LPKF
Laser & Electronics

OMNI PRESENT

ANNUAL REPORT 2017

LPKF LASER & ELECTRONICS AG AT A GLANCE

CONSOLIDATED REVENUE AS OF 31 DECEMBER 2017

		2013	2014	2015	2016	2017
REVENUE	EUR million	129.7	119.7	87.3	91.1	102.1
REVENUE BY REGION						
Germany	EUR million	11.7	12.2	12.6	12.9	10.4
Other Europe	EUR million	17.7	14.9	17.3	16.5	20.5
North America	EUR million	21.3	25.6	19.0	17.7	23.0
Asia	EUR million	77.4	63.4	35.6	42.3	45.7
Other	EUR million	1.6	3.6	2.8	1.7	2.5
REVENUE BY SEGMENT						
Development	EUR million	20.9	25.1	25.5	22.6	24.4
Electronics	EUR million	75.7	51.2	29.9	30.6	31.7
Welding	EUR million	21.5	20.9	23.3	24.0	25.4
Solar	EUR million	11.1	21.9	8.5	13.9	20.6
All other segments	EUR million	0.5	0.6	0.1	0.0	0.0

CONSOLIDATED FINANCIAL KEY FIGURES AS OF 31 DECEMBER 2017

		2013	2014	2015	2016	2017
EBIT	EUR million	23.2	12.7	-3.7	-6.8	4.0
EBIT margin	%	17.9	10.6	-4.3	-7.4	3.9
Consolidated net profit after non-controlling interests	EUR million	15.1	8.5	-3.5	-8.8	1.2
Net margin before non-controlling interests	%	12.1	7.1	-4.0	-9.7	1.1
ROCE[1]	%	26.4	11.8	-3.5	-6.8	4.1
Cash and cash equivalents	EUR million	12.5	6.0	-0.9	3.6	-4.0
Equity ratio	%	56.6	53.5	53.4	46.5	46.5
Cash flow from operating activities	EUR million	34.2	1.8	10.1	5.7	9.6
Investments in property, plant and equipment and intangible assets	EUR million	21.3	15.0	13.7	7.5	6.8
EPS, diluted	EUR	0.68	0.38	-0.16	-0.40	0.05
Dividend per share[2]	EUR	0.25	0.12	0.00	0.00	0.00
Orders on hand	EUR million	17.7	17.7	13.3	27.8	38.8
Incoming orders	EUR million	113.1	119.7	82.8	105.7	113.2
Employees[3]	Number	752	795	778	700	683

[1] Return on Capital Employed

[2] 2017: Proposal at Annual General Meeting

[3] excl. trainees and workers in minor employment

OMNI PRESENT

LIGHT: THE TOOL OF THE FUTURE

LPKF Laser & Electronics AG is a highly specialized photonics machinery manufacturer and the world's leading provider of laser-driven production processes. LPKF develops all-in-one solutions for dynamic markets such as the electronics industry, automotive parts suppliers, the solar industry, medical technology, research institutions, and universities. The LPKF Group maintains a broad-based product portfolio. With **innovative ideas and application-specific know-how**, the LPKF Group has taken a leading position in all of its segments while developing entirely new markets on a regular basis. To maintain its ability to innovate, the Company invests around 10% of its revenue into **in-house R&D activities** every single year.

In many industries, the superior precision offered by laser technology is supplanting traditional manufacturing techniques. Deployed as a tool, light is clearing the way for the **environmentally friendly, digital production** of increasingly smaller yet more powerful products.

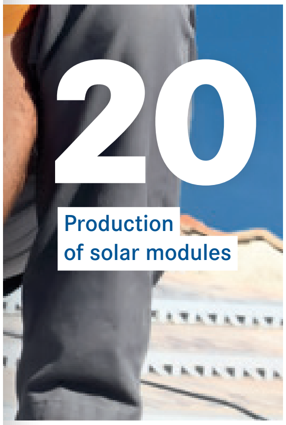
The **miniaturization megatrend** demands increasingly precise and efficient manufacturing methods for products such as phones, sensors or microfluidic systems, while the progressive digitization of manufacturing (Industry 4.0) calls for greater flexibility in production. Unlike conventional tools, lasers can be programmed for a multitude of tasks and integrate easily into the digital systems used for the process control of entire production runs.

LPKF Laser & Electronics AG is headquartered in Garbsen near Hannover, Germany. The Company maintains a broad-based global presence, with a **workforce of 683** based at sites in Europe, Asia and the US. The **export share** was around 90% in the 2017 financial year.

The shares of LPKF Laser & Electronics AG are listed on the **Prime Standard segment** of Deutsche Börse.


16
Omni present: laser technology in everyday life


18
Technological advantage for customers


20
Production of solar modules


22
Enabling digitization with high-tech processes

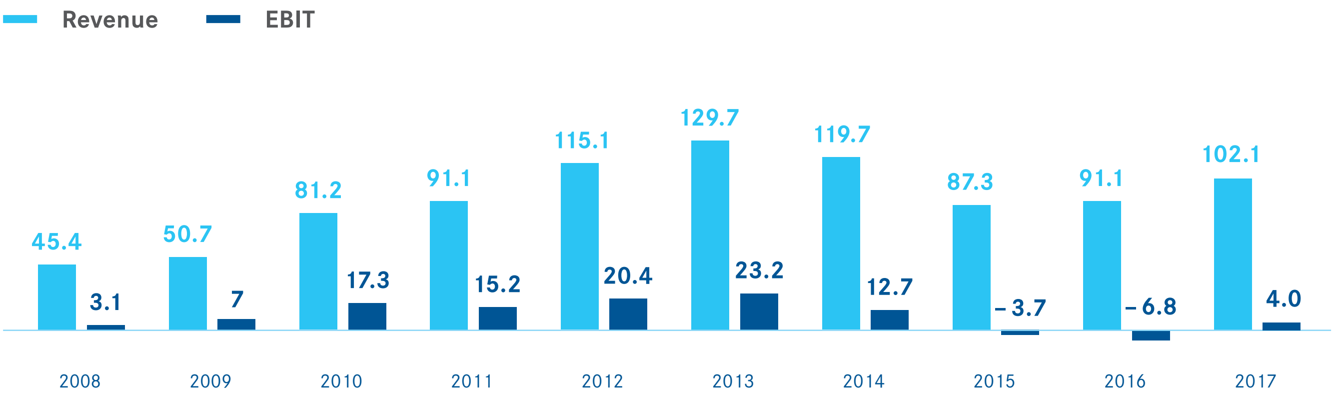
THE LPKF GROUP AT A GLANCE

LPKF SITES WORLDWIDE

- Export share 2017: 90%
- Extensive sales and service network worldwide
- Production and technical know-how remain in Europe
- Proximity to customers

REVENUE AND EBIT

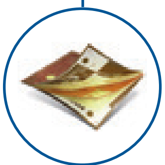
in EUR million



SEGMENT OVERVIEW

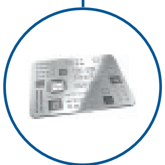
LPKF LASER & ELECTRONICS AG

DEVELOPMENT



Systems for PCB Prototyping and research

ELECTRONICS

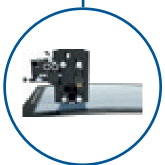


Systems for electronics production

WELDING

Systems for plastic welding

SOLAR



Systems for Solar Module Production and for Laser Transfer Printing

LPKF LA
AT A GL

CONSOLIDATED REVE

REVENUE

REVENUE BY REGION

Germany

Other Europe

North America

Asia

Other

REVENUE BY SEGMENT

Development

Electronics

Welding

Solar

All other segments

CONSOLIDATED FINA

EBIT

EBIT margin

Consolidated net profit after non-controlling interests

Net margin before non-controlling interes

ROCE [1]

Cash and cash equivalents

Equity ratio

Cash flow from operating acti

Investments in property, plan equipment and intangible ass

EPS, diluted

Dividend per share [2]

Orders on hand

Incoming orders

Employees [3]

1 Return on Capital Employed

2 2018: Proposal at Annual Genera

2 excl. trainees and workers in min

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Title photo:

Laser technology is involved in many things we use on a daily basis. This includes cars, phones, watches and many other ‘smart’ products that simplify our lives or can even save them.


16 Omni present: laser technology in everyday life


18 Technological advantage for customers


20 Production of solar modules


22 Enabling digitization with high-tech processes

LETTER

TO THE SHAREHOLDERS

LADIES AND GENTLEMEN,

The LPKF Group took an important step toward a turnaround in 2017. We are in the black again with earnings before interest and taxes (EBIT) of EUR 4.0 million. At 3.9%, our EBIT margin has not yet reached a satisfactory level, but there are many indicators that we are again on the way to achieving profitable growth.

BUSINESS PERFORMANCE IN 2017

Total revenue in 2017 was up 12% over the previous year's level to EUR 102.1 million. The Company is pleased that all segments are expanding, although at different rates. Systems for structuring thin film solar cells saw particularly strong revenue growth at 48%. Performance in the Development segment was also positive, with revenue up 8%. Earnings also showed a positive trend in these two segments. In contrast, the situation was muted in the Welding and Electronics segments. In the printed circuit board cutting machine business (Electronics segment) in China, pressure on margins grew considerably starting in early 2017. Newly developed machines and technologies are expected to kick off an improvement starting in 2018.

At EUR 113.2 million, incoming orders in 2017 were 7% higher than in the previous year. Orders on hand at the end of the year, at EUR 38.8 million, were 39% above the previous year's figure of EUR 27.8 million. These figures were positively influenced by the solar business. Favorable order books will put wind in our sails in 2018.

Our commitment to cost discipline allowed us to successfully lower costs further, therefore laying a solid foundation for profitable growth going forward. We returned to profitability in 2017 with positive earnings. But we cannot and will not rest on our laurels.

FRESH START

After the drastic collapse of the LDS business with a decline in revenue of more than EUR 50 million and two subsequent years that ended with a loss (2015 and 2016), we reviewed and adjusted the strategic direction of the LPKF Group. We aim to generate sustainable and profitable revenue growth with a diversified and high-margin product portfolio. Innovations and the resulting unique selling points are the keys here.

At the same time, we concentrated on putting in place a solid basis for new growth. This foundation consists of our "cash cows": products that have made us the market leader for many years now. These are supplemented with laser systems that will help us further replace conventional production methods in high-growth markets and – last but not least – innovative technologies that allow us to anticipate the needs of our customers and give us the opportunity to develop completely new markets.

In 2018, we will increasingly focus on improving profitability in individual product segments, particularly Welding and Electronics. In order to optimize capital expenditure for this purpose, we are highlighting ROCE (Return on Capital Employed) more prominently as a key performance indicator. The goal is to quantify an adequate return on the employed capital and to measure the achievement of performance targets. In 2017, ROCE improved from 6.8% in the prior year to 4.1%, but that is not a satisfactory level.

THE MANAGEMENT BOARD
Dr. Christian Bieniek
Kai Bentz
Bernd Lange

For 2018, we anticipate consolidated revenue of between EUR 103 and EUR 108 million and ROCE of between 2% and 7%, assuming the performance of the global economy is stable. We also project an EBIT margin of up to 6%. Our goal is to generate ROCE of between 10% and 15% by 2020 with innovative products, therefore far exceeding our cost of capital of 8% currently.

FOCUSED INVESTMENTS IN PROMISING TECHNOLOGIES

Our R&D activities concentrate on future technologies for applications that further advance megatrends such as miniaturization and digitization. We have kept the share of total research and development costs at a high level in recent years. In 2017, EUR 11.1 million was spent on R&D activities, which is equal to 11% of revenue. The product development processes implemented for this purpose ensure that we use the available resources efficiently and effectively.

Despite comprehensive cost-cutting measures, we have spent these difficult years investing specifically in completely new technologies and processes. From experience, however, we know that it often takes more time than planned to develop and successfully launch marketable products from promising technologies. This year, we expect great strides to be made in this regard.

We aim to continue the successful performance of the Development segment in 2018. In the Solar segment, we currently see major opportunities that we plan to leverage with the required degree of caution, but also with vision. It is gratifying that not just the short-term but also the medium- to long-term outlook in this industry has improved markedly in recent months. Here we will focus on using capacity from business areas where performance is weaker. Our business regularly sees strong fluctuation in capacity utilization. We would like to address this trend by making our organization as flexible as possible.

The LIDE (Laser Induced Deep Etching) process will help us unlock the potential of glass in the manufacture of chips and microsystems. LIDE has great potential for the future, but considerable effort is required to develop the markets for it.

LTP (Laser Transfer Printing) is a contactless printing process for functional pastes and is the digital answer to the still very widespread method of industrial screen printing. This completely new process also has enormous future potential. We are on the verge of finishing development and then launching the LTP process. Initial revenue is expected from pilot projects in 2018.

CORPORATE RESPONSIBILITY

For the first time, LPKF is publishing a separate non-financial report (in accordance with Section 289b (1) sentence 3 of the German Commercial Code (Handelsgesetzbuch – HGB) in the form of a declaration of compliance with the German Sustainability Code. This documents our clear commitment to transparency, sustainability, and corporate responsibility. Our business activities rest on a foundation of responsible corporate governance focused on integrity and adherence to compliance rules. This is true both within the Company and in our relationships with business partners.

THANK YOU!

Our business is focused on the success of our customers. We would like to sincerely thank you for the confidence you have placed in us. Our most important mission continues to be providing our customers with innovative products and new technologies.

In particular, we would like to thank our employees who have put forth great effort in recent years despite the uncertainties to ensure that the necessary changes in the Company are implemented successfully. Thank you also to our Works Council members for their constructive cooperation and commitment to fairness. Despite unavoidable differences of opinion about some issues, we were always able to reach good agreements for the Company and our workforce again in 2017.

We would like to thank our Supervisory Board for working with us in a spirit of trust and cooperation and for maintaining an active dialogue regarding issues important to LPKF.

Our thanks also goes to you, our shareholders, for supporting LPKF's change process. We hope you will continue to participate in the development of our business in the future.

We are confident that thanks to the LPKF Group's strategy, innovative products for the major markets of the future, highly qualified employees, and a clear focus on earnings, the Group is back on the path to sustainable profitability.

Yours sincerely,

KAI BENTZ

BERND LANGE

DR.-ING. CHRISTIAN BIENIEK

QUESTIONS

FOR THE MANAGEMENT BOARD

KAI BENTZ
Spokesman of the Management Board and Chief Financial Officer (CFO)
Finance, Human Resources, Investor Relations and Law

Born 1971, member of the Management Board since 2007 – Upon completion of his degree in economics at the University of Hannover, Kai Bentz worked for a large international accounting and auditing firm. After qualifying as a tax advisor, he joined LPKF in 2002.

Mr. Bentz, after two years that ended in losses, LPKF was again in the black in 2017, revenue rose 12%, and the LPKF's stock gained 33%. Is the turnaround complete?

Kai Bentz: In 2017, we took a big step forward and are in a much better position than we were a year ago. In addition to making major investments in new products, we worked on optimizing our costs and, as a result, in 2016 had to lay off employees and close sites. This reduced our fixed costs considerably. Moreover, business picked up in 2017 and ultimately produced a positive operating result. However, there is a lot left to do. For instance, the successful market launch of new products is key to our future success. In addition, the strength of our business in individual segments differs, and we have to reallocate our resources accordingly. Bottom line: 2018 will be another interesting year.

As usual, performance in the segments varied again in 2017. What does this mean for your strategic positioning?

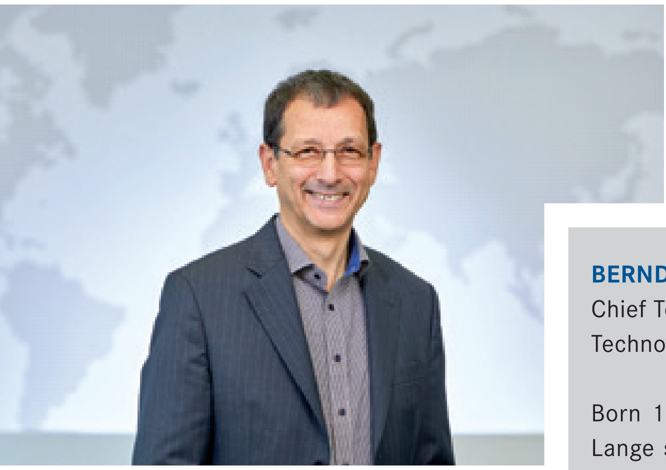
Kai Bentz: Each of our segments operates differently and follows different cycles. We often face the challenge of mastering larger projects in a relatively short period of time. That results in fluctuations in capacity utilization that we have to balance out. The visibility of new projects is also generally low, which carries risks as well as opportunities. In any case, this requires an organization that is as flexible as possible and especially really good employees who are prepared to deal with changing situations. All in all, it pays off for LPKF to serve a wide variety of markets and customers. This means we are less dependent on the performance of a single business. We aim to preserve this broad positioning in the future and develop new markets and applications with innovative products. There's more to do here!

In 2018, you will bring ROCE (return on capital employed) to the forefront as a key performance indicator. What influence will ROCE have on your strategic decisions?

Kai Bentz: Our business requires capital, which we have to handle economically, including in the interests of our shareholders. To this extent, I think it's important to not only measure earnings, but always keep in mind the necessary capital and its internal rate of return. Only then can we optimally use our financial resources. Our goal is to generate ROCE of between 10% and 15% by 2020 with innovative products, therefore exceeding our cost of capital of 8%.

Despite the return into profit territory, LPKF shareholders will not yet be able to expect a dividend in 2018. How do you intend to make the Company's shares attractive to investors again?

Kai Bentz: From my point of view, the most important thing is the potential in LPKF and its shares. With our laser-based solutions, we benefit from long-term megatrends such as miniaturization and the requirements of digitization on our customers' production activities. In addition to a series of established products, we have any number of innovations in the pipeline or going through the product launch process. This positioning is expected to pay off and result in strong earnings for the Company. When that happens, we can and will be able to make the necessary investments in our business as well as again pay dividends.



BERND LANGE

Chief Technology Officer (CTO)
Technology, Research and Development, Sales and Marketing

Born 1961, member of the Management Board since 2004 – Bernd Lange studied electrical engineering at the University of Odessa and has worked in a variety of companies in the fields of electrical engineering and scientific instrumentation. He joined the LPKF Group in 2000.

Your solar business again did surprisingly well in 2017. How sustainable is this development? What do you expect from the solar market in the near future?

Bernd Lange: We are very optimistic in this regard. LPKF supplies laser technology for the manufacture of thin film solar panels. This type of solar panel is currently making great strides in terms of manufacturing costs and efficiency, and is specifically promoted in China. In the coming years, extensive plans are underway for new factories. In 2017, we developed a completely new generation of solar scribers that more than double the productivity of this equipment. We are well positioned in this segment.

Innovations play a key role in the future performance of LPKF. However, in 2017, there was hardly any revenue generated by brand-new products. What can we expect in 2018?

Bernd Lange: We have new and updated products in all segments. The new generation of solar scribers, for example, contributed substantially to revenue in 2017. There is a developed market for these products. Introducing new technologies, such as for welding three-dimensional vehicle lights, is considerably more expensive and time intensive, and often happens through pilot projects that create market acceptance. We are in this phase in 2018 with a number of different new developments.

You want to use the LIDE (Laser Induced Deep Etching) process to unlock the potential of glass in the manufacture of chips and microsystems. What are LIDE's benefits for customers?

Bernd Lange: LIDE is definitely one of those technologies that has massive potential for the future and requires extensive market development. The first year of market development showed clearly that there is great interest in glass as a material for electronics and microsystems technology. The applications vary widely and range from the miniaturization of mobile phone components through printheads to displays. We offer the option of deeply etching structures into thin glass quickly, precisely, and flawlessly. Many users are therefore able to consider glass and its advantages for the first time.

LTP (Laser Transfer Printing) is a digital printing process for functional pastes. What are the markets for this technology? When will LTP generate revenue for the LPKF Group?

Bernd Lange: LTP is the digital answer to industrial screen printing. Anywhere viscous media or pastes containing a high percentage of solids have to be printed precisely, customers currently still reach for screens. This segment is different than other digital printing processes such as inkjet printing. LTP offers a digital solution for the first time. Currently, we are concentrating our efforts on printing ceramic colors, e. g., in the glass industry. In 2018, we expect initial revenue to be generated by pilot projects.

DR. CHRISTIAN BIENIEK

Chief Operating Officer (COO)

Production, ERP, Administration, Organization and IT

Born in 1967, member of the Management Board since 2012 – Christian Bieniek studied mechanical engineering (with a focus on manufacturing technology) before completing his doctorate at TU Braunschweig. Afterwards, he first worked in a management consultancy followed by various responsible operations functions in the commercial vehicle and capital goods industries. He joined the LPKF Management Board in December 2012.

Almost all of your production capacity in the Solar segment was being used already in 2017. This situation might intensify further in 2018. How will you meet the strong demand from solar customers?

Dr. Christian Bieniek: It's true that the capacity situation in the Solar segment was very challenging in 2017. Thanks to the excellent work by our solar team and temporary support from other LPKF units, we were able to meet ambitious delivery targets. The high number of orders on hand right now indicates that we will not use less capacity in 2018. The solar market is currently sending signals that give us a positive outlook for the coming years, too.

Against this backdrop, we invested in solar production in particular last year. In November, a new production hall began operating at the Suhl site in order to enable the Company to efficiently assemble increasingly larger and heavier equipment. We also focused particularly on hiring new employees and continuing the training of employees already on board. In order to meet solar market demand, we will also hire mechatronic technicians and electricians for our Suhl facility in 2018. We will additionally move some functions from Suhl to other LPKF sites or deploy assembly service providers to meet the demand.

You reduced working capital significantly in 2017. What was necessary to accomplish this? How sustainable is this development?

Dr. Christian Bieniek: A number of measures were implemented that, all told, reduced capital employed. Focal points are programs for receivables management and specifically reducing inventories without negative effects on deliverability.

In my opinion, the success of these measures rests on a change in our management system that brings working capital to the attention of every employee much more effectively than to date. With ROCE as the core KPI, we compare the earnings we generate against the capital we employ. For this high-level ratio, low inventories and small, overdue receivables play as important a role as higher earnings. That provides the right momentum and guarantees a sustainable and efficient business.

This year, LPKF is presenting an extensive sustainability report. What part do environmental and social issues play in your strategy? What steps have you taken for the future?

Dr. Christian Bieniek: The top priority of our business is increasing the long-term value of the Company. In the holistic sense, this can only be accomplished by doing business sustainably. To this extent, careful stewardship of environmental and social resources is a basic condition for our success. We aim to address this challenge both internally, in our development and production activities, as well as through our products themselves.

Currently, we are putting in place energy management measures to identify the potential for energy conservation and effectively conserve energy.

In developing new systems and processes, conserving resources in production always plays a role. Our goal is for our laser systems to supplant environmentally unfriendly processes, avoid scrap, and reduce the use of rare materials.

In recent years, LPKF has scaled back investments considerably. What is your planned investment volume for the next few years?

Dr. Christian Bieniek: As a technology company, LPKF will continue to invest around 10% of its revenue in the development of innovative products going forward. This is also directly linked with investing in further training for our employees, who ultimately drive innovation.In contrast, we do not plan on any larger investments in buildings and infrastructure in 2018. We are in a good position here, with sufficient facilities for our planned production activities.

REPORT OF THE SUPERVISORY BOARD

DEAR SHAREHOLDERS, LADIES AND GENTLEMEN,

after stabilizing during the 2017 financial year, LPKF Laser & Electronics AG is once again undergoing a period of transformation. We want to and must make the Company strong and fit for the future. 2017 was a challenging year for our employees, Management Board and Supervisory Board. Our aim was to provide constructive support for the restructuring measures introduced in the previous year and instigate additional far-reaching changes. I am delighted to report that these efforts are already showing signs of success, with revenue growth of 12% and positive EBIT once again. However, we will not rest on our laurels.

Allow me to present the report of the Supervisory Board to you for the first time for the 2017 financial year. LPKF Laser & Electronics AG is a company with tremendous potential and expertise. My visits to our production sites in Europe gave me a good insight into our innovative capabilities and highly motivated employees. The aim of the Supervisory Board is to introduce changes that consistently add value. Only by placing the Company back on a sustainably profitable growth trajectory can we offer attractive long-term employment and meet the demands of our shareholders. While we have taken important steps in this area, we have not yet reached our goal. We are working hard to align the Company with the megatrends of the future – miniaturization, digitization, Industry 4.0 – and enhance our innovative capabilities.

We successfully completed our search for a new Chairman of the Management Board shortly before this report went to print: On 15 March 2018, the Supervisory Board appointed Dr. Götz Bendele as Chairman of the Management Board and Chief Executive Officer (CEO). He will assume his new position effective 1 May 2018; his contract runs for three years. We are delighted to have gained a proven technology expert in Götz Bendele who has worked for many years in the semiconductor, electronics and solar industry. He will also contribute his experience in setting up new business units in international markets and can resolutely implement the growth strategy together with the LPKF team.

MONITORING AND ADVISING

In the 2017 financial year, the Supervisory Board closely monitored the performance of LPKF Laser & Electronics AG and fulfilled its duties pursuant to the law and Articles of Incorporation. A total of eleven Supervisory Board meetings, including three extraordinary meetings, took place in the reporting period. With one exception, all members of the Supervisory Board attended all meetings personally. Two members of the Supervisory Board took part in December's extraordinary meeting via telephone. The Supervisory Board reviews the efficiency of its activities once a year. For financial year 2017, a successful efficiency review was conducted at the meeting on 24 January 2018.

The Supervisory Board continuously monitored the Management Board in its running of the Company and regularly advised it on management issues. The Management Board informed the Supervisory Board without delay and comprehensively of all issues with regard to strategy, planning, business development, risk situation, risk management and adherence to compliance regulations. The Management Board also outlined any deviations in the Company's development from plans and targets. The Supervisory Board was always involved at an early stage in all decisions of importance to the Group. The Management Board reports monthly in writing to the Supervisory Board about the earnings and liquidity situation and provides an overview of the Company's business and risk situation. The Management Board informed the Supervisory Board that the Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht – BaFin) initiated fine proceedings in March 2017 against LPKF Laser & Electronics AG on suspicion

CHAIRMAN OF THE SUPERVISORY BOARD
Dr. Markus Peters

of a breach of Section 37w (1) sentence 1 of the German Securities Trading Act (WpHG) together with Section 37y no. 2 WpHG. Specifically, this means that the responsibility statement was formally missing from the 2016 half-yearly report. The Management Board has engaged a specialist lawyer to represent it in these proceedings.

The members of the Supervisory Board were able to critically evaluate the reports and proposed resolutions and contribute their own suggestions. This was done both in the Supervisory Board meetings and in a variety of discussions and consultations with the Management Board. The Chairman of the Supervisory Board also regularly exchanged information with the Management Board outside of Board meetings. Proposals requiring approval were submitted to the Supervisory Board in accordance with the Articles of Incorporation and rules of procedure; the Supervisory Board approved these measures following discussions. In addition, the Supervisory Board regularly monitored the legality, propriety and fitness for purpose of the Management Board's actions. Where necessary, the Supervisory Board was granted access to the Company's books and business documents. The newly elected Supervisory Board had access to all Supervisory Board documents for the years 2014 to 2017.

MAIN FOCUS OF THE DISCUSSIONS

The main topic of the 2017 financial year was the Group's economic situation. The Management Board communicated key figures to the Supervisory Board regularly, particularly orders on hand, incoming orders, working capital, cash flow and the profit/loss situation. Where necessary, the Supervisory Board requested corrections and sets of measures to be implemented. Discussions predominantly focused on topics relating to internal organization, increasing profitability at segment level, cash flow optimization and net working capital. As a value-oriented key performance indicator, ROCE (return on capital employed) will be introduced as a KPI for the 2018 financial year. In the first half of 2017, the Supervisory Board also discussed changes to the Board that resulted in the submission of an appropriate proposal to the Annual General Meeting.

The Management Board once again opted to forgo variable remuneration in the 2017 financial year. The Supervisory Board thanks the Management Board for foregoing this remuneration.

The annual strategy meeting makes up a significant part of the Supervisory Board's work. This meeting is held along with the Management Board and division heads. At the strategy meeting, the Supervisory Board thoroughly addressed strategy proposals from the Management Board for the divisions, as well as strategies for the individual business units and the overall Group strategy. On 27 February 2018, the Supervisory Board discussed the jointly developed 2018+ strategy paper and approved its key propositions.

The performance of the Development and Solar segments in the 2017 financial year was encouraging. The Welding segment must continue to optimize its internal processes in order to exploit the full potential of this highly attractive market segment. One of the Management Board's key tasks in 2018 will be to place the Electronics segment back on a successful development path.

We will continue to focus on innovation in the future, and have high expectations of the LTP and LIDE technologies. Unfortunately, the market launch is not happening as quickly as expected. We cannot be satisfied with this situation. The Supervisory Board scrutinized the development projects on several occasions and called for corrections where necessary. Reporting in this area was reorganized as part of these efforts.

Internal auditing issues are also a fixture of Supervisory Board meetings. Internal auditing at LPKF Laser & Electronics AG has been outsourced to an auditing firm, which is reviewing selected units of the Company according to a set schedule and audit plan. The Management Board reports on the internal audit findings. In each case, the Supervisory Board duly noted the report and approved the measures proposed for improving internal workflows following discussions.

CORPORATE GOVERNANCE AND DECLARATION OF COMPLIANCE

In 2017, the Supervisory Board also intensively discussed the implementation of corporate governance standards in the Company. LPKF Laser & Electronics AG reports extensively on corporate governance in the Corporate Governance Report. On 20 March 2018, the Management Board and Supervisory Board issued the annual Declaration of Compliance in accordance with Section 161 German Stock Corporation Act (Aktiengesetz) which reports deviations from the recommendations. Additionally, the Declaration of Compliance is publicly available on the Internet at http://www.lpkf.com/investor-relations/corporate-governance/declaration-compliance.htm. With two exceptions, LPKF Laser & Electronics AG fulfills all of the recommendations and is committed to the Corporate Governance Code as an integral part of its corporate governance activities. No conflicts of interest arose in the reporting year; the independence of the members of the Supervisory Board was ensured.

SUSTAINABILITY

Sustainability was and continues to be an important part of the Group's strategy. The Supervisory Board supports the activities presented in the Sustainability Report relating to the corporate, social, and environmental responsibility of LPKF Laser & Electronics AG. The declaration of compliance of LPKF Laser & Electronics AG with the German Sustainability Code can be found no later than by the end of April 2018 at www.lpkf.com/lpkf-group/sustainability.

AUDIT OF THE ANNUAL FINANCIAL STATEMENTS

As resolved by the Company's Annual General Meeting, the Supervisory Board engaged PricewaterhouseCoopers AG Wirtschaftsprüfungsgesellschaft (PwC) to audit the 2017 annual and consolidated financial statements and defined the focal points of the audit at its meeting on 13 November 2017. Both the annual and consolidated financial statements were audited by the auditors and issued with an unqualified auditors' report. The auditor participated in the Supervisory Board meetings on 27 February 2018 and 20 March 2018 and reported on the audits of the 2017 annual and consolidated financial statements, especially providing explanations on the net assets, financial position and results of operations of the Company and the Group as well as further information. Furthermore, after reviewing the risk early warning system, the auditor of the financial statements confirmed that the Management Board executed the measures required by the German Stock Corporation Act to identify risks that could endanger the continued existence of the Company as a going concern.

The documents concerning the annual financial statements of the parent and the consolidated financial statements as well as the reports prepared by PwC were submitted to the members of the Supervisory Board for inspection and review in a timely manner. There were no circumstances that cast doubt on the impartiality of the auditor. The auditor reported on these activities along with the auditing of the financial statements to the Supervisory Board as agreed.

The Supervisory Board discussed PwC's audit reports and the documents relating to the financial statements including the combined management report and the Group management at length with the representatives of the auditor and examined these itself. The Supervisory Board reached the conclusion that the reports comply with the legal requirements of Sections 317 and 323 of the German Commercial Code (Handelsgesetzbuch) in particular. At its meeting on 20 March 2018, the Supervisory Board agreed with result of the auditor's audit and approved the annual financial statements of the parent and the consolidated financial statements prepared by the Management Board. The annual financial statements of LPKF Laser & Electronics AG are thereby adopted.

The Management Board and the Supervisory Board will propose to the Annual General Meeting on 31 May 2018 that a dividend not be paid. In the current situation of the Company, priority is given in particular to reducing debt and investing in growth.

STAFFING

Dr. Dirk Rothweiler joined the Supervisory Board on 13 June 2017. Bernd Hackmann stepped down from his position on 12 July 2017. Dr. Markus Peters joined the Supervisory Board on 13 July 2017, was elected Deputy Chairman on 25 July 2017 and elected Chairman of the Supervisory Board with effect from 16 October 2017.

THANKS

The Supervisory Board would like to thank our shareholders for remaining loyal to LPKF Laser & Electronics AG. The Supervisory Board would also like to thank all employees and the Management Board for their dedicated work during the 2017 financial year. Our thanks also go to our customers around the world, who once again made even greater use of LPKF products.

During the financial year under review, the Works Council members also constructively represented the interests of the Group's employees and, in doing so, kept the welfare of the Company as a whole in their sights. We are particularly thankful for their efforts.

Garbsen, Germany, March 2018

DR. MARKUS PETERS
Chairman of the Supervisory Board

THE SUPERVISORY BOARD
Dr. Dirk Rothweiler,
Dr. Markus Peters,
Dr. Heino Büsching,
Prof. Erich Barke

DR. MARKUS PETERS | Chairman

Born 1964, member of the Supervisory Board since 13 July 2017 – After completing a training as a banker, Markus Peters studied business administration at Christian-Albrechts-University Kiel and in the USA. He worked in various managerial positions for RWE, thyssenkrupp, Outokumpu Holding Germany GmbH and DMG MORI, including 4 years in the USA. Since July 2017 Markus Peters is member of the Executive Board of German Technology AG, a subsidiary of BANTLEON BANK AG.

DR. DIRK ROTHWEILER

Born 1963, member of the supervisory board since 13 June 2017 – Dirk Rothweiler studied physics at the Technical University Aachen, where he also obtained a PhD degree at the faculty of mechanical engineering. He was a project manager at Fraunhofer-Institute for Laser Technology ILT and at the Institute for Laser Technology of the Technical University Aachen. He worked as a manager for various international companies like Carl Zeiss AG, Suess Microtec AG and Jenoptik AG. Since 2017 he is CEO of First Sensor AG in Berlin.

DR. HEINO BÜSCHING | Deputy Chairman

Born 1964, member of the Supervisory Board since 1998 – Heino Büsching studied law at the University of Göttingen and works as a lawyer, specialist lawyer for tax law and tax consultant. He is Partner at CMS Hasche Sigle in Hamburg.

PROF. ERICH BARKE

Born 1946, member of the Supervisory Board since 2006 – Erich Barke studied electrical engineering at the University of Hannover. After receiving his PhD degree in 1978, his habilitation in 1982 and his appointment as professor in 1983 he moved to industry and joined Siemens AG 1985 as a manager in its semiconductor division. In 1992 he became Professor at the University of Hannover and Director of the Institute for Microelectronic Systems at the University of Hannover. From 2001 – 2004 Erich Barke was First Dean of the IT faculty of the University of Hannover, from 2005 – 2014 President of the University of Hannover.

Memberships in other supervisory boards
- Esso Deutschland GmbH, Hamburg, Germany
- Exxon Mobil Central Europe Holding GmbH, Hamburg, Germany
- hannoverimpuls GmbH, Hannover, Germany

SEGMENTS AT A GLANCE

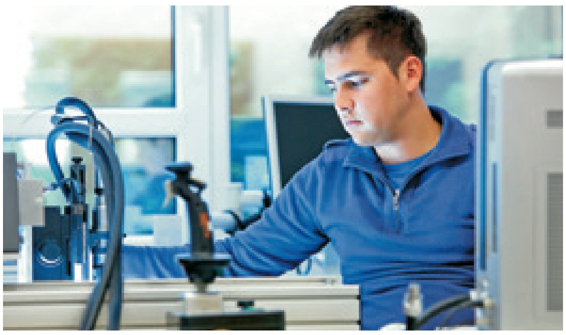
SERVICE & SUPPORT

LPKF has been actively involved in high-performance systems for industrial production and efficient prototyping methods for many years, all over the world. From the outset, one important goal and differentiator was that LPKF would offer a reliable, worldwide support structure for its systems around the clock. Today, our support works from three Service Hubs based in Europe, the US, and Asia. Customs warehouses around the globe ensure spare parts are available at short notice without complex formalities. LPKF's skilled customer service team can draw on many years of experience gained in a wide range of production and application areas. After system installation and commissioning, LPKF also provides support for the customer production ramp-up. Customers are also increasingly using service contracts as a preventive approach to system availability. Remote services offer an efficient way to analyze performance and apply updates. If things do go 'haywire', however, experts from an LPKH Service Hub are onsite quickly, plus a trained LPKF representative if necessary.

LPKF's subsidiary LaserMicronics GmbH helps customers with process design and optimization, and can also provide support for production orders.

Expert support in emergencies provided by technical customer service staff.

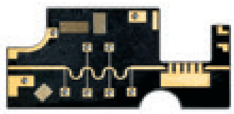
In three Service Hubs worldwide.



DEVELOPMENT

LPKF is the market leader in the systems and methods used for the zero-chemical production of circuit board prototypes in research or industrial electronics laboratories. Researchers and developers trial a wide range of layouts or new materials for performance optimization and miniaturization in electronics. LPKF's lab lasers are especially popular for processing the kinds of specialized, high-quality materials now increasingly used in electronics.

With LPKF's systems, developers can hold their prototypes in their hands just hours after finishing the draft. LPKF's newest flagship system, the ultrashort pulse laser 'ProtoLaser R', is now providing customers with a way to experiment on entirely new substrates in the lab at the micro- and nanoscale. One example in this context are organic LEDs. These OLEDs are currently the focus of attention in industry and science and are of interest to almost all sectors, including space travel.



Fast and precise: This titanate test sample was produced with the LPKF ProtoLaser R in exactly 2 minutes.

WELDING

LPKF pioneered the innovative process of laser plastic welding. The laser beam in the LPKF welding machines joins plastics together to create a reliable, high-precision and visually appealing weld seam – with no chemicals and minimal stress to the component. The systems offered by LPKF cover a broad spectrum of applications: both small and large parts, with weld seams from 100 µm to several millimeters. One specialized area of excellence involves systems for the high-volume production of large 3D parts such as vehicle taillights and other components. LPKF is using its 'wobble welding' technology to expand its lead in this area and support the lightweight trend. The internally produced system software and a recently developed processor unit at the heart of the machine ensures best-in-class processes.

Safely welded together: The weld seam is leak-proof.

PowerWeld 3D 8000

The new flagship for micro material processing.

High-end processing of delicate substrates in labs.

ProtoLaser R

LPKF Allegro

SOLAR

These scribers are as pacey as their name suggests: the high-speed 'Allegro' units offer high-precision structuring of thin-film solar modules and are setting standards worldwide in particular for the way they maximize the active module surface. The results – which boost the energy yield of the solar modules while lowering production costs – are important success factors for companies in the photovoltaic industry. LPKF's Allegro cuts the costs of photovoltaic power generation while contributing to the expansion of renewable energy sources.

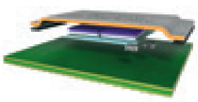
Apart from modification and structuring, lasers can also be used to print onto glass. The LTP (Laser Transfer Printing) digital printing process developed by LPKF is an ideal solution for printing on glass – for example in the automotive sector. Its digital approach makes the process very flexible and fast. Printing with certified inks based on original screen printing inorganic materials is carried out at high resolutions. Data matrix or barcodes for logo serialization can be printed just as effectively as series with a large number of variants.

Boosting yield with LPKF: The Allegro laser scriber maximizes the usable surface of photovoltaic modules

ELECTRONICS

With specialized, high-performance laser machinery for the precise cutting, drilling, dicing or material abrasion of organic and inorganic circuit board materials at the micro scale, LPKF is already meeting the requirements of tomorrow's electronics industry. Users of flexible and demanding circuit board materials benefit in particular from high-performance LPKF MicroLine laser systems, for example, which are now increasingly found in production use. The systems use their built-in interfaces to integrate seamlessly with an existing Manufacturing Execution System (MES). The provision of tracking and tracing information for individual production runs creates a reliable documentation trail for production data – a crucial feature for security-related applications.

The pinnacle of microelectronic art, namely the packaging of integrated circuits into multi-chip modules for easy handling and assembly, is a demanding discipline requiring perfect workmanship and miniaturization.



Small, yet powerful: Chip manufacturers use LPKF's tools to achieve miniaturization with high functional density.

LPKF offers innovative solutions for IC packages and their extraordinary functional density, processes state-of-the-art materials at the micro-/nanoscale and positions itself as an industry benchmark. As one example, the patented LIDE technology used by LPKF's Vitrion system enables the creation of deep microstructures in thin glass at never-before-experienced levels of precision, performance and quality. Winner of the 2017 Productronica Innovation Award, the process represents a quantum leap in the application of inexpensive glass in microsystems technology. LPKF is also exploiting further potential in miniaturization with Laser Direct Structuring (LDS): This makes it possible to exploit the tops of chip packages by creating antennas or rewiring levels on them.

LPKF Vitrion 5000


STARBUCKS COFFEE
TSUTAYA
洋服の青山
書店
331-06

CENTER STAGE

THE WORLD IS CHANGING FAST!

Even if the trend has gone largely unnoticed, laser technology is now involved in many things we use on a daily basis. This includes cars, phones, watches and many other ‘smart’ products that simplify our lives or can even save them – like the helicopter on p. 18.

In recent years, the use of laser technology has been a decisive factor in the development of electronic products that are simultaneously **smaller, lighter and more powerful**. As a **high-precision tool**, the laser is an important driver of progressive miniaturization.

And **miniaturization**, in turn, helps the rapid spread of laser technology to new applications.

Other trends such as **digitization**, advances in medical technology and the increasing significance of energy efficiency are making laser technology indispensable for the production of **highly complex components**.

DEVELOPMENT SEGMENT

TOUCH DOWN

A TECHNOLOGY LEADER IN PCB PROTOTYPING

The **Development** segment has for many years formed a solid basis for business development in the LPKF Group, and can currently look back on a highly successful year of business in 2017. The segment is synonymous with systems that are used for the manufacture of **PCB prototypes** or **low-volume production**. For over 40 years, these high-precision lab machines have secured LPKF's reputation as a **valued partner** for R&D institutions all over the world. In contrast to the other segments, this business unit maintains a varied and small-scale product portfolio that has enabled it to establish a **global customer base** consisting of over 10,000 individual customers.

LPKF's ProtoLaser was a star not only at the show at Munich's Productronica!

LPKF PROTOMATS AND PROTOLASERS FORM THE BASIS FOR THE TECHNOLOGICAL EDGE ENJOYED BY INNOVATIVE COMPANIES AND INSTITUTIONS.

OUR ADVANTAGE: SIMPLE USABILITY AND PROCESS CONTROL FROM A SINGLE SOURCE

As a market leader in the field of rapid prototyping, LPKF is the world's only provider capable of supplying a complete production line for PCB prototyping from a single source. Requiring no chemicals, the process ensures safety and comfort in the lab. And the advantages of in-house manufacturing – time savings, flexibility, process control, data security – are especially appealing in these times of advancing digitization. The system software, developed in-house by LPKF, ensures that the machinery's superlative technological performance is also matched by its ease of use. LPKF has operated this successful model of innovation driven by research and industry for many years now.

Helicopter landing with the aid of millimeter-wave sensors developed with an LPKF ProtoLaser

2 MINUTES INSTEAD OF **3** DAYS

In-house prototyping for rapid, demand-driven production – all possible with LPKF ProtoLasers and ProtoMats

Revenue 2017: +8%
EBIT 2017: +167%

Researchers and engineers at the Fraunhofer Institute for Applied Solid State Physics have used an LPKF ProtoLaser to develop a distance radar with millimeter-wave sensors for helicopters. Such sensors can penetrate snow, dust and fog while simultaneously achieving high spatial resolution. Even in poor visibility, the new technology reliably measures ground clearance and vertical distances, as well as drift velocity. This enables helicopter pilots to land safely even when forced to maneuver in blizzards or over very dusty terrain. Other applications for this sensor technology including traffic control, medical technology or sensor systems in manufacturing, for example. Laser technology therefore indirectly lies right at the heart of some helicopter systems, making an active contribution to aviation safety.

VERSATILE DEPLOYMENT

LPKF ProtoMats and ProtoLasers form the basis for the technological edge enjoyed by innovative companies and institutions. The systems work with all of the latest circuit board materials. Recently, leading manufacturers have also been using the LPKF ProtoLaser system for materials testing, for example.

PERPETUAL INNOVATION

The ProtoLaser R, a laser system developed specifically for use in research, is now providing positive momentum for business development. And the Development segment's power to innovate continues unabated. Further development of ProtoMat and ProtoLaser models is pursued on a continuous basis.

SOLAR SEGMENT

OUTLOOK FOR SOLAR

WORKING TOWARDS A BETTER WORLD WITH MORE EFFICIENT SOLAR CELLS

The **solar market** is at the mercy of sales fluctuations, cut-throat competition and the influence of state actors. While many consider it unpredictable, the market has enjoyed consecutive years of growth and **an end to this growth** is not in sight. Energy analysts from Bloomberg expect that capacities for **solar energy manufacturing** will expand by a factor of 14 by the year 2040. This would make solar the **biggest supplier of energy** with a share of 29%, followed by coal (16%) and wind power (13%).

Our customers use LPKF technology to manufacture thin-film solar modules at the lowest costs in the world. Together with our customers, this means that we make an important contribution to keeping the costs of solar energy low, enabling it to compete without subsidies against real-world electricity prices in key markets around the world.

Not all solar cells are created equal. Unlike silicon-based solar cells, thin-film photovoltaic modules require less energy, water and semiconductor material during their manufacturing processes.

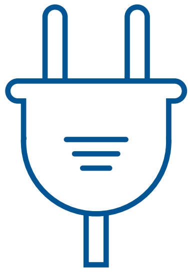
This enables them to achieve the best ecological footprint – a fact that explains the Chinese interest in thin-film technology. In day-to-day use, thin-film modules offer impressive low-light capabilities, improved temperature coefficients and a lack of sensitivity to the angle of incidence of solar radiation.

FORECAST FOR 2040
Energy sources in the future

13% WIND

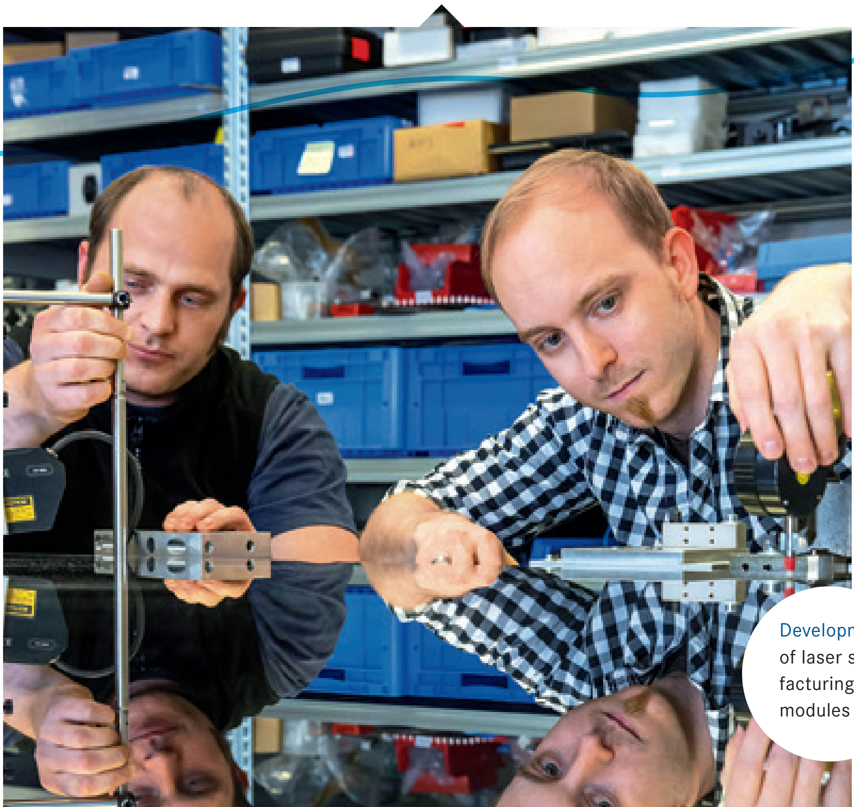
16% COAL

29% SOLAR



Lower costs of production costs and innovative technologies will strengthen solar power's position on the energy market.

THE ALLEGRO LASER SYSTEMS ARE DEPLOYED IN LASER STRUCTURING PROCESSES FOR THIN-FILM SOLAR MODULES. THE SERIES COMBINES MAXIMUM PERFORMANCE AND COST EFFECTIVENESS.



Revenue:
EUR 20.6 million (plus 48%)

Incoming orders:
EUR 36.6 million

Orders on hand:
EUR 28.3 million

Development and production of laser systems for manufacturing thin-film solar modules at the Suhl facility

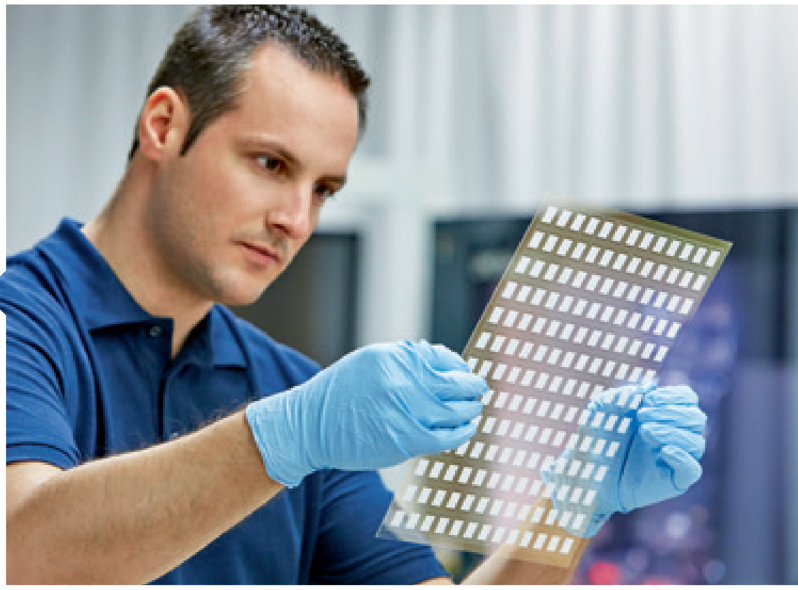
ELECTRONICS SEGMENT

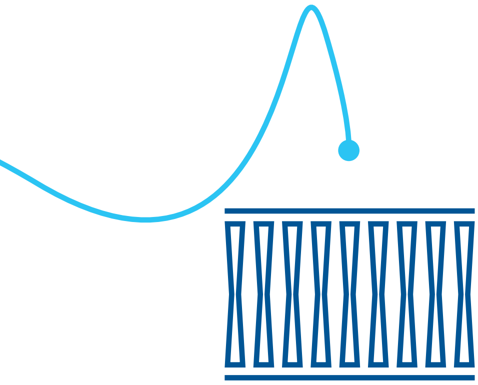
A NETWORKED WORLD

DIGITIZATION REPRESENTS ONE OF TODAY'S BIGGEST DRIVERS FOR CHANGE

In the near future, billions of devices will be networked together. **Industry 4.0** is part of this dynamic force for change. The Internet of Things (IoT), on the other hand, doesn't focus on industrial manufacturing as such but refers to the use of **digitalized, networked devices** and products in our daily lives. The physical world is being covered by an invisible network, able to link and process the **mountains of data** produced by smart things and ubiquitous sensors.

LIDE TECHNOLOGY IS FACILITATING NEW PRODUCT DESIGNS IN MICROSYSTEMS TECHNOLOGY AND HAS THE POTENTIAL TO REVOLUTIONIZE ENTIRE PRODUCTION PROCESSES. THE LASER MACHINING IS QUICK AND VIRTUALLY STRESS-FREE ON GLASS





A high-productivity laser system plus an innovative machining process is revolutionizing the processing of thin-film substrates. The LIDE process offers efficient micro-machining for glass.

The LPKF Vitrion 5000 laser system keeps manufacturing efficient and cost-effective.

1 IN SECOND

5,000 HOLES REALIZED

LIDE stands for Laser Induced Deep Etching and describes a process developed by LPKF that uses a laser for the high-speed, high-precision machining of very thin sheets of glass. The glass sheet, which is less than half a millimeter thick, is first subjected to a series of individual laser pulses. As a next step, a chemical process is used to produce high-precision holes or other exact geometric shapes.

GLASS CAN REPLACE EXPENSIVE SILICON

Modern approaches to manufacturing microsystems such as sensors typically make use of clean-room conditions. While these processes almost always utilize silicon, it is a comparatively expensive material and glass would offer several benefits if used instead, since it is transparent, thermostable, an electrical insulator and chemically inert. Glass also has a very smooth surface finish and is cheap to produce.

While glass is now deployed in many ways in electronics manufacturing, it is used only rarely as a material, since it is exceptionally difficult to machine. Attempts to use conventional processes to etch deep structures in thin glass sheets have almost always ended in microfissuring or splintering. This kind of machining weakens and destabilizes the glass. The contemporary methods used to work with glass not only produce substandard structures but are also too time-consuming for efficient use in production.

LIDE offers a solution to the problem of machining glass. In a single second, LIDE creates up to 5,000 perfectly formed microholes, each with a diameter of less than 10 µm. This process can also be used to make high-precision micro-cuts. LIDE therefore fully exploits the potential of glass as a material for the manufacture of sensors, antennas, microfluidic systems, filter applications, displays and many other kinds of applications.

THE LPKF SHARE

INVESTORS REWARD SUCCESSES IN CONSOLIDATION AND REALIGNMENT OF LPKF'S BUSINESS

LPKF's stock price trend in 2017 indicates that investors are rewarding the Company's success in realigning its business but are also jittery when their expectations are not fully met. At the beginning of the year, the Company's share price stood at EUR 7.13. In the course of the year, the low price of EUR 6.89 was reached in February and a high of EUR 10.875 on 26 May. At the end of August, the stock price slumped somewhat, falling back to EUR 7.04, but then rose to EUR 9.34 at the end of the year. All in all, LPKF shares gained 31% in 2017.

The share price performance was also reflected in the demand for LPKF's shares. The trading volume was between 3,200 and 207,000, with an average of 42,506 shares trading hands on XETRA each day.

MARKET CAPITALIZATION AND SHAREHOLDER STRUCTURE

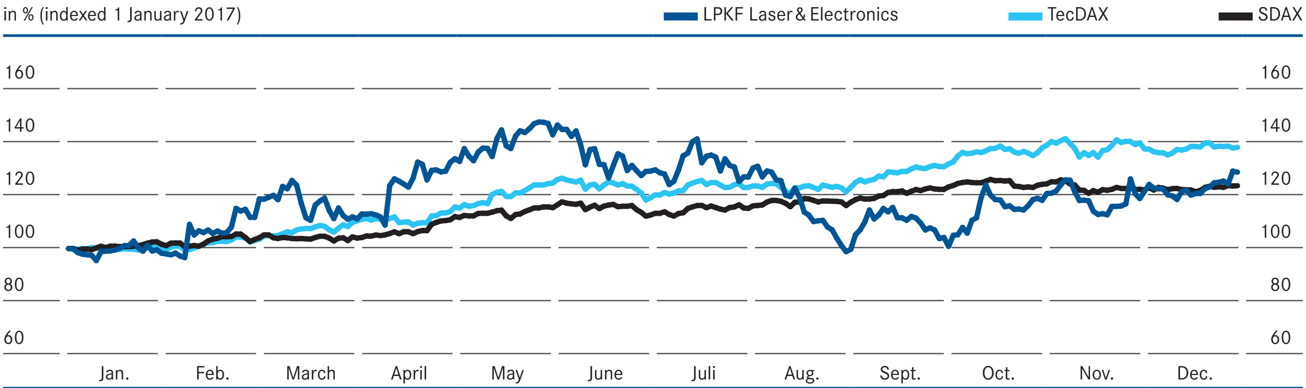
The subscribed capital of LPKF Laser & Electronics AG amounted to EUR 22,269,588.00. The corresponding number of ordinary shares are admitted to trading on the Prime Standard segment of the Frankfurt Stock Exchange's Regulated Market, with 20.02% of the shares held by German Technology AG. Three other investors each hold over 3% of our shares. Shares held by asset managers and trust companies, funds and pension funds, or German or foreign investment firms in their respective investment funds are not considered long-term holdings. German Technology is an exception to this rule. This shareholder has positioned itself as a long-term anchor shareholder and has publicly announced that it is pursuing strategic goals and aims to have a sustained influence over corporate policies. According to this definition by Deutsche Börse AG, 80% of LPKF's shares are in free float. LPKF's market capitalization was EUR 158.78 million on 2 January 2017, and EUR 209.11 million at the close of trading on 29 December 2017.

DIVIDEND POLICY AS PART OF CORPORATE STRATEGY

Our dividend policy is based on continuity and reliability. As a rule, the Company aims to propose to the Annual General Meeting that between 30% and 50% of LPKF's earnings per share be distributed as a dividend. LPKF will only deviate from this aim if it faces an uncertain future due to circumstances such as an economic downturn, or if paying a dividend would jeopardize its ability to finance investments or dilute the financial position of LPKF AG or the Group.

PERFORMANCE OF THE LPKF SHARE IN 2017

in % (indexed 1 January 2017)



KEY FIGURES ON THE LPKF SHARE

	2017	2016	2015
Number of shares as of 31 December	22,269,588	22,269,588	22,269,588
High (XETRA)	EUR 10,875	EUR 10.64	EUR 13.53
Low (XETRA)	EUR 6.89	EUR 5.41	EUR 7.14
Closing price at year's end (XETRA)	EUR 9.39	EUR 6.95	EUR 7.20
Market capitalization at year's end	EUR 209.11 million	EUR 154.77 million	EUR 160.34 million
Average daily trading volume (shares)	42,506	51,993	100,182
Earnings per share, diluted	0.05	– 0.40	– 0.16
Dividend per share[1]	EUR 0.00	EUR 0.00	EUR 0.00

[1] 2018: Proposal at Annual General Meeting

The Management Board and the Supervisory Board will propose to the Annual General Meeting on 31 May 2018 that a dividend not be paid. In the current situation of the Company, priority is given in particular to reducing debt and investing in growth.

The focus of management is on solid financing of the Company. Ensuring a high equity ratio of at least 40% (currently: 45%) is one of the key prerequisites.

DIALOGUE WITH SHAREHOLDERS, ANALYSTS, AND THE BUSINESS MEDIA

LPKF maintains open and transparent dialogue with capital market players. The former CEO Dr. Ingo Bretthauer and CFO Kai Bentz spoke with around 60 institutional investors and analysts from Germany at five road shows. LPKF's shares were regularly analyzed by seven banks in 2017.

LPKF also maintains a high level of contact with journalists from financial and business publications. The Management Board is available anytime for conversations with the press and, particularly when quarterly financials are announced, proactively offers individual interviews so that shareholders have a complete and independent picture of the Company. Shareholders are still keenly interested in our company, as evidenced by the strong attendance of our Annual General Meeting: Around 400 shareholders accepted the invitation to the Annual General Meeting held in Hannover on 01 June 2017.

IR CONTACT

LPKF's website is an important platform for providing comprehensive and transparent information. Existing and potential shareholders can also contact LPKF personally with their questions.

All information on the Company is available online at www.lpkf.de. In addition, the Investor Relations department can be contacted at the following address:

LPKF Laser & Electronics AG
Bettina Schäfer
Investor Relations Manager
Tel.: +49 5131 7095-1382
investorrelations@lpkf.com

CORPORATE GOVERNANCE

SUSTAINABLE VALUE CREATION AND EFFICIENT COLLABORATION

Corporate governance stands for responsible corporate leadership and management aimed at increasing the shareholder value in the long term; purposeful and efficient collaboration between the Management Board and the Supervisory Board; consideration for the interests of shareholders and employees; transparency and responsibility in all corporate decision making; as well as appropriate risk treatment. LPKF follows the German Corporate Governance Code.

The actions of the LPKF Group's management and supervisory bodies are guided by the principles of responsible and good corporate governance. The Management Board and the Supervisory Board report on issues of corporate governance in this chapter pursuant to Article 3.10 of the German Corporate Governance Code. This chapter also contains the corporate governance declaration pursuant to Sections 289a and 315 (1) of the German Commercial Code (Handelsgesetzbuch – HGB). For the remuneration report, please see pages 44 ff. of the combined management and Group management report.

CORPORATE GOVERNANCE DECLARATION

1. PROCEDURES OF THE MANAGEMENT BOARD AND THE SUPERVISORY BOARD

LPKF AG is an enterprise incorporated according to German law, on which the German Corporate Governance Code is based. The dual management system comprising the Management Board and the Supervisory Board as corporate bodies, both of which have distinct responsibilities, is a fundamental element of German corporate law. The Management Board and the Supervisory Board of LPKF AG work together closely and in an atmosphere of trust in managing and supervising the Company. The Management Board of LPKF AG consists of three members. They are responsible for managing the Company's business in the interests of the Company and with the aim of creating sustainable value. The Supervisory Board had set a target of 0% for the share of women on the Management Board to be fulfilled by 30 June 2017 since no changes in the composition of the Management Board were planned. The Supervisory Board defined a new target for the share of women in the Management Board of 25%, to be fulfilled by 30 June 2022.

In accordance with the German Act on the Equal Participation of Women and Men in Executive Positions in the Private and the Public Sector, the Management Board also laid down a target for the share of women on the two management levels below the Management Board: 17% in each case. The deadline set for achievement of this target was 30 June 2017. At this date, the share of women on the upper management level was 17% and on the lower management level was 21%. The Management Board has laid down new targets for the share of women on the first and second management levels below the Management Board of 17% and 23%, respectively, to be fulfilled by 30 June 2022.

The Supervisory Board advises and monitors the Executive Management Board with regard to its management of the Company. The Supervisory Board is integrated in corporate strategy and planning, as well as all aspects of fundamental importance to the Company. The rules of procedure require the Management Board to obtain the approval of the Supervisory Board for significant business transactions.

The Chairman of the Supervisory Board coordinates the work of the Supervisory Board, chairs its meetings and represents the Supervisory Board externally.

The Management Board informs the Supervisory Board in a timely and comprehensive manner – both in writing and at regular meetings – of the Group's planning, performance and situation, including risk management and compliance. Extraordinary Supervisory Board meetings are convened as necessary in connection with material events. The Supervisory Board adopted rules of procedure for its own work.

For all members of its Management Board and Supervisory Board, LPKF AG has taken out a D&O insurance policy subject to a deductible corresponding to 10% of the damage but no more than one-and-a-half times the fixed annual remuneration.

The Supervisory Board of LPKF AG consists of four members. At the most recent Supervisory Board election during the Annual General Meeting on 5 June 2014, the Supervisory Board members were elected individually as recommended by the German Corporate Governance Code. One Supervisory Board member resigned from office effective 12 July 2017 and a new member was elected to the Supervisory Board by the Annual General Meeting on 1 June 2017. In addition, by way of a resolution by the Annual General Meeting on 1 June 2017, the Supervisory Board was augmented by one member. This member was also elected at the Annual General Meeting on 1 June 2017. The term of office of the Supervisory Board members runs until the 2019 Annual General Meeting and, in the case of the newly created Supervisory Board position, until the 2022 Annual General Meeting. All election proposals concerning potential Supervisory Board members shall consider the expertise, abilities and professional experience that are required for carrying out the respective tasks as well as issues of diversity. For its proposals to the Annual General Meeting for the election of new Supervisory Board members, the Supervisory Board makes sure that the candidates in question can devote the requisite amount of time to the Company.

OBJECTIVES REGARDING THE COMPOSITION OF THE SUPERVISORY BOARD

According to Article 5.4.1 GCGC, the Supervisory Board shall disclose specific objectives with regard to its composition in view of the Company's international activities, potential conflicts of interest, an age limit to be specified for Supervisory Board members, a regular limit of length of membership to be specified for the members of the Supervisory Board, the independence of Supervisory Board members and diversity, and disclose the status of implementation in the corporate governance report.

For this purpose, the Supervisory Board approved objectives regarding its composition as well as a diversity concept. The Supervisory Board prepared a profile of skills for the entire Board, which the Supervisory Board fulfills in its current composition and will be taken into account when proposing new candidates for the Supervisory Board.

a) Addressing the international nature of the Company's activities

The international activities of LPKF Laser & Electronics AG have been reflected to date in the participation of shareholder representatives in the Supervisory Board and will continue to be addressed in the future in nominations of candidates by the Supervisory Board to the Annual General Meeting. In addition to the ability to speak and write English, the measure here is the professional experience acquired in other German and foreign companies with international operations, whether in management or supervisory bodies, and the understanding of global economic issues. The criterion of internationality does not stipulate that the Supervisory Board's composition include one or more Supervisory Board members holding foreign citizenship. Instead, German citizens can also contribute this desired experience.

b) Independence and avoiding potential conflicts of interest

The Supervisory Board must include what it considers to be an appropriate number of independent members within the meaning of Article 5.4.2 of the German Corporate Governance Code. For the purposes of this recommendation, at least half of the members of the Supervisory Board must be independent from the Supervisory Board's perspective. Within the meaning of this recommendation, Supervisory Board members are to be considered non-independent in particular if they have a personal or business relationship with the corporation, its governing bodies, a controlling shareholder or a company affiliated with the controlling shareholder that may cause a substantial and not merely temporary conflict of interest.

The Chairman of the Supervisory Board, Dr. Markus Peters, is a member of the Executive Board of German Technology AG. German Technology AG is part of the BANTLEON Group and according to its last notification of voting rights in accordance with Section 21 German Securities Trading Act holds more than 20% of the voting rights in LPKF Laser & Electronics AG.

Members of the Supervisory Board shall not be members of governing bodies of, or exercise advisory functions at, significant competitors of the Company and the Group.

No more than one former member of the Management Board may be a member of the Supervisory Board.

c) Specifying an age limit

The age limit for members of the Supervisory Board was set at under 70 years at the time of election by resolution of the Supervisory Board on 22 January 2014.

d) Specifying a regular limit of length of membership for the members of the Supervisory Board

To ensure a balanced mix of experience and new members on the Supervisory Board, the Supervisory Board specified a regular limit of 10 years for the average length of membership for the members of the Supervisory Board based on the date of their election.

e) Diversity

The composition of the Supervisory Board of LPKF Laser & Electronics AG should reflect as broad as possible a spectrum of professional expertise and experience in various areas relevant to the Company.

f) Target for the share of women in the Supervisory Board pursuant to Section 111 (5) German Stock Corporation Act

The Supervisory Board had laid down a target of 25% for the share of women on the Supervisory Board, to be fulfilled by 30 June 2017. On 30 June 2017, the share of women on the Supervisory Board was 0% and is currently 0%. The reasons why the target for the share of women in the Supervisory Board was not reached were discussed at the 2017 Annual General Meeting in connection with the proposal of candidates for election to the Supervisory Board. The Supervisory Board took the suggestions made by the group of shareholders on board and submitted corresponding proposals to the Annual General Meeting; the Annual General Meeting resolved on the changes in the Supervisory Board. The Supervisory Board defined a new target for the share of women in the Management Board of 25%, to be fulfilled by 30 June 2022.

Both the Management Board and the Supervisory Board are obliged to observe the corporate interests of LPKF AG. There were no conflicts of interest in the financial year just ended that would have had to be disclosed to the Supervisory Board without delay. No member of the Management Board held more than three appointments to the supervisory boards of listed stock corporations not belonging to the Group.

The status of implementation of the objectives regarding the composition of the Supervisory Board outlined in a) to g) above is as follows:

STATUS OF IMPLEMENTATION OF THE OBJECTIVES REGARDING COMPOSITION

The objectives relating to a) “Addressing the international nature of the Company’s activities,” b) Independence and avoiding potential conflicts of interest,” c) “Specifying an age limit,” d) “Specifying a regular limit of length of membership for the members of the Supervisory Board,” and e) “Diversity” have already been achieved.

Target f) “25% share of women on the Supervisory Board” has not yet been achieved. The Supervisory Board intends to stick to its target of having a 25% share of women on the Supervisory Board. According to the current planning, this target is to be taken into account by finding a suitable female candidate in connection with the regular election of three Supervisory Board members by the Annual General Meeting in 2019. The term of office of the Supervisory Board members is five years, and the current term of three Supervisory Board members ends with the Annual General Meeting in 2019.

CORPORATE GOVERNANCE REPORT

LPKF implements the recommendations and suggestions of the German Corporate Governance Code (GCGC) apart from a few exceptions. The Management Board and the Supervisory Board jointly issued the 2018 Declaration of Compliance on 20 March 2018 pursuant to Section 161 German Stock Corporation Act (Aktiengesetz). The Declaration is permanently made public on LPKF AG's website.

DECLARATION OF COMPLIANCE OF LPKF LASER & ELECTRONICS AG FOR THE 2018 FINANCIAL YEAR WITH THE CORPORATE GOVERNANCE CODE IN ACCORDANCE WITH SECTION 161 GERMAN STOCK CORPORATION ACT (AKTIENGESETZ)

Since the most recent Declaration of Compliance dated 21 March 2017, LPKF Laser & Electronics AG has observed the recommendations of the Government Commission on the German Corporate Governance Code (GCGC) as amended on 5 May 2015 – with the exceptions mentioned below.

LPKF Laser & Electronics AG complies with the recommendations of the German Corporate Governance Code as amended on 7 February 2017 (published on 24 April 2017) and intends to continue to comply with these in the future. The following exceptions apply:

1. No severance pay cap agreed for Directors' contracts in case of premature termination of a Director's contract (Article 4.2.3 (4) and (5) GCGC)

   Because they only run for a maximum of three years, the Directors' contracts do not contain a cap on severance pay. If a Director's contract is terminated prematurely without cause, remuneration is limited to no more than the remaining contractual period. The Supervisory Board therefore considered it unnecessary to include in the Directors' contracts a cap on severance pay amounting to two years remuneration.

2. Formation of Supervisory Board committees (Article 5.3.1 and 5.3.2 GCGC)

   Given that the Supervisory Board has only four members, the formation of committees is not deemed expedient for maximum work efficiency. After consultation, members of the Supervisory Board are entrusted with special tasks for specific topics and report to the full Supervisory Board.

SHAREHOLDERS AND ANNUAL GENERAL MEETING

The shareholders of LPKF AG exercise their co-determination and control rights at the General Meeting, which takes place at least once per year. It resolves all matters determined by law with binding effect on all shareholders and the Company. Each share grants one vote at the Annual General Meeting.

Every shareholder who registers in due time has the right to participate in the Annual General Meeting. Shareholders who cannot or do not want to attend in person have the option of appointing a bank, a shareholders' association, the proxies appointed by LPKF AG who are bound by instructions, or any other agent as their proxy to exercise their voting right.

The notice of the Annual General Meeting as well as the reports and information required for the resolutions are published in accordance with the requirements of German corporate law and are also made available on LPKF AG's website in both German and English.

RISK MANAGEMENT

The responsible handling of business risks is an integral part of all good corporate governance. The Management Board of LPKF AG is supported in its work by a comprehensive Group-wide reporting and control system that makes it possible to record, assess and manage risks of this kind. This system is continuously refined, adjusted to changing parameters, and audited by the auditors of the financial statements. The Management Board informs the Supervisory Board on a regular basis of existing risks and their development. The risk report contains details of the LPKF Group's risk management. The risk report is part of the Group management report and contains the report on the accounting-related internal control and risk management system pursuant to the German Commercial Code.

TRANSPARENCY

LPKF regularly, immediately and simultaneously informs the participants in the financial markets and interested members of the public about the commercial situation of the Group and any new facts. The annual report, the half-yearly financial report and the quarterly financial reports are published within the specified deadlines. Press releases, and ad hoc announcements where stipulated, provide information on current events and new developments. All of the information is published in printed form and via suitable electronic media such as email and the Internet. The www.lpkf.com website also provides comprehensive information on the LPKF Group and LPKF shares.

A financial calendar lists the scheduled dates for the most important regular events and publications such as the Annual General Meeting, annual report, quarterly financial reports, financials press conference and analyst conferences. The calendar is published well in advance of the scheduled events and is made available permanently on the LPKF AG website.

SHARE TRANSACTIONS OF MEMBERS OF THE COMPANY'S CORPORATE BODIES

Reportable directors' dealings were published on the Company's website and reported to the competent supervisory authorities. A listing of the shares held by members of the Company's corporate bodies is shown in the remuneration report.

ACCOUNTING AND AUDITING

LPKF AG prepares its consolidated financial statements and its interim consolidated financial statements in accordance with the International Financial Reporting Standards (IFRS) as applicable in the European Union. The annual financial statements of LPKF AG are prepared in accordance with the German Commercial Code. The consolidated financial statements are prepared by the Management Board, audited by the auditor of the financial statements and reviewed by the Supervisory Board. The interim reports and the half-yearly financial reports are discussed by the Supervisory Board and the Management Board before publication. The consolidated financial statements and the annual financial statements of LPKF AG were audited by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, Hannover, the auditor elected by the 2017 Annual General Meeting. The audit reports were signed by German public auditors Jens Wedekind (since the 2016 annual financial statements) and Hanno Karlheim (since the 2017 annual financial statements). The audits were conducted in accordance with German auditing standards and taking the generally accepted German standards for the audit of financial statements promulgated by the Institute of Public Auditors (IDW) into account. The audits also assessed the risk management and compliance with the reporting obligations defined for proper corporate governance pursuant to Section 161 German Stock Corporation Act.

LPKF AG also entered into a contract with the auditor pursuant to which they must notify the Supervisory Board immediately, while the audit is in progress, of any grounds for excluding them, any partiality on their part as well as any material findings and events. Nothing of this nature arose in the course of the audit covering the 2017 financial year.

COMPLIANCE — PRINCIPLES GOVERNING CORPORATE ACTIONS AND BUSINESS ACTIVITIES

Acting in compliance with the principles of corporate, environmental and social sustainability in accordance with applicable law is an indispensable element of LPKF's corporate culture. This includes trust, respect and integrity in interactions with other people, values expressed in exemplary behavior vis-à-vis employees, business partners, shareholders and the public. LPKF's understanding of compliance includes observing all laws, statutes and the Articles of Incorporation, complying with internal regulations, and honoring voluntary obligations.

LPKF AG considers it particularly important to raise the awareness of compliance among all of the Group's employees, to entrench compliance in the internal processes (for example, through adherence to the principle of dual control) and to build a compliance structure for the Group that makes compliance guidelines binding on all LPKF employees worldwide and is suitable for effectively preventing compliance violations for the benefit of the Group as a whole.

Training for employees was offered in connection with the Group-wide compliance code to familiarize them with the goal of this code of conduct and to guarantee uniform ethical and legal standards throughout the entire Group.

The Compliance Office holds regular meetings to discuss current topics, some times in the presence of the technical officers.

Reliable reporting channels for internal and external stakeholders help to ensure that possible irregularities are reported confidentially to carry out an objective and comprehensive investigation. Internal auditing is also used for this purpose. To obtain knowledge of any possible compliance violations, LPKF makes the following contact channels available to internal and external whistleblowers:

Email address of the Compliance Manager (compliance@lpkf.com). Employees who feel it necessary to have an anonymous and confidential conversation when submitting such reports also have the opportunity to contact LPKF Laser & Electronics AG's independent legal counsel. The legal counsel for LPKF AG is lawyer Dr. Carsten Thiel von Herff, Thiel von Herff law firm, Bielefeld. He has been responsible for providing legal counsel to LPKF since 1 March 2017 and can be contacted as follows: Tel.: +49 (0)521 5573330, mobile: +49 (0)151 58230321, E-mail: vertrauensanwalt@thielvonherff.de. Additional employee contact details can be found in the Compliance Code, on the intranet and on notices posted at the Company.

An online anti-corruption training session has been prepared for around 80 employees in the LPKF Group's Purchasing and Sales departments and was held in the first quarter of 2017. This training concerned the "United Nations Convention against Corruption" and explored several issues, including dealing with gifts, facilitation payments and corruption, use of intermediaries/lobbyists, corruption/social investments and insider information.

Internal auditing, which is performed by an international audit firm functioning as a third-party service provider, plays a key role in the compliance organization. The relevant audits are also used to update the internal control system.

Kai Bentz | Dr.-Ing. Christian Bieniek | Bernd Lange

LPKF AS AN EMPLOYER

In 2017, 683 employees contributed to our successful financial year with their ideas, expertise and tireless commitment.

Our highly motivated employees are the foundation for the future of the LPKF Group. The experience and specialist knowledge of the people who work for LPKF worldwide enable us to successfully market innovative technologies in sometimes intensely competitive markets.

LPKF offers applicants good reasons for joining our international technology group. At the top of the list is definitely our fascinating laser technology, followed by development opportunities in a medium-sized company, and the innovative strength and worldwide network of the LPKF Group. LPKF allows employees to put their own ideas into action and see quick successes – another important factor in our favor. In an innovation-driven company like LPKF, qualifications are not the only thing that matters: we also look for creative thinkers who love to experiment.

“Team spirit is a key feature of company sports activities, too.”

CONTINUING EDUCATION AND LEADERSHIP SKILLS

We have made targeted improvements to our HR development work and implemented a range of programs for both training and CPD for our technical and management staff. Our training catalogue has been expanded and optimized accordingly. An area of focus in 2017 was further developing leadership skills and supporting emerging talent.

We successfully tested a mentoring program in a pilot project. A total of 11 young professionals benefited from the knowledge and tips provided by experienced executives in other business units on practical daily management issues. The program will be integrated into the range of professional development courses in 2018 as a regular offering and offered in Slovenia as well as the German sites. We also concentrated on promoting diversity in 2017. Executives, emerging talent and the Works Council participated in the ProDivers development program. This took place by way of training, one-on-one discussions and an exchange of information among companies in the Hannover region. The goal was to identify the advantages of a diverse workforce, promote openness and enthusiasm for innovation among employees, and make collaboration more interesting.

From the very beginning, employees and executives at LPKF are systematically guided and supported in their professional development through probationary period and annual employee performance meetings, in-house training, and consulting on and design of personalized solutions. We consider it very important for experienced and highly qualified employees to pass on their knowledge to young people. In our view, training is an investment in the future of the LPKF Group. LPKF brought on board 15 trainees in various professions in 2017.

“We offer our trainees good prospects.”

CHALLENGING DUTIES AND RESPONSIBILITY AS DEVELOPMENT OPPORTUNITIES

The decline in the number of employees in the last two years led to changes in job descriptions and duties. Against the backdrop of a positive outlook for the future in our business segments and the new applications for our technologies, our employees can take on many new and challenging duties. These additionally offer major responsibility and decision-making power, which is a popular personal development opportunity for employees.

Feeling comfortable plays an important part in employees being able to optimally contribute their talents to the Company. LPKF aims to create a community feeling across the various sites. Working together in teams made up of employees from various facilities plays an important role here. This enables us to benefit as a company from their many different cultures and skills. And our colleagues get the chance to experience other cultures and gain intercultural skills. This often proves useful when liaising with foreign clients. LPKF has sites in seven countries around the globe (Germany, Slovenia, USA, China, Japan, Korea and Malaysia). This gives us a broad international base and a workforce operating from sites all over the world. But the considerable diversity of LPKF is not limited to its cultural base. While LPKF has a relatively young workforce – the average age is just 39.6 – we are nonetheless proud to have employed many of our staff for several decades now. Our employee turnover rate is 10.1%. And we can also offer the vast majority of our trainees a permanent position at the end of their training period.

NOT JUST WORK

Collective activities outside of the working day continually provide opportunities for reinforcing this sense of community. Motorcycle tours, company ski trips, corporate runs, and Christmas celebrations at the sites provide inspiration and motivation. Employee health is another area to which we devote our attention at LPKF. We use various programs here to promote our employees’ well-being, motivation and general health and fitness.

Detailed information on LPKF as an employer will be provided no later than by 30 April 2018 in our sustainability report at http://www.lpkf.com/lpkf-group/sustainability/

COMBINED MANAGEMENT REPORT 2017

of the LPKF Group and LPKF AG

I. FUNDAMENTAL INFORMATION ABOUT THE GROUP

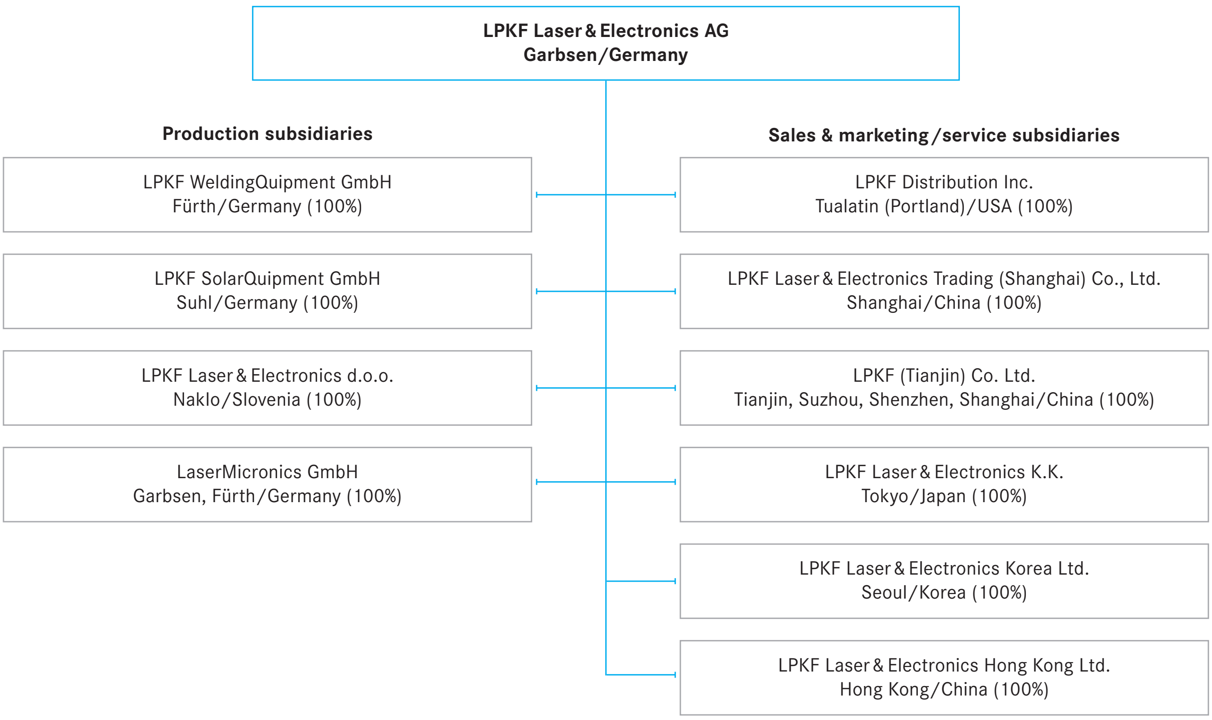
1.1 GROUP STRUCTURE AND BUSINESS MODEL

LPKF Laser & Electronics AG (LPKF AG) is a highly specialized photonics machinery manufacturer and the world's leading provider of laser-driven production processes. LPKF develops all-in-one solutions for dynamic markets such as the electronics industry, automotive parts suppliers, the solar industry, medical technology, and research institutions and universities.

The LPKF Group maintains a broad-based product portfolio. With innovative ideas and application-specific know-how, it has taken a leading position in all of its segments while developing entirely new markets on a regular basis. To maintain its ability to innovate, the Company invests around 10% of its revenue into in-house R&D activities every single year.

In many industries, the superior precision offered by laser technology is supplanting traditional manufacturing techniques. Deployed as a tool, light is clearing the way for the environmentally friendly, digital production of increasingly smaller yet more powerful products.

GROUP STRUCTURE



The companies are headquartered at the locations mentioned first in each case.

The miniaturization megatrend demands increasingly precise and efficient manufacturing methods for products such as phones, sensors or microfluidic systems, while the progressive digitization of industry calls for greater flexibility in production. Unlike conventional tools, lasers can be programmed for a multitude of tasks and integrate easily into the digital systems used for the process control of entire production runs.

LPKF Laser & Electronics AG is headquartered in Garbsen near Hannover, Germany. The Company maintains a broad-based global presence, with a workforce of 683 based at sites in Europe, Asia and the US. The export share was around 90% in the 2017 financial year. The shares of LPKF Laser & Electronics AG are listed on the Prime Standard segment of Deutsche Börse.

1.1.1 Legal structure of the Group

As of 31 December 2017, LPKF AG had ten subsidiaries, which together with the parent company form the basis of consolidation (see chart on p. 34).

Domiciled in Garbsen, near Hannover, Germany, LPKF AG carries out top-level Group functions such as strategic business development and innovation management and performs core activities in the areas of management accounting, investor relations, HR, accounting, legal, internal audit, risk management, compliance, marketing, strategic purchasing and management systems. Sales and marketing, service, production and development work is handled by separate business units per segment. In LPKF's most important markets outside Germany, sales and service functions are provided by sales and service subsidiaries in close collaboration with business unit management.

1.1.2 Operating segments

LPKF was active in the following segments in financial year 2017.

OPERATING SEGMENTS

LPKF Laser & Electronics AG

Development	Electronics	Welding	Solar
Systems for circuit board development and research	Systems for electronics production	Systems for plastic welding	Systems for the production of solar cells and for Laser Transfer Printing

Development

In the **Development** segment, LPKF supplies almost everything required by developers of electronic equipment to manufacture and assemble printed circuit board prototypes largely without the use of chemicals. In addition to the development departments of industrial customers, the Company primarily supplies public organizations such as research institutes, universities and schools. Customers in this segment mainly make their purchasing decisions on the basis of their available budget.

Electronics

The following product groups comprise the **Electronics** segment: In the SMT Equipment product group, LPKF supplies StencilLasers for print stencil cutting and UV laser systems for circuit board depaneling. The PCB Equipment product group includes UV laser systems for cutting and drilling flexible circuit boards. The MID equipment product group mainly comprises laser systems and process expertise for the production of molded interconnect devices (MIDs) using the laser direct structuring (LDS) method patented by LPKF. In the ICP Equipment group, LPKF supplies laser systems for the high-precision drilling and cutting of ultra-thin glass (laser-induced deep etching, LIDE).

Welding

Welding comprises laser systems for welding plastic components. These systems are primarily used by the automotive supply industry, medical technology and in the production of consumer electronics.

Solar

In the Solar segment, LPKF develops and produces laser scribers for the structuring of thin-film solar cells. Its customers are mainly solar cell manufacturers. This segment also includes laser systems for the digital printing of functional pastes and inks (laser transfer printing, LTP).

Other segments

The other segments category mainly includes undistributed costs and income, primarily expenses for the holding company function and foreign exchange expenses and income.

1.1.3 Competitive position

The LPKF Group is among the market and / or technology leaders in its areas of business. As a rule, LPKF strives to become at least the number two in new markets. LPKF competes with an entirely separate set of competitors in each segment and in each product group. These groups of competitors range from multinational corporations to smaller, regional providers, who are often active in only a single market.

1.1.4 Primary locations

PRIMARY LOCATIONS

Country	City	Function	Focus area
Germany	Garbsen	Group headquarters, production, development, sales & marketing and services	Electronics segment - Stencil, cutting and drilling, LIDE, LDS Development segment
	Fürth	Production, development, sales & marketing and services	Welding segment - Systems for plastic welding
	Suhl	Development, sales & marketing, production and services	Solar segment - Systems for structuring thin-film solar panels - LTP
Slovenia	Naklo	Production, development and services	Development segment - Systems for prototyping, - Laser sources
USA	Portland, Oregon	Sales & marketing and services	Sales & marketing and services in North America
China	Shanghai, Shenzhen, Suzhou, Tianjin	Sales & marketing and services	Shanghai: China headquarters; Sales & marketing and services in the greater Shanghai region All other locations: Serving important key economic urban areas in China
Japan	Tokyo	Sales & marketing and services	- Supporting local distributors in sales & marketing - Establishing their own customer contacts
Korea	Seoul	Sales & marketing and services	Supporting local distributors in sales & marketing - Establishing their own customer contacts

There is a further site in Malaysia (Penang). Operations at the Hong Kong location were discontinued as of the end of the 2017 financial year.

1.1.5 Production and procurement

Production takes place exclusively at the German locations and in Slovenia. Rapid Prototyping Equipment and other equipment for the Development segment, as well as some of the laser sources used within the Group, are produced by the subsidiary LPKF Laser & Electronics d.o.o. in Naklo (Slovenia). Systems for the Electronics segment are mainly manufactured in Garbsen. Welding segment production takes place in Fürth, Germany. Solar and LTP systems are produced in Suhl.

LPKF generally acquires no complete systems from third parties. If system components are purchased from outside the Group, several suppliers are available in most cases. A large portion of the procurement volume involves a relatively small number of suppliers.

1.1.6 Sales & marketing

Global sales & marketing, especially in important regions such as China, Japan and North America are handled by subsidiaries. Overall, the Group is represented by subsidiaries or distributors in 78 countries. Distribution, sales and marketing activities are managed at segment level.

1.1.7 Management and control

Organization of management and control

The Management Board represents the Company and is responsible for running it. The members of LPKF's Management Board are appointed by the Supervisory Board. The Supervisory Board may withdraw appointments for cause. The Supervisory Board determined that certain transactions require its approval. The Annual General Meeting may only decide on management issues if requested to do so by the Management Board. Any amendment to the Articles of Incorporation requires a resolution by the Annual General Meeting to be passed with a majority of the share capital represented at the adoption of the resolution. Article 25 (1) of the Company's Articles of Incorporation stipulates that in cases where the law requires that a resolution be passed by a majority of the share capital represented, a simple majority of the share capital represented is sufficient, unless the law mandates a larger majority.

The following persons were members of the Management Board of LPKF AG in financial year 2017:

- Kai Bentz (CFO, Spokesman of the Management Board since 16 October 2017)
- Dr.-Ing. Christian Bieniek (COO)
- Dr. Ingo Bretthauer (Chairman of the Management Board (CEO) until 15 October 2017)
- Bernd Lange (CTO)

In the 2017 financial year, the Supervisory Board consisted of the following members:

- Prof. Dr.-Ing. Erich Barke
- Dr. Heino Büsching (Chairman until 15 October 2017, Deputy Chairman since 16 October 2017)
- Bernd Hackmann (Deputy Chairman) until 12 July 2017
- Dr. Markus Peters since 13 July 2017 (Deputy Chairman since 25 July 2017, Chairman since 16 October 2017)
- Dr. Dirk Rothweiler since 13 June 2017

1.1.8 Legal factors

The Company and each of its segments are subject to the general legal requirements applicable to listed companies. Over and above this, no special legal provisions apply.

1.2 STRATEGY

1.2.1 Strategic framework

Vision

Light is THE tool of the future.

Mission

"As a specialist in laser technology we enable miniaturization and digitization."

Corporate responsibility

For the LPKF Group, sustainability means acting with responsibility, achieving economic success as well as both ecological and social progress while working to secure the future of the Company.

Mission statement

All activities of the LPKF Group are geared toward the success of its customers. All activities and decisions are aimed at improving the competitiveness of the Group's customer base through technical advancement and efficiency gains. Strengthening LPKF in the long term serves the interest of all customers, business partners, employees and shareholders. Management therefore emphasizes strengthening the Group's innovation resources and ensuring profitability.

LPKF is a technology group. LPKF shapes technological progress and gains leading market positions through the strength of its superior technical solutions. LPKF concentrates its efforts on products with the potential to become market leader or at least number two in the market. A sense of professional partnership characterizes relationships with customers, suppliers and representatives as well as the working relationships among employees within the LPKF Group. As an internationally active group, LPKF strives for understanding various cultures and philosophies and always places the Group's interests above those of its individual subsidiaries.

The high quality of its products is the key to customer satisfaction. All employees shoulder responsibility for the quality of the work the LPKF Group does for its customers. LPKF promotes the professional qualifications of its employees to sustain the high quality of LPKF products.

With laser-based technology, LPKF helps to reduce the environmental impact generated by chemical waste. LPKF designs its products and internal processes as eco-friendly as possible. Health and well-being are the foundation for success. LPKF pays special attention to both occupational safety and promoting the health of its employees. As a technology leader, LPKF always strives to optimize its products and the processes necessary for their development. It goes without saying that this requires a corporate culture that is open and encourages learning and constructive criticism. LPKF's responsibility extends to its customers, employees, business partners, shareholders and the public. Being a good corporate citizen includes obeying applicable laws at all times and everywhere, respecting ethical principles and pursuing sustainability. The LPKF Compliance Code supports the Company's employees in this endeavor.

Success factors

LPKF specializes in innovative mechanical engineering solutions, primarily laser-based systems.

The Group's success is based on its understanding of laser microprocessing of different materials. A key factor of success is the LPKF's focus on core competencies and the interplay between them:

Core competencies

- Laser technology and optics
- Precision drive systems
- Control technology and software
- Materials technology

Other success factors include close relationships with customers and a thorough understanding of the core markets of electronics, automotive, solar and medical technology.

1.2.2 Corporate goals, objectives and action areas

Corporate goals

The Group's fundamental, overarching corporate goal is to increase the value of the Company in the long term. The Group's technical edge is continually sharpened to achieve this goal. A strong emphasis on R&D work is of central importance. Furthermore, a solid financial basis with a high equity ratio contributes towards achieving this goal. LPKF aims at achieving a return on capital employed (ROCE) of 10% to 15% by 2020.

Strategic objectives

The Company's long-term activities for reaching the top-level corporate goals are mainly grouped into four strategic objectives:

- Increasing customer benefit
- Driving innovation
- Boosting efficiency
- Optimizing the Group structure

Strategic action areas

The interplay of corporate goals and strategic objectives results in the following 12 action areas:

Basically:

1. Development of the Group and strengthening of its financial position

The Group's efforts are focused on the welfare of the Group as a whole. In order to ensure and advance the Group's welfare, LPKF supports the individual strategic objectives.

Increasing customer benefit:

2. Optimizing the existing product portfolio

The product portfolio is continually being reworked and overhauled. In this context, LPKF aligns its efforts with changing customer needs and updates its products and processes to ensure it always offers its customers the best price-performance ratio. Closely networking the Company's development departments with market research, sales and service, and providing a R&D budget averaging at least 10% of revenue make a significant contribution to reaching this goal.

3. Optimizing product structure

Growth and the increasing complexity of products as well as cooperation across the Group place high demands on the product structure. Using economies of scale and Group-wide best practices is intended to further increase profitability. All products are regularly reviewed with the aim of justifying their continued existence.

4. Increasing and guaranteeing quality

Quality is a central value of LPKF products along with cost-efficiency. Rapidly offering customers stable machines suitable for volume production in view of frequently short development cycles requires LPKF to continually improve its ability to avoid defects, detect them, rectify them and learn from them.

5. Enhancing customer proximity

Strengthening key account management will enable the entire Group to respond to the demands of major international customers. The industry-specific expertise of individual segments should also be utilized to an even greater extent across segments.

Driving innovation:

6. Attaining technological leadership

The Company will further strengthen its technology management to systematically manage and coordinate the collective use of its resources. In addition to its own R&D activities, the LPKF Group will develop new processes and products for future markets in cooperation with universities and institutes as well as in joint projects with industry partners.

7. Expanding the business base

LPKF will expand its business base in the interest of minimizing its financial dependence on individual product lines and sectors and therefore reducing the risk and effects of economic volatility. This comprises both further penetration of established markets as well as the development of new sectors and areas of application to which the Company can transfer existing processes and products, e. g. through cross-selling activities within the Group.

8. Extending services and products to all development and manufacturing processes

The Group will try to extend its “product” beyond purely the machine to offer customers a complete process to solve their technical issues.

Boosting efficiency:

9. Improving the basis for making decisions

At LPKF, decision-making is analytical and structured, and uses standardized ratios as much as possible.

10. Breathing organization and establishment of lean concepts

To avoid activities that do not create value, LPKF institutes a culture of continual improvement and in accordance with lean principles throughout the Group.

11. Reinforcing cooperation across business units and sites

Within the Group, LPKF will network its capacity and potential and thus exploit these optimally. LPKF is focused on harmonizing processes and structures across the Group, thereby creating long-term added-value in all units of the Company.

12. Systematic personnel development

Personnel development is essential for the Company’s success in the long term. Continued systematization of key HR processes is a working priority within the LPKF Group.

1.2.3 Corporate management

LPKF manages its business performance using key performance indicators (KPI) and ratios at various reporting levels. The following section outlines the key figures LPKF uses.

At segment level, revenue is one these financial indicators and ratios. At Group level, LPKF also looks at earnings before interest and taxes (EBIT) and the EBIT margin, net working capital, the net working capital ratio and the error rate. In 2017, return on capital employed (ROCE) was introduced as an additional key figure. LPKF has developed targets for these financial indicators and ratios through strategic and operational planning processes, and these are reviewed annually. The applicable targets for the reporting period are listed along with the time series.

EBIT: The Group goal of profitable growth can be reviewed by analyzing revenue in conjunction with EBIT. The EBIT margin is given as a ratio for the Group’s goal and is calculated using the following formula: EBIT margin = EBIT / revenue x 100.

ROCE (Return on Capital Employed): Capital employed is calculated as the sum of intangible assets and property, plant and equipment, inventories and trade receivables, net of advances received. This is then compared against EBIT and expressed as a percentage to denote the return on capital employed. LPKF is targeting a minimum rate of return of 2% – 7% in 2018, and plans to generate a ROCE of between 10% and 15% by 2020.

Net working capital: It is calculated by using inventories and current trade receivables less current trade payables and advances received. This KPI reflects the net capital tied up in the reported items.

Net working capital ratio: It is the ratio of net working capital to revenue. Generally, when business grows, net working capital also increases.

Error rate: This is the ratio of error costs to revenue. Error costs comprise expenditure associated with the fulfillment of warranty obligations and quality assurance. The aim is to lower the error rate in the Group determined in the 2013 financial year by 50% and maintain this improved rate thereafter. Target achievement is calculated based on three-year averages. If the error rate is not reduced, this constitutes a target achievement of 0%. The target achievement is calculated by means of linear interpolation between the initial value and the minimum value of the error rate.

Other than the error rate, no significant non-financial key performance indicator was used for controlling the Group in the 2017 financial year. Explanatory notes on the non-financial performance indicators for the LPKF Group are contained in the declaration of compliance with the German Sustainability Code (www.lpkf.com).

The control system was expanded further to include ROCE as a key figure during the year under review in order to meet more stringent requirements.

The following table presents the changes in the Group's key financial figures over the past five years and the applicable target figures:

REVENUE

EUR million	Target 2017	2013	2014	2015	2016	2017
Revenue	92 – 100	129.7	119.7	87.3	91.1	102.1
EBIT	1 – 5	23.2	12.7	– 3.7	– 6.8	4.0
EBIT margin %	1.0 – 5.0	17.9	10.6	– 4.3	– 7.4	3.9
Net working capital	< 35	37.3	50.1	40.3	35.2	33.3
Net working capital ratio (%)	< 35	28.7	41.9	46.2	38.7	32.6
Error rate %	50	100	71	60	73	78

Target / actual comparison of planning and realization

According to its forecast on 7 February 2017, the Management Board expected revenue between EUR 92 million and EUR 100 million and an EBIT margin of between 1% and 5% for the 2017 financial year. The Management Board maintained this assessment during the year, as the Group continued with its efforts to improve efficiency and control costs. Further details of this guidance were published during the course of the year.

The Group surpassed its annual target with revenue of approximately EUR 102 million, while the EBIT margin of 3.9% was in line with expectations.

Improved management of inventories and receivables also kept inventories at a lower level during the year and resulted in net working capital of EUR 33.3 million at the year end. This corresponded to a net working capital ratio of 32.6%, which meant that both figures achieved their targets. By contrast, the quality costs target, measured by error rate, was not achieved.

1.2.4 Strategic orientation of operating business

The megatrends of miniaturization and digitization require lasers as highly-precise tools for the production of electronic components. As an experienced and innovative laser specialist, LPKF supplies an important key technology for many growth industries. The Company's broad portfolio of products and services contributes to boosting efficiency and thus conserving resources. LPKF is a strategic partner for international customers, with whom it works closely to design advanced solutions.

LPKF is positioned as a global laser specialist. From this vantage point, LPKF enjoys many advantages over competitors, who are often only active in one market or who act only as regional players. Since LPKF addresses a range of markets, it therefore reduces its dependence on the cycles in individual industries, making it easier to compensate for economic fluctuations. This approach requires the integration of business processes with potential synergies. LPKF has made further progress in this area in the past year.

Infrastructure and interdepartmental functions within the LPKF Group are used jointly by all of the segments. Examples include development or procurement activities, use of the international sales network, company IT or administration. Since segments share sites, this means that LPKF can cater to local service and sales business in key regions throughout the world. Shared use of infrastructure also simplifies market entry while helping to ensure optimization of the cost base by exploiting synergy effects.

Strategic alignment of the segments

The **Development** segment offers its customers the entire value chain for the manufacturing of circuit board prototypes. The core focus is on mechanical and – increasingly – laser-based systems that undergo continuous enhancement. In the Development segment, LPKF addresses a global market with many individual customers from manufacturing and universities. Many customers invest on the basis of an R&D budget. The Development segment can draw on a worldwide network of agents, who are in many cases longtime partners of the Company and able to secure outstanding options for market entry. The segment is seen as relatively stable business. Despite a large market share of around 60%, the Management Board sees solid growth rates in this segment due to new products and applications. As one example, LPKF has offered micromachining systems for research use outside circuit board prototyping for several years. This offers an opportunity to open up new markets above and beyond pure electronics development, and develop a new segment of the electronics development market.

The **Electronics** segment addresses markets associated with the production and processing of electronic components. LPKF acts in a highly dynamic market offering opportunities for generating short-term revenue but with the risk that innovations will not be accepted by the market as soon as expected. The Electronics segment offers its customers systems for cutting, structuring and drilling a wide variety of materials at high speed and with outstanding precision. LPKF also has a major presence in its target market of Asia with its own offices and partners. Particularly in the field of production machinery, after-sales service is one of LPKF's major competitive advantages.

In the **Welding** segment, LPKF develops, produces and markets laser systems for welding plastics. This segment primarily targets the automotive supplier industry, medical technology and manufacturers of consumer electronics. Laser welding offers the opportunity to replace traditional methods of joining materials in many sectors, thereby creating a sizable market potential. Since this is not a conventional niche market, competitive pressure is much more substantial. LPKF's primary competitive differentiators are its superior product quality, its wealth of process know-how, its shorter lead times and its global service network.

The **Solar** segment is dominated by major orders from a single customer. Thanks to many years of working with this customer, LPKF has reached a leading position within the thin-film solar market. The precision and the speed of the Allegro systems are some of LPKF's key differentiators in the solar energy market. In 2017, LPKF was able to acquire new major orders and additional orders from new customers, which indicates a considerable upturn in the solar market. LPKF is attempting to reduce its dependency on a major customer in the Solar segment. One approach being pursued is developing new markets outside the solar industry with the LTP method. With its new LTP technology, LPKF is addressing the market for printing functional pastes. There is potential here to replace the predominant screen printing method in some areas.

LPKF's strategy for growth also includes the continuous development and optimization of its product portfolio. Here, the Company is not only orienting its development work on market trends but is also pursuing its own concepts and innovations. All products are reviewed at least once a year with the aim of justifying their continued existence.

1.2.5 Group structure, equity investments and financing measures

The Group regularly examines whether it is necessary to adapt the Group structure to changing market conditions. As of the reporting date, 80% of LPKF's shares were held as free float in accordance with the definitions of Deutsche Börse AG. As a result of business developments, stabilizing Company financing was a top-priority objective in the 2017 financial year. The Company has access to various unused lines of credit. A number of opportunities for raising equity are also still available. The Management Board believes there is sufficient financial scope for further development of the business.

1.3 RESEARCH AND DEVELOPMENT

1.3.1 Focus of R&D activities

Research and development (R&D) is of considerable significance for LPKF as a technology company. Innovations decisively influence the future capabilities of the LPKF Group – and hence the business success of the Company. The primary strategic goal of R&D activities is to acquire, secure or develop the Company's role as an innovation leader within the sectors in question. New products are designed to exhibit differentiators that are then secured via patents. The benchmark for our development activities is strengthening our customers' profitability.

During the 2017 financial year, development activities focused in particular on products being readied for market launch or those capable of offering contributions to improving profitability over the short or medium term. Approaches to improving the quality of the development process included the use of agile project management techniques.

Pre-competitive collaboration with research institutions and industry partners, organized as consortium projects, continues to support technological development at the LPKF Group.

1.3.2 R&D expenses, investment and ratios

Continuous investment in near-to-market developments are of crucial importance to a technology-oriented Group such as LPKF. Development expenses in 2017 amounted to EUR 11.1 million, which is equivalent to 10.9% of revenue. LPKF capitalized EUR 3.3 million (previous year: EUR 4.9 million) in development expenses as intangible assets in the reporting year, which equates to a capitalization ratio of 32% (previous year: 43%). Amortization of capitalized development expenses in 2017 amounted to EUR 3.3 million (previous year: EUR 3.0 million).

1.3.3 R&D employees

The number of employees in the Group's R&D departments fell to 155 during the reporting period, down from 159 the previous year.

1.3.4 R&D results

In the Electronics segment, production readiness was achieved in 2017 for the Vitrion glass drilling system. The jury at the Productronica trade show presented the LIDE process for machining ultra-thin glass with the Productronica Innovation Award in the Semiconductor category. Other development activities in this segment were focused on performance enhancements for cutting and drilling systems.

In the Development segment, a new generation of laser prototyping systems was successfully launched on the market. Other segment activities included continuous improvement work on the portfolio.

In the Solar segment, development activities concentrated on the new generation of high-performance thin-film scribers, which were shipped out as prototypes at the end of the year, and on the development of a printer unit for the digital printing of functional pastes using the LTP process.

The Welding segment produced an innovative laser welding machine for three-dimensional parts such as vehicle lamps and a system for welding large plastic parts. The segment also completed the groundwork required to support the modularization of the welding system hardware and software.

The following multi-period overview of R&D shows the development of key figures:

R&D RESULTS

EUR million	2013	2014	2015	2016	2017
R&D expenses in EUR million[1]	13.5	11.1	9.9	11.4	11.1
in % of revenue	10.4	9.3	11.3	12.5	10.9
R&D staff	165	171	179	159	155

[1] Current R&D expenses were adjusted for amortization and impairments, and the capitalization of development costs.

2. REPORT ON ECONOMIC POSITION

2.1 OVERVIEW OF THE COMPANY'S DEVELOPMENT

2.1.1 Macroeconomic environment

2017 was characterized by a marked upturn in global trade. According to information provided by the Kiel Institute for the World Economy (IfW), the global economy grew by 3.8% during the past year, the highest growth rate since 2011. After a long period of weakness, global trade has picked up significantly since the end of 2016 and analysts believe it is experiencing an upward trend. The primary reason for this was the expansion of foreign trade in the Asian region and increased global investment.

Economic growth accelerated, particularly in developed economies. According to the IfW, gross domestic product (GDP) rose by 2.4% in 2017, after increasing 1.6% in the previous year. This is also reflected in the world's largest economy, the USA, where GDP growth climbed significantly from 1.6% to 2.4% in 2017. In the eurozone, the second-largest economic area, GDP rose by a similarly significant rate of 2.4% after 1.7% in the previous year. According to Eurostat, GDP in the 19 euro member states was up 2.5% in the last year, the highest growth rate in ten years. In contrast, economic development in the United Kingdom was more restrained in the wake of the vote to leave the EU.

Germany experienced strong growth in 2017. The Federal Statistical Office reported a 2.2% rise in gross domestic product to mark the eighth successive year of growth for the German economy. The rate of growth has increased each year for the past three years. With an average growth rate of 1.3% over the past ten years, 2017 was almost 1% above the average. In addition to private consumption, construction activity and increasing investments contributed to the rise.

Global economic momentum was somewhat weaker in emerging markets. At 5.2%, GDP growth in these countries was only 0.5% higher in 2017 than in the previous year. After a slump in commodity prices in 2015 and 2016, commodity production recovered in 2017. In China, the largest emerging economy, economic growth only slowed slightly from 6.9% in 2016 to 6.8% in 2017 despite the withdrawal of monetary incentives.

The robust global economy led to a rise in commodity prices in 2017. According to the Hamburg Institute of International Economics, oil and gas prices particularly increased as well as prices for metals required in production. Despite positive economic development, there was no rise in inflation, which correlated with moderate consumer price development.

2.1.2 Sector-specific environment

In addition to the economy, the business performance of laser technology specialist LPKF AG is also impacted by sector-specific developments. This includes the engineering, automotive, solar and electronics sectors with a focus on the consumer electronics and plastics processing industries. The following section addresses the performance of these sectors during the 2017 financial year.

German engineering benefited from the global economic recovery, with mechanical engineering production rising by 3.1% in 2017 according to preliminary calculations by the Federal Statistical Office. This confirms the forecasts of the German Engineering Federation (Verband Deutscher Maschinen- und Anlagenbau, or VDMA) and means 2017 was the first year of upturn after many years of restrained growth. Incoming orders rose by 7% overall. Exports provided significant momentum, particularly in the USA and China, where incoming orders climbed by 10%. By contrast, domestic demand remained subdued with an increase of 5%.

According to the German Automotive Industry Association (Verband der Automobilindustrie – VDA), 2017 was also a good year for the international automotive industry. Overall, new car sales increased by 2% to 84.6 million vehicles worldwide. In the largest sales market, China, the number of vehicles sold rose by 2% to 24.2 million. This was followed by the second-largest market, the USA, which declined by 1.9% to 17.1 million passenger cars. The third-largest market, Europe, recorded a significant 3% increase to 15.6 million units, its highest sales since 2007.

According to analysis by Bloomberg New Energy Finance (Bloomberg), investments in the global photovoltaics market in 2017 rose slightly by 3% to USD 333.5 billion. This resulted in solar panels with a total output of around 100 gigawatts (GW). Expansion in China alone contributed 53 GW of this total. The second-largest photovoltaics market is the USA, with only limited growth of 1% in 2017. By contrast, investments declined in Japan, the United Kingdom and Germany. According to the German Solar Industry

Association (Bundesverband der Solarwirtschaft, or BSW), installed capacity also increased significantly by 15% of 1.75 GW in Germany due to a further decline in module prices. According to the VDMA, German engineering companies benefited from China's high levels of investment in photovoltaics by boosting their exports. In particular, demand for thin-film technology grew.

In the consumer electronics sector, analysis by market research institute Gartner suggested that 1.882 billion smartphones were sold in 2017, about the same number as in the previous year.

According to statistics from the German Plastics Processing Industry Association (Gesamtverband Kunststoffverarbeitende Industrie – GKV), revenues in this sector rose by 4.8% to EUR 63.70 billion in 2017. Revenues had also increased slightly in previous years.

2.1.3 Effects on the LPKF Group

The macroeconomic environment improved significantly for LPKF AG both nationally and internationally in 2017. Sectors important for LPKF product sales, particularly the solar industry, also benefited from the robust global economy. Only the smartphone market exhibited stagnation due to signs of saturation. By contrast, the appreciation of the euro against other key currencies was not conducive to LPKF's export activities.

2.2 DISCLOSURES RELATED TO ACQUISITIONS

The takeover-related disclosures required under Section 289a (1) and Section 315a (1) German Commercial Code are shown below.

On 31 December 2017, the share capital of LPKF AG amounted to EUR 22,269,588.00. The share capital is divided into 22,269,588 ordinary shares (no-par shares). No preferred shares have been issued. One no-par share represents a pro-rata interest of EUR 1.00 in the share capital. The rights and duties under the no-par shares comply with the relevant requirements of the German Stock Corporation Act, specifically, in Sections 12, 53a ff., 118 ff. and 186. Both the exercise of voting rights and the transfer of shares are subject solely to statutory limits.

Direct or indirect interests in the share capital exceeding 10% of the voting rights are disclosed in the consolidated notes.

The regulations on appointing and dismissing members of the Management Board, as well as on amending the Articles of Incorporation, comply with the respective requirements of both the German Stock Corporation Act and the Articles of Incorporation. Complementing Sections 84 and 85 of the German Stock Corporation Act, Article 7 of the Company's Articles of Incorporation governs the Management Board's composition as follows: The Management Board shall comprise at least two members. Deputy members of the Management Board may be appointed. They have the same rights as the regular members of the Management Board when representing the Company vis-à-vis third parties. The Supervisory Board shall determine the number of both regular and deputy members of the Management Board and appoint them, enter into director's contracts with them as well as dismiss them. Likewise, the Supervisory Board may also appoint a member of the Management Board to serve as its chairperson or speaker and appoint additional Management Board members to serve as deputy chairpersons or speakers.

Under Sections 133 and 179 German Stock Corporation Act, in conjunction with Article 25 (1) of the Company's Articles of Incorporation, the latter may only be amended by resolution of the Annual General Meeting, which must be adopted by the simple majority of the share capital represented at the Meeting unless larger majorities are required by law. The Supervisory Board is authorized under Article 12 (2) of the Articles of Incorporation to make amendments that affect solely the given wording.

2.3 REMUNERATION REPORT

Remuneration of the Management Board

Basic features of the remuneration system

The system of Management Board remuneration at LPKF AG is set up to provide an incentive for successful and sustainable corporate management.

The Supervisory Board of LPKF Laser & Electronics AG fixes and regularly reviews the overall structure of the remuneration of the Management Board as well as the key elements of the respective director's contracts. When determining the appropriate amount of remuneration for the members of the Management Board, the Supervisory Board focuses on the Company's size and activities, its economic and financial position as well as on the responsibilities and performance of the respective Management Board member, the success and future prospects of the Company, and the customary level of the remuneration under consideration of the level of executive remuneration at peer companies and the remuneration structure in place in other parts of the Company. The relationship between the remuneration of the Executive Board and that of senior management and the workforce overall is taken into account also in terms of its development over time, whereby the Supervisory Board determines how senior managers and the workforce are to be defined for the purposes of the comparison. The remuneration of the members of the Management Board is based on performance and calculated such that it is both appropriate and competitive, offering an incentive for committed and successful work. The remuneration system was approved by the Annual General Meeting on 5 June 2014 with a majority of 93%.

The overall remuneration of the members of the Management Board comprises a non-performance-based fixed component and variable performance-based components. These remuneration components are explained in more detail below.

Non-performance-based components

The fixed remuneration comprises both the base salary, which is paid in equal monthly installments, and benefits. The incidental benefits include a company car for both official and private use, as well as insurance contributions, particularly in connection with health, care and legal insurance.

Performance-based components

The variable remuneration components comprise both long-term incentives (LTI) and short-term incentives (STI).

The remuneration components Quality (LTI 1), Options (LTI 2) and Long-term EBIT (LTI 3) are designed as long-term incentives while EBIT (STI 1) and EBIT per employee (STI 2) are designed as short-term incentives. The LTI 1, LTI 3, STI 1, and STI 2 remuneration components are based on targets whose achievement is decisive for the amount of the remuneration component in question.

Short Term Incentives (STI)

STI 1 and STI 2 are each calculated based on the corporate planning approved prior to the beginning of a given financial year, in which the targets for EBIT and EBIT per employee are set for three different future scenarios (normal, aggressive, and defensive). A target achieved in the financial year under the normal scenario constitutes a target achievement in accordance with the target value shown in the benefits table and, under the defensive scenario, a target achievement of 0% (minimum). The maximum target achievement shown in the table is calculated when the planned aggressive scenario is exceeded by at least 20%. The scenarios are based on ambitious targets, which means that the maximum can only be reached if the targets are significantly overachieved. There is linear interpolation between the individual values. If negative EBIT is reported for the following year, in certain circumstances the given loss may be taken into account retroactively.

Long Term Incentives (LTI)

Safeguarding product quality at the highest level is one of the strategic action areas of LPKF Laser & Electronics AG. LTI 1 (Quality), which will run for three years, is measured by the achievement of these quality specifications. The aim is to lower the error rate in the Group calculated in the 2013 financial year by 50% by 2016 and maintain this improved rate in 2017 and 2018. Target achievement is calculated based on two- and three-year averages. If the error rate is not reduced, this constitutes a target achievement of 0%. The target achievement is calculated by means of linear interpolation between the initial value and the average target value of the error rate.

For the variable multi-year remuneration components LTI 1 (Quality), the Company will make advance payments at the end of a given financial year based on the level of target achievement of the error rate at the end of the financial year. If the advance payments shown under benefits received exceed the entitlement to variable remuneration under LTI 1, the Management Board members will be required to pay the excess.

A long-term bonus plan was established as LTI 2 (Options). Details are laid down in the plan's terms and conditions, which are part of the contractual arrangements with the Management Board members. Decisive factors for the amount of LTI 2 are the development of the EBIT margin of the LPKF Group and the share price performance. LTI 2 is therefore directly tied to the pursuit of the Group's objectives of profitable growth and a long-term increase in the enterprise value.

In detail, LTI 2 is designed as follows: Fictitious shares, known as phantom stocks, are granted to the Management Board members in a contractually stipulated amount, which for Chief Executive Officer Dr. Ingo Bretthauer is EUR 50 thousand and for the Management Board members Kai Bentz, Dr. Christian Bieniek and Bernd Lange EUR 25 thousand. The number of phantom stocks granted to a single Management Board member will be calculated based on the set amount to be granted divided by the average closing price of the shares of LPKF Laser & Electronics AG over the last 30 trading days prior to 1 January of the year in which the shares are allotted. After the expiry of a four-year performance period, the beneficiaries will be entitled for the first time to a disbursement amount whose calculation will depend on the final number of phantom stocks. The final number of phantom stocks will be calculated by multiplying the preliminary number of phantom stocks by a performance factor that is determined by the average EBIT margin of the LPKF Group during the relevant performance period. The amount to be paid out will in turn be calculated by multiplying the final number of phantom stocks by the average share price of LPKF Laser & Electronics AG on the last 30 trading days before the end of the relevant performance period. This is capped at three times the amount to be granted, the maximum shown in the benefits table. If the beneficiaries waive their right to a disbursement after the four-year performance period, they can obtain the amount to be paid out after a five- or six-year performance period. One prerequisite for a disbursement under the long-term bonus plan is an own investment in the form of shares of LPKF Laser & Electronics AG, which must correspond to at least half of the amount to be granted.

From 2016 onwards, the Directors' contracts have in included an additional long-term remuneration component, LTI 3 (Long-term EBIT), which will replace STI 2. Annual payments are calculated based on target achievement in accordance with STI 1 (EBIT) for the respective financial year, the prior financial year and the financial year before that.

Cap

Each of the components of variable performance-based remuneration has a maximum amount (cap).

Due to the economic situation, the Management Board and Supervisory Board agreed a reduction in variable remuneration for the 2017 financial year.

It was therefore agreed that there would be no entitlement to any of the variable remuneration components in the event of an EBIT margin of less than 5%. The calculation of STI 1 EBIT was also changed so that otherwise identical operating results generate lower values than under the previous contractual provisions: In the range of the aggressive scenario up to 5% EBIT margin, values decline on a straight-line basis, so that the target achievement amounts to 0% at 5% EBIT margin. The resulting provisional bonus amount is then reduced by 20% to give the final STI 1 EBIT amount.

2018 outlook

During the 2018 financial year, the Management Board and Supervisory Board again discussed a reduction in variable remuneration if unsatisfactory business performance is imminent.

In addition, the Supervisory Board is currently developing a new remuneration system that it expects to apply to the contracts of a new Chief Executive Officer during the 2018 financial year. In addition to a non-performance-related fixed salary, the new system includes short and long-term variable remuneration components based even more closely on positive value creation, growth and the return on investment of LPKF Laser & Electronics AG. These new targets are designed to be even more demanding than those already published.

Value of the benefits in the reporting period

The benefits for the 2017 reporting period are presented in the table below, supplemented by the minimum and maximum amounts that can be reached. The multi-year variable remuneration granted in the past is broken down according to various plans and the length of the respective periods is indicated. The target value of a moderately probable scenario is stated for LTI 1 and the amount to be granted is stated for LTI 2.

BENEFITS GRANTED (PLAN)

	Dr. Ingo Bretthauer Chief Executive Officer (CEO) until 15 October 2017				Bernd Lange Chief Technology Officer (CTO)				Kai Bentz Chief Financial Officer, Spokesman of the Management Board from 16 October 2017				Dr.-Ing. Christian Bieniek Chief Operating Officer (COO)				Total
EUR thsd.	**2016**	**2017**	**(Min)**	**(Max)**	**2016**	**2017**	**(Min)**	**(Max)**	**2016**	**2017**	**(Min)**	**(Max)**	**2016**	**2017**	**(Min)**	**(Max)**	**2017**
Fixed remuneration[1]	325	257	257	257	243	243	243	243	213	213	213	213	210	210	210	210	923
Incidental benefits	40	29	29	29	23	24	24	24	20	19	19	19	20	22	22	22	94
Total	**365**	**286**	**286**	**286**	**266**	**267**	**267**	**267**	**233**	**232**	**232**	**232**	**230**	**232**	**232**	**232**	**1,017**
One-year variable remuneration																	
STI 1 (EBIT)	152	122	0	203	94	150	0	188	79	132	0	165	79	126	0	158	530
STI 2 EBIT per employee	49	49	0	81	38	n/a	n/a	n/a	32	n/a	n/a	n/a	n/a	n/a	n/a	n/a	49
Multi-year variable remuneration																	
LTI 1 Quality (3 years)	73	73	0	122	56	75	0	94	47	66	0	83	47	63	0	79	277
LTI 2 Options 2016 (4 years)	50	n/a	n/a	n/a	25	n/a	n/a	n/a	25	n/a	n/a	n/a	25	n/a	n/a	n/a	n/a
LTI 2 Options 2017 (4 years)	n/a	n/a	n/a	n/a	n/a	25	0	75	n/a	25	0	75	n/a	25	0	75	75
LTI 3 Long-term EBIT (3 years)	n/a	n/a	n/a	n/a	n/a	75	0	94	n/a	66	0	83	55	63	0	79	204
Other																	
Termination benefit	n/a	125	125	125													125
Total	**324**	**369**	**125**	**531**	**213**	**325**	**0**	**451**	**183**	**289**	**0**	**406**	**206**	**277**	**0**	**391**	**1,260**
Cost of benefits[1]	0	0	0	0	7	7	7	7	7	7	7	7	0	0	0	0	14
Total remuneration	**689**	**655**	**411**	**817**	**486**	**599**	**274**	**725**	**423**	**528**	**239**	**645**	**436**	**509**	**232**	**623**	**2,291**

[1]) According to the contracts, the cost of benefits is part of fixed remuneration.

Benefits received for the reporting period

In compliance with the recommendations of the German Corporate Governance Code (GCGC), the fixed remuneration and incidental (fringe) benefits are stated in the table below. Since Management Board members are entitled to performance-based remuneration components only if the EBIT margin is at least 5%, in financial year 2017 there no benefits were received from the one-year variable remuneration components or from multi-year variable remuneration for the ordinary members of the Management Board. The Chairman of the Management Board is entitled to a termination benefit totaling EUR 125 thousand upon his departure. Of this amount, EUR 50 thousand were received in 2018.

Following the recommendations of the GCGC, the benefit costs correspond to the committed contributions to old-age pensions, although they do not represent benefits received in the narrow sense.

The members of the Management Board in office in 2017 were paid total remuneration of EUR 1,107 thousand (2016: EUR 1,108 thousand) for their activities in the 2017 financial year. EUR 1,107 thousand of which can be attributed to fixed remuneration components, including incidental benefits, that were fully paid out in the 2017 reporting period.

BENEFITS RECEIVED (ACTUAL)

	Dr. Ingo Bretthauer Chief Executive Officer (CEO) until 15 October 2017		Bernd Lange Chief Technology Officer (CTO)		Kai Bentz Chief Financial Officer, Spokesman of the Management Board from 16 October 2017		Dr.-Ing. Christian Bieniek Chief Operating Officer (COO)		Total
EUR thsd.	2016	2017	2016	2017	2016	2017	2016	2017	2017
Fixed remuneration	325	257	243	243	213	213	210	210	923
Incidental benefits	40	29	23	24	20	19	20	22	94
Total	**365**	**286**	**266**	**267**	**233**	**232**	**230**	**232**	**1,017**
One-year variable remuneration									
STI 1 (EBIT)	0	0	0	0	0	0	0	0	0
STI 2 EBIT per employee	0	0	0	0	0	0	0	0	0
Multi-year variable remuneration									
LTI 1 Quality (3 years)	0	0	0	0	0	0	0	0	0
LTI 2 Options (4 years)	0	0	0	0	0	0	0	0	0
LTI 3 Long-term EBIT (3 years)	0	0	0	0	0	0	0	0	0
Other									
Termination benefit	0	75	0	0	0	0	0	0	75
Total	**0**	**75**	**0**	**0**	**0**	**0**	**0**	**0**	**75**
Cost of benefits	0	0	7	7	7	7	0	0	14
Total remuneration acc. to GCGC (benefits received)	**365**	**361**	**273**	**274**	**240**	**239**	**230**	**232**	**1,106**
Share-based remuneration acc. to GCC / GAS 17 (for LTI 2 options)	0	0	0	0	0	0	0	0	0
Total remuneration acc. to GCC / GAS 17 (inflow)	**365**	**361**	**273**	**274**	**240**	**239**	**230**	**232**	**1,106**

Commitments to members of the Management Board upon termination

Post-contractual non-competition agreements have been made with the members of the Management Board in the event their activities as such are terminated, irrespective of whether it is an ordinary or extraordinary termination. Under these agreements, the Company shall pay remuneration equivalent to 50% of the respective individual's most recent average base salary for the 12-month term of the post-contractual non-competition agreement unless the individual in question is retiring.

If the appointment of a member of the Management Board ends early on account of his or her death while in office, the fixed monthly remuneration shall be paid to the heirs for a six-month period.

A separate agreement was entered into with Dr. Bretthauer to settle the employment relationship. Termination benefits of EUR 125 thousand were paid on this basis. These mainly comprise the continued payment of his fixed salary including fringe benefits for 2.5 months after his dismissal on 15 October and an amount of EUR 50 thousand to settle claims from the allocation of the LTI 2 options from 2015 and, if applicable, any other claims. A post-contractual non-compete clause was agreed for a period of 18 months after his departure. Any remuneration claims resulting from an advisory role of Dr. Bretthauer will not be offset against the compensation to be paid in connection with the non-compete clause.

The Company has not made any defined-benefit commitments to the current members of its Management Board.

Contracts regarding a company pension were closed with the members of the Management Board, Kai Bentz and Bernd Lange. These are defined-contribution commitments. No provisions for pensions are required in this case.

No other provisions and commitments have been made with respect to the ordinary or extraordinary termination of a member of the Management Board.

Total remuneration of former members of the Management Board

Provisions were recognized for EUR 535 thousand (previous year: EUR 511 thousand) in pension commitments (pension plan, disability pension and widow's pension) toward former members of the Management Board and their survivors.

A total of EUR 17 thousand (previous year: EUR 17 thousand) in pensions was paid to a former member of the Management Board in 2017. A commitment to pay termination benefits of EUR 125 thousand was also made. Of that amount, EUR 75 thousand were paid in 2017.

Shareholdings of members of the Company's corporate bodies

The shareholdings of the members of the Company's corporate bodies are distributed as follows:

SHAREHOLDINGS OF MEMBERS OF THE COMPANY'S CORPORATE BODIES

EUR thsd.	31 Dec. 2017	30 Sep. 2017	30 June 2017	31 March 2017
Management Board				
Dr. Ingo Bretthauer (until 15 October 2017)	n/a	60.000	60.000	60.000
Bernd Lange	35,000	35,000	35,000	35,000
Kai Bentz	17,600	17,600	17,600	17,600
Dr.-Ing. Christian Bieniek	1,500	1,500	1,500	1,500
Supervisory Board				
Dr. Markus Peters (since 13 July 2017)	0	0	n/a	n/a
Dr. Heino Büsching	10,000	10,000	10,000	10,000
Prof. Dr.-Ing. Erich Barke	2,000	2,000	2,000	2,000
Dr. Dirk Rothweiler (since 13 June 2017)	0	0	0	n/a
Bernd Hackmann (until 12 July 2017)	n/a	n/a	125,600	125,600

Remuneration of the Supervisory Board

Each member of the Supervisory Board receives fixed basic remuneration for each full financial year of membership on the Supervisory Board that is specified by resolution of the Annual General Meeting and is payable after the end of the financial year. The Chairman of the Supervisory Board receives double and the Deputy Chairman receives one-and-a-half times the amount of the fixed basic remuneration. By resolution of the 2011 Annual General Meeting, the fixed basic remuneration of each member of the Supervisory Board was set at EUR 40 thousand effective 1 January 2011. The fixed remuneration from 1 January 2017 was set at EUR 32 thousand by resolution of the Annual General Meeting on 2 June 2016.

The remuneration of the Supervisory Board is as follows:

REMUNERATION OF THE SUPERVISORY BOARD

EUR thsd.		Dr. Markus Peters (Chairman)	Dr. Heino Büsching (Deputy Chairman)	Dr. Dirk Rothweiler	Bernd Hackmann	Prof. Dr.-Ing. Erich Barke	Total
Fixed remuneration	2016	25	61	18	25	32	161
	2017	0	80	0	60	40	180
Variable remuneration	2016	0	0	0	0	0	0
	2017	0	0	0	0	0	0
Total remuneration	**2016**	**25**	**61**	**18**	**25**	**32**	**161**
	2017	**0**	**80**	**0**	**60**	**40**	**180**

Supervisory Board members

Dr. Markus Peters (from 13 July 2017; Chairman from 16 Oct. 2017)	Head of Finance and Investment of German Technology AG, Hannover, Germany
Dr. Heino Büsching (Chairman until 15 Oct. 2017; Deputy Chairman from 16 Oct. 2017)	Lawyer / tax consultant at CMS Hasche Sigle, Partnerschaft von Rechtsanwälten und Steuerberatern mbB, Hamburg, Germany
Bernd Hackmann (Deputy Chairman until 12 July 2017)	Consultant to technology companies formerly: Chief Executive Officer of LPKF Laser & Electronics AG, Chairman of the Supervisory Board of Viscom AG, Hannover, Germany, Member of the Supervisory Board SLM Solutions Group AG, Lübeck, Germany
Prof. Dr.-Ing. Erich Barke	Retired professor of Leibniz University, Hannover, Germany, formerly: President of Leibniz University Hannover, Germany, Member of the Supervisory Board of the following companies: Esso Deutschland GmbH, Hamburg, Germany, ExxonMobil Central Europe Holding GmbH, Hamburg, Germany, hannoverimpuls GmbH, Hannover, Germany, Solvay GmbH, Hannover, Germany (until July 2017)
Dr. Dirk Rothweiler (from 13 June 2017)	CEO of First Sensor AG Berlin, Germany

2.4 RESULTS OF OPERATIONS, FINANCIAL POSITION AND NET ASSETS OF THE GROUP

2.4.1 Results of operations

Development of revenue

The LPKF Group generated revenue of EUR 102.1 million in the 2017 financial year, an increase of 12.0% compared with the previous year. An encouraging business trend emerged in all operating segments. The Solar segment in particular lifted its revenue by 48.2% to EUR 20.6 million. However, the Development segment also achieved growth of 7.7% year-on-year with revenue of EUR 24.4 million. Likewise, the Welding segment slightly exceeded its prior-year revenue figure with an increase of 6.0%. In the Electronics segment, substantial growth was seen in cutting systems for electronics production, though the other product groups fell short of their prior-year revenue figures. LDS systems, for example, now account for less than 2% of the Group's total revenue. Overall, the Electronics segment boosted its revenue by 3.5% year-on-year.

The following table shows the revenue by region:

DISTRIBUTION OF REVENUE

in %	2017	2016
Asia	44.8	46.5
Germany	10.2	14.2
Europe excluding Germany	20.1	18.0
North America	22.5	19.4
Other	2.4	1.9
Total	**100.0**	**100.0**

At 89.8%, the Group's export rate is higher than the level for the previous year (85.8%). Germany's share was down slightly, but combined with the rest of Europe it still accounts for one-third of revenue. Due to its importance for electronics production, Asia remains LPKF's most important market despite minor decreases compared with the previous year.

Development of orders

At EUR 113.2 million, incoming orders during the reporting period were 7% up on the previous year's level. Orders on hand at the end of the year, at EUR 38.8 million were clearly above the previous year's figure of EUR 27.8 million (+39%). This increase is primarily attributable to a strong solar business.

Development of main income statement items

EUR 3.3 million of the development costs for products and software were shown as capitalized development costs. Overall, other operating income was virtually unchanged on the previous year. In 2017, compensation of EUR 2.2 million was paid for the business interruption in connection with the fire damage at the Garbsen site in 2015. In the previous year, the same amount had been paid from the property damage adjustment and an initial advance payment toward the business interruption loss had been made. Otherwise, higher income from the reversal of write-downs and higher investment grants were offset by lower income from the reversal of provisions and lower other income.

The material cost ratio relative to revenue and changes in inventories fell slightly again from the high level of 34.9% in the previous year and stood at 33.4% for 2017 as a whole. The material cost ratio in 2016 had been higher due to write-downs of inventories and scrappages with a total value of EUR 5.9 million. By contrast, in 2017 significant revenue shares were generated in the Electronics segment with lower margins. This especially led to a higher cost of materials relative to revenue. In addition, EUR 1.1 million in write-downs of inventories and scrappages was recognized under the cost of materials in 2017.

Following the substantial cuts made in 2016, the number of employees decreased once more in the 2017 financial year, falling from 700 to 683 at year-end. Restructuring expenses were incurred in the amount of EUR 0.6 million (previous year: EUR 1.8 million). The Management Board voluntarily forwent any performance-based remuneration again in 2017. Staff costs stood at EUR 41.9 million (previous year: EUR 43.9 million), a reduction of nearly 5%. The ratio of staff costs to total revenue was 41.0%, down from 48.2% in the previous year.

Depreciation, amortization and impairment losses fell by EUR 0.4 million year-on-year to EUR 7.7 million. This decline was driven primarily by the impairment losses on capitalized development costs of EUR 0.8 million that had been incurred in the previous year. However, the Group-wide investment restraint of recent years is also reflected in the low level of depreciation, amortization and impairment losses.

At EUR 23.3 million, other operating expenses in 2017 were at the level of the previous year. The individual expense items turned in a mixed performance. Reductions were recorded for maintenance (– EUR 0.5 million), sales expenses (– EUR 0.4 million), and rental expenses (– EUR 0.3 million), whereas increases resulted from currency losses (+ EUR 0.9 million), legal and consulting costs (+ EUR 0.4 million) and third-party work (+ EUR 0.4 million).

The sharp rise in revenue and the non-recurrence of the extraordinary expenses seen in the previous year lifted EBIT from EUR – 6.8 million in the previous year to EUR 4.0 million. The EBIT margin rose from –7.4% to 3.9%. EBIT in the financial year included extraordinary expenses arising from restructuring expenses in the amount of EUR 0.7 million. In contrast to the previous year (combined figure of EUR 6.7 million), there were no write-downs of inventories and no impairment losses recognized on development costs. An insurance payment of EUR 2.2 million generated extraordinary income in 2017 (previous year: EUR 1.3 million). Excluding these effects, the Group would have recorded EBIT of EUR 2.4 million.

Through increased use of short-term lines of credit, interest expenses rose by EUR 0.1 million. As a result, net interest income totaled EUR – 0.9 million during the financial year (previous year: EUR – 0.8 million).

The tax expense of EUR 1.9 million was attributable to positive earnings by individual companies and to the non-recognition of deferred taxes on losses incurred by the parent company. This raised the tax ratio to 61.8% (previous year: – 16.4%). Consolidated net profit for the year after taxes is EUR 1.2 million (previous year: EUR – 8.8 million).

MULTI-PERIOD OVERVIEW OF RESULTS OF OPERATIONS

		2013	2014	2015	2016	2017
Revenue		129.7	119.7	87.3	91.1	102.1
EBIT	EUR million	23.2	12.7	– 3.7	– 6.8	4.0
Material cost ratio	%	26.7	31.4	28.6	34.9	33.4
Staff cost ratio	%	31.2	36.3	50.1	48.2	41.0
Tax rate	%	30.1	28.6	20.9	– 16.4	61.8
EBIT / employee	EUR thsd.	**32.0**	**16.1**	**– 4.7**	**– 9.0**	**5.3**

Details regarding the operating segments can be found in the notes to the consolidated financial statements.

2.4.2 Financial position

Principles and goals of financial management

External funding sources available to LPKF AG include the issue of shares and raising short- and long-term loans. The Group uses its profits, as well as the retention of proceeds generated by depreciation / amortization and provisions, as sources for its internal financing.

Within the LPKF Group, derivatives are managed by the parent company, LPKF Laser & Electronics AG. Derivatives are used only to hedge foreign exchange rates and interest rates. The European companies optimize their liquidity peaks by way of cash pooling. All other companies carry out their ongoing cash management locally. LPKF is continually reviewing whether to expand cash pooling to other international companies. If large amounts of funds are required, reviews are performed to determine whether to utilize local financing or financing via LPKF AG.

Statement of cash flows

The following statement of cash flows shows the origin and use of financial resources:

STATEMENT OF CASH FLOWS

EUR million	2017	2016
Cash flow from operating activities	9.6	5.7
Cash flow from investing activities	– 6.3	– 7.5
Cash flows from financing activities	– 10.8	6.3
Change in cash funds due to changes in foreign exchange rates	– 0.1	0.0
Change in cash funds	– 7.5	4.5
Cash funds on 1 Jan.	3.6	– 0.9
Cash funds on 31 Dec.	– 4.0	3.6
Composition of cash funds:		
Cash-in-hand, bank balances	3.3	3.6
Overdrafts	– 7.3	0.0
Cash funds on 31 Dec.	**– 4.0**	**3.6**

The Group's cash funds fell from EUR 3.6 million at the end of the previous year to EUR – 4.0 million. The net profit for the financial year and the depreciation, amortization and impairment losses to be added back led to a cash inflow. Changes in inventories and receivables exceeded the increase in liabilities and provisions, and a cash flow from operating activities of EUR 9.6 million was generated. The Group's investing activities amounted to EUR 6.6 million. A positive free cash flow (balance of cash flow from operating activities and cash flow from investing activities) of EUR 3.3 million was generated again for the first time after two years.

Financing activities led to a cash outflow of EUR 10.8 million. Both long-term borrowings and short-term loans were repaid on schedule and no further short-term loans were taken out.

Long-term financing is used for non-current assets. subject to long-term fixed interest periods. The long-term loans currently have interest rates of 1.0% to 3.98%. Sufficient credit lines (EUR 12.1 million) that have not been used to date are still available. In 2017, a collateral pooling agreement was signed by LPKF AG and four financing banks as the basis for stable financing. This sets out that the previously unsecured lines of credit and short-term loans furnished are secured through the assignment of inventories and receivables.

Covenants were agreed for two loans. These covenants were complied with as of the reporting date.

The financial position was stable in financial year 2017.

MULTI-PERIOD OVERVIEW OF FINANCIAL POSITION

EUR million	2013	2014	2015	2016	2017
Free cash flow	12.9	– 12.9	– 3.6	– 1.8	3.3
Net liabilities to banks	11.2	30.2	37.3	39.9	37.7

2.4.3 Net assets

Analysis of net assets and capital structure

The Company's net assets and capital structure developed as follows year on year:

ANALYSIS OF NET ASSETS AND CAPITAL STRUCTURE

	31 Dec. 2017		31 Dec. 2016	
	EUR million	in %	EUR million	in %
Non-current assets	63.9	54.8	66.4	56.8
Current assets	52.7	45.2	50.5	43.2
Assets	**116.6**	**100.0**	**116.9**	**100.0**
Equity	54.2	46.5	54.3	46.5
Non-current liabilities	21.6	18.5	24.1	20.6
Current liabilities Income	40.8	35.0	38.5	32.9
Equity and liabilities	**116.6**	**100.0**	**116.9**	**100.0**

The capitalization of development costs led to an increase in non-current assets, which was more than offset by a decrease in property, plant and equipment triggered by depreciation and impairment losses, however. As a result, only the rise in deferred taxes led to higher non-current assets compared to the previous year. A total of 88% of the non-current assets are covered by equity (previous year: 85%).

Of the current assets, inventories remained at the prior-year level. Despite high revenue at the end of the fourth quarter, trade receivables did not increase at the balance sheet date. Other current assets rose, due in particular to the recognition of an insurance payment and to higher VAT receivables than in the previous year. As of 31 December 2017, cash and cash equivalents were down marginally on the prior-year level at EUR 3.3 million. Net working capital fell by EUR 1.9 million to EUR 33.3 million at the reporting date. This figure declined as a result of an increase in advances received compared to the previous year. The significant growth in revenue reduced the net working capital ratio from 38.7% in the previous year to 32.6% in the reporting period, after a reduction had already been achieved in the previous year.

At 46.5%, the equity ratio in 2017 was level with the previous year. Other provisions increased by EUR 0.4 million, due in particular to higher warranty provisions resulting from the development of revenue. Liabilities to banks declined by a total of EUR 2.5 million. Long-term loans were reduced by EUR 2.6 million through scheduled repayments; at EUR 21.0 million, short-term liquidity loans including overdrafts remained at the prior-year level. Of the current liabilities, advances received and trade liabilities increased by a total of EUR 2.1 million. With these exceptions, there has been no substantial change in the structure of the statement of financial position.

The return on capital employed (ROCE) is used to quantify an adequate return on the employed capital and to measure the achievement of performance targets. ROCE is calculated in percent as a ratio of EBIT and capital employed (interest-bearing equity and borrowings). Capital employed is determined as the sum of intangible assets, property, plant and equipment, inventories and trade receivables less advances received and trade payables.

MULTI-PERIOD OVERVIEW OF NET ASSETS

	2013	2014	2015	2016	2017
Fixed assets ratio (%)	44.5	44.9	54.1	54.4	53.1
Inventories ratio (%)	27.6	25.1	26.2	21.3	21.9
ROCE (%)	26.4	11.8	– 3.5	– 6.8	4.1
Net working capital (EUR million)	37.3	50.1	40.3	35.2	33.3
Net working capital ratio (%)	28.7	41.9	46.2	38.7	32.6
Days sales outstanding (days)	53	54	64	63	67

Days sales outstanding (DSO) are determined based on the average amount of outstanding receivables between reporting dates.

Capital expenditures

In the 2017 financial year, EUR 6.6 million was invested in intangible assets and property, plant and equipment and thus EUR 0.9 million less than in the previous year. The largest single investment was a production hall built at the Suhl site at the end of the year to handle the extensive orders for solar energy systems and to be able to continue the positive trend that is emerging. In addition to the capitalization of development costs, capital expenditures also included minor expenditures for the replacement of office and IT equipment.

Employees

LPKF's basic philosophy is to secure motivated and well-trained employees and tie them to the Group on a long-term basis. Due to the economic situation, new hires were only made where necessary in 2017. Vacancies were mostly filled internally, with the exception of the expanding solar business. As part of human resources development, economically justifiable internal and external training courses and essential staff training measures were conducted in all areas to ensure that staff is well prepared to cope with future challenges. LPKF trains mechatronic technicians, industrial business assistants, IT specialists, product designers and technical drafters in order to acquire properly qualified young staff. The Group employed 35 trainees at the reporting date (2016: 38); the number of trainees is expected to remain stable for the next years.

2.4.4 Segment performance

The following table provides an overview of the operating segments' performance:

SEGMENT PERFORMANCE

EUR million		Electronics	Development	Welding	Solar	Other	Total
External revenue	2016	30.6	22.6	24.0	13.9	0.0	91.1
	2017	31.8	24.4	25.3	20.6	0.0	102.1
EBIT	2016	– 4.4	2.0	– 0.1	– 1.0	– 3.3	– 6.8
	2017	0.9	5.3	0.6	1.5	– 4.3	4.0
Extraordinary items	2016	– 3.5	– 1.3	– 1.0	– 1.4	0.0	– 7.2
	2017	1.6	0.3	– 0.1	– 0.1	– 0.2	1.5
Adjusted EBIT	2016	– 0.9	3.3	0.9	0.4	– 3.3	0.4
	2017	– 0.7	5.0	0.7	1.6	– 4.1	2.5

Extraordinary items in the reporting year included the regulation of the business interruption loss (EUR 2.2 million) and restructuring expenses EUR 0.7 million). In the previous year, the extraordinary items included the write-downs of inventories (EUR 5.9 million), the impairment losses recognized on capitalized development costs (EUR 0.8 million), the restructuring costs (EUR 1.8 million), and the insurance payment for the business interruption in connection with the fire (EUR 1.3 million).

2.5 RESULTS OF OPERATIONS, FINANCIAL POSITION AND NET ASSETS OF LPKF AG

The following explanations aim to provide an overview of the economic development of LPKF AG (single entity). The annual financial statements of LPKF AG are prepared in accordance with the provisions of the German Commercial Code (HGB) as amended to reflect the provisions of the Accounting Directive Implementation Act (BilRUG) and published in the Federal Gazette (Bundesanzeiger). The single entity is managed according to the same principles as the Group, on the basis of the IFRSs. On account of the single entity's large share of the value creation in the Group, LPKF therefore refers to the statements in the "Corporate management" section and in the report on expected developments, which can also be extrapolated for the parent company.

2.5.1 Results of operations

In financial year 2017, LPKF AG increased revenue by 11% from EUR 42.1 million to EUR 46.8 million. Both of LPKF AG's business segments contributed to this growth. The Development segment saw a gain of 13% over the prior year, mainly due to higher ProtoLaser revenue, and the Electronics segment was able to outperform the previous year's result by 12% thanks to strong cutting systems revenue. The percentage of revenue generated internationally was 82.1% (previous year: 84.1%).

The fire loss incurred in 2015 was settled with the insurance company in 2017 and led to insurance compensation of EUR 2.3 million in 2017. Other operating income included currency gains of EUR 0.8 million (previous year: EUR 0.4 million), income from affiliated companies of EUR 0.8 million (previous year: EUR 1.2 million) and grants of EUR 0.5 million (previous year: EUR 0.5 million). All told, other operating income thus rose from EUR 4.8 million in 2016 to EUR 5.4 million in the 2017 financial year.

The revenue growth in the Electronics segment was generated in part with products exposed to strong price pressure in China. This bumped up the share of material costs, resulting in an increase in the material cost ratio from 46.3% in the prior year to 47.0% in 2017. Write-downs of inventories and scrappages amounted to EUR 0.9 million in 2017 (previous year: EUR 3.6 million, thereof write-downs of EUR 3.2 million).

Staff costs at LPKF AG decreased by a total of EUR 1.3 million mainly on account of a reduction in the workforce of 28 employees on average at the Garbsen site in Germany. This decreased the ratio of staff costs to 33% from 40.0% in the previous year. Depreciation, amortization and impairment losses declined by EUR 0.2 million on account of reduced investment activity. In the previous year, this item had included write-downs of current assets of EUR 3.2 million. Other operating expenses were up over the previous year by a total of EUR 0.5 million. In view of the increase in revenue, this represents a decline of 2.2 percentage points. In particular, increases were seen in selling and distribution expenses (up EUR 0.6 million), currency translation loss (up EUR 0.5 million) and legal and consulting costs (up EUR 0.4 million). In contrast, decreases were recorded in third-party work (down EUR 0.6 million) and repair expenses (down EUR 0.6 million).

ADJUSTED EBIT

EUR million	2017	2016
EBIT	– 3.0	– 9.3
Extraordinary items		
Insurance payment business interruption	2.2	1.3
Write-downs of inventories	0.0	– 3.2
Restructuring expenses	– 0.1	– 0.6
Adjusted EBIT	– 5.1	– 6.8
Adjusted EBIT margin (%)	– 11.0	– 16.2

Although the previous year's figure had been adversely affected by extraordinary items of EUR 3.8 million, EBIT rose by EUR 6.3 million in 2017, amounting to EUR – 3.0 million at the end of the year. The revenue growth led to an improvement in earnings, and a comparison of adjusted EBIT margins shows an increase of 5.2 percentage points. The financial result includes distributions from LaserMicronics and LPKF d.o.o. totaling EUR 3.4 million. Due to profit and loss transfer agreements with LPKF SolarQuipment and LPKF WeldingQuipment, LPKF AG received EUR 1.4 million in profit after assuming total losses of EUR 1.7 million in the previous financial year. Earnings before tax therefore grew substantially by EUR 6.5 million, an increase of 119%. This led to net profit for the year after taxes of EUR 1.0 million, compared to a net loss of EUR 5.5 million reported in the previous year.

INCOME STATEMENT OF LPKF AG

EUR million	2017	2016
Revenue	46.8	42.1
Change in inventories	– 1.2	0.2
Other operating income	5.4	4.8
Cost of materials	21.4	19.6
Staff costs	15.5	16.8
Depreciation, amortization and write-downs	2.8	6.2
Other operating expenses	14.3	13.8
Operating result	**– 3.0**	**– 9.3**
Financial result	**4.1**	**3.9**
Income taxes	0.0	0.0
Earnings after taxes	**1.1**	**– 5.4**
Other taxes	0.1	0.1
Net loss / income for the year	1.0	**– 5.5**
Retained earnings brought forward from the previous year	– 1.2	4.3
Net retained profits	**– 0.2**	**– 1.2**

Regarding the performance indicators, the expectation is that LPKF AG will essentially develop in line with Group's forecast described in section 8.1.3.

2.5.2 Net assets and financial position

Total assets stood at EUR 78.8 million on 31 December 2017, down on the prior-year figure of EUR 82.3 million. Investments in tangible and intangible assets amounted to EUR 1.2 million in 2016 after EUR 2.1 million the previous year. Intangible assets saw an increase mainly in connection with the upgrade of the ERP system. Acquisitions of technical and office equipment again remained lower than depreciation. Systematic inventory management was a major factor in the reduction in inventories for the second consecutive year. As of 31 December 2017, this item was EUR 2.3 million below the prior-year figure. On the reporting date, trade receivables were also well under the previous year's figure. Receivables from affiliated companies rose significantly compared to the previous year and primarily comprise financial receivables. After reaching EUR 1.5 million in the previous year, cash and cash equivalents dropped to EUR 0.2 million. Overall, current assets decreased by EUR 1.6 million. Deferred tax assets totaling EUR 3.8 million are primarily attributable to the loss carryforwards from the past two financial years and declined slightly in the current year due to the positive earnings before tax.

The net profit for the current financial year led to a slight increase in equity from EUR 34.5 million in the previous year to EUR 35.5 million. The equity ratio therefore increased from 41.9% in the prior year to 45.0%. Other provisions decreased slightly, by a total of EUR 0.4 million compared to the previous year, primarily as a result of reduced provisions for invoices outstanding. Liabilities to banks were also somewhat lower, declining by EUR 0.8 million from the figure at the prior-year reporting date. The majority of these liabilities have a remaining maturity of up to one year (EUR 19.3 million). Miscellaneous liabilities primarily include liabilities to affiliated companies resulting from both trade payables and financing. They fell by a total of EUR 3.2 million. At EUR 41.1 million, total liabilities were considerably lower that the previous year's level (EUR 45.3 million).

The Company's net assets and capital structure developed as follows year on year:

NET ASSETS AND CAPITAL STRUCTURE

	31 Dec. 2017		31 Dec. 2016	
	EUR million	in %	EUR million	in %
Non-current assets	39.9	50.7	41.9	50.9
Current assets	38.9	49.3	40.4	49.1
Assets	**78.8**	**100.0**	**82.3**	**100.0**
Equity	35.5	45.0	34.5	41.9
Non-current liabilities	13.6	17.3	14.6	17.7
Current liabilities Income	29.7	37.7	33.2	40.4
Equity and liabilities	**78.8**	**100.0**	**82.3**	**100.0**

The improved results from operations contributed to strong stabilization of the asset and capital structure and reinforced equity. As a result of the recent increase in the equity ratio, LPKF AG's net assets and financial position are judged to be stable, given that there are undrawn lines of credit as well.

Capital expenditures

Investments totaling EUR 1.2 million primarily consist of the upgrade of the ERP system, equipment for application areas, and measurement technology and IT hardware.

Employees

LPKF AG had 235 employees at the reporting date, 7 less than in the previous year.

Dividend

The sustained ability to pay a dividend is key goal of the LPKF Group. The Company plans to propose to the Annual General Meeting that between 30% and 50% of LPKF's earnings per share be distributed as a dividend in the following year. LPKF may deviate from this aim, especially if it were to face an uncertain future due to circumstances such as an economic downturn, or if paying a dividend would jeopardize its ability to finance investments or put the financial position of LPKF AG or the Group at risk.

The Management Board and the Supervisory Board will propose to the Annual General Meeting on 31 May 2018 that a dividend not be paid. In the current situation of the Company, priority is given in particular to reducing debt and investing in growth.

2.5.3 Risk report

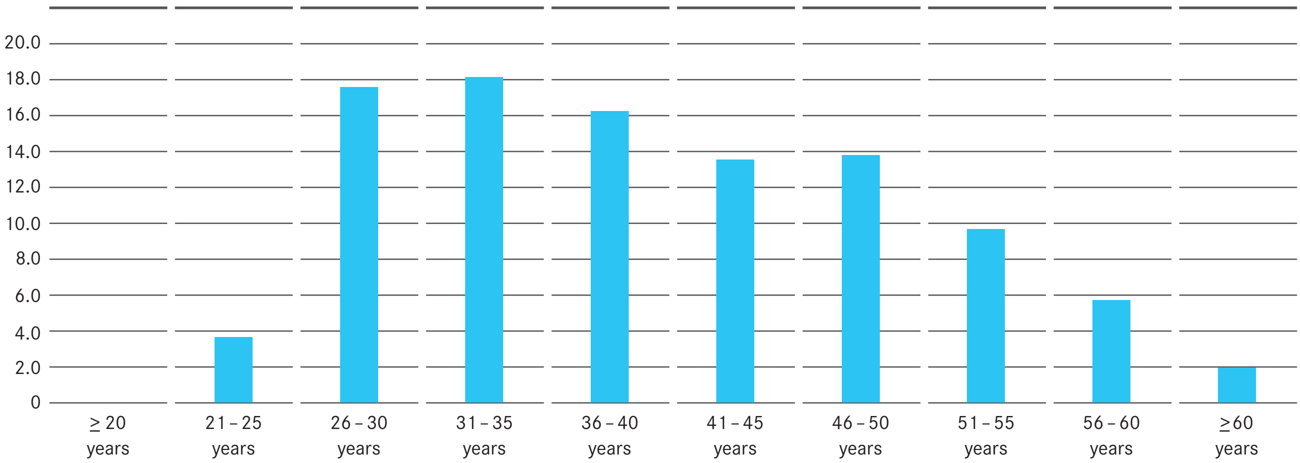
The business development of LPKF AG is essentially exposed to the same risks as that of the LPKF Group. These risks are explained in the risk report (section 7) of the combined management report.

2.6 EMPLOYEES

Highly-qualified and motivated staff is the key to success for a technology group like LPKF. Low levels of sick leave and employee turnover are important indicators of LPKF's success in achieving this goal. At 4.1%, the sick leave percentage in the LPKF Group was below the average for the metal working and electronics industry in Germany (2016: 5.4%). The employee turnover rate in the Group was 10.1% (previous year: 15.9%).

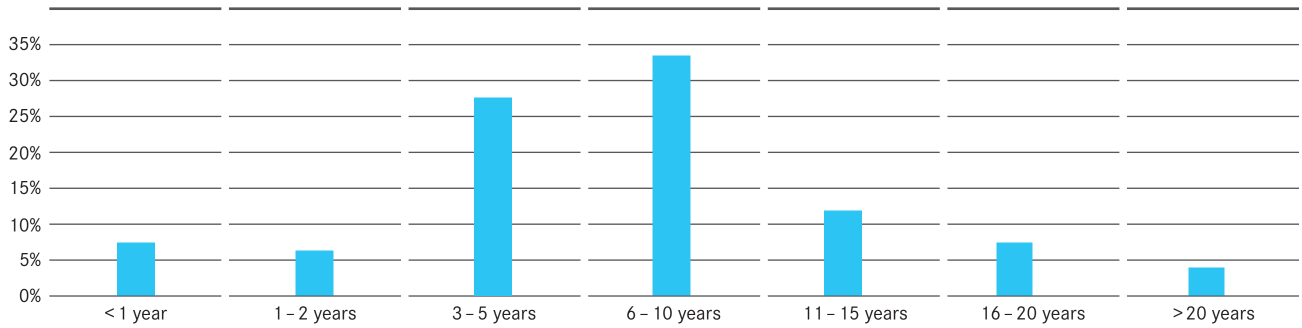
The average age of the workforce at the LPKF Group was 39.6 years (previous year: 39.0). According to information provided by the VDMA, the average age of all employees in the German engineering industry is rising slowly but steadily.

AGE STRUCTURE ANALYSIS IN YEARS, LPKF GROUP (EXCLUDING TRAINEES)



An analysis of the length of service of LPKF Group employees shows that with an average of 7.5 years (previous year: 6.5 years) LPKF can point to a healthy mix of experienced and new employees.

DISTRIBUTION OF LENGTH OF SERVICE IN YEARS, LPKF GROUP (EXCLUDING TRAINEES)



Based on the current age structure and a balanced mix of years of service, LPKF is positioned well to face the challenges posed by demographic trends.

2.7 OVERALL APPRAISAL OF THE GROUP'S ECONOMIC SITUATION

After posting a loss for 2015 and 2016, LPKF reported a positive result and revenue growth once again in 2017. This lifted equity and the equity ratio, helped by the decrease in fixed cost items and a surge in business. Progress was also made in relation to net working capital. Overall, the Group's economic situation therefore improved compared with the previous year.

In the financial year, extraordinary income was generated from an insurance payment of EUR 2.2 million for the business interruption caused by the fire in 2015. Restructuring expenses of EUR 0.7 million (severance payments and write-downs of inventories) resulting from the site consolidation in Asia had a negative impact on earnings. Excluding these factors, the Group posted EBIT of EUR 2.4 million and an EBIT margin of 2.4%.

The Management Board expects LPKF to continue to make progress in 2018 in terms of earnings, revenue and return on capital employed.

3 REPORT ON POST-BALANCE SHEET DATE EVENTS

DISCLOSURES ON PARTICULARLY SIGNIFICANT EVENTS

The Supervisory Board appointed Dr. Götz Bendele the Company's new Chairman of the Management Board (Chief Executive Officer) on 15 March 2018. His term of office begins on 1 May 2018; his contract runs for three years.

Please refer to the consolidated notes for reportable events after the reporting date.

4 CORPORATE GOVERNANCE DECLARATION

The corporate governance declaration pursuant to Section 289a HGB is part of the combined management report. The declaration is available for the public on LPKF AG's website (http://www.lpkf.com/investor-relations/corporate-governance/declaration-compliance.htm) and included in the corporate governance report on pages 29 – 31 of the annual report.

5 SUSTAINABILITY REPORT

In 2014, the European Parliament and EU member states adopted a directive (the CSR Directive) to expand the reporting of large publicly traded companies, credit institutions, financial services institutions and insurance companies. The aim of the Directive is to increase transparency about ecological and social aspects of companies in the EU. It includes information on environmental, social and employee issues as well as respect for human rights and combating corruption and bribery. Germany has implemented the Directive into its national law (CSR Directive Implementation Act). The CSR Directive Implementation Act applies to management reports with effect from the 2017 financial year onwards.

LPKF AG is complying with its CSR reporting requirement by submitting a Declaration of Compliance with the German Sustainability Code (Deutscher Nachhaltigkeitskodex – GSC). The GSC provides a clear structure for reporting non-financial performance, with a focus on materiality and transparency.

The separate non-financial consolidated report of LPKF AG will be published on http://www.lpkf.com/lpkf-group/sustainability within the legally stipulated period and no later than 30 April 2018.

6 REPORT ON OPPORTUNITIES

6.1 OPPORTUNITY MANAGEMENT

As a technology company, LPKF does business in a dynamic market environment. New opportunities constantly arise from a changing technology landscape and new market requirements. Systematically identifying and leveraging these opportunities is a major factor in the sustainable growth of the LPKF Group. Opportunity management involves closely monitoring new markets and applications, evaluating market analyses, and regularly reviewing the focus of the product portfolio.

In the R&D unit, innovation managers specialize in systematically seeking out new technologies. The responsibility for identifying opportunities in the product groups and markets lies with the product managers and international subsidiaries. Results are regularly reported to the Company's management. If it is likely that opportunities will materialize, they are included in the planning and outlook for the coming years. The opportunities listed below focus on future trends or events that could result in a positive deviation for LPKF from the outlook given in the report on expected developments. Taking into account the existing estimation uncertainty, the opportunities presented below can make a positive contribution to earnings in the single-digit million range.

6.2 OPPORTUNITIES

6.2.1 Further developing the existing product portfolio

LPKF updates the product portfolio on an ongoing basis, aligning this activity with signals from customers, technological progress outside the Company and changing markets. At the same time, it also pursues its own ideas and innovations. The Company thus aims to always be prepared to meet future customer needs while at the same time actively creating new market demand through its own innovative and efficient processes. LPKF ensures its capability to innovate for the future by closely networking its development departments with market research, sales and service, as well as providing a suitable annual R&D budget of approximately 10% of revenue. The continual updating of the product portfolio can result in changes in the product mix, and these changes provide opportunities as well as posing risks.

6.2.2 New technology breakthroughs

LPKF is a market leader in all product groups worldwide. The chances are excellent for further expansion of market share thanks to LPKF's wide-ranging technological expertise, brand recognition and long-term relationships with customers. In addition to established markets, LPKF additionally concentrates on attractive new markets that promise good growth and income opportunities. Moreover, LPKF aims to open up new markets and further cement its presence in existing markets by developing new products. The purpose of systematic market and technology monitoring is to identify market opportunities. Based on this monitoring, technology studies are conducted that provide an opportunity to register industrial property rights on completely novel solutions, among others.

6.2.3 Takeover of external companies with strategically relevant expertise

LPKF has a broad product portfolio and many ideas for further developing products and uncovering new market opportunities. This is why organic growth is at the forefront of LPKF's corporate strategy. Nonetheless, the Company also pursues opportunities for external growth that could come from acquiring patents or companies with strategically relevant expertise.

6.2.4 Impact of the megatrends of miniaturization und digitization

The production methods developed by LPKF enable the miniaturization of components and often have commercial and quality advantages compared to conventional production technologies. Above average growth is possible if customers decide to abandon traditional methods in favor of LPKF's equipment. Especially in a rapidly changing market environment, many of LPKF's customers see the need to make larger investments in their own developments and launch new products. This benefits sales of LPKF products to development laboratories. Both the increasing digitization of production and LPKF's intensive development activities are making laser-based machinery more attractive to customers than established technologies, even for mass production.

6.2.5 Independence of individual markets as a result of broad positioning

LPKF's strategy to build on its core competencies and enter different markets has a potentially stabilizing effect against the backdrop of cyclical markets. The various markets served by LPKF undergo sometimes asynchronous and different industry cycles.

6.2.6 Business organization

The consistent alignment of the corporate structure to the strategy has created one of the key conditions for exploiting opportunities for further growth. The Group's organization and internal processes are continually improved and focused on market proximity and profitable growth. Going forward, LPKF aims to profit further from the size of the Group and more effectively leverage economies of scale.

7 RISK REPORT

7.1 DESCRIPTION OF THE INTERNAL CONTROL SYSTEM

7.1.1 Overview

The internal control system (ICS) comprises the principles, procedures and measures introduced by LPKF's management. They focus on the organizational implementation of management decisions and statutory requirements. The aim of the methods and measures implemented by LPKF is to safeguard the Group's assets and to boost its operating efficiency.

The ongoing refinement of the ICS involves analyzing the Company's functional areas – e. g. during audits, workshops, internal audits and Management Board meetings – and assessing the probability of damage occurring in these areas and the extent of potential damage.

The Management Board organizes the structure of the individual units and constantly adjusts workflow to the findings gathered from the ICS. Among others, this involves strictly separating incompatible activities, implementing the dual control principle in all significant areas internationally and installing controls in the workflows. Examples include signature regulations, approval requirements for significant transactions, and IT access authorizations.

The results of the internal audits are presented to the Supervisory Board. It is stipulated that the findings must be worked through in a timely manner. Follow-up audits ensure that the agreed implementation of the findings is monitored regularly and documented. Implementation is the responsibility of the relevant Management Board member with purview over the respective area.

The risk and opportunity management system is also an integral part of the ICS.

7.1.2 Risk management system

Risk management is pursued actively at LPKF, as is opportunity management, which is treated separately. In doing so, the Company employs a number of reporting tools.

Risk management at LPKF involves the formulation and implementation of measures that are suitable to identify existing risks, hedge them, reduce their probability of occurring, mitigate them or consciously accept them to a reasonable extent. Risk is defined as potential future trends or events that might result in a negative departure from forecasts or goals. Risk management serves to safeguard the foundation of business and enhance competitiveness by providing a platform for suitably controlling specific risks and managing them transparently. It ensures that risks are identified and controlled proactively. This is a crucial factor for sustainable commercial success because risks are inseparably associated with business activity. The risk management system is integrated with compliance management through creation of a shared position.

An international firm of public auditors performs internal auditing tasks for the entire LPKF Group. These audits are based on a multi-year audit plan that reflects the risk situation of the Group documented by the risk management system and the risk assessment developed by the Management Board. In financial year 2017, audits were conducted at LPKF AG and one subsidiary.

The LPKF Group is exposed to numerous risks as it pursues its global business activities within the rapidly changing conditions affecting its target markets. Risk management, specifically the risk early warning system, is therefore always a fundamental element in the planning and implementation of LPKF's business strategy. Although risks can be limited by taking suitable measures and can be identified rapidly and precisely through an early warning system, they can never be completely excluded and can only be assessed as of a given point in time. LPKF therefore makes use of a number of highly developed management and control systems to measure, monitor, control and handle the risks the Group is exposed to. Group-wide strategic planning and the associated reporting system are particularly important in this context. The Management Board of LPKF AG is responsible for risk policy and the internal control and risk management system. The second- and third-level management staff implement these control functions in each of the Group's organizational units and benefit here from theoretical technical knowledge, practical experience and excellent networking in the relevant topical areas. In this way, the responsible employees can use suitable and effective means to identify new risks quickly and directly where they arise and then report them to the risk manager. A central database is used for reporting. A risk report is submitted to the Supervisory Board and the Management Board on a monthly basis. In addition to regular reporting on identified risks, ad hoc reports must be prepared as needed on all risks that occur unexpectedly. This involves the risk manager coordinating and, if necessary, participating in developing the various risk control measures. The risk manager reports directly to the Management Board.

Aspects of risk and opportunity management are also a fixture on the agenda of the weekly meetings of the full Management Board. This procedure has proven its worth time and again in past years. The risk early warning system is reviewed annually by a public auditor, and where necessary also by other external auditors. Internal auditing also reviews the risk management system as part of a multi-year auditing plan, most recently in 2014.

In order to record and control risks, existing instruments in the context of the risk management process such as the risk management manual and the reporting tools are updated continuously and the daily implementation of the risk management system is documented. Risk management discussions of all types are always recorded in minutes. As in previous years, existing and potential risks were reassessed and the reporting system was reviewed to ascertain its efficiency in managing risks in the 2017 financial year. New risk owners were trained and made aware of risks. A database-supported reporting system has been installed. The quality management system pursuant to DIN EN ISO 9001:2015 is another important element of the risk early warning system and for ensuring structured business processes. The implementation of the recommendations of the German Corporate Governance Code, which also plays an important part in the cooperation between the Supervisory Board and the Management Board, is yet another instrument for limiting and managing risks.

7.1.3 Description of the main features of the internal control and risk management system relevant to the financial reporting process (Section 289 (5) German Commercial Code)

The internal control and risk management system relevant for the financial reporting process is designed to ensure proper financial reporting, which is defined as the compliance by the consolidated financial statements and combined management report with all applicable regulations.

The workflows in the Group are structured around processes and are set up identically for the most part thanks to the use of the same ERP system in key units of the Group. Automatic process controls are integrated into this system and protected from unintentional changes with an IT-based authorization concept. LPKF plans to harmonize the systems Group-wide.

The dual-control principle is applicable throughout the LPKF Group. Through the general separation of functions related to administration, execution, accounting and approval – and the delegation of these functions to different members of staff or departments – this approach limits the possibilities for engaging in fraudulent acts. This is a manual control that also underlies the process descriptions, signature regulations, guidelines and work instructions.

The specific functions of the internal control system are the risk management system, Group Accounting, Internal Auditing and Compliance Management, all of which are based at the Group's headquarters at LPKF AG.

Possible incorrect reporting by subsidiaries and the publication of financial reports containing errors are particular risks documented in the risk management system. These risks are monitored continually. More details on the risk management system are included in section 7.1.2.

The entries recorded at LPKF AG and the subsidiaries provide the data used to prepare the consolidated financial statements. LPKF guarantees the quality of this data by selecting suitable staff and regularly training employees. In this context, LPKF is supported by service providers, e. g. in measuring non-current liabilities and determining facts material to accounting by Group Accounting. Before being included in the consolidated financial statements, the data is subject to automatic and manual controls. The consolidated financial statements are prepared in a system separate from the ERP system to which only a limited group of authorized persons has access. It is managed solely at headquarters. In further developing the systems, the focus is on automating standard procedures to the greatest extent possible. The annual financial statements of the parent company and the consolidated financial statements are subject to a statutory audit, one component of which is to check whether the Management Board has met the requirements of Section 91 (2) German Stock Corporation Act for setting up an appropriately structured risk early warning system, and whether the risk early warning system is suitable for identifying developments that would endanger the Company's status as a going concern at an early stage.

LPKF has a well-documented compliance organization undergoing constant development to ensure that all business activities comply with statutory provisions and the Company's values. In 2017, measures such as the appointment of a legal counsel led to the creation of a whistleblower system. The legal counsel is available to provide guidance to employees and third parties such as customers and suppliers worldwide anonymously and confidentially outside the Company. During the 2017 financial year, the compliance organization was subjected to an audit by an international auditing firm based on the basic elements of IDW Audit Standard 980. The conclusions of this audit have already been implemented. The main features of the compliance management systems have been published on the websites lpkf.de and lpkf.com.

Based on the organizational, control and monitoring structures defined by the Management Board, the internal control system enables the complete recording and proper presentation of transactions in the Company's accounts.

However, personal judgments, defective controls and criminal acts in particular cannot be fully excluded despite these measures. This could limit the effectiveness of the internal control system, which means that even the strict application of regulations provides no absolute guarantee for the correct, complete and punctual recording of all matters in the accounts.

7.2 SPECIFIC RISKS

The risk management process currently involves dealing in detail with the specific risks listed in the table below which could have a significant impact on the LPKF Group's business, as well as its net assets, financial position and results of operations. Some of the risks changed compared to the previous year.

The following risks in particular are given high priority[1]:

MULTI-PERIOD OVERVIEW OF NET ASSETS

Specific risk	Qualitative probability of occurrence[2]	Possible financial effects[3]
General business risks (esp. macroeconomic risks from sector trends)	less likely (possible)	moderate (material)
Dependence on individual customers	less likely	material
Technological developments	possible (less likely)	moderate (material)
Market acceptance[4]	possible	material
Patent risks	less likely	moderate
Personnel risks	possible	moderate
Financial risks	unlikely	material

[1] Previous year's assessments are shown in parentheses if they have changed.
[2] Categories: unlikely = probability of occurrence less than 5%
less likely = probability of occurrence up to 25%
possible = probability of occurrence higher than 25% and up to 50%
more likely than unlikely = probability of occurrence higher than 50%
[3] Categories: moderate = damage amount up to EUR 5 million
material = damage amount higher than EUR 5 million
[4] New specific risk

Other risks which are currently unknown, or which are currently (still) considered negligible, could also have a negative impact on business.

Disclosures on individual risks:

7.2.1 General business risks

Cause
LPKF is operating internationally in an ever faster changing environment. The Company's customers are exposed to considerable cost and competitive pressures as well as curtailed investment budgets. Business in LPKF's target markets is cyclical, with particularly strong fluctuations especially in the electronics industry as well as the automotive and solar industry.

Whereas the automotive industry continued to grow in 2017, some uncertainty was noticeable in the consumer electronics industry. For example, a slowdown in market growth and a loss of market share on the part of major international vendors in favor of emerging Chinese competitors was observed in the cell phone and smartphone market. The solar market is exhibiting strong growth. Investments are being made to improve the efficiency of existing product lines and to add new production capacity. Among others, the further development of the business with solar scribers is also contingent on the continuation of and further amendments to legal regulations that govern the feed-in fees, e. g. for solar electricity. Government regulations, particularly in China, also have a considerable effect on business performance. Often, investment decisions are not made based on economic factors but instead in view of political considerations.

Economic fluctuations have a strong impact on the investment in production equipment. Especially in markets outside Asia, customers' willingness to expand capacities or introduce new technologies is therefore limited. New investments are often only made when future utilization of such equipment appears assured by concrete orders from customers.

The Group's general business risks also include the increasing share of the project business in the overall operations. Order volumes of several million euros are being negotiated more frequently than in the past in connection with projects. This places special demands on the Group's flexibility to be able to also deal with greater fluctuations in sales volumes. The ability to plan the Company's business performance can also be impacted as a result. This affects the Solar and Electronics segments in particular.

LPKF is also exposed to risks associated with a rapidly changing technological environment. The availability of high-quality components enables new players to launch cost-efficient competitive products or alternative techniques. For more explanations see section 5.2.4.

The systematic development of new technologies and business segments is generally associated with the risk that the planned business model fails to meet its targets. A risk also exists that new technologies may not be accepted by the market overall or only accepted after a considerable time lag. There is also the risk, especially in connection with new technologies or machine types, that deliveries might be delayed or that formal acceptance procedures might not take place at all or only later. Ensuring the high level of quality required by customers places great demands on development and production processes. Especially systems, components and technologies that have been newly developed from scratch entail a risk of high quality costs.

Product liability risks in connection with patents and warranty of title arise to different degrees in all segments. Furthermore, the risk that recall costs may be incurred is to be pointed out. This latter risk arises in particular in the business with production services at the subsidiary Laser-Micronics GmbH.

The generally very strong economy currently seen in the engineering industry is giving rise to increasingly long lead times and occasional bottlenecks in the supply chain. This can lead to delays in delivery and, in the worst cases, to contractual penalties and raised transport costs.Last but not least, the global political situation may also pose risks affecting the development of LPKF's business. The risks involved here include possible changes in laws, e. g. with respect to the import of capital goods to China or in other important markets such as the USA. Recent years have seen the increasing implementation of tariff and non-tariff barriers to trade in China. Furthermore, political crises can have an unfavorable effect on the willingness of government institutions to invest and therefore particularly affect the Development segment.

Measures

In part, industry cycles are staggered timewise in different markets such that LPKF's broad market positioning helps to balance matters somewhat. This positioning in the market is part of the business model and is to be retained in the future. In order to expand LPKF's leading role in the various businesses, it is important to have a robust innovation and product management system with state-of-the-art technology and to be in close contact with customers in close proximity to the market. Overall, around 10% of revenue should also be invested in the new and further development of products in the future.

In order to be able to compensate for fluctuations in the utilization of capacities, LPKF is focusing on flexible structures in production, and increasingly also on the collaboration of LPKF's production sites. In addition, peak workload levels are covered by way of external production service providers and recourse to temporary workers. In the case of lower workload levels, the depth of production can be increased.

In the Electronics segment, the new LIDE method was developed to market readiness to expand the product portfolio. A wide range of promising projects, including those in the IC packaging sector, have been identified and sampled so far. In 2018, several laser systems are expected to qualify for development and pilot production. In addition to creating the first TGVs, LPKF also qualified the LIDE process for high-precision glass cutting. New applications are therefore likely to be implemented.

The Solar segment is experiencing excellent capacity utilization. A new technology, the LTP method, is also being developed for the digital printing of functional pastes. The first machines were delivered to pilot customers in 2017. Significant revenue contributions are anticipated starting in 2019. LTP is expected to decrease the Solar segment's dependence on the solar industry in the long term.

Expanding quality management is a focus of the Group's strategy. The Company received certification in accordance with ISO 9001:2015 during the 2017 financial year.

Existing product liability risks are covered by insurance policies where possible.

One of LPKF's subsidiaries also provides production services for the automotive supply industry. There is a risk in this connection that the Group will be held liable for auto manufacturers' recalls on account of defects. The probability of a loss is deemed to be low, however. This risk is further mitigated by taking out insurance.

Effects on economic position

Despite the measures in place and planned, occurrence of the risks described above is considered less likely and any financial effects on the Company are considered moderate.

7.2.2 Dependence on individual customers

Cause

The distribution of revenue by region shows a clear shift to Asia, China in particular. While it reflects prevailing market conditions, it has resulted in the Group's evolving dependence on international customers that base most of their manufacturing in China. In the Solar segment, larger-scale projects are often completed with a few customers. For some time now, a major customer has dominated significant parts of this business. In the Electronics segment, there is also a certain dependence on decisions made on the part of a few major customers for laser-based technologies who provide their suppliers with corresponding instructions. These instructions can have an impact on LPKF's business with these suppliers.

If the Company were to fail to land individual major projects, this could significantly affect the financial success of this business segment. The risks of order cancellations and defaults on payment in the Solar segment outlined in the previous year were reduced by the improved economic situation in the solar industry.

Measures

LPKF is continuing to work on making the organization more flexible to ensure that it can anticipate larger project-related fluctuations in the business. In the solar business, the agreed payment terms and other contractual conditions provide a certain level of protection against cancellations and payment defaults. A considerable portion of the default risk can also be insured.

Effects on economic position

Possible order cancellations can have a negative impact on the Group's revenue and earnings if, for example, capacities cannot be wound down fast enough or used by other business units. The Solar business is stabilizing, at least in the medium term, based on current customer projects.

Taking into account the overall circumstances, this risk is considered less likely to occur than before. Due to the current order situation, any possible loss is categorized as material.

7.2.3 Technological developments / market acceptance

Cause

As a technology company, LPKF primarily markets manufacturing solutions for current technical issues. There is a risk that the demand for LPKF's manufacturing technologies will develop adversely due to changes in end customer markets or that markets will not accept or only to a limited degree accept the new technologies developed by LPKF. In the markets, some of which can be quite cyclic, there is an additional risk when the capacity and willingness to invest in new technology diminishes temporarily in response to the state of the economy. The emergence of competing techniques can lead to declining revenue and income, in particular if these techniques should prove to be technologically and / or economically advantageous.

The competitive situation and the rapidly changing technological requirements are associated with cross-segment risks. LPKF's success significantly depends on the speed and quality with which new products can be developed to market readiness and customers can be convinced of the developed technologies.

Measures

Permanent follow-up by the Supervisory Board and the Management Board is an integral part of the risk management system to review the sustainable value of new developments and integrate these findings into the product strategy. This follow-up also involves the division heads and technology management. The development of high-quality products in a structured, expeditious flow of development projects is supported by a structured idea generation and development process. In addition to frequently achieving cost benefits by investing in LPKF's technology, LPKF's customers can also enjoy competitive benefits and harness the associated market opportunities. This requires continuous engagement with the market and close contact with end customers. In this way, it has been possible to repeatedly replace established technologies with laser-based processes. New applications are developed and promoted for existing technologies. The technologies are also protected by patents.

Effects on economic position

In 2017, LPKF once again generated a significant share of its revenue with fresh products and developed a major innovation, the LIDE technology, to readiness for series production. The planning for the coming years assumes that this success can be continued. On the whole, innovation is critically important for the LPKF Group. The competitive situation and rapidly changing technological requirements necessitate a flexible and dynamic development process. The occurrence of risks related to technological development and market acceptance is currently considered possible. With respect to technological developments, the potential financial effects are considered moderate if demand for manufacturing technologies develops adversely. In terms of market acceptance, the financial effects are considered material, particularly if a technology developed with great effort in terms of costs and time is not accepted by the market.

7.2.4 Patent risks

Cause

The LPKF Group owns 45 patent families, and most of them are international. LPKF continually applies for new patents thanks to its intense development activities. It may also acquire the industrial property rights or usage rights of third parties. LPKF considers the obtaining of patent rights to be the most effective way of preventing its R&D investments to be devalued by copyists. Existing or new industrial protection rights of third parties cannot be precluded and might have an impact on the financial condition of LPKF. There is also the risk that competitors might successfully challenge LPKF's patents.

Measures

In general, these risks are addressed with comprehensive innovation and product management and close cooperation with internationally active patent attorneys. LPKF is also in close contact with customers and other sources of information and, in this way, tries to identify and counter risks in this area at an early stage. Furthermore, by intensively pursuing R&D activities, LPKF always strives to gain a technological edge over its competitors and possible patent infringers. If successful, this is an effective additional measure of protection against copying and the theft of intellectual property.

Effects on economic position

Due to the significant decline in the importance of the LDS business and the associated patent situation for the LPKF Group, the possible financial consequences in this area can be described as moderate. This risk is currently estimated to be less likely to occur.

7.2.5 Personnel risks

Cause

Demand for qualified technical personnel in both mechanical engineering and manufacturing remains high. LPKF's business performance in the previous year in conjunction with the necessary communication had a mostly negative effect on its employer brand on the market. Due to capacity reductions in 2016 and consolidation in 2017, only a relatively small number of jobs were advertised outside the Company. Accordingly, only some 400 applications were received by the German sites. This situation has become more demanding in recent years as a result of the growing skills shortage, particularly in technical departments.

Due to the high level of qualifications of LPKF's staff, all segments are exposed to the risk of losing key employees with important know-how as a result of head hunting and not being able to fill vacancies in a timely manner.

Measures

An attractive working environment and development opportunities within the LPKF Group are offered to employees to retain high performers in the Company. Particular value is placed on individual flexibility, compensation that reflects performance and a good working atmosphere. Executives have an important role to play in maintaining employee satisfaction and retaining staff. Leadership issues were the focus in many discussions and meetings, including in events for managers. HR marketing will continue to be important to position LPKF on the labor market as an attractive employer among small- and medium-sized mechanical engineering firms. Investment in systematic personnel development once again increased in 2017 and continuing professional and personnel development measures aligned with the needs of employees were initiated. There is increased demand for technical personnel in the Solar business due to the strong order and project situation. This business also makes use of employees in other segments and includes external service providers in its recruiting.

Effects on economic position

Thanks to its attractive work environment, contacts with universities and the growing level of awareness the Company enjoys in the laser sector, LPKF had problems attracting adequately trained staff only in a few cases. Strong demand for internships and traineeships, the number of unsolicited applications received and the very short time it usually takes to fill positions are evidence of this. However, there continues to be a risk in all segments associated with the loss of key employees with important know-how as a result of head hunting. This risk is currently estimated to be possible to occur. The financial effects can be described as moderate.

7.2.6 Financial risks

Cause

An unfavorable business trajectory coupled with the lack of access to cash tied up in assets can result in a downturn in the liquidity of the Group. External influences, such as deterioration in the financing environment, a rating change or customer payment difficulties can also adversely affect the liquidity situation. This risk affects all segments.

Measures

LPKF has reduced its cost base since 2016 and worked hard on optimizing working capital management. The SPRINT project was launched with external support to continue these measures and improve processes. Numerous talks were held the financing banks, during which the initiated measures and their effectiveness were discussed and reviewed. Openness and transparency were essential in this context in order to secure long-term collaboration with the financing partners. The same is true for communication with the capital markets.

The Company uses suitable information sources in an effort to assess financial risks at the level of customers, the relevant markets and economic conditions and, if necessary, to hedge these with credit default insurance.

Effects on economic position

The economic position of the Group can be affected materially by financial risks. The current economic environment is viewed as fairly positive. The initiated measures had the desired effect. As a result, the financial situation remained stable. LPKF therefore considers it unlikely that such risks will materialize.

7.2.7 Other risks

In addition to the significant risks described above, the Group is also exposed to the following risks, among others:

Exchange rate fluctuations

Cause

The exchange rates between foreign currencies and the euro can undergo major fluctuations. For LPKF, the main fluctuations are those with regard to the US dollar (USD) and the Chinese renminbi (CNY). This risk also includes obligations from hedging relationships entered into that arise from delays in the underlying transaction (e. g., late receipt of USD already sold). As a rule, LPKF invoices in euros. Only transactions with American customers are sometimes billed in USD. If business is invoiced in euros, exchange rate volatility can have an indirect effect on LPKF's competitiveness because most of its competitors are not from the eurozone and material costs at LPKF are incurred in euros.

Measures

LPKF closes hedging transactions to protect itself against exchange rate risks involving business transactions invoiced in foreign currencies. This part of the risk management is handled by the parent Company in Garbsen, Germany, also on behalf of subsidiaries, if required. In accordance with the risk management strategy, most of the foreign currency cash flow is either used for procuring materials in the dollar countries or hedged by engaging in forward exchange transactions.

Effects on economic position

Fluctuations in exchange rates can have a moderately positive or negative effect on earnings. Counter measures are permanently reviewed and implemented to the degree possible. The appreciation of the euro against the US dollar and important Asian currencies seen in 2017, is in principle considered to be negative rather than positive for competitiveness and the business in general.

IT risks

Cause

In terms of its information, its international activities and the IT systems used to process it, the Group is potentially exposed to the risk of industrial espionage or disruptions by internal or external perpetrators, just as other innovative companies.

Measures

By implementing redundant IT infrastructures, LPKF protect itself against risks that occur in the event of a systems failure or natural disaster. Security is also ensured by means of a restrictive policy for granting access authorizations to systems and information as well as by maintaining distributed backups of business-critical data. The Company uses various IT security technologies to mitigate the risk of unauthorized access to Company data. In addition to technical measures, LPKF also provides training to all employees. IT security measures are evaluated on an ongoing basis by way of audits conducted by both internal staff and external consultants. In this context, LPKF adheres to national and international standards. The results are structured for management and serve as a planning and decision-making tool for further risk management. There is a separate budget planning for IT security at LPKF.

Effects on economic position

The performance of many security measures is sometimes costly, but results in LPKF being able to classify the likelihood of occurrence of a risk and possible loss as moderate. A residual risk that cannot be fully managed exists with regard to IT security due to the rapid pace of continuing technical developments.

7.3 Assessment by the Management Board of the risk situation affecting the Group

The macroeconomic environment for LPKF AG improved in 2017 as a result of the positive performance of the economy. The sectors relevant to the Company exhibited different trends during the financial year ended. Economic research institutes forecast a slight upward trend for 2018 and the following years, characterized by economic uncertainties. On the whole, planning reliability and the foreseeability of business trends continue to be low in most business segments. Financial risks have decreased slightly because of LPKF's business development in 2017. However, the various individual risks only have a limited influence on the overall risk situation of the Group and have not led to any significant changes compared with the previous year.

A review of the overall risk situation of the LPKF Group concluded that there are currently no concrete risks jeopardizing the Group's existence as a going concern.

There is also currently no foreseeable development which could significantly and sustainably harm the profit or loss, cash flows and financial position of the LPKF Group in the future. There is, however, a continued possibility that the effects of a significant economic slowdown, particularly in China, could impede the further development of LPKF. The extent to which a change in foreign trade policy in the United States will expose LPKF to risk still cannot be estimated.

The auditor of the financial statements reviewed LPKF AG's risk early warning system set up pursuant to the German Stock Corporation Act (Aktiengesetz). This review revealed that the existing Groupwide risk early warning system is fit for purpose, meets the requirements of the German Stock Corporation Act and is suitable for detecting developments that jeopardize the Company's continued existence as a going concern at an early stage.

8 REPORT ON EXPECTED DEVELOPMENTS

8.1 OVERALL APPRAISAL OF THE GROUP'S PROBABLE PERFORMANCE

8.1.1 Economic environment

The upturn in the economy will continue in the current year and 2019. The IfW therefore expects global economic growth to rise by 3.9% in 2018 and 3.6% in 2019. Despite the robust economic outlook, only a gradual price increase and thus low inflation is expected. The International Monetary Fund (IMF) forecasts global economic growth of 3.9% for both 2018 and 2019, with Europe and Asia providing significant momentum.

While developed economies will benefit from the rising demand expected from emerging markets, the IfW expects economic output to increase more moderately in the next two years, by 2.4% in 2018 and 1.9% in 2019, due to the relatively high capacity utilization already achieved. After strong performance in 2017, the US economy is expected to improve further in 2018. By contrast, economic output in the eurozone is likely to increase to a similar extent as in the previous year.

In Germany, experts predict that economic output will rise at least as much this year as in the previous year. According to an economic survey conducted by the German Chambers of Industry and Commerce, exports will benefit from robust global economic development and the associated increase in investments and will rise further. In the United Kingdom, economic experts believe that the imminent withdrawal from the EU will lead to significantly subdued economic development both this year and next.

Economic output in emerging markets will grow at a similar rate to last year, rising by 5.2% this year and 5.0% the following year. The primary reason for this is the slowdown in economic expansion in China, as containing the increase in debt and structural change are high on the government's agenda.

While the risks to economic development arising from political uncertainty have decreased, the focus is now shifting to the normalization of monetary policy. This could lead to the kind of insecurity on the capital markets witnessed recently, and might also result in corrections in asset prices, yields and exchange rates. Although the economic policy of the USA under President Trump is giving rise to uncertainty about global economic development, this is difficult to quantify. While the economic programs announced have largely failed to materialize so far, the tax reforms led to positive economic effects. The trade restrictions announced so far have primarily been imposed upon China.

In addition to economic development, the engineering, automotive, solar and electronics sectors, with a focus on the consumer electronics and plastics processing industries, are also important factors in the business performance of LPKF AG.

The German Engineering Federation (Verband Deutscher Maschinen- und Anlagenbau e. V.) expects the economic upturn to continue in the current year. As a result, production is likely to rise at a similar rate to 2017 of 3%.

The German Automotive Industry Association (VDA) anticipates further growth in the global passenger car market in 2018. New registrations are projected to grow by 1% worldwide to approximately 86 million units this year.

Installed photovoltaic capacity is also expected to rise significantly. Bloomberg anticipates a worldwide increase of between 94 and 111 GW in 2018 and between 107 and 121 GW in 2019, which would be significantly more than in 2017.

In the smartphone segment of the consumer electronics sector, Gartner expects sales of new devices to climb by 2.6% to a total of 1.903 billion units in 2018.

The German plastics processing industry is expected to continue performing well.

8.1.2 Group performance

Economists expect the upturn to continue in 2018 and 2019. This provides very good conditions for the business performance of the globally operating, export-oriented LPKF Group.

The LPKF Group’s high degree of diversification reduces its dependence on individual market segments. The Company anticipates above-average growth in the Solar segment. Robust growth is expected to continue in the Development segment.

LPKF also anticipates strong growth in the Welding segment due to its significant market potential.

LPKF expects the Electronics segment to grow at an average rate. New cutting and PCB drilling systems should boost growth in this area. The Group does not envisage growth in the LDS and Stencil businesses. Expectations of the LDS business have been reduced to an very low level.

LPKF also expects the new LIDE and LTP technologies to provide fresh stimulus for growth over the next few years. Both technologies are scheduled to be introduced to their respective markets in 2018. As a result, smaller quantities that will primarily be sold to customers in the R&D sectors are still planned for 2018. LIDE technology can process extremely thin glass precisely and efficiently and can therefore be harnessed for microsystems technology. LTP offers a new alternative to widespread screen printing and will be used for the digital printing of pastes. LPKF sees a variety of applications for both technologies. However, it is difficult to predict how long it will be until customers are ready to convert their production to these new techniques.

8.1.3 Development of significant indicators and outlook 2017

Revenue in financial year 2017 reached EUR 102.2 million, thus exceeding the prior-year figure by 12.0%. The sharp rise in revenue, the improved fixed cost base and the non-recurrence of the extraordinary expenses seen in the previous year lifted EBIT from EUR – 6.8 million in the previous year to EUR 3.4 million. The EBIT margin rose from – 7.4% to 3.3%. Adjusted for extraordinary items (insurance compensation: EUR +2.2 million; restructuring expenses: EUR – 0.7 million) EBIT stood at EUR 2.4 million with an EBIT margin of 2.4%.

Improved management of inventories and receivables also kept inventories at a lower level during the year and resulted in net working capital of EUR 33.3 million at the year end. The net working capital ratio fell to 32.6%.

At EUR 113.4 million, incoming orders during the reporting period were 7% up on the previous year's level. Orders on hand at the end of the year totaled EUR 38.8 million, up 39% year-on-year. This provides LPKF with a good foundation on which to start the new financial year.

2018

The Management Board expects the global economy to remain stable in 2018, with consolidated revenue of between EUR 103 million and EUR 108 million and return on capital employed (ROCE) between 2% and 7%. An EBIT margin of up to 6% is thus predicted. This results in planning for EBIT of up to EUR 6.5 million in 2018.

The net working capital ratio is expected to fall below 33%, which corresponds to net working capital of less than EUR 34 million for the forecast period. This would be on the same level as the previous year. Regarding the error rate, LPKF expects it to improve slightly.

2020

LPKF aims to generate a ROCE of between 10% and 15% by 2020. This improvement is expected to result from a growing business, particularly in light of new products and an optimized fixed cost base.

9 RESPONSIBILITY STATEMENT

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 material opportunities and risks associated with the expected development of the Group.

Garbsen, Germany, 20 March 2018

Kai Bentz   Bernd Lange   Dr.-Ing. Christian Bieniek

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CONSOLIDATED STATEMENT OF FINANCIAL POSITION

as of 31 December 2017

ASSETS

EUR thsd.	Note	31 Dec. 2017	31 Dec. 2016
Non-current assets			
Intangible assets	10		
Goodwill		74	74
Development costs		13,541	13,266
Other intangible assets		1,826	1,928
		15,441	**15,268**
Property, plant and equipment	10		
Land, similar rights and buildings		38,642	38,611
Plant and machinery		3,859	4,801
Other equipment, operating and office equipment		3,955	4,929
Advances paid and construction in progress		0	0
		46,456	**48,341**
Financial assets			
Other borrowings		0	0
		0	**0**
Restricted securities		**0**	**0**
Receivables and other assets			
Trade receivables	12	107	214
Income tax receivables	13	0	0
Other assets	13	124	69
		231	**283**
Deferred taxes	15	**1,731**	**2,514**
		63,859	**66,406**
Current assets			
Inventories	11		
(System) parts		13,617	12,512
Work in progress		3,625	3,179
Finished products and goods		8,086	9,162
Advances paid		200	108
		25,528	**24,961**
Receivables and other assets			
Trade receivables	12	19,401	19,781
Income tax receivables	13	198	434
Other assets	13	4,236	1,770
		23,835	**21,985**
Cash and cash equivalents	14	3,345	3,584
		52,708	**50,530**
		116,567	**116,936**

EQUITY AND LIABILITIES

EUR thsd.	Note	31 Dec. 2017	31 Dec. 2016
Equity	16		
Subscribed capital		22,270	22,270
Capital reserves		1,489	1,489
Other retained earnings		10,942	10,933
Reserve for cash flow hedges		0	0
Revaluation surplus		0	0
Share-based payment reserve		490	490
Currency translation reserve		338	1,595
Net retained profits		18,703	17,553
Non-controlling interests	18	0	0
		54,232	**54,330**
Non-current liabilities			
Provisions for pensions and similar obligations	17	329	290
Other provisions	18	0	24
Non-current liabilities to banks	19	20,045	22,630
Deferred income from grants	3	627	679
Non-current liabilities to banks	21	0	0
Deferred taxes	15	568	512
		21,569	**24,135**
Current liabilities			
Tax provisions	18	0	178
Other provisions	18	3,707	3,164
Current liabilities to banks	19	20,952	20,852
Trade payables	19	3,227	3,071
Other liabilities	19	12,880	11,206
		40,766	**38,471**
		116,567	**116,936**

CONSOLIDATED INCOME STATEMENT

from 1 January to 31 December 2017

EUR thsd.	Note	2017	2016
Revenue	1	102,067	91,124
Changes in inventories of finished goods and work in progress		-689	– 2,288
Other own work capitalized	2	3,559	4,902
Other operating income	3	5,728	5,784
		110,665	**99,522**
Cost of materials	4	33,807	31,029
Staff costs	5	41,897	43,895
Depreciation, amortization and impairment losses	6	7,677	8,057
Other operating expenses	7	23,332	23,293
Operating result (EBIT)		**3,952**	**– 6,752**
Finance income	8	4	6
Finance costs	8	945	832
Earnings before tax		**3,011**	**– 7,578**
Income taxes	9	1,861	1,244
Consolidated net profit		**1,150**	**– 8,822**
Of which attributable to			
Owners of the parent		1,150	– 8,822
Non-controlling interests		0	0
		1,150	**– 8,822**
Earnings per share (basic)	21	EUR 0.05	EUR – 0.40
Earnings per share (diluted)	21	EUR 0.05	EUR – 0.40

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

from 1 January to 31 December 2017

EUR thsd.	Note	2017	2016
Consolidated net profit		1,150	– 8,822
Revaluations (mainly actuarial gains and losses)		20	– 17
Deferred taxes		– 11	17
Sum total of changes which will not be reclassified to the income statement in the future		**9**	**0**
Fair value changes from cash flow hedges reclassified to the income statement		0	0
Currency translation differences		– 1,257	– 350
Sum total of changes which will be reclassified to the income statement in the future if certain conditions are met		**– 1,257**	**– 350**
Other comprehensive income after taxes		**– 1,248**	**– 350**
Total comprehensive income		**– 98**	**– 9,172**
EBIT margin		**3.9%**	**– 7.4%**

CONSOLIDATED STATEMENT OF CASH FLOWS

from 1 January to 31 December 2017

EUR thsd.	Note	2017	2016
Operating activities			
Consolidated net loss		1,150	– 8,822
Income taxes		1,861	1,244
Interest expense		945	832
Interest income		– 4	– 6
Depreciation, amortization and impairment losses		7,677	8,057
Gains / losses from the disposal of non-current assets including reclassification to current assets		175	78
Changes in inventories, receivables and other assets		– 4,149	– 5,885
Changes in provisions		559	120
Changes in liabilities and other equity and liabilities		578	4,637
Other non-cash expenses and income		1,647	6,574
Interest received		4	7
Income taxes paid		– 869	– 1,167
Cash flows from operating activities		**9,574**	**5,669**
Investing activities			
Investments in intangible assets		– 3,835	– 5,447
Investments in property, plant and equipment		– 2,717	– 2,022
Proceeds from disposal of financial instruments		0	0
Proceeds from disposal of non-current assets		292	21
Cash flows from investing activities		**– 6,260**	**– 7,450**
Cash flows from financing activities			
Dividend payment		0	0
Interest paid		– 945	– 832
Proceeds from borrowings		0	10,000
Cash repayments of borrowings		– 9,841	– 2,916
Cash flows from financing activities		**– 10,786**	**6,252**
Change in cash funds			
Change in cash funds due to changes in foreign exchange rates		– 121	27
Change in cash funds		– 7,472	4,472
Cash funds on 01 January		**3,581**	**– 917**
Cash funds on 31 December		**– 4,012**	**3,581**
Composition of cash funds			
Cash and cash equivalents		3,345	3,584
Overdrafts		– 7,357	– 3
Cash funds on 31 December	**20**	**– 4,012**	**3,581**

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

as of 31 December 2017

EUR thsd.	Subscribed capital	Capital reserves	Other retained earnings
Balance as of 01 Jan. 2017	**22,270**	**1,489**	**10,933**
Consolidated total comprehensive income			
Consolidated net profit	0	0	0
Revaluations (mainly actuarial gains and losses)	0	0	20
Deferred taxes on changes recognized directly in equity	0	0	–11
Currency translation differences	0	0	0
Consolidated total comprehensive income	**0**	**0**	**9**
Transactions with owners			
Capital increase from Company funds	0	0	0
Appropriation to retained earnings	0	0	0
Distributions to owners	0	0	0
Balance as of 31 Dec. 2017	**22,270**	**1,489**	**10,942**

EUR thsd.	Subscribed capital	Capital reserves	Other retained earnings
Balance as of 01 Jan. 2016	**22,270**	**1,489**	**10,933**
Consolidated total comprehensive income			
Consolidated net profit	0	0	0
Reclassification of cash flow hedge reserve to the income statement	0	0	0
Revaluations (mainly actuarial gains and losses)	0	0	–17
Deferred taxes on changes recognized directly in equity	0	0	17
Currency translation differences	0	0	0
Consolidated total comprehensive income	**0**	**0**	**0**
Transactions with owners			
Distributions to owners	0	0	0
Balance as of 31 Dec. 2016	**22,270**	**1,489**	**10,933**

	Cash flow hedge reserve	Share-based payment reserve	Currency translation reserve	Net retained profits	Total equity
	0	**490**	**1,595**	**17,553**	**54,330**
	0	0	0	1,150	1,150
	0	0	0	0	20
	0	0	0	0	–11
	0	0	–1,257	0	–1,257
	0	**0**	**–1,257**	**1,150**	**–98**
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	**490**	**338**	**18,703**	**54,232**

	Cash flow hedge reserve	Share-based payment reserve	Currency translation reserve	Net retained profits	Total equity
	0	**490**	**1,945**	**26,375**	**63,502**
	0	0	0	–8,822	–8,822
	0	0	0	0	0
	0	0	0	0	–17
	0	0	0	0	17
	0	0	–350	0	–350
	0	**0**	**–350**	**–8,822**	**–9,172**
	0	0	0	0	0
	0	**490**	**1,595**	**17,553**	**54,330**

CONSOLIDATED NOTES 2017

A. BASIC INFORMATION

LPKF Laser & Electronics AG, Garbsen (the Company) and its subsidiaries (hereinafter the LPKF Group) produce equipment and systems for electronics development and production. New laser-based technologies are aimed at customers in the automotive, electronics and solar industries.

The Company is a stock corporation which was established and is headquartered in Germany. Its registered seat is at:

Osteriede 7
30827 Garbsen

These consolidated financial statements were approved for publication by the Management Board on 20 March 2018.

B. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS

The consolidated financial statements of LPKF Laser & Electronics AG, Garbsen, have been prepared using uniform accounting policies. They take into account all International Financial Reporting Standards (IFRS) and all interpretations of the International Financial Reporting Interpretations Committee (IFRIC) as applicable on the reporting date and in the EU.

The consolidated financial statements are prepared on the basis of historical cost, limited by the market valuation of available-for-sale financial assets as well as by the measurement of financial assets and financial liabilities (including derivatives) at fair value through profit and loss.

Preparing IFRS consolidated financial statements requires the use of estimates. Furthermore, the application of Group-wide accounting policies requires assessments by management. Areas that permit greater leeway in terms of assessments or exhibit greater complexity, or where assumptions and estimates are of critical significance to the consolidated financial statements, are discussed in the notes under E.

The financial year corresponds to the calendar year. The consolidated financial statements have been prepared in euros. Unless indicated otherwise, all amounts are shown in thousands of euros (EUR thousand).

The following standards that were amended, revised or issued prior to the reporting date were applied in the 2017 financial year:

ISSUED STANDARDS

Standard / interpretation		Mandatory application	Adopted by the EU commission [1]	Effects
IAS 7	Statement of Cash Flows: Disclosures in the Notes	01 Jan. 2017	09 Nov. 2017	none
IAS 12	Income Taxes: Recognition of Deferred Tax Assets for Unrealized Losses	01 Jan. 2017	09 Nov. 2017	none
IFRS 12	Annual Improvements Cycle 2014 – 2016	01 Jan. 2017		none

1 Balance as of 31 December 2017

Initial application of these pronouncements and amendments did not have any material effects on the current or previous presentation of the Group's net assets, financial position and results of operations.

The following standards that were amended, revised or issued prior to the reporting date were not applied in the 2017 financial year:

ISSUED STANDARDS

Standard / interpretation		Mandatory application	Adopted by the EU commission [1]
IFRS 9	Financial Instruments (July 2014)	01 Jan. 2018	22 Nov. 2016
IFRS 15	Revenue from Contracts with Customers	01 Jan. 2018	22 Sep. 2016
IFRS 2	Classification and Measurement of Share-based Payment	01 Jan. 2018	not yet adopted
IFRS 4	Insurance Contracts	01 Jan. 2018	09 Nov. 2017
IFRIC 22	Foreign Currency Transactions and Advance Consideration	01 Jan. 2018	not yet adopted
IAS 40	Investment Property	01 Jan. 2018	not yet adopted
IFRS 1 IAS 28	Annual Improvements Cycle 2014 – 2016	01 Jan. 2018	not yet adopted
IFRS 15	Amendments to IFRS 15: Clarification to IFRS 15	01 Jan. 2018	31 Oct. 2017
IFRS 16	Leases	01 Jan. 2019	09 Nov. 2017
IFRIC 23	Uncertainty over Income Tax Treatments	01 Jan. 2019	not yet adopted
IAS 28	Investments in Associates and Joint Ventures (2011)	01 Jan. 2019	not yet adopted
IFRS 9	Financial Instruments (amendments)	01 Jan. 2019	not yet adopted
IFRS 3 IFRS 11 IAS 12 IAS 23	Annual Improvements Cycle 2015 – 2017	01 Jan. 2019	not yet adopted
IFRS 10 IAS 28	Sale of Assets of an Investor	Postponed indefinitely	not yet adopted
IFRS 17	Insurance Contracts	01 Jan. 2021	not yet adopted

1 Balance as of 31 December 2017

IFRS 9 FINANCIAL INSTRUMENTS

The IFRS 9 Financial Instruments standard issued by the IASB on 24 July 2014 is a three-phase project to replace IAS 39 Financial Instruments: Recognition and Measurement. The standard governs the classification and measurement of financial instruments, accounting for the impairment of financial assets and hedge accounting. For EU entities applying IFRSs, the standard is mandatory for financial years beginning on or after 1 January 2018.

The key requirements of the final version of IFRS 9 are as follows:

- The requirements of IFRS 9 regarding the scope of application and recognition and derecognition remain largely the same as in the previous standard, IAS 39 Financial Instruments: Recognition and Measurement.
- However, IFRS 9 stipulates a new classification model for financial assets different from that in IAS 39.

- Going forward, remeasurement of financial assets will be according to three categories with different methods of measuring value and recognizing changes in value. The classification depends on the contractual cash flows of the financial instrument on the one hand and on the business model in which they are held on the other hand. Measurement is at amortized cost using the effective interest method (AC category), at fair value through other comprehensive income (FVTOCI category), or at fair value through profit or loss (FVTPL category). These are mandatory classifications with companies having options under certain circumstances.
- Most of the rules in IAS 39 regarding financial liabilities were transferred to IFRS 9. The only material change relates to financial liabilities to which the fair value option is applicable. Fluctuations of the fair value resulting from changes in the credit risk of the liability must be recognized in other comprehensive income in this case.
- The new impairment model in IFRS 9 stipulates three stages that determine the amount of the loss to be recognized and the calculation of interest revenue. Losses expected on addition must be recognized in the amount of the present value of a 12-month expected credit loss (Stage 1). If there is a significant increase in credit risk, a loss allowance for lifetime expected credit losses is recognized (Stage 2). Where there is objective evidence of impairment, the interest revenue is calculated on the net carrying amount (carrying amount less loss allowance) (Stage 3).
- The revised hedge accounting rule in IFRS 9 still includes three methods of hedge accounting that are also available in IAS 39. However, the new rules offer additional options for applying hedge accounting and allow the entity to better reflect its risk management activities in its financial statements. The key changes relate to the expanded scope of possible underlying transactions and hedging instruments as well as new rules regarding the effectiveness of hedges, in particular the elimination of the 80 – 125% corridor in place to date.

Based on initial analyses, the effects of the new standard on the LPKF Group are estimated to be minimal.

On the asset side, the Group has financial instruments classified in the loans and receivables category under IAS 39 that are measured at fair value. In the future, these will be measured at amortized cost. They mainly comprise trade receivables and cash and cash equivalents. Trade receivables are held for the purpose of collecting the nominal value of the receivables. They are therefore assigned to the “hold to collect” business model, just like cash and cash equivalents. According to this approach, both will be allocated to the AC category going forward as per IFRS 9 and will continue to be measured at amortized cost. Since receivables generally have a short term and do not carry interest, the effective interest rate is deemed to be zero, and the amortized cost is equal to the nominal value.

On the liabilities side, the Group has financial liabilities that are also measured at amortized cost. These mainly include liabilities to banks and trade payables. According to IFRS 9, financial liabilities must be subsequently measured at amortized cost as long as they do not meet the exclusion criteria in IFRS 9.4.2.1. It is assumed that the existing financial liabilities will not meet the exclusion criteria. They will therefore also continue to be measured at amortized cost.

Forward contracts and options used to hedge exchange rate risk fall under the “held for trading” category according to IAS 39 and are measured at fair value through profit or loss. In the future, the derivatives will be classified as FVTPL in accordance with IFRS 9, which means they will continue to be measured through profit or loss.

The new impairment model in IFRS 9 will be relevant particularly to trade receivables, which generally have a short term and as a result do not include any material interest rate components. For this reason, the simplified approach in accordance with IFRS 9 can be applied. According to this approach, the expected loss for receivables due in less than 12 months is equal to the expected loss for the remaining term. Transferring items from Stage 1 to Stage 2 according to IFRS 9 is therefore unnecessary. As a result, the new three-stage impairment model according to IFRS 9 is only expected to have a minimal effect.

IFRS 9 has been applied retrospectively by LPKF since 01 January 2018.

IFRS 15 REVENUE FROM CONTRACTS WITH CUSTOMERS

IFRS 15 stipulates when and in what amount entities preparing their financial statements according to IFRSs must recognize revenue. In addition, entities are required to provide the users of financial statements with more informative and relevant data than previously. IFRS 15 must generally be applied to all contracts with customers. The following contracts are an exception to this rule:

- Leases within the scope of IAS 17 Leases;
- Financial instruments and other contractual rights or obligations within the scope of IFRS 9 Financial Instruments, IFRS 10 Consolidated Financial Statements, IFRS 11 Joint Arrangements, IAS 27 Separate Financial Statements, or IAS 28 Investments in Associates and Joint Ventures;
- Insurance contracts within the scope of IFRS 4 Insurance contracts; and
- Non-financial barter transactions between companies in the same industry intended to simplify sales to customers or potential customers.

In contrast to the currently applicable rules, the new standard stipulates a single principle-based, five-step model that must be applied to all contracts with customers. According to the five-step model, the entity must identify the contract with the customer, identify the performance obligations in the contract, determine the transaction price, allocate the transaction price to the individual performance obligations, and ultimately recognize revenue when the entity satisfies a performance obligation.

According to IFRS 15, a determination must be made when a contract is signed whether the revenue stemming from the contract will be recognized at a particular point in time or over a time period. The relevant factor here is whether control over the performance obligation has passed over time or at a specific point in time.

In addition to general revenue recognition principles, the standard contains detailed implementation guidelines on issues such as sales with a right of return, customer options for additional goods or services, principal versus agent considerations, and bill-and-hold arrangements.

Finally, the standard also includes extensive new rules regarding disclosures on revenue in the financial statements of an entity applying IFRSs.

In particular, the entity must make qualitative and quantitative disclosures on all of the following points:

- Existing contracts with customers
- Significant judgments and changes in the judgments made in applying the revenue rules to those contracts
- Any assets recognized from the costs to obtain or fulfill a contract with a customer
- Any liability resulting from the obligation to transfer goods and services to a customer for which consideration has been received by this customer

The standard is mandatory for financial years beginning on or after 1 January 2018. The initial application at LPKF will be according to the modified retrospective method according to which IFRS 15 will be applied throughout the Group as of 1 January 2018, with the cumulative effects of initial application reported in retained earnings. On initial application, LPKF will take advantage of the simplification options for the modified retrospective method provided for in the standard.

LPKF began conducting extensive analyses before implementation of IFRS 15. In this process, contracts and the business model and its effects were analyzed. Based on these analyses, adjustments have already been made to the reporting system and reports.

The core business of the LPKF Group is the sale of equipment and systems for electronics development and production. As a result, the following areas are relevant for the IFRS 15 analysis:

- Sale of machines
- Maintenance contracts
- Repair services
- Guarantees

In sales of equipment and machines, the revenue is generated at a specific time and is thus recognized on transfer of control. The application of IFRS 15 will not result in any changes in revenue recognition in this context.

Maintenance contracts and repair services generally have a term of less than one year. These services are considered separate performance obligations and meet the conditions for recognition of the revenue over time. The revenue is therefore recognized according to when the service is performed. This is true for contracts with a term of less than one year as well as contracts with a term exceeding one year. No material effects are anticipated in this regard.

The majority of guarantees are legally prescribed guarantees which cannot be acquired separately. As a result, these guarantee services will continue to be recognized in accordance with IAS 37 Provisions, Contingent Liabilities and Contingent Assets, which is how they are accounted for currently. In exceptional cases, guarantee extensions are sold. From 01 January 2018 onward, in accordance with IFRS 15 these will be reported as separate performance obligations, allocated a transaction price, and the revenue realized over a period of time.

Based on the analyses, the effects on revenue of the implementation of IFRS 15 are estimated to be very minimal. For financial year 2018, the change from recognizing revenue at a point in time to over a period of time and the allocation of revenue to separate performance obligations are expected to result in only an insignificant effect of less than 1% of revenues from shift in the timing of revenue recognition. This effect stems mostly from guarantee extensions.

IFRS 16 LEASES

IFRS 16 must generally be applied to all leases as of 01 January 2019. The standard includes a comprehensive model for identifying lease agreements and for accounting at both the lessor and the lessee. A lease as defined in IFRS 16 exists if the lessee is granted contractual rights by the lessor to control an identifiable asset for a specified period of time, and the lessor receives consideration from the lessee in return.

The distinction in effect to date between operating and finance leases is eliminated in the new standard. In the future, the lessee must report a right of use for the leased object and a corresponding lease liability for all leases. Exceptions are made for short-term leases and lease agreements covering low-value assets. The right-of-use asset is recognized in the amount of the lease liability plus any initial direct costs of the lessee on addition. Subsequent measurement of the asset is at amortized cost with two exceptions. The amount of the lease liability is equal to the present value of the lease payments not yet due. Changes in lease payments trigger remeasurement of the lease liability.

The disclosure requirements of IFRS 16 are much more extensive than those in IAS 17. This is expected to give financial statement readers a better understanding of the effects of leases on an entity's net assets, financial positions and results of operations.

At the LPKF Group, only operating leases are currently used, including vehicle leases and rental leases. Therefore, the asset is currently not recognized. Initial assessments indicate that the right-of-use assets and related lease liabilities must be reported as a rule with the application of IFRS 16 starting on 01 January 2019. However, the number of leases falling under the exceptions for short-term leases at the time this standard enters into force must be determined.

The implementation of IFRS 16 will therefore result in changes to the consolidated financial statements. The scope of the effects is currently being determined.

LPKF plans to apply IFRS 16 retrospectively as of 01 January 2019.

Basis of consolidation

In addition to the Group's parent company, LPKF Laser & Electronics Aktiengesellschaft, Garbsen, the following subsidiaries have also been included in the consolidated financial statements:

BASIS OF CONSOLIDATION

Name	Registered seat	Equity interest (previous year) in %	Equity EUR thsd.	Result for the financial year ended EUR thsd.
Fully consolidated				
LaserMicronics GmbH	Garbsen / Germany	100.0 (100.0)	848.2	157.9
LPKF SolarQuipment GmbH	Suhl / Germany	100.0 (100.0)	7,194.9	0.0
LPKF WeldingQuipment GmbH	Fürth / Germany	100.0 (100.0)	286.9	0.0
LPKF Laser & Electronics d. o. o.	Naklo / Slovenia	100.0 (100.0)	5,184.4	1,583.7
LPKF Distribution Inc.	Tualatin (Portland) / USA	100.0 (100.0)	4,986.1	1,099.6
LPKF (Tianjin) Co. Ltd.	Tianjin / China	100.0 (100.0)	9,852.2	199.1
LPKF Laser & Electronics Trading (Shanghai) Co. Ltd.	Shanghai / China	100.0 (100.0)	33.4	– 0.9
LPKF Laser & Electronics (Hong Kong) Ltd.	Hong Kong / China	100.0 (100.0)	1,586.3	14.1
LPKF Laser & Electronics K. K.	Tokyo / Japan	100.0 (100.0)	– 1,495.3	– 340.2
LPKF Laser & Electronics Korea Ltd.	Seoul / Korea	100.0 (100.0)	– 1,466.8	– 780.3

The equity and earnings figures for the financial year just ended concern the financial statements as of 31 December 2017 and represent the balances pursuant to the local financial statements prior to reconciliation for purposes of groupwide recognition and measurement.

The legal structure of the LPKF Group did not change in the 2017 financial year.

With the authorization of the Annual General Meeting on 28 May 2015, a profit transfer agreement with a five-year term effective retrospectively at the beginning of 2015 is in place between LPKF Laser & Electronics AG and LPKF SolarQuipment GmbH. With the authorization of the Annual General Meeting on 02 June 2016, LPKF WeldingQuipment GmbH signed a profit transfer agreement with LPKF Laser & Electronics AG that became effective retrospectively at the beginning of 2016. Due to their inclusion in the consolidated financial statements, LPKF WeldingQuipment GmbH and LPKF SolarQuipment GmbH met the requirements of Section 264 (3) German Commercial Code and to the extent possible made use of the exemption rule.

As of 31 December 2017, LPKF AG had ten subsidiaries, which together with the parent company form the basis of consolidation.

C. CONSOLIDATION PRINCIPLES

The consolidated financial statements are based on the financial statements as of 31 December 2017 of the companies included in the consolidated financial statements, which were prepared in accordance with uniform accounting policies.

Subsidiaries include all entities that are controlled by LPKF AG. LPKF AG controls an investee when it has power over the investee, risk exposure or rights to variable returns arise from its investment in the investee and LPKF AG has the ability to use its power over the investee such that this affects the amount of the investee's variable returns. Consolidation of an investee begins on the day on which LPKF AG gains control over the entity. It ends when LPKF AG loses control over the investee.

Subsidiaries acquired are accounted for using the purchase method. The acquisition costs correspond to the fair value of the assets given, the equity instruments issued and the liabilities incurred or assumed at the acquisition date.

Assets, liabilities and contingent liabilities identifiably in connection with a business combination are remeasured upon initial consolidation, irrespective of the scope of the non-controlling interests. The excess of the cost of the acquisition over the Group's interest in the fair value of the net assets acquired is recognized as goodwill. If the cost of acquisition is lower than the fair value of the net assets of the subsidiary acquired, the difference is recognized directly in profit or loss.

Intra-Group transactions, balances and unrealized gains and losses from transactions between Group companies are eliminated. Deferred taxes are recognized on consolidation measures reported in the income statement.

The accounting policies used by subsidiaries were adjusted as necessary to the Group's uniform accounting policies to ensure uniform accounting.

If the Group loses either its control or significant influence over an entity, its remaining equity interest is remeasured at fair value and the resulting difference is recognized in profit or loss. The fair value of an associate, joint venture or financial asset is the fair value determined upon initial recognition. In addition, the treatment of any amounts shown in other comprehensive income relating to this entity is analogous to the treatment of transactions by the parent company directly disposing of the respective assets and liabilities. This means that any gain or loss previously shown in other comprehensive income must be reclassified from equity to profit or loss.

D. CURRENCY TRANSLATION

Annual financial statements are prepared in the functional currency of each entity; it is defined as the currency of the economic environment in which the entity mainly operates. The functional currency of subsidiaries is the same as the currency of the country in which the subsidiary is domiciled.

If the annual financial statements of a subsidiary are prepared in a functional currency other than the euro, the assets and liabilities are translated into euros at an average exchange rate at the reporting date and equity is translated at the historical exchange rate. Expenses and income are translated at the average annual exchange rate. The translation differences are recognized directly in equity as a currency translation reserve until the subsidiary is disposed of.

The exchange rates of the material currencies that were applied in the preparation of these consolidated financial statements are listed below:

FOREIGN EXCHANGE RATES

	Closing rate		Average exchange rate	
1 euro = currency x	31 Dec. 2016	31 Dec. 2017	2016	2017
US dollar	USD 1.0541	USD 1.1993	USD 1.1066	USD 1.1293
Chinese renminbi yuan	CNY 7.3202	CNY 7.8044	CNY 7.3512	CNY 7.6264
Hong Kong dollar	HKD 8.1751	HKD 9.372	HKD 8.5900	HKD 8.8012
Japanese yen	JPY 123.40	JPY 135.01	JPY 120.31	JPY 126.65
South Korean won	KRW 1,269.36	KRW 1,279.61	KRW 1,284.57	KRW 1,275.83

E. CRITICAL ACCOUNTING AND MEASUREMENT ESTIMATES AND ASSUMPTIONS

All estimates and assessments are continuously updated and are based on historical experience and other factors including expectations of future events that are believed to be reasonable under the circumstances.

The Group makes assessments and assumptions that concern the future. Estimates based on these assessments and assumptions often do not correspond to actual facts in the future. The estimates and assumptions associated with a significant risk of triggering material adjustments to the carrying amounts of assets and liabilities within the next financial year are discussed in the following.

(a) Estimated impairment of goodwill

In accordance with the accounting policy described in note 10.1, the Group tests goodwill for impairment annually and whenever there is a concrete indication of possible impairment. The recoverable amount of cash generating units (CGUs) was determined based on a calculation of their value in use. These calculations must be based on assumptions made by the management on 31 December 2017.

(b) Intangible assets and property, plant and equipment

Material assumptions and estimates refer to determining the useful lives and the recoverable residual values of intangible assets and items of property, plant and equipment. More details regarding useful lives and residual values are presented under note 10, “Non-current assets” in chapter H “Consolidated statement of financial position”.

(c) Provisions

Accounting for provisions involves making assumptions regarding probability, maturity and risk level. Actuarial calculations are used to determine the obligation from defined-benefit pension commitments and termination benefits paid to employees as well as the obligation from a long-term bonus program launched for the first time in 2012. The amount of the pension provisions is essentially dependent on the life expectancies on which it is based, and the choice of discount rate which is redetermined every year. The discount rate is based on the interest rate paid on high-quality corporate bonds in that currency in which the benefits are paid and whose maturities correspond to the pension obligations. Key parameters in the calculation of provisions for anniversary payments and termination benefits are employee turnover and the salary growth factor. Detailed information is provided in note 17 describing pension provisions. An option pricing model is used to calculate the value of the obligation arising from the long-term bonus program settled in cash due to the influence exerted by LPKF’s share price. Another material factor is the performance of the EBIT margin, which is derived from the Group’s planning. Detailed information is provided in note 18 describing other provisions.

(d) Income taxes

The Group is subject to income tax payments in various countries. Material assumptions are therefore required to determine income tax provisions on a global scale.

There are numerous business transactions and calculations for which the ultimate level of taxation cannot be finally determined during the course of normal business activities. The Company determines the amount of the provisions for expected tax audits based on best estimates of whether and to what extent additional income taxes may become payable. If the final level of taxation of these business transactions deviates from the initial assumptions, this will have an impact on the actual taxes and deferred taxes in the period in which taxation is finally determined.

Deferred tax assets are recognized at the amount at which it is probable that future tax benefits will be realized. The assessment of recoverability is based on five-year planning, probable performance as well as taxable temporary differences. The actual extent to which earnings in future periods must be taxed, and thus the actual extent to which the tax benefits will be usable, may deviate from the assessment at the time the deferred tax assets are recognized.

(e) Fair value of derivative and other financial instruments

The fair value of financial instruments not traded on an active market is determined by applying suitable valuation techniques selected from a large number of methods. The assumptions applied in this context are largely based on the market conditions existing on the reporting date.

(f) Accounting changes

No accounting changes were made in these financial statements.

F. SEGMENT REPORTING

In accordance with the provisions of IFRS 8 Operating Segments, selected information in the annual financial statements is presented by operating segment and region, with segmentation being based on internal reporting to the chief operating decision maker. The chief operating decision maker is responsible for determining the allocation of resources to segments and reviewing their performance. The Management Board of LPKF AG has been defined as the Group's chief operating decision maker. Segment reporting aims to lend greater transparency to both the performance and potential of the Group's individual activities.

Primary segment reporting is based on the following segments:

- Development comprises products such as circuit board plotters and ProtoLasers, primarily for electronics developers.
- The Electronics segment comprises production systems for cutting print stencils, rigid and flexible circuit boards, ultra-thin glass, and the structuring of plastic circuit carriers.
- Welding comprises systems for laser beam welding of plastic components.
- The Solar segment develops and produces laser scribers for the structuring of thin-film solar cells and laser systems for the digital printing of functional pastes and inks (laser transfer printing, LTP) which are used in production.
- The Other category contains some expense and income items which cannot be assigned to any of the other operating segments.

There is insignificant intersegment revenue. The existing goodwill (EUR 74 thousand) is allocated to the Welding segment.

The segment information was determined as follows:

- The segment result (EBIT) is determined taking into account impairment of goodwill, but without taking into account the financial result and taxes.
- The investments and depreciation and amortization including impairment losses refer to property, plant and equipment and intangible assets including goodwill.
- The figures reported are those after consolidation.

SEGMENT REPORTING

EUR thsd.		Electronics	Development	Welding	Solar	Other	Total
External revenue	2017	31,653	24,412	25,408	20,594	0	102,067
	2016	30,579	22,662	23,985	13,898	0	91,124
Operating result (EBIT)	2017	883	5,272	629	1,475	– 4,307	3,952
	2016	– 4,351	1,973	– 99	-975	– 3,300	– 6,752
Depreciation / amortization / impairment losses (fixed assets)	2017	2,810	1,749	1,937	1,112	69	7,677
	2016	3,505	1,752	1,657	1,045	98	8,057
Impairment losses (inventories)	2017	793	111	215	17	0	1,136
	2016	3,680	1,036	745	1,165	0	6,626
Other non-cash expenses	2017	689	775	485	373	113	2,435
	2016	625	334	428	394	145	1,926
Structure in %							
External revenue	2017	31.0	23.9	24.9	20.2	0.0	100.0
	2016	33.6	24.9	26.3	15.3	0.0	100.0

The impairment losses recognized on inventories are shown under cost of material.

Geographical segments:
Reporting reflects the four main geographical regions in which the Group is active.

GEOGRAPHICAL SEGMENTS

EUR thsd.		Germany	Other Europe	North America	Asia	Other	Total
External revenue	2017	10,375	20,490	23,004	45,698	2,500	102,067
	2016	12,907	16,468	17,702	42,342	1,705	91,124
Assets	2017	100,125	1,596	5,613	9,233	0	116,567
	2016	92,224	5,533	6,044	13,135	0	116,936
Capital expenditures	2017	6,085	481	14	183	0	6,763
	2016	7,018	235	136	82	0	7,471

G. CONSOLIDATED INCOME STATEMENT

1. REVENUE

Revenue is recognized when the service has been rendered or the goods and products have been delivered.

Two customers accounted for revenue of EUR 17 million and EUR 13 million, respectively. In the previous year, one customer accounted for revenue of EUR 11 million.

In addition to the sale of goods, there are no other significant categories of revenue in accordance with IAS 18.35.

2. OTHER OWN WORK CAPITALIZED

Own work capitalized by the Group concerned non-current assets amounted to EUR 3,559 thousand (previous year: EUR 4,902 thousand). This comprises own work for plant and machinery used by Group companies for production as well as prototype development projects capitalized during 2017 which are intended for permanent use in Group operations. Research costs, on the other hand, are immediately expensed when they are incurred. Costs incurred in the context of development projects in connection with the design and test runs of new or improved products are recognized as intangible assets if the criteria of IAS 38.57 are met. Other development costs which do not meet these criteria are expensed on an accrual basis. Development costs expensed in prior periods are not capitalized in subsequent reporting periods. Development costs recognized as intangible assets are amortized on a straight-line basis over their useful lives – up to a maximum of three years – from the time they become usable.

3. OTHER OPERATING INCOME

EUR thsd.	2017	2016
Income from insurance payments	2,255	2,164
Income from currency translation differences	1,021	1,044
Research and development grants	642	648
Income from the reversal of provisions	144	392
Reversal of deferred item income from grants	192	63
Income from the reversal of write-downs	193	25
Income from the disposal of non-current assets	12	18
Other	1,269	1,430
	5,728	**5,784**

Income from insurance payments mainly resulted from compensation for the loss suffered by the 2015 fire in Garbsen. Research and development grants are recognized in accordance with IAS 20 and exclusively concern government grants – in some cases with the involvement of private project companies. They are granted for costs actually incurred in connection with a specific purpose during the financial year (expenditure grant). Payments are made in line with project progress. Grants received for capitalized development costs and other assets which have been recognized as deferred income are reversed on an accrual basis in accordance with the useful life of the associated capitalized development costs and other assets. The same applies to a grant for building costs in Suhl totaling EUR 943 thousand.

4. COST OF MATERIALS

EUR thsd.	2017	2016
Cost of (system) parts and purchased goods	32,964	29,927
Cost of purchased services	843	1,102
	33,807	**31,029**

Cost of materials includes impairment losses on inventories in the amount of EUR 1,136 thousand (previous year: EUR 6,626 thousand).

5. STAFF COSTS AND EMPLOYEES

EUR thsd.	2017	2016
Wages and salaries		
Expenses for wages	34,686	36,345
Other	1,051	956
	35,737	**37,301**
Social security costs and pension costs		
Employer’s contribution to social security	5,719	6,139
Pension costs	249	208
Employer's liability insurance association	192	247
	6,160	**6,594**
	41,897	**43,895**

The item, social security costs and pension costs, includes contributions of EUR 2,106 thousand (previous year: EUR 2,223 thousand) to Germany’s statutory pension scheme. There were ongoing pension payments of EUR 17 thousand (previous year: EUR 17 thousand) arising from pension obligations in financial year 2017 (also see note 17).

The workforce is distributed as follows:

NUMBER OF EMPLOYEES

	As of the reporting date		Annual average	
	31 Dec. 2017	31 Dec. 2016	2017	2016
Production	163	164	164	168
Sales	120	136	125	144
Development	155	159	157	173
Services	97	88	96	99
Administration	148	153	148	165
	683	**700**	**690**	**749**

6. DEPRECIATION, AMORTIZATION AND IMPAIRMENT LOSSES

Depreciation, amortization and impairment losses on non-current assets are shown in the statement of changes in fixed assets (note 10). An impairment loss of EUR 0 thousand was recognized on capitalized development costs in the reporting year (previous year: EUR 764 thousand).

7. OTHER OPERATING EXPENSES

OTHER OPERATING EXPENSES

EUR thsd.	2017	2016
Travel, meals / entertainment	3,100	3,030
Advertising and sales expenses	2,257	2,343
Third-party work	2,202	1,766
Rent, ancillary rental costs, leases, land and building costs	2,151	2,480
Consumables, Development and Purchased Development Services	2,078	2,098
Repairs, maintenance, operating materials	1,624	2,137
Exchange rate losses	1,492	601
Legal and consulting costs	1,345	933
Sales commissions	1,015	1,332
Insurance, contributions, duties	885	779
Vehicle costs	692	799
Trade fair costs	629	794
Expenses for warranties	602	735
Telephone, postage, telefax	611	681
Voluntary benefits, training and further education	491	462
Investor relations	321	440
Financial statements preparation, publication, auditing costs	292	314
Bank charges	261	209
Office supplies, books, software	190	173
Supervisory Board remuneration incl. reimbursement of expenses	165	182
Addition to allowance on receivables and bad debts	86	293
Other	843	712
	23,332	**23,293**

In 2017, total research and development costs or the effect on profit or loss were EUR 11,145 thousand (previous year: EUR 11,419 thousand). Besides EUR 3,156 thousand for materials and other costs (previous year: EUR 4,044 thousand), they also contain EUR 7,989 thousand (previous year: EUR 7,375 thousand) in additional costs for staff as well as depreciation, amortization and impairment losses, among other things.

8. FINANCIAL RESULT

EUR thsd.	2017	2016
Finance income		
Other interest and similar income	4	6
Finance costs		
Interest and similar expenses	– 945	– 832
	– 941	**– 826**

The other interest income arose from overnight and time deposits totaling EUR 4 thousand (previous year: EUR 6 thousand). At EUR 945 thousand (previous year: EUR 832 thousand), the other interest expense was incurred in connection with long-term loans as well as short-term money market loans.

Borrowing costs that are directly attributable to the acquisition or production of a qualifying asset are capitalized as part of the cost of that asset. Other borrowing costs are recognized as an expense in the period in which they are incurred.

9. INCOME TAXES

Actual and deferred taxes are reported in the income statement as tax expense or tax income unless they affect items recognized directly in equity. In this case, the taxes are recognized directly in equity.

INCOME TAXES

EUR thsd.	2017	2016
Corporate income tax and solidarity surcharge	1,021	800
Trade tax	35	19
	1,056	**819**
Of which related to prior period	7	9
Deferred taxes	805	425
	1,861	**1,244**

The German entities of the LPKF Group are subject to trade tax of 15.1% or 15.4%, depending on the applicable trade tax assessment rate. As in the previous year, a corporate income tax rate of 15.0% plus a solidarity surcharge of 5.5% on corporate income tax applies. Foreign income taxes are calculated on the basis of the laws and regulations applicable in the individual countries. The income tax rates applicable to the foreign entities vary from 16.5% to 25.0% for deferred taxes (previous year: 16.5% to 40.0%) and 16.5% to 39.0% for current taxes (previous year: 16.5% to 40.0%).

The corporate tax rates applicable in the respective countries were used to calculate the deferred tax assets and tax liabilities in connection with the preparation of the consolidated financial statements.

Reconciliation of estimated and current tax expense:

CURRENT TAX EXPENSE

EUR thsd.	2017	2016
Consolidated profit / loss before income taxes	3,011	– 7,578
Anticipated tax expense (previous year: 30.0%)	903	– 2,273
Effect of different tax rates	– 127	– 27
Effect from unrecognized deferred tax assets	1,062	3,434
Effects of legal tax rate changes	90	0
Tax-free income	– 201	– 122
Trade tax additions and deductions	22	18
Tax effect of non-deductible operating expenses	121	148
Prior-period tax effects	– 7	41
Other differences	– 2	25
Effective tax expense 61.8% (previous year: – 16.4%)	**1,861**	**1,244**

The tax rate applied for the reconciliation for 2017 and 2016 presented above corresponds to the corporate tax rate of 30% that is to be paid on taxable profits by the Company in Germany in accordance with German tax law.

The effect from unrecognized deferred tax assets results from the non-recognition of deferred tax assets on tax loss carryforwards in the amount of EUR 996 thousand (previous year: EUR 3,613 thousand) and the derecognition of previously recognized benefits in the amount of EUR 68 thousand (previous year: EUR 0 thousand) on the one hand, and from the offsetting effect of utilizing previously unrecognized tax losses and temporary differenced in the amount of EUR 2 thousand (previous year: EUR 179 thousand) on the other.

H. CONSOLIDATED STATEMENT OF FINANCIAL POSITION

ASSETS

10. FIXED ASSETS

The following statement of changes in fixed assets shows the changes in the individual categories:

FIXED ASSETS 2017

EUR thsd.	Cost					
	Balance on 01 Jan. 2017	Currency differ-ences	Addition	Reclassifi-cation	Disposal	Balance on 31 Dec. 2017
Intangible assets						
Goodwill	74	0	0	0	0	74
Development costs	35,875	0	3,327	0	0	39,202
Other intangible assets	10,949	– 2	508	0	41	11,414
	46,898	**– 2**	**3,835**	**0**	**41**	**50,690**
Property, plant, and equipment						
Land, similar rights and buildings	48,405	– 313	123	1,467	0	49,682
Plant and machinery	12,184	– 125	796	0	990	11,865
Other equipment, operating and office equipment	13,853	– 105	542	0	137	14,153
Advances paid and construction in progress	0	0	1,467	– 1,467	0	0
	74,442	**– 543**	**2,928**	**0**	**1,127**	**75,700**
	121,340	**– 545**	**6,763**	**0**	**1,168**	**126,390**

FIXED ASSETS 2016

EUR thsd.	Cost					
	Balance on 01 Jan. 2016	Currency differ-ences	Addition	Reclassifi-cation	Disposal	Balance on 31 Dec. 2016
Intangible assets						
Goodwill	74	0	0	0	0	74
Development costs	31,079	0	4,796	0	0	35,875
Other intangible assets	10,346	0	652	0	49	10,949
	41,499	**0**	**5,448**	**0**	**49**	**46,898**
Property, plant, and equipment						
Land, similar rights and buildings	48,050	82	268	5	0	48,405
Plant and machinery	11,465	– 27	1,163	210	627	12,184
Other equipment, operating and office equipment	13,628	– 12	592	– 202	153	13,853
Advances paid and construction in progress	13	0	0	– 13	0	0
	73,156	**43**	**2,023**	**0**	**780**	**74,442**
	114,655	**43**	**7,471**	**0**	**829**	**121,340**

	Depreciation, amortization and impairment losses						Residual carrying amounts	
	Balance on 01 Jan. 2017	Currency differ-ences	Addition	Reclassifi-cation	Disposal	Balance on 31 Dec. 2017	Balance on 31 Dec. 2017	Previous year
	0	0	0	0	0	0	74	74
	22,609	0	3,052	0	0	25,661	13,541	13,266
	9,021	– 1	609	0	41	9,588	1,826	1,928
	31,630	**– 1**	**3,661**	**0**	**41**	**35,249**	**15,441**	**15,268**
	9,794	– 51	1,297	0	0	11,040	38,642	38,611
	7,383	– 74	1,276	0	579	8,006	3,859	4,801
	8,924	– 85	1,443	0	84	10,198	3,955	4,929
	0	0	0	0	0	0	0	0
	26,101	**– 210**	**4,016**	**0**	**663**	**29,244**	**46,456**	**48,341**
	57,731	**– 211**	**7,677**	**0**	**704**	**64,493**	**61,897**	**63,609**

	Depreciation, amortization and impairment losses						Residual carrying amounts	
	Balance on 01 Jan. 2016	Currency differ-ences	Addition	Reclassifi-cation	Disposal	Balance on 31 Dec. 2016	Balance on 31 Dec. 2016	Previous year
	0	0	0	0	0	0	74	74
	19,606	0	3,003	0	0	22,609	13,266	11,473
	8,355	0	712	0	46	9,021	1,928	1,991
	27,961	**0**	**3,715**	**0**	**46**	**31,630**	**15,268**	**13,538**
	8,396	14	1,384	0	0	9,794	38,611	39,654
	6,580	– 21	1,371	0	547	7,383	4,801	4,885
	7,491	– 20	1,586	0	133	8,924	4,929	6,137
	0	0	0	0	0	0	0	13
	22,467	**– 27**	**4,341**	**0**	**680**	**26,101**	**48,341**	**50,689**
	50,428	**– 27**	**8,056**	**0**	**726**	**57,731**	**63,609**	**64,227**

10.1 INTANGIBLE ASSETS

Software

As an intangible asset, purchased software is recognized at cost less straight-line amortization.

Goodwill

As a rule, the goodwill arising from business combinations (capitalized differences arising from acquisition accounting) is assumed to have an unlimited useful life. The carrying amount of the goodwill is compared to the recoverable amount at every reporting date. The goodwill is written down if its carrying amount exceeds its recoverable amount. It is assigned to a cash generating unit for an impairment test. Based on the Welding segment, a detailed planning period of five years and an appropriate rate of return on capitalization are applied. Based on this, there was no impairment loss on goodwill in 2017, just as in the previous year.

Development costs

Own capitalized development costs are also reduced over their useful life using straight-line amortization. Borrowing costs are not capitalized. Instead, they are expensed in the period in which they are incurred unless they relate to qualifying assets pursuant to IAS 23. The item is broken down by segment as follows:

DEVELOPMENT COSTS

EUR thsd.	2017	2016
Electronics	6,804	7,526
Development	2,043	2,108
Welding	3,219	2,747
Solar	1,475	885
	13,541	**13,266**

Both the residual carrying amounts and the useful lives of the intangible assets are tested for impairment, at a minimum, as of the end of every financial year. Pursuant to IAS 36, intangible assets are written down if the recoverable amount of the respective asset has dropped below its carrying amount. Capitalized development costs not yet available for use are tested for impairment annually. In addition to amortization, impairment losses of EUR 0 thousand were recognized in 2017 due to the discontinuation of the LDS development projects (previous year: EUR 764 thousand).

Reviews to determine whether write-ups are required for intangible assets written down in the past are conducted as of every reporting date; this does not concern the goodwill. No write-ups were necessary during the reporting year.

Intangible assets subject to amortization are deemed to have the following useful lives:

USEFUL LIFE

	Years
Software	3
Development costs	3

10.2 PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment is measured at cost less accumulated straight-line depreciation. Borrowing costs are not capitalized. Instead, they are expensed in the period in which they are incurred unless they relate to qualifying assets pursuant to IAS 23. Land is not depreciated. The residual carrying amounts and the useful lives of each item of property, plant and equipment are tested for impairment, at a minimum, as of the end of every financial year. Property, plant and equipment is tested for impairment if certain events or changes in circumstances indicate that the given carrying amount may no longer be recoverable.

Property, plant and equipment is written down in accordance with IAS 36 if the recoverable amount of the respective asset has dropped below its carrying amount. The recoverable amount is the higher of its value in use and fair value less costs to sell. Corresponding write-ups are made if the reasons for an earlier write-down no longer apply.

Production costs cover the costs of materials and related overheads as well as the manufacturing costs and related overheads.

They are deemed to have the following useful lives:

USEFUL LIFE

	Years
Buildings	33 or 25
External facilities	10
Plant and machinery	3 – 10
Other equipment, operating and office equipment	3 – 10

Bank loans totaling EUR 32,889 thousand (previous year: EUR 14,430 thousand) are secured by land and buildings, and by the assignment of receivables and inventories.

Leases are classified as finance leases when substantially all of the risks and rewards of ownership are transferred to the lessee under the terms of the lease. All of the other leases are classified as operating leases.

At the inception of finance leases, the relevant assets are capitalized at the lower of the fair value of the leased property and the present value of the minimum lease payments and depreciated over their expected useful lives, analogous to the treatment of comparable own assets, or over the term of the contract, whichever is shorter. At this time, no assets have been recognized as finance leases.

11. INVENTORIES

Inventories are recognized at the lower of cost and net realizable value at the reporting date.

The costs of conversion of inventories include costs directly related to the units of production (such as production costs and directly attributable material costs). They also include a systematic allocation of fixed and variable production overheads that are incurred in converting materials into finished goods. Borrowing costs are not capitalized. Instead, they are expensed in the period in which they are incurred unless they relate to qualifying assets pursuant to IAS 23. Inventories are measured using the weighted average cost formula. Inventories were written down below cost to their net realizable value and scrapped by EUR 1,136 thousand (previous year: EUR 6,626 thousand).

Some inventories are subject to customary collateral such as reservations of title.

12. TRADE RECEIVABLES

EUR thsd.	2017	2016
Nominal amount of receivables	19,705	20,665
Specific valuation allowances incl. currency losses	– 197	– 670
Receivables after valuation allowances, discounts and currency losses	**19,508**	**19,995**

Trade receivables are measured at fair value on addition and subsequently at amortized cost using the effective interest rate method less impairment losses. An impairment of trade receivables is recognized if there is objective evidence that a receivable may not be fully recoverable on becoming due. The amount of the impairment is measured as the difference between the carrying amount of the receivable and the present value of the estimated future cash flows from this receivable, discounted at the effective interest rate. Impairment losses are recognized directly in equity and shown in an impairment loss item under trade receivables. Trade receivables are derecognized upon offsetting against previously recognized impairment losses if they are unrecoverable, e. g. if the given debtor is insolvent. Items recognized in foreign currencies are measured at the average exchange rate as of the reporting date.

The residual carrying amount of the trade receivables is EUR 107 thousand (previous year: EUR 214 thousand) and concerns receivables with remaining maturities of more than one year.

The following table describes the counterparty credit risk from trade receivables as of 31 December 2017:

CREDIT RISK

			Not impaired but past due since				
EUR thsd.	Carrying amount as of 31.12	Of which not impaired and not past due	less than 30 days	between 30 and 60 days	between 60 and 90 days	between 90 and 360 days	more than 360 days
2016	19,995	14,967	3,144	265	182	706	61
2017	**19,508**	**12,621**	**3,758**	**866**	**385**	**1,598**	**83**

There is no indication that the recoverability of receivables has suffered if they are neither past due nor impaired.

VALUATION ALLOWANCES RECOGNIZED ON TRADE RECEIVABLES AND BORROWINGS

EUR thsd.	2017	2016
Balance on 01 Jan.	**670**	**628**
+ Additions	27	69
– Reversals (allowances not required)	193	25
– Uses (allowances required)	307	2
+/– Currency differences (foreign currency receivables)	0	0
Balance on 31 Dec.	**197**	**670**

There were no proceeds from derecognized receivables in the 2017 financial year (previous year: EUR 21 thousand).

13. OTHER ASSETS AND INCOME TAX RECEIVABLES

With the exception of derivatives, the other assets and current tax receivables are measured at cost. Derivatives are measured at their fair value, non-current tax receivables at the present value of the future rights to reimbursement.

OTHER ASSETS AND INCOME TAX RECEIVABLES

EUR thsd.	2017	2016
Input tax receivables	1,707	503
Income tax receivables	198	434
Deferred income	493	437
Other	2,160	899
Total	**4,558**	**2,273**

Rights to reimbursement of corporate income and trade taxes are reported in tax receivables. The other assets item includes a receivable from an insurance company in the amount of EUR 1,450 thousand.

14. CASH AND CASH EQUIVALENTS

Cash and cash equivalents comprise cash on hand of EUR 5 thousand (previous year: EUR 5 thousand) and bank balances of EUR 3,341 thousand (previous year: EUR 3,579 thousand); they are reported at their nominal value. Cash and cash equivalents in foreign currencies are translated at the respective reporting date exchange rate.

15. DEFERRED TAXES

Deferred taxes are determined using the liability method pursuant to IAS 12. Accordingly, deferred taxes are recognized for all temporary differences between the tax base of the assets and liabilities and their carrying amounts in the consolidated statement of financial position. Deferred tax assets are recognized only if it is probable that adequate earnings will be available in future periods to offset the tax benefits. Income tax liabilities are netted against income tax receivables within the same fiscal territory if maturity and type are matched.

The income taxes are calculated in accordance with applicable laws and regulations.

The capitalized deferred tax assets encompass deferred taxes mainly on loss carryforwards and intercompany profits. The deferred tax liabilities largely concern capitalized development costs. The deferred taxes consist of the following:

DEFERRED TAX ASSETS

EUR thsd.	2017	2016
Tax loss carryforwards	3,660	4,220
Intangible assets	214	227
Provisions	251	293
Elimination of intercompany profits and other deductible temporary differences	1,296	1,443
Other	24	32
Offsetting with deferred tax liabilities	– 3,714	– 3,701
Total	**1,731**	**2,514**

DEFERRED TAX LIABILITIES

EUR thsd.	2017	2016
Capitalized development costs	4,029	3,980
Property, plant and equipment	62	135
Trade receivables	188	86
Other	3	12
Offsetting with deferred tax assets	– 3,714	– 3,701
Total	**568**	**512**

Within the next twelve months, EUR 1,810 thousand (previous year: EUR 1,927 thousand) in deferred tax assets and EUR 192 thousand (previous year: EUR 97 thousand) in deferred tax liabilities will be realized.

For entities which in the reporting period or in the previous year made a tax loss, deferred tax assets in the amount of EUR 1,058 thousand (previous year: EUR 1,675 thousand) are recognized because planning assumes the achievement of taxable profits. Since the restructuring measures in these regions have been largely completed, we one again expect growth and positive earnings going forward.

The amount for tax losses not yet used and temporary differences for which no deferred tax assets were recognized in the statement of financial position, was EUR 16,218 thousand (previous year: EUR 13,603 thousand).

No deferred tax liabilities were recognized on EUR 917 thousand (previous year: EUR 968 thousand) in temporary differences related to investments in subsidiaries and branches.

EQUITY AND LIABILITIES

16. SUBSCRIBED CAPITAL

Share capital

The Company's share capital amounts to EUR 22,269,588.00. It is fully paid-in and denominated in 22,269,588 no-par bearer shares with an interest in capital of EUR 1.00 per share.

The capital reserves comprise only a capital reserve pursuant to Section 272 (2) no. 1 German Commercial Code.

There is no ban on dividend distributions with respect to net retained profits, since sufficient revenue reserves are available.

Authorized capital

With the resolution adopted by the Annual General Meeting on 5 June 2014, the Management Board is authorized to increase the share capital once or repeatedly until 4 June 2019 with the approval of the Supervisory Board by up to a total of EUR 11,134,794.00 by issuing up to 11,134,794 new no-par value bearer shares in return for contributions in cash or in kind (authorized capital). Shareholders shall generally be granted a subscription right in that connection. However, the Management Board is authorized with the approval of the Supervisory Board to disapply the pre-emptive rights of shareholders

- to exclude fractional amounts from shareholders' pre-emptive rights;
- if the new shares are issued in return for cash contributions and the issue price of the new shares is not significantly lower than the stock exchange price of the shares currently listed when the issue price is finally determined. The number of shares issued while thus disapplying shareholders' pre-emptive rights may not exceed a total of 10% of the share capital, neither at the time when this authorization takes effect nor when it is exercised. Other shares that are issued or were sold during the period in which this authorization is in effect while disapplying shareholders' pre-emptive rights in direct or corresponding application of section 186(3) sentence 4 of the Stock Corporation Act (Aktiengesetz, AktG) are to be counted toward this upper limit of 10% of the share capital. Shares that are issued to service option rights and /or conversion rights or conversion obligations from convertible bonds or bonds with warrants or profit participation rights are also to be counted toward this limit if such debt securities or profit participation rights are issued during

the period in which this authorization is in effect while disapplying shareholders' pre-emptive rights in corresponding application of section 186(3) sentence 4 AktG;

- if the capital increase is carried out in return for contributions in kind for the purpose of acquiring entities, business divisions, equity investments, other assets related to an intended acquisition or in connection with mergers or for the purpose of acquiring industrial property rights, including copyrights and know-how or rights to use such rights;
- if it is necessary to grant subscription rights for new shares to the bearers or creditors of bonds with warrants and convertible bonds or profit participation rights with option rights or conversion rights and / or conversion obligations that were or will be issued by the Company or companies in which the Company holds a direct or indirect majority interest in the volume to which they would be entitled after exercising the option rights or conversion rights or after conversion obligations are fulfilled;
- if the new shares are issued to individuals who are in an employment relationship with the Company or its affiliated companies. The number of shares issued while disapplying shareholders' pre-emptive rights may not exceed a proportionate interest in the share capital in the total amount of EUR 200,000.00.

In any case, the authorization to disapply shareholders' preemptive rights is limited insofar as after exercising the authorization the sum of shares issued while disapplying shareholders' pre-emptive rights in exchange for contributions in cash or in kind under this authorized capital may not exceed a total of 10% of the share capital, neither at the time that this authorization takes effect nor when it is exercised. The following count toward the aforementioned 10% limit:

- treasury shares that are sold during the period in which this authorization is in effect while disapplying shareholders' pre-emptive rights, as well as
- new shares that are to be issued on the basis of convertible bonds or bonds with warrants or profit participation rights issued during the period in which this authorization is in effect while disapplying shareholders' pre-emptive rights.

The Management Board is authorized with the approval of the Supervisory Board to determine the contents of the share rights, the further details of the capital increase, and the terms and conditions under which the shares are issued, in particular the issue price.

The Supervisory Board is authorized to revise the Articles of Association accordingly after utilization of the authorized capital or the expiration of the period for utilizing the authorized capital.

The authorization to increase the share capital was not exercised before the reporting date.

TREASURY SHARES

The Management Board was authorized by resolution of the Annual General Meeting on 28 May 2015, subject to the Supervisory Board's prior approval, to buy back treasury shares until 27 May 2020 corresponding to up to 10% of the Company's share capital either on the date the resolution was adopted or on the date the authorization is exercised, whichever is higher; to use the treasury shares so acquired for all statutory purposes; and, in particular cases, to disapply shareholders' right to tender or subscribe such shares, respectively, in connection with buybacks and subscriptions. This authorization was not utilized as of the reporting date.

17. PROVISIONS FOR PENSIONS AND SIMILAR OBLIGATIONS

The following obligations are recognized for this item in the consolidated financial statements:

a) Post-employment benefits
b) Anniversary payments and benefits similar to pensions

a) Post-employment benefits

Germany has a statutory defined-contribution national pension scheme for employees that pays pensions contingent on income and contributions made. Except for the payment of its contributions to the statutory pension insurance entity, the Company has no other benefit obligations. As part of the Company pension plan and based on a shop agreement, some of the Group's employees have also taken out policies with a private insurer or a benevolent fund. In this case, too, the Company has no other benefit obligations above and beyond the cost of contributions that are reported in current staff costs.

The provisions reported as retirement benefits in the statement of financial position comprise only defined-benefit obligations to former Management Board members of the parent company for which fixed retirement benefits have been stipulated. The plan is financed through payments to a fund and to insurance companies. The promised benefits comprise payments for retirement pensions, disability pensions and widow's and orphan's pensions. Once the age threshold has been attained by reaching the end of the 65th year of life, or if eligibility to receive a disability pension is established prior to reaching the end of the 65th year of life, a commitment is made to pay the beneficiary a monthly pension payment for life. The widow's pension paid to a surviving wife amounts to 60% or 70% of the relevant retirement pension entitlement. The weighted average term of the defined benefit plans is 17.5 years.

There is longevity and interest rate risk with regard to the pension provision. Reinsurance policies were obtained for hedging purposes and pledged to the beneficiaries. The fair value amounts are reported in the offsetting and reconciliation of the excess of plan assets over post-employment benefit liability.

The carrying amount in the statement of financial position of the net liabilities (assets) for defined benefit plans in accordance with IAS 19 corresponds to the present value of the defined benefit obligation (DBO) on the balance sheet date less the fair value of the plan assets. The DBO is calculated annually by an independent actuary using the projected unit credit method. The DBO's present value is determined by discounting the expected future cash outflows at the interest rate of high-quality corporate bonds. The resulting revaluations (mainly actuarial gains and losses) in connection with the remeasurement of net liabilities and net assets are recognized directly in other comprehensive income (OCI) due to the amendment of IAS 19.

The following amounts were reported in the statement of financial position for defined benefit plans:

DEFINED BENEFIT PLANS

EUR thsd.	2017	2016
Present value of the defined benefit obligation at beginning of period	**755**	**668**
Current service cost	0	0
Interest expense	11	15
Pension payments	– 17	– 17
Actuarial gains (–) and losses (+)	– 15	89
Present value of the defined benefit obligation at end of period	**734**	**755**
Plan assets		
Reinsurance coverage	– 312	– 288
Securities	– 478	– 463
Deficit (net liability (+)) / excess (net asset (–)) shown in the statement of financial position	**– 56**	**4**

DEVELOPMENT OF NET LIABILITIES / ASSETS

EUR thsd.	2017
Net assets at beginning of period	4
Total amount in the income statement	0
Total of the revaluations recognized in OCI	– 44
Benefit payments	0
Employer contributions	– 16
Net assets at end of period	**– 56**

All defined benefit plans are covered by plan assets; there are no unfunded plans. The fair value of the plan assets developed as follows:

PLAN ASSETS

EUR thsd.	2017	2016
At beginning of period	751	752
Interest income from plan assets	11	17
Expected return on plan assets without interest income	29	– 17
Payments from plan assets	– 17	– 17
Funded by the employer	16	16
At end of period	**790**	**751**

The plan assets are made up as follows:

PLAN ASSETS

	2017		2016	
	Absolute	in %	Absolute	in %
Equity securities	0	0%	0	0%
Debt securities	478	61%	463	62%
Other	312	39%	288	38%
	790	**100%**	**751**	**100%**

The debt securities include mixed fund shares that are primarily invested in fixed-income securities. As in the previous year, the plan assets do not contain any financial instruments.

The following amounts were recognized in the income statement:

EUR thsd.	2017	2016
Current service cost	0	0
Interest income from plan assets	11	17
Interest expense related to the liability	– 11	– 15
Total effect on earnings in the income statement	**0**	**2**

The provisions for pensions were determined based on the following assumptions:

PENSION PROVISIONS

in %	2017	2016
Discount rate as of 31 December	1.60	1.50
Future salary increases	0.00	0.00
Future pension increases	1.75	1.75
Expected return on plan assets	1.60	1.50
Employee turnover	0.00	0.00

The determination of the expected return on the plan assets was based on the estimated return on the assets, taking the changes in the yields of non-current fixed-income instruments into account. The allocations to plans for post-employment benefits and pension payments payable in the financial year ending 31 December 2017 are estimated to total EUR 33 thousand.

The undiscounted pension payments based on the average life expectancy of 17.5 years result in the following maturity analysis:

MATURITY ANALYSIS

EUR thsd.	Up to 1 year	More than 1 and up to 5 years	More than 5 and up to 10 years	Total
Retirement benefits	17	68	185	**270**

Regarding possible changes in the significant actuarial assumptions made, the following sensitivities were determined:

BASIC VALUES

	2017
Discount rate	1.60%
Pension trend	1.75%
DBO	EUR 734,027

SENSITIVITIES

	Revalued DBO	Change in percent of the DBO
Discount rate plus 0.5%	EUR 677,385	– 7.72%
Discount rate minus 0.5%	EUR 797,727	8.68%
Pension trend plus 0.25%	EUR 756,811	3.10%
Pension trend minus 0.25%	EUR 712,213	– 2.97%

b) Anniversary payments and benefits similar to pensions

One Group company is obligated to pay its employees a benefit equal to three months of an employee's salary based on the most recently paid salary when employment is terminated due to the employee reaching the maximum age threshold. In addition, the company is required to pay a benefit calculated based on the attainment of a certain number of years of service with the company. The company, which is included in the consolidated financial statements, meets these obligations itself as soon as they come due. These obligations are measured annually by an independent actuary. No plan assets are maintained for this purpose. The amount of the obligation is therefore reported in the statement of financial position under provisions for pensions.

Payments totaling EUR 68 thousand are expected in the following five years.

The amounts recognized in the statement of financial position are comprised as follows:

EUR thsd.	2017	2016
Present value of the defined benefit obligation at beginning of period	**285**	**352**
Current service cost	21	28
Interest expense	5	6
Benefit payments	– 6	– 9
Benefit changes	0	0
Actuarial gains (–) and losses (+)	24	– 92
Present value of the defined benefit obligation at end of period	**329**	**285**

The following amounts were recognized in the income statement:

EUR thsd.	2017	2016
Current service cost	21	28
Interest expense related to the liability	5	6
Total amount in the income statement	**26**	**34**

Regarding possible changes in the significant actuarial assumptions made, the following sensitivities were determined:

BASIC VALUES

	2017
Discount rate	1.83%
Salary trend	3.00%
DBO	EUR 329,241

SENSITIVITIES

	Revalued DBO	Change in percent of the DBO
Discount rate minus 0.5%	EUR 354,366	7.63%
Discount rate plus 0.5%	EUR 306,644	– 6.86%
Salary trend minus 0.5%	EUR 306,759	– 6.83%
Salary trend plus 0.5%	EUR 353,969	7.51%

18. TAX PROVISIONS AND OTHER PROVISIONS

Provisions are recognized for legal or constructive obligations resulting from past events if it is probable that settling the obligation will lead to an outflow of Group resources and that a reliable estimate of the amount of the obligation can be made. Provisions are recognized at their estimated settlement value in accordance with IAS 37.

The tax provisions concern the following:

TAX PROVISIONS

EUR thsd.	2017	2016
Corporate income tax and solidarity surcharge	0	116
Trade tax	0	62
	0	**178**

STATEMENT OF CHANGES IN PROVISIONS

EUR thsd.	Balance as of 01 Jan. 2017	Use	Currency differences	Reversals	Addition	Balance as of 31 Dec. 2017
Pension provisions and similar obligations	290	11			50	329
Tax provisions	178	178				0
Bonus	353	336	– 15	9	485	478
Warranty and guarantee	1,999	1,090	– 6	31	1,482	2,354
Other	836	729	– 3	104	875	875
Total	**3,656**	**2,344**	**– 24**	**144**	**2,892**	**4,036**

The provisions for guarantees and warranties cover potential statutory or financial obligations under guarantee and goodwill cases. Other provisions mainly include provisions for severance payments, litigation and share-based payment plans settled in cash in accordance with IFRS 2.

In 2012, a long-term incentive program (LTI) was launched in which a selected group of LPKF Group executives can participate. The beneficiaries are entitled to a long-term bonus, Which is paid to the beneficiaries depending on the long-term bonus allotment granted to each individual, the average EBIT margin of the LPKF Group during a four-, five- or six-year performance period and the performance of LPKF's share price. The program does not stipulate settlement by granting of equity instruments. The first prerequisite for payment of the bonus is an investment in LPKF shares to be made and held throughout the entire duration of the long-term bonus plan. The beneficiaries must also have an unterminated employment contract as of 20 July of the year in which the payment is made.

At plan inception, a preliminary number of phantom stocks corresponding to the allotment value is specified, which represents the starting point for calculating the bonus payment. At the end of the performance period, the final number of phantom stocks is determined. The performance period amounts to at least four years, but can be extended to five, or no more than six, years upon request by an individual beneficiary. The final number of virtual shares is determined based on an in-house measure of the Company's success, the EBIT margin. If the target is exceeded or the actual figure falls short of the target, the preliminary number of phantom stocks at the time of the allotment is increased or decreased accordingly. The payment amount is determined by measuring the value of the phantom stocks using the average XETRA closing quote for LPKF shares on the 30 trading days prior to 21 July after the end of the four-, five- or six-year performance period. The amount of the payment is limited to no more than 300% of the individual allotment value.

Reporting of share-based compensation transactions settled in cash is governed by IFRS 2 "Share-based Payment." The expense expected to arise from the long-term bonus program is estimated at fair value at each reporting date using a Monte Carlo simulation. The expected total expense from the program is distributed pro rata temporis across the time period up to the first possible exercise date. On this basis, the amount of the provision in the Group for financial year 2017 is EUR 0 thousand (previous year: EUR 0 thousand). Mainly due to the impact the consolidated net profits generated in 2015, 2016 and 2017 had on the average EBIT margin applicable to all tranches' performance periods, a total of EUR 0 thousand was reversed in the reporting period and EUR 6 thousand in the previous year.

The following parameters were used in the option price model (modified Black Scholes (Merton) model) for determining the fair value as of 31 December 2017:

	Tranche 2 2013	Tranche 3 2014	Tranche 4 2015	Tranche 5 2016	Tranche 6 2017
Expected volatility	44%	44%	44%	44%	44%
Risk-free interest rate	0.00% p. a.	0.00% p. a.	0.00% p. a.	0.00% p. a.	0.00% p. a.
Expected remaining maturity	1 year and 7 months	2 years and 7 months	3 years and 7 months	4 years and 7 months	5 years and 7 months
Price of the LPKF share on 30 December 2017	EUR 9.34	EUR 9.34	EUR 9.34	EUR 9.34	EUR 9.34
Initial price of the LPKF share	EUR 12.10	EUR 15.02	EUR 8.08	EUR 6.18	EUR 9.58
Number of phantom stocks at the allotment date	**3,822**	**4,803**	**10,359**	**11,938**	**7,663**

Separate plan terms were introduced for the members of the Management Board in 2014. The main difference is the programs' terms, which begin on 1 January of each year for the members of the Management Board instead of on 21 July. The following parameters were used in the option price model (modified Black Scholes (Merton) model) for determining the fair value of the Management Board plan as of 31 December 2017:

EUR thsd.	Tranche 1 2014	Tranche 2 2015	Tranche 3 2016	Tranche 4 2017
Expected volatility	44%	44%	44%	44%
Risk-free interest rate	0.00% p. a.	0.00% p. a.	0.00% p. a.	0.00% p. a.
Expected remaining maturity	2 years	3 years	4 years	5 years
Price of the LPKF share on 30 December 2016	EUR 9.34	EUR 9.34	EUR 9.34	EUR 9.34
Initial price of the LPKF share	EUR 18.25	EUR 10.97	EUR 7.72	EUR 6.69
Number of phantom stocks at the allotment date	**4,110**	**11,395**	**0**	**0**

Recognition of the expected volatility is based on the historical volatility of the previous two years. The resulting volatility is rounded to full percentage points.

19. LIABILITIES

Upon initial recognition, financial liabilities are measured at fair value after deduction of transaction costs. They are subsequently measured at amortized cost. Any difference between the disbursement amount (after deduction of transaction costs) and the repayment amount is amortized over the term of the loan using the effective interest method.

The breakdown of the liabilities by remaining maturities follows from the statement of changes in liabilities below:

TYPE OF LIABIALITY

			Liabilities with remaining maturities of				
EUR thsd.		Total amount	up to 1 year	1 to 5 years	more than 5 years	Collateralized amounts	Type of collateral
Liabilities to banks	2016	43,482	20,852	19,584	3,046	14,430	[1]
	2017	40,997	20,953	18,837	1,207	40,247	[1]
Trade payables	2016	3,071	3,071	0	0	0	–
	2017	3,227	3,227	0	0	0	–
Other liabilities	2016	11,206	11,206	0	0	0	–
	2017	12,880	12,880	0	0	0	–
	2016	**57,759**	**35,129**	**19,584**	**3,046**	**14,430**	
	2017	**57,104**	**37,060**	**18,837**	**1,207**	**40,247**	

[1] Land charge, assignments of receivables and security assignment of inventories (from 2017)

The loans are earmarked for financing new construction, purchases of real property, investments to expand capacities and development projects.

The other liabilities item includes advances received in the amount of EUR 8,426 thousand (previous year: EUR 6,433 thousand).

I. OTHER DISCLOSURES

20. STATEMENT OF CASH FLOWS

The statement of cash flows is derived from the consolidated financial statements using the indirect method; pursuant to IAS 7, it presents the changes in cash flows broken down by inflows and outflows for operating activities, investing activities and financing activities. Cash comprises cash on hand and demand deposits. Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

21. EARNINGS PER SHARE

According to IAS 33, basic earnings per share are determined by dividing the consolidated net profit for the year attributable to the shareholders of LPKF Laser & Electronics AG by the weighted number of shares outstanding during the financial year. There are currently no transactions triggering dilution.

	2017	2016
Number of shares, undiluted	22,269,588	22,269,588
Number of shares, diluted	22,269,588	22,269,588
Consolidated net profit / loss (in EUR thsd.)	1,150	– 8,822
Adjusted consolidated profit / loss (in EUR thsd.)	1,150	– 8,822
Basic earnings per share (in EUR)	0.05	– 0.40
Diluted earnings per share (in EUR)	0.05	– 0.40

22. DIVIDEND PER SHARE

The Management Board and the Supervisory Board will propose to the Annual General Meeting on 31 May 2018 that it resolve to carry the net accumulated losses of LPKF Laser & Electronics AG in the amount of EUR 204,768.03 for the 2017 financial year (previous year: net accumulated losses of EUR 1,201,183.01) forward to new account.

23. TRANSACTIONS WITH RELATED PARTIES

There are no reportable business relationships with parties related to the LPKF Group.

As of the reporting date, LPKF AG had EUR 192 thousand in liabilities to members of the Supervisory Board (previous year: EUR 214 thousand).

For the rest, there are no other receivables from or liabilities to LPKF Group companies, nor were any payments or benefits granted to related parties. Notes 27 and 28 provide details on the corporate bodies of LPKF AG.

24. GERMAN CORPORATE GOVERNANCE CODE

The Declaration of Compliance by the Supervisory Board and the Management Board required under Section 161 German Stock Corporation Act on the application of the recommendations of the Government Commission of the German Corporate Governance Code, as well as the disclosures of any noncompliance with the recommendations, were made available to the shareholders on the Company's website (http://www.lpkf.de/investor-relations/corporate-governance/entsprechenserklaerung/index.htm).

25. OTHER DISCLOSURES

Other financial obligations
Short- and mid-term leases for land and buildings are in place for the offices of LPKF (Tianjin) Co. Ltd., LPKF Laser & Electronics (Hong Kong) Ltd., LPKF Laser & Electronics K.K., LPKF Laser & Electronics Korea Ltd. and for LPKF SolarQuipment GmbH for a production hall in Suhl. Furthermore, auto leases are in place at LPKF SolarQuipment GmbH, LPKF WeldingQuipment GmbH and the parent company.

The existing auto leases are classified as operating leases. The lease payments are determined by the term of the given lease and the car's mileage. There are no other provisions or agreements with respect to the extension of maturities or favorable purchasing options. Total future lease payments broken down by maturity are:

EUR thsd.	2017	2016
Lease payments included in the net profit / loss for the period	350	612
Up to 1 year	342	459
More than 1 year and up to 5 years	281	478

All future rental payments due under building and office leases are broken down by maturity as follows:

EUR thsd.	2017	2016
Up to 1 year	219	438
More than 1 year and up to 5 years	194	99

There are no other significant financial obligations.

Financial Instruments

The financial instruments reported in the statement of financial position (financial assets and financial liabilities) as defined in IAS 32 and IAS 39 comprise specific financial assets, trade receivables, cash, trade payables as well as certain other assets and liabilities under agreements.

1. Non-derivative financial instruments

IAS 39 makes a general distinction between non-derivate and derivative financial instruments and classifies non-derivative financial instruments into the following categories:

- Financial assets or liabilities at fair value through profit or loss;
- Held-to-maturity investments;
- Loans and receivables;
- Available-for-sale financial assets

The "financial assets or liabilities at fair value through profit or loss" category has two sub-categories: financial assets that have been classified as held for trading from inception, and those that are designated upon initial recognition as at fair value through profit or loss. A financial asset is allocated to this category if it was acquired principally for the purpose of selling it in the near term or was designated as such by management. Derivatives also belong to this category unless they qualify as hedges.

There are no non-derivative financial instruments that are designated as "financial assets or financial liabilities at fair value through profit or loss" or "financial instruments held to maturity."

Loans and receivables primarily concern loans to third parties, receivables, other assets as well as cash and cash equivalents. The initial measurement is at fair value plus transaction costs, subsequent measurements at amortized cost using the effective interest method.

Non-derivative financial liabilities are initially measured at fair value and subsequently at amortized cost using the effective interest method.

The financial instruments are classified as non-current assets if management does not intend to sell them within twelve months of the reporting date.

Settlement date accounting is used for reporting purchases and sales of previously recognized assets. Financial assets are derecognized when the rights to the cash flows from the financial assets have expired or were transferred and the Group has transferred substantially all of the risks and rewards of ownership.

Impairment is assumed if payment is substantially delayed or insolvency proceedings have been opened.

2. Derivative financial instruments

The Group uses various derivative financial instruments to hedge future transactions and cash flows. Particularly derivatives such as forwards, options and swaps are used to that end. Special hedge accounting rules may be applied under IAS 39 if certain conditions are met. The hedging relationship between the hedged item and the hedging instrument must be documented, and its effectiveness must be evidenced. The accounting principles of IAS 39 shall be used if the requirements for application of the special hedge accounting rules do not apply.

The existing forward contracts and options do not qualify for hedge accounting pursuant to IAS 39.71 ff. All these derivatives are therefore designated as held for trading (a subcategory of the category, “assets and liabilities at fair value through profit or loss”) and recognized at fair value in the statement of financial position. Fair value changes are recognized in profit or loss. The issuing banks notified the Group of the fair values (market values). The measurement took current ECB reference prices and forward premiums or discounts into account. If the fair value is positive, these instruments are recognized in current assets, otherwise under current liabilities. The current assets contain swap and forward transactions in USD with a positive fair value of EUR 26 thousand.

3. DISCLOSURES PURSUANT TO IFRS 7

Carrying amounts, reporting amounts and fair values by measurement category

EUR thsd.	Measurement category pursuant to IAS 39	Carrying amount as of 31 Dec. 2017	IAS 39 carrying amount: Amortized cost	IAS 39 carrying amount: Fair value recognized in equity	IAS 39 carrying amount: Fair value through profit or loss	Fair value 31 Dec. 2017
Assets						
Cash and cash equivalents	LaR	3,345	3,345			3,345
Trade receivables	LaR	19,508	19,508			19,508
Other assets	LaR	2,094	2,094			2,094
Restricted securities and available-for-sale financial instruments	AfS	0		0		0
Derivative financial assets						
Derivatives	FAHfT	26			26	26
Equity and liabilities						
Trade payables	FLAC	3,227	3,227			3,227
Liabilities to banks	FLAC	40,997	40,997			40,716
Other interest-bearing liabilities	FLAC	0	0			0
Other interest-free liabilities	FLAC	448	448			448
Derivative financial liabilities						
Derivatives	FLHfT	0			0	0
Of which accumulated by IAS 39 measurement category						
Loans and receivables;	(LaR)	24,947	24,947			24,947
Available-for-sale financial assets	(AfS)	0		0		0
Assets held for trading	(FAHfT)	26	0	0	26	26
Financial liabilities measured at amortized cost	(FLAC)	44,672	44,672			44,391
Liabilities held for trading	(FLHfT)	**0**			0	**0**

LaR Loans and Receivables
FLAC Financial Liabilities Measured at Amortized Cost
FAHfT Financial Assets Held for Trading
FLHfT Financial Liabilities Held for Trading

			IAS 39 carrying amount		
Measure-ment category pursuant to IAS 39	Carrying amount as of 31 Dec. 2016	Amortized cost	Fair value recognized in equity	Fair value through profit or loss	Fair value 31 Dec. 2016
LaR	3,584	3,584			3,584
LaR	19,995	19,995			19,995
LaR	856	856			856
AfS	0		0		0
FAHfT					
FLAC	3,071	3,071			3,071
FLAC	43,482	43,482			43,311
FLAC	0	0			0
FLAC	1,587	1,587			1,587
FLHfT	36			36	36
(LaR)	24,435	24,435			24,435
(AfS)	0		0		0
(FAHfT)					
(FLAC)	48,140	48,140			47,969
(FLHfT)	36			36	36

Because of short remaining maturities, the fair values of cash and cash equivalents, current receivables, trade payables as well as current financial assets and liabilities closely correspond to the respective carrying amounts. The carrying amount of the derivative financial instruments corresponds to their fair value (Level 2 of the fair value hierarchy).

The financial instruments designated as assets held for trading in the amount of EUR 26 thousand have been allocated to Level 2 of the fair value hierarchy. Level 2 requires availability of a stock or market price for a similar financial instrument or calculation parameters based on data from observable markets. The measurement takes current ECB reference prices and forward premiums or discounts into account based on a discounted cash flow method.

There were no financial instruments that had to be classified to Level 3 of the fair value hierarchy.

The net gains / losses from financial instruments are as follows:

EUR thsd.		2017	2016
Loans and receivables	(LaR)	6	408
Available-for-sale financial assets	(AfS)	0	0
Assets and liabilities held for trading	(FAHfT) + (FLHfT)	0	0
Financial liabilities measured at amortized cost	(FLAC)	945	832
		951	**1,240**

The net gains / losses from loans and receivables include changes in allowances, gains and losses on derecognition / disposal, payments received, reversals of write-downs on loans and receivables as well as currency translation.

Net gains and losses from financial assets and liabilities held for trading contain changes in the fair value of the derivative financial instruments not subject to hedge accounting as well as gains and losses on maturity during the reporting period.

Net gains and losses from financial liabilities recognized at amortized cost comprise gains and losses on disposal and currency translation. Total interest expense using the effective interest method was EUR 945 thousand.

There are no significant counterparty credit risks by customer group or geographical region. Loans and receivables are securitized in part through credit insurance or bank guarantees (LC). For the rest, the maximum exposure to lending risks corresponds to the carrying amount of the aforementioned receivables by class.

MATURITY ANALYSIS AS OF 31 DECEMBER

EUR thsd.		Carrying amount as of 31 Dec.	Up to 6 months	6 months up to 1 year	Between 1 year and 5 years	More than 5 years
Trade payables	2017	3,227	3,227	0	0	0
	2016	3,071	3,071	0	0	0
Financial obligations and loans	2017	40,997	19,684	1,269	18,837	1,207
	2016	43,482	19,446	1,405	19,584	3,047
Other interest-free liabilities	2017	448	448	0	0	0
	2016	1,587	1,587	0	0	0
Derivative financial instruments	2017	26	26	0	0	0
	2016	36	36	0	0	0

RECONCILIATION FOR LIABILITIES FROM FINANCING ACTIVITIES PURSUANT TO IAS 7

			Non-cash expenses			
EUR thsd.	01 Jan. 2017	Cash changes	Acquisitions	Changes due to changes in foreign exchange rates	Fair value changes	31 Dec. 2017
Long-term borrowings	22,631	– 2,587	0	0	0	20,044
Short-term borrowings	20,851	102	0	0	0	20,953
Lease liabilities	0	0	0	0	0	0
Assets held as collateral for long-term borrowings	0		0	0	0	0
Total	**43,482**	**– 2,485**	**0**	**0**	**0**	**40,997**

4. HEDGING POLICY AND RISK MANAGEMENT

Risk management principles

The assets, liabilities and planned transactions of LPKF Laser & Electronics AG are exposed, in particular, to risks from fluctuations in foreign exchange rates and interest rates. The aim of financial risk management is to limit these risks. Depending on the nature of the risk, this primarily involves the use of derivative financial instruments. These instruments are exclusively used for hedging, i. e. they are not used for trading or speculative purposes.

Risk management is handled by the Management Board, which fixes the general guidelines for risk management and determines the relevant procedures. It is implemented by the technical departments and subsidiaries subject to compliance with authorized business guidelines and coordinated by the Group Risk Officer.

The material risks from financial instruments and the attendant risk management system of the LPKF Group are disclosed below:

Currency risks

The currency risks to which the LPKF Group is exposed mainly arise from receivables, liabilities, cash and future transactions in foreign currencies. Assets recognized in currencies with declining exchange rates decline in value whereas liabilities reported in currencies with rising exchange rates increase in value. From the Group's point of view, only the difference between income and expense in a foreign currency is exposed to risk.

As a rule, risks are only hedged if they have an impact on the Group's cash flows. Foreign currency risks that have no impact on the Group's cash flows are not hedged. These include risks from the translation of the assets and liabilities reported in the annual financial statements of foreign subsidiaries into euros, the Group's reporting currency.

Most invoices related to operations are written in euros; sales in North America are invoiced in USD. Cash flows in JPY and other foreign currencies are required in some cases.

To the extent possible, the Group pays for its procurement in USD, thus following a natural hedge philosophy. In net terms, however, this does give rise to USD cash inflows. Foreign currency forward contracts or currency options are used to hedge foreign currency inflows contracted for up to twelve months. Foreign currency hedges cannot fully offset the negative effects of the euro's continued strength against the US dollar on the Group's competitive position.

Changes in the fair value of the derivatives used to hedge currency risks that arise from foreign exchange rates and changes in the hedged item in the statement of financial position during the same period are virtually balanced in the income statement.

The disclosure of market risks requires sensitivity analyses pursuant to IFRS 7. They show the effects of hypothetical changes in the relevant risk variables on performance and equity. Currency risks arising from changes in the USD exchange rate have priority for LPKF in this respect. The periodic effects are determined by relating the hypothetical changes in the risk variables to the holdings of financial instruments as of the reporting date. The assumption is that the value of the holdings as of the reporting date is representative for the whole year. Differences from foreign-currency translation of the annual financial statements of foreign subsidiaries into euros, the Group's functional currency, are not taken into account.

The currency sensitivity analysis is based on the following assumptions:

Interest income or expenses associated with financial instruments are either reported directly in the functional currency or translated into the functional currency by way of derivatives. This means that the figures analyzed cannot have material consequences.

Pursuant to IFRS 7, the analysis only shows the effects of exchange rate changes on financial instruments held by the Group as of the reporting date.

If the euro had risen by 10% against the USD dollar, earnings before income taxes would have been reduced by EUR 124 thousand. A 10% decline in the euro would have raised earnings (before income taxes) by EUR 86 thousand.

Interest rate risks

Interest rates give rise to cash flow risks that affect cash funds. An increase in interest rates by 25 basis points yields a gain of EUR 9 thousand while a decrease in interest rates by 25 basis points yields a loss of EUR 4 thousand. Given low interest rates, the sensitivities are determined using a hypothetical change by 25 basis points. The low interest rate sensitivities relative to cash funds largely stem from low-interest cash funds.

The long-term loans obtained to finance buildings are subject to fixed interest rates.

Other price risks

LPKF is not exposed to other price risks.

Liquidity risks

The liquidity risk concerns the risk of not being able to satisfy existing or future payment obligations for lack of cash. This is centrally managed within the LPKF Group. The liquidity risk is minimized through continuous liquidity planning. In addition to existing cash and cash equivalents, credit lines are also available from various banks. The European companies optimized their liquidity peaks by way of cash pooling. All other companies carry out their ongoing cash management locally. LPKF is continually reviewing whether to expand cash pooling to other international companies. If large amounts of funds are required, reviews are performed to determine whether to utilize local financing or financing via LPKF AG. Long-term bank loans were used to finance the buildings in Garbsen, Suhl and Fürth.

Credit risks

The LPKF Group's operating business and certain of its financing activities expose it to default risks. Receivables from the operating business are monitored on an ongoing basis in decentralized fashion by the segments and subsidiaries. Default risks are accounted for by appropriate allowances.

Trade receivables are also securitized by EUR 193 thousand in payment commitments from banks (letters of credit). This leaves solely the credit risk of the chattel mortgagor. In addition, EUR 6,973 thousand in trade receivables is hedged through credit default insurance. The deductible for customers insured under a credit limit is 36%; for customers insured under a discretionary limit, it is 62%.

Capital management disclosures

The Group's capital management serves to secure the Company's existence as a going concern and pursue opportunities for growth with the aim of continuing to funnel profits to its shareholders and pay other interested parties that to which they are entitled. Maintaining an the best possible capital structure to reduce capital costs is another objective. To maintain or modify its capital structure, depending on the given situation the Group adjusts dividend payments to its shareholders; repays capital to its shareholders; issues new shares; or sells assets in order to discharge liabilities. The capital available comprises equity of EUR 54,232 thousand and borrowings of EUR 62,335 thousand.

26. DISCLOSURES PURSUANT TO SECTION 315e HGB

The requirements of Section 315e German Commercial Code for the preparation of consolidated financial statements according to IFRS, as applicable in the EU, have been fulfilled. In addition to IFRS disclosure obligations, LPKF also publishes details and explanations required under the German Commercial Code.

27. DISCLOSURES ON MANAGEMENT BOARD REMUNERATION

The following individuals have been appointed as members of the Company's Management Board:

Dipl.-Oec. Kai Bentz (CFO) (Interim spokesman)	Finance, Controlling, Risk Management, Human Resources, Investor Relations, Legal
Dr. Ingo Bretthauer (until 15 October 2017)	Sales, Marketing, Services, Strategy, Investor Relations, Legal Affairs
Dipl.-Ing. Bernd Lange (CTO)	Research, Development, Patents, Sales, Marketing, Services
Dr.-Ing. Christian Bieniek (COO)	Production, Purchasing, Logistics, Quality Management, Administration, Organization / IT

The remuneration of the Management Board is performance-based and consists of a fixed component and variable performance-based components. Details regarding the remuneration system and individual disclosures are presented in the remuneration report, which is part of the Group management report.

The members of the Management Board in office in 2017 were paid total remuneration of EUR 1,106 thousand (previous year: EUR 1,108 thousand) for their activities in the 2017 financial year. Of this amount, EUR 923 thousand (previous year: EUR 991 thousand) was fixed remuneration, EUR 94 thousand (previous year: EUR 103 thousand) were fringe benefits and EUR 75 thousand (previous year: EUR 0 thousand) was paid as a termination benefit and / or recognized as a liability. The remuneration of the Management Board's active members represents short-term benefits as defined in IAS 24.17 (a). The contributions of EUR 14 thousand (previous year: EUR 14 thousand) are post-employment benefits as defined in IAS 24.17 (b). The termination benefit is a benefit as defined in IAS 24.17 (d).

Expenses of EUR 0 thousand (previous year: EUR 0 thousand) relating to the setting-up of provisions for share-based payments as defined in IAS 24.17 (e) were recognized for members of the Management Board in the financial year just ended. The fair value at the allotment date was EUR 0 thousand.

COMMITMENTS TO MEMBERS OF THE MANAGEMENT BOARD UPON TERMINATION

The Company has not made any pension commitments to the current members of its Management Board. Pension contracts were closed with the members of the Management Board, Kai Bentz and Bernd Lange; the Company makes contributions toward these contracts. Contributions of EUR 14 thousand (previous year: EUR 14 thousand) were paid in the financial year In connection with post-employment benefits as defined in IAS 24.17 (b). No provisions for pensions are required in this case.

Post-contractual non-competition agreements have been made with the members of the Management Board in the event their activities as such are terminated, irrespective of whether it is an ordinary or extraordinary termination. Under these agreements, the Company shall pay remuneration equivalent to 50% of the respective individual's most recent average base salary for the 12-month term of the post-contractual non-competition agreement unless the individual in question is retiring.

If a member of the Management Board dies while in office, the fixed monthly remuneration shall be paid to the heirs for a six-month period. No other provisions and commitments have been made with respect to the ordinary or extraordinary termination of a member of the Management Board.

A separate agreement was entered into with Dr. Bretthauer to settle the employment relationship. Termination benefits of EUR 125 thousand were paid on this basis. These mainly comprise the continued payment of his fixed salary including fringe benefits for 2.5 months after his dismissal on 15 October and an amount of EUR 50 thousand to settle claims from the allocation of the LTI 2 options from 2015 and, if applicable, any other claims. A post-contractual non-compete clause was agreed for a period of 18 months after his departure. Any remuneration claims resulting from an advisory role of Dr. Bretthauer will not be offset against the compensation to be paid in connection with the non-compete clause.

TOTAL REMUNERATION OF FORMER MEMBERS OF THE MANAGEMENT BOARD

Provisions were recognized for EUR 535 thousand (previous year: EUR 511 thousand) in pension commitments (pension plan, disability pension and widow's pension) toward former members of the Management Board and their survivors. A total of EUR 17 thousand (previous year: EUR 17 thousand) in pensions was paid to a former member of the Management Board in 2017. A commitment to pay termination benefits of EUR 125 thousand was also made. Of that amount, EUR 75 thousand were paid in 2017.

28. DISCLOSURES ON SUPERVISORY BOARD REMUNERATION

Dr. Markus Peters (from 13 July 2017; Chairman from 16 October 2017)	Head of Finance and Investment of German Technology AG, Hannover, Germany
Dr. Heino Büsching (Chairman until 15 October 2017; Deputy Chairman from 16 October 2017)	Lawyer / tax consultant at CMS Hasche Sigle Partnerschaft von Rechtsanwälten und Steuerberatern mbB, Hamburg, Germany
Bernd Hackmann (Deputy Chairman until 12 July 2017)	Consultant to technology companies formerly: Chief Executive Officer of LPKF Laser & Electronics AG Chairman of the Supervisory Board of Viscom AG, Hannover, Germany Member of the Supervisory Board of SLM Solutions Group AG, Lübeck, Germany
Prof. Dr.-Ing. Erich Barke	Retired professor of Leibniz University Hannover, Germany formerly: President of Leibniz University Hannover, Germany Member of the Supervisory Board of the following companies: Esso Deutschland GmbH, Hamburg, Germany ExxonMobil Central Europe Holding GmbH, Hamburg hannoverimpuls GmbH, Hannover Solvay GmbH, Hannover, Germany (until July 2017)
Dr. Dirk Rothweiler (from 13 June 2017)	CEO of First Sensor AG, Berlin, Germany

Each member of the Supervisory Board receives fixed basic remuneration for each full financial year of membership on the Supervisory Board that is specified by resolution of the Annual General Meeting and is payable after the end of the financial year. The Chairman of the Supervisory Board receives double and the Deputy Chairman receives one-and-a-half times the amount of the fixed basic remuneration. By resolution of the Annual General Meeting dated 2 June 2016, the fixed basic remuneration of each member of the Supervisory Board was set at EUR 32 thousand effective 1 January 2017.

The remuneration of the Supervisory Board's active members solely concerns short-term benefits as defined in IAS 24.17 (a). Further disclosures regarding the remuneration of the Supervisory Board, particularly individual disclosures, are set forth in the remuneration report, which is part of the Group management report.

29. DISCLOSURE OF REPORTED SHAREHOLDINGS IN THE COMPANY

The following entities and persons have notified us that their shareholdings exceeded the 3% threshold in 2017:

Mr. Jörg Bantleon, Germany, notified us in accordance with Section 21 (1) WpHG that his share of the voting rights in LPKF Laser & Electronics AG, Garbsen, Germany, on 16 September 2016 had exceeded the threshold of 15% and on that date was 20.02% (representing 4,457,307 voting rights). Of these, 10.02% (2,230,307 voting rights) are attributable to Bantleon Bank AG, Zug, in accordance with Section 22 WpHG.

Bantleon Bank AG, Zug, Switzerland, notified us in accordance with Section 21 (1) WpHG that it transferred its 10.02116 % share of the voting rights in LPKF Laser & Electronics Aktiengesellschaft, Garbsen, Germany, (representing 2,230,307 voting rights) to its subsidiary German Technology AG, Hannover, Germany, on 10 July 2017.

Luxunion S.A., Leudelange, Luxembourg, notified us in accordance with Section 26 (1) WpHG that its 5.18% share of the voting rights in LPKF Laser & Electronics AG, Garbsen, Germany, (representing 1,152,739 voting rights) is fully attributable to Luxempart S.A., Leudelange, Luxembourg.

Mr. Jörg Bantleon, Germany, notified us in accordance with Section 26 (1) WpHG that he transferred his 10.02% share of the voting rights in LPKF Laser & Electronics Aktiengesellschaft, Garbsen, Germany, (representing 2,230,307 voting rights) to its subsidiary German Technology AG, Hannover, Germany, on 11 October 2017. The overall share of the voting rights of German Technology AG now amounts to 20.28% (representing 4,515,436 voting rights).

All other notifications of voting rights in accordance with the German Securities Trading Act concerned cases in which the interest in the voting shares had fallen below the 3% threshold. They have been published at http://www.lpkf.com/investor-relations/share/notification-of-voting-rights.htm

30. AUDITOR FEES INVOICED IN THE FINANCIAL YEAR JUST ENDED

The Company is obligated under the German Commercial Code (Section 314 (1) no. 9) to disclose Group auditor's fees for auditing the annual financial statements invoiced during the financial year:

EUR thsd.	2017	2016
Audits of financial statements	146	125
Other assurance services	5	0
Other services	50	0
	201	125

31. EVENTS AFTER THE REPORTING PERIOD

The Supervisory Board appointed Dr. Götz Bendele the Company's new Chairman of the Management Board (Chief Executive Officer) on 15 March 2018. His term of office begins on 1 May 2018; his contract runs for three years.

Other than that there were no significant events after the end of financial year 2017.

Garbsen, Germany, 20 March 2018

LPKF Laser & Electronics Aktiengesellschaft

The Management Board

KAI BENTZ

BERND LANGE

DR.-ING. CHRISTIAN BIENIEK

INDEPENDENT AUDITOR'S REPORT

TO LPKF LASER & ELECTRONICS AKTIENGESELLSCHAFT, GARBSEN

REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND OF THE GROUP MANAGEMENT REPORT

Audit opinions

We have audited the consolidated financial statements of LPKF AG, Garbsen, Germany, and its subsidiaries (the Group), which comprise the consolidated financial statements as of 31 December 2017, the consolidated statement of comprehensive income, the consolidated income statement, the consolidated statement of changes in equity and the consolidated statement of cash flows for the financial year from 1 January 2017 to 31 December 2017, and the notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the Group management report of LPKF Laser & Electronics Aktiengesellschaft, Garbsen, Germany, which has been combined with the Company's management report, for the financial year from 1 January 2017 to 31 December 2017. In accordance with the German legal requirements, we have not audited the content of the Group management report specified in the "Other information" section of our auditor's report.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Section 315e (1) German Commercial Code (HGB) and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as of 31 December 2017, and of its financial performance for the financial year from 1 January 2017 to 31 December 2017, and
- the accompanying Group management report as a whole provides an appropriate view of the Group's position. In all material respects, this Group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our audit opinion on the Group management report does not cover the content of the Group management report specified in the "Other information" section.

Pursuant to Section 322 (3) Sentence 1 German Commercial Code (HGB), we state that our audit has not led to any reservations with respect to the propriety of the consolidated financial statements and the combined management report.

Basis for the audit opinions

We conducted our audit of the consolidated financial statements and of the Group management report in accordance with Section 317 German Commercial Code (HGB) and the EU Audit Regulation (No. 537/ 2014; referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's responsibilities for the audit of the consolidated financial statements and of the Group management report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) Point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the Group management report.

Key audit matters in the audit of the consolidated financial statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from 1 January 2017 to 31 December 2017. These matters were addressed in the context of our audit of the consolidated financial statements as a whole and in forming our audit opinion thereon; we do not provide a separate audit opinion on these matters.

In our view, the following items comprise the key audit matters:

1. Deferred tax assets on loss carryforwards
2. Recognition of development costs

Our presentation of these key audit matters has been structured as follows in each case:

1. Issue and presentation of problem
2. Audit approach and findings
3. Reference to additional information

In the following we present the key audit matters:

1. Deferred tax assets on loss carryforwards

<u>1. Issue and presentation of problem</u>

In the Company's consolidated financial statements, deferred tax assets are reported in the amount of EUR 5.4 million, of which EUR 3.7 million is for tax loss carryforwards. Deferred tax assets on temporary differences and tax loss carryforwards are recognized to the extent it is probable according to estimates by the executive directors that taxable profits will be generated in the future against which the deductible temporary differences and tax losses can be offset. In addition, if the available deferred tax liabilities are insufficient, forecasts are made regarding future taxable profits. These taxable profits arise from the tax planning prepared by the executive directors, which is derived from the multi-year plan by the Group for the period from 2018 to 2022. Moreover, the Company has domestic and foreign loss carryforwards in the amount of EUR 16.2 million for which no deferred tax assets were recognized. It is not likely that this amount will be used for tax purposes, i. e., offset against taxable profits, according to estimates by the executive directors.

In our view, the recognition of deferred tax assets was a key matter within the framework of our audit, because it is highly dependent on estimates and assumptions by the executive directors and therefore subject to uncertainty.

<u>2. Audit approach and findings</u>

In our audit, our internal Tax Reporting & Strategy specialists assisted us in assessing whether the tax items were impaired and whether their presentation in the financial statements was appropriate. With their support, we assessed factors including the internal processes and controls established for recording tax items and the methods involved in calculating, measuring and reporting deferred taxes. Furthermore, we compared the recoverability of the deferred tax assets on deductible temporary differences and tax loss carryforwards based on the Company's internal forecasts of future taxable earnings with the tax plan prepared by the executive directors and derived from the multi-year plan for 2018 to 2022 and assessed the appropriateness of the underlying estimates and assumptions.

Based on our audit procedures, we obtained assurance that the estimates and assumptions made by the executive directors are justified and sufficiently documented.

<u>3. Reference to additional information</u>

The Company's disclosures regarding deferred tax assets and tax loss carryforwards are included in the "Accounting policies" section as well as in section H.15 in the consolidated financial statements.

2. Recognition of development costs

1. Issue and presentation of problem

In LPKF AG's consolidated financial statements, the intangible assets items includes capitalized development costs in the amount of EUR 13.5 million. This item accounts for approximately 11% of total assets.

"Development" comprises prototype development projects intended for permanent use in the LPKF Group's operations. Development costs are capitalized at the time of fulfillment of the criteria in IAS 38.57, whereas in contrast, research costs are treated as expenses. Capitalized development costs are amortized on a straight-line basis from the time they become usable over a maximum useful life of three years.

The carrying amounts and the useful lives of the capitalized development costs are tested for impairment / validity as of the end of every financial year. Capitalized development costs are written down in accordance with IAS 36 if the recoverable amount of the respective asset has dropped below its carrying amount. In addition, capitalized development costs not yet available for use are tested for impairment annually.

To the extent that impairment losses have been recognized in the past, a test is conducted as of every reporting date to determine whether these must be reversed.

The recoverability of development costs depends on the estimates and assumptions of the executive directors and is subject to uncertainty. Moreover, the capitalized development costs contribute directly to consolidated profit / loss, because they are recognized on the face of the consolidated income statement. In our view, development costs are therefore a key audit matter.

2. Audit approach and findings

In conducting our audit, we first reconciled the documentation of the capitalized development costs with the balances in the consolidated statement of financial position. Regarding initial measurement, we reviewed the procedure established by LPKF for fulfilling the criteria in IAS 38.57 and the classification of research and development activities in terms of content and consistency.

We verified the assignment of capitalized expenses to existing development projects (additions) that are not yet available for use by way of the appropriate audit procedures. In this process, we obtained assurance of the currentness of the reported development projects.

We assessed the calculation of the recoverable amount obtained in the impairment test, including the measurement parameters applied. In particular, we reviewed the inclusion and consistency of the sales plans that form the basis for testing impairment.

The procedures established by the executive directors, including the assumptions and estimates applied to classification, measurement and recognition of the development costs are verifiable, sufficiently documented and, in our view, wholly suitable for allowing for proper measurement and recognition of the development costs.

In our view, the accounting policies applied by the executive directors to the development costs are appropriate overall.

3. Reference to additional information

The disclosures regarding development costs are contained in sections G.2 and H.10.1 of the notes to the consolidated financial statements.

Other information

The executive directors are responsible for the other information. The other information comprises the following non-audited parts of the group management report received by us before the date of this auditor's report:

- the reference to the corporate governance declaration pursuant to Section 289f HGB and § 315d HGB included in section V. of the Group management report
- the reference to the corporate governance report pursuant to Article 3.10 of the German Corporate Governance Code included in section V. of the Group management report,
- the separate non-financial Group report pursuant to Section 315b (3) HGB

We expect to receive the annual report after the date of the auditor's report.

We expect to receive the separate non-financial group report pursuant to Section 315b (3) HGB after the date of the auditor's report.

Our audit opinions on the consolidated financial statements and on the Group management report do not cover the other information, and consequently we do not express an audit opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the Group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

Responsibilities of the executive directors and the Supervisory Board for the consolidated financial statements and the Group management report

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) German Commercial Code (HGB) and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the Group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a Group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the Group management report.

The Supervisory Board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the Group management report.

Auditor's responsibilities for the audit of the consolidated financial statements and of the Group management report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the Group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and on the Group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 German Commercial Code (HGB) and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this Group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also

- identify and assess the risks of material misstatement of the consolidated financial statements and of the Group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures relevant to the audit of the Group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.
- evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.
- conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the Group management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.
- evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and with the additional requirements of German commercial law pursuant to Section 315e (1) German Commercial Code (HGB).
- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and on the Group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.
- evaluate the consistency of the Group management report with the consolidated financial statements, its conformity with German law, and the view of the Group's position it provides.
- perform audit procedures on the prospective information presented by the executive directors in the Group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

OTHER LEGAL AND REGULATORY REQUIREMENTS

Further information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor by the Annual General Meeting on 1 June 2017. We were engaged by the Supervisory Board on 22 November 2017. We have been the group auditor of LPKF AG Aktiengesellschaft, Garbsen, Germany, without interruption since the financial year 2004.

We declare that the audit opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

GERMAN PUBLIC AUDITOR RESPONSIBLE FOR THE ENGAGEMENT

The German Public Auditor responsible for the engagement is Jens Wedekind.

Hannover, Germany, 20 March 2018

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

Jens Wedekind	ppa. Hanno Karlheim
Wirtschaftsprüfer	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]

INCOME STATEMENT SINGLE-ENTITY FINANCIAL STATEMENTS

from 1 January to 31 December 2017

EUR thsd.	2017	2016
Revenue	46,808	42,102
Changes in inventories of finished goods and work in progress	– 1,195	213
Other own work capitalized	0	0
Other operating income	5,425	4,795
	51,038	**47,110**
Cost of materials		
Cost of raw materials, consumables and supplies, and of purchased merchandise	21,420	19,610
Staff costs		
Wages and salaries	13,227	14,334
Social security costs and pension costs (of which for pensions: EUR 115 thousand (previous year: EUR 140 thousand)	2,295	2,487
Depreciation, amortization and impairment losses		
Amortization and write-downs of intangible fixed assets and depreciation and write-downs of tangible fixed assets	2,838	3,082
Write-downs of currents assets to the extent that they exceed the usual write-downs	0	3,154
Other operating expenses	14,296	13,768
	54,076	**56,435**
Income from equity investments (of which from affiliated companies: EUR 3,400 thousand (previous year: EUR 5,959 thousand)	3,400	5,959
Other interest and similar income (of which from affiliated companies: EUR 153 thousand (previous year: EUR 248 thousand)	153	248
Income from profit transfer	1,693	0
Expenses from loss absorption	268	1,685
Write-downs of financial assets	147	0
Interest and similar expenses (of which to affiliated companies: EUR 0 thousand (previous year: EUR 0 thousand)	741	623
Taxes on income	11	82
Earnings after taxes	**1,041**	**– 5,508**
Other taxes	45	26
Net profit for the year	**996**	**– 5,534**
Retained earnings brought forward from the previous year	– 1,201	4,333
Net retained profits	**– 205**	**– 1,201**

BALANCE SHEET

Single-entity financial statements of LPKF Laser & Electronics AG as of 31 December 2017

ASSETS

EUR thsd.	2017	2016
Fixed assets		
Intangible assets		
Software	1,161	1,210
Rights of use	29	33
Advances paid		
	1,190	**1,243**
Property, plant and equipment		
Land, similar rights and buildings	17,549	18,232
Plant and machinery	2,294	2,481
Other equipment, operating and office equipment	3,150	3,927
Advances paid and construction in progress		
	22,993	**24,640**
Financial assets		
Shares in affiliated companies	15,658	15,804
	15,658	**15,804**
	39,841	**41,687**
Current assets		
Inventories		
Raw materials, consumables and supplies	6,803	7,924
Work in progress	426	926
Finished products and goods	2,886	3,522
Advances paid	17	13
	10,132	**12,385**
Receivables and other assets		
Trade receivables (of which due within more than one year: EUR 107 thousand (previous year: EUR 214 thousand)	4,572	6,469
Receivables from affiliated companies	17,971	15,165
Other assets (of which due within more than one year: EUR 0 thousand (previous year: EUR 46 thousand)	1,822	677
	24,365	**22,311**
	34,497	**34,696**
Cash-in-hand, bank balances and checks	168	1,535
	34,665	**36,231**
Deferred income	**234**	**275**
Deferred taxes	**3,797**	**3,857**
Excess of plan assets over pension liability	**255**	**240**
	78,792	**82,290**

EQUITY AND LIABILITIES

EUR thsd.	2017	2016
Equity		
Subscribed capital	22,270	22,270
Capital reserves	2,186	2,186
Revenue reserves		
Statutory reserve	41	41
Other retained earnings	11,200	11,200
	11,241	11,241
Net retained profits	– 205	– 1,201
	35,492	**34,496**
Provisions		
Provisions for pensions	0	0
Other provisions	2,051	2,489
	2,051	**2,489**
Liabilities		
Liabilities to banks	32,918	33,764
Payments received on account of orders	439	221
Trade payables	748	1,304
Liabilities to affiliated companies	6,007	9,221
Other liabilities	990	748
(of which from taxes: EUR 194 thousand (previous year: EUR 238 thousand)		
(of which from social security: EUR 6 thousand (previous year: EUR 7 thousand)		
	41,102	**45,258**
Deferred taxes	**147**	**47**
	78,792	**82,290**

GLOSSARY OF TECHNICAL TERMS

EBIT
Earnings before interest and taxes

EBIT margin
Operating profit as a percentage of revenue

FTE
(Full-time equivalent) A labor comparison metric, FTE expresses the workforce in terms of the compensable workload handled by a full-time employee (i. e. working a standard, full-time schedule).

HDI circuit board
(High-density interconnect circuit board) A HDI circuit board is a highly compact PCB, where widths and spacing between conductive paths and contact pads are reduced to structural sizes of <100µm.

IC (integrated circuit)
An IC is a set of electronic circuitry attached to a thin piece of semiconductor material typically only a few millimeters in size. The piece of semiconductor material is often referred to as a “chip”.

ICP (IC packaging)
The encapsulation of a semiconductor chip (see entry for IC) including its contact pins is commonly referred to as a “package”. Apart from protecting the integrated circuit (IC) die on the chip itself, the package is used to attach the chip to a circuit board and connect it with the various components on the board. A great many types of IC packages are in common use.

IC substrate
An IC substrate is a small, multi-layered special PCB constructed from a number of materials depending on the application. The IC substrate connects the variously-sized contacts on chips and circuit boards in an extremely compact form factor. Alongside organic laminates, ceramics or other specialized starting materials are also used.

LDS method
(Laser direct structuring) A laser-based manufacturing process for three-dimensional circuit carriers, otherwise known as molded interconnect devices (MIDs), made of plastic, which also handle mechanical functions.

LIDE
(Laser-induced deep etching) High-precision method for machining glass. LIDE enables the creation of ultra high-precision holes and structures in glass at very high speeds, and also includes the TGV method.

LTP method
(Laser transfer printing) A method for digitally printing functional pastes as an alternative to screen printing.

Rapid prototyping
A method for the chemical-free manufacture of prototype printed circuit boards in in-house laboratories.

ROCE
Return on capital employed

StencilLasers
Laser systems for cutting fine, highly precise openings in a stainless steel stencil. Stencils are used for the precision printing of solder paste onto printed circuit boards – a vital technique for today’s closely packed PCBs.

TGV method
(Through-glass-via) A laser method for creating ultrafine holes in glass (see LIDE).

Thin film solar panels
Thin film solar panels are manufactured by coating a sheet of glass or a film with extremely thin layers. A laser divides each layer into strips to enable the series connection of cells in the finished module.

FINANCIAL CALENDAR

26 March 2018	Publication of the 2017 annual financial report
15 May 2018	Publication of the 2018 three-month report
31 May 2018	Annual General Meeting
15 August 2018	Publication of the 2018 half-yearly financial report
15 November 2018	Publication of the 2018 nine-month report

CONTACT

LPKF Laser & Electronics AG
Osteriede 7
30827 Garbsen
Germany
Tel.: +49 5131 7095-0
Fax: +49 5131 7095-9111
investorrelations@lpkf.com
www.lpkf.com

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LPKF Laser & Electronics AG
Osteriede 7
30827 Garbsen
Germany

Tel.: +49 5131 7095-0
Fax: +49 5131 7095-90

www.lpkf.com