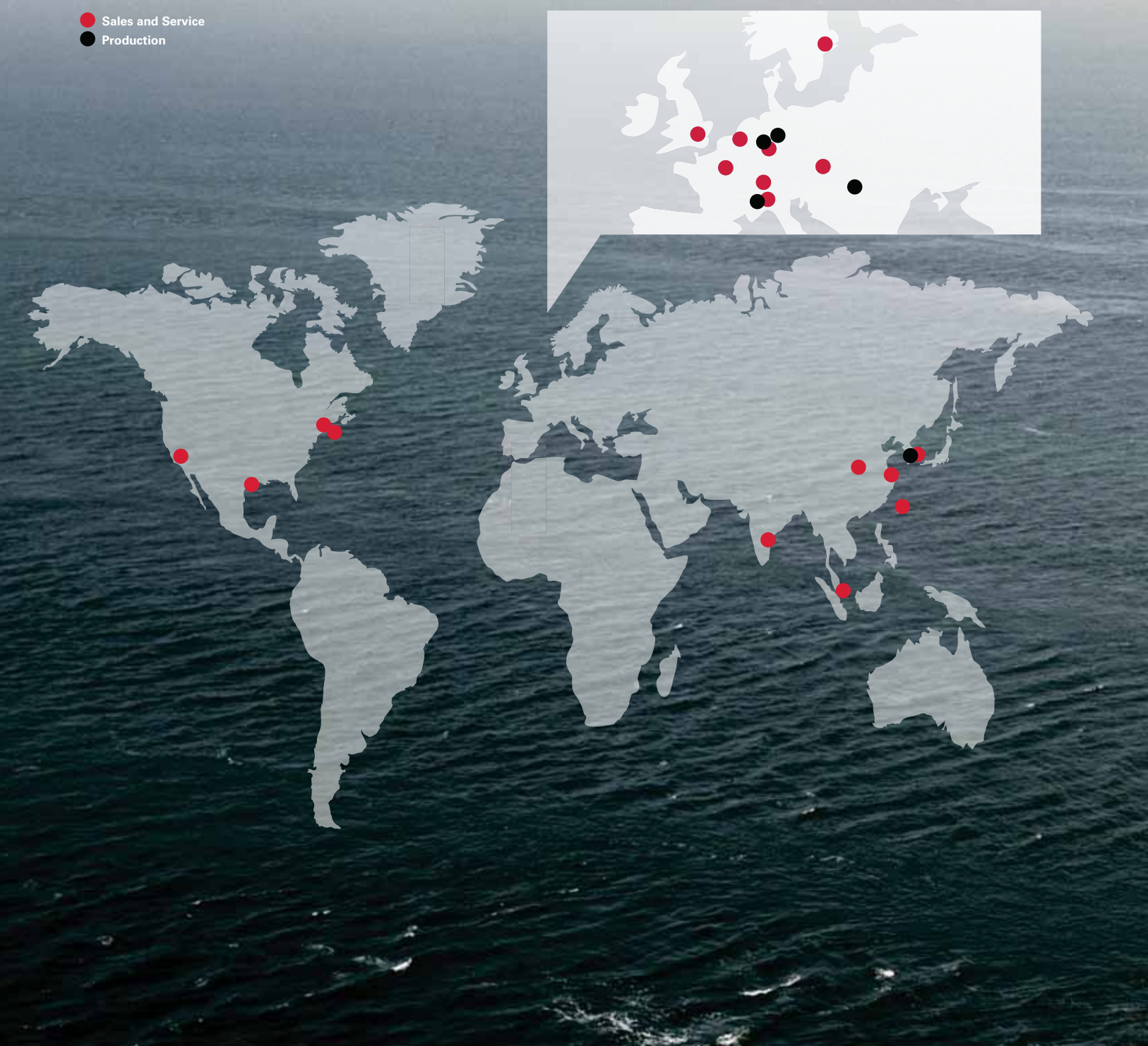

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Consolidated Statements of Income (6-Year-Overview)

in K€	2015	2014	2013	2012	2011	2010
Net sales	**451,521**	406,642	408,727	461,327	519,509	220,475
Cost of sales	– 276,010	– 263,259	–259,345	–294,182	–352,129	–117,553
Gross profit	**175,511**	143,383	149,382	167,145	167,380	102,922
Selling and marketing expenses	– 59,850	– 52,789	–51,343	–50,431	–54,521	–26,211
General and administrative expenses	– 35,838	– 29,853	–29,407	–30,118	–35,009	–16,518
Research and development expenses	– 25,479	– 23,936	–22,900	–22,317	–22,713	–6,993
Other operating income	13,297	10,176	8,268	10,515	14,648	1,424
Other operating expenses	– 6,882	– 2,237	–3,477	–6,317	–8,008	–1,714
Operating profit	**60,759**	44,744	50,523	68,477	61,777	52,910
Financial expenses	– 691	– 978	–1,217	–2,245	–2,923	–1,798
Financial income	383	507	644	822	645	3,416
Earnings before taxes	**60,451**	44,273	49,950	67,054	59,499	54,528
Income taxes	– 18,535	– 11,854	–15,135	–21,230	–17,931	–16,199
Net income	**41,916**	32,419	34,815	45,824	41,568	38,329
Earnings per share (in €)	**4.25**	3.29	3.53	4.64	4.19	4.40
Number of shares (weighted average)	9,867,659	9,867,659	9,867,659	9,867,659	9,867,659	8,667,075
Profitability figures						
Gross margin	38.9 %	35.3 %	36.5 %	36.2 %	32.2 %	46.7 %
Operation profit margin	13.5 %	11.0 %	12.4 %	14.8 %	11.9 %	24.0 %
After-tax return on sales	9.3 %	8.0 %	8.5 %	9.9 %	8.0 %	17.4 %
Sales by region						
Europe	187,003	183,181	182,070	190,753	229,857	127,650
Asia	151,511	130,323	143,863	171,483	189,781	37,319
The Americas	112,412	92,636	81,447	98,204	98,769	54,745
Rest of world	595	502	1,347	887	1,102	761
Sales by product						
Turbopumps	144,777	124,693	125,351	132,992	144,337	92,378
Backing pumps	102,381	89,419	92,075	121,023	182,941	28,654
Instruments and components	98,777	96,899	101,151	110,863	111,335	69,155
Service	96,730	84,967	81,653	78,217	72,487	23,146
Systems	8,856	10,664	8,497	18,232	8,409	7,142

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Financial Calendar 2016

FRIDAY,
February 19
Preliminary results for fiscal year 2015

WEDNESDAY,
March 23
Results for fiscal year 2015

TUESDAY,
May 3
Interim report 1st quarter 2016 results

TUESDAY,
May 24
Annual General Meeting 2016

TUESDAY,
August 2
Interim report 2nd quarter/ 1st half-year 2016 results

TUESDAY,
November 1
Interim report 3rd quarter/ 9-month 2016 results

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Financial Glossary

Cash and cash equivalents
Indicates the cash and cash equivalents provided by the various capital flows and is the result of the cash flow accounting.

Cash flow from financing activities
Indicates the balance of cash and cash equivalents provided to or used by a company in connection with transactions involving shareholders' equity or outside capital.

Cash flow from investment activities
Indicates the balance of cash and cash equivalents that a company has invested or received in connection with the acquisition or sale of financial and tangible assets.

Cash flow from operating activities
Indicates the change in cash and cash equivalents resulting from operative business during the period under review.

Corporate governance
The organizational structure and content of the way companies are managed and controlled.

Dividend yield
Indicates the ratio between a dividend and a defined share trading price – typically the year-end trading price. The dividend yield expresses the magnitude of the effective yield of the capital invested in shares.
Calculation: Dividend ÷ Trading Price x 100

Equity ratio
Describes the relationship between shareholders' equity and total capital. The more shareholders' equity that is available to a company, the better its credit rating will typically be.
Calculation: Shareholders' Equity ÷ Balance Sheet Total x 100

Free-float
The free-float includes all shares that are not held by major shareholders; i. e. shares that can be acquired and traded by the general public. Under Deutsche Börse's definition, shares totaling over 5 percent of total equity or over 25 percent held by investment funds are not considered to be part of the free-float.

Gross margin
Indicates the ratio between gross profit and net sales, enabling conclusions to be drawn regarding a company's production efficiency.
Calculation: Gross Profit ÷ Net Sales x 100

Gross profit
The result of net sales less cost of sales.
Calculation: Net Sales – Cost of Sales

Market capitalization
Indicates the current market value of a company's shareholders' equity on the stock exchange.
Calculation: Number of Shares Outstanding x Trading Price

Operating profit (EBIT)
Operating profit (earnings) before interest and taxes.
Calculation: Net Income ± Financial Income / Expenses ± Income Taxes ± Gain / Loss from Investment

Operating profit margin (EBIT margin)
The ratio between operating profit and net sales – the higher the ratio, the higher the profitability of operating activities.
Calculation: Operating Profit (EBIT) ÷ Net Sales x 100

Research and development expense ratio
Is an expression of the relationship between the volume of research and development expenses and the volume of net income generated. Is thus considered to be an indicator of a company's willingness to invest in its own innovation activities.
Calculation: R & D Expenses ÷ Net Income x 100

Return on capital employed (ROCE)
Ratio between operating profit and the total capital employed during a period.
Calculation: EBIT ÷ (Net) Assets + Working Capital x 100

Return on equity
Provides information about the yield on the equity provided by shareholders.
Calculation: Net Income ÷ Shareholders' Equity x 100

Working capital
A liquidity parameter that indicates the surplus of a company's assets that are capable of being liquidated short term (within one year) over its short-term liabilities.
Absolute calculation: Current Assets – Short-Term Borrowed Capital; Relative calculation: Current Assets ÷ Short-Term Borrowed Capital x 100

group.pfeiffer-vacuum.com