WE ENABLE INNOVATION

ANNUAL REPORT 2019

LPKF
Laser & Electronics

AT A GLANCE
LPKF LASER & ELECTRONICS AG

CONSOLIDATED REVENUE AS OF 31 DECEMBER 2019

in EUR million	2015	2016	2017	2018	2019
Revenue	87.3	91.1	102.1	120.0	**140.0**
Revenue by region					
Germany	12.6	12.9	10.4	12.8	9.7
Rest of Europe	17.3	16.5	20.5	31.9	29.2
North America	19.0	17.7	23.0	24.7	37.5
Asia	35.6	42.3	45.7	49.1	60.8
Other	2.8	1.7	2.5	1.5	2.8
Revenue by segment					
Development	25.5	22.6	24.4	24.3	24.5
Electronics	29.9	30.6	31.7	34.6	43.7
Welding	23.3	24.0	25.4	22.2	27.7
Solar	8.5	13.9	20.6	38.9	44.1
Other	0.1	0.0	0.0	0.0	0.0

CONSOLIDATED FINANCIAL KEY FIGURES AS OF 31 DECEMBER 2019

in EUR million	2015	2016	2017	2018	2019
EBIT	−3.7	−6.8	4.0	6.8	19.2
EBIT margin (in %)	−4.3	−7.4	3.9	5.7	13.7
Consolidated net profit after non-controlling interest	−3.5	−8.8	1.2	8.0	13.0
Diluted EPS (in EUR)	−0.16	−0.40	0.05	0.33	0.53
Dividend per share* (in EUR)	0.0	0.0	0.0	0.0	0.10
ROCE (in %)	−3.6	−6.9	4.1	7.0	25.5
Equity ratio (in %)	53.4	46.5	46.5	60.4	71.2
Investment in property, plant and equipment and intangible net assets	13.7	7.5	6.8	5.7	5.8
Free cash flow	−3.6	−1.8	3.3	5.8	42.2
Orders on hand	13.3	27.8	38.8	58.4	32.3
Incoming orders	82.8	105.7	113.2	139.8	114.0
Employees** (Number)	778	700	683	655	682

* 2019: Annual General Meeting recommendation

** not including trainees and marginal employees

WE ENABLE INNOVATION

MISSION STATEMENT

We enable innovation – this statement can be found throughout this year's annual report and encompasses what our work is all about:

We want to make our customers' new products possible.

These could be even smaller wireless headphones or more powerful solar panels. They could also be intelligent new sensors for autonomous vehicles or perhaps foldable glass displays. Lasers are an ultra-precise and extremely flexible tool that helps to reduce process and material costs while also increasing design freedom. The result is **innovations** that provide their manufacturers and our customers with a clear **competitive advantage**.

Over the following pages, we will present our various areas of activity from the perspective of our employees. Their experience, creativeness and passion make LPKF what it is and are the main driving forces for our future growth.

We enable innovation – in order to meet this high standard, we will continue to invest a considerable portion of our revenue in research and development to secure our place in the world of advanced technology.

COMPANY PROFILE
THE LPKF GROUP

DEVELOPMENT
Solutions for PCB prototyping and micromaterial processing.

ELECTRONICS
Solutions for mass producing assembled and non-assembled printed circuit boards.

WELDING
Solutions for welding plastics in mass production.

SOLAR
Solutions for thin-film photovoltaic module production and digital printing of ceramic inks via Laser Transfer Printing.

LPKF is a leading supplier of laser-based solutions for the technology industry. Our laser systems are vital in the manufacture of printed circuit boards, microchips, automotive parts, solar panels and many other components. The LPKF glass foundry also supplies customers from various industries with high-precision glass components.

Our machines allow our customers to manufacture smaller and higher-precision components. At the same time, the functionality of the components can be increased and new design options used. This creates products at the cutting edge of technology, both for the industry and for consumers.

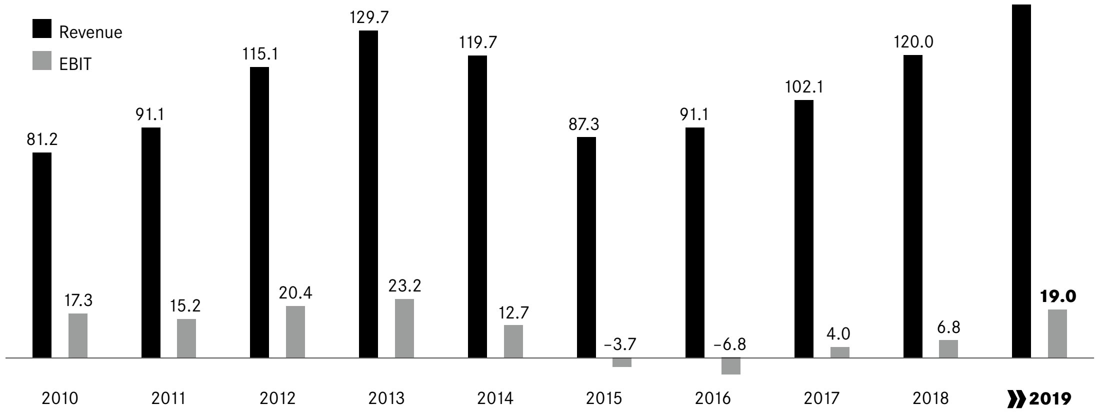
Our employees are laser technology experts and know how to integrate lasers as a tool into powerful machines. This gives us considerable influence over progress in a range of high-tech sectors. The result is more powerful, smaller and more energy efficient products along with improvements in mobility, connectivity, electricity generation and digital entertainment.

LPKF has over 40 years of experience as a technology and innovation leader. Going forward, we also plan to maximize the full potential of laser technology in the digital world.

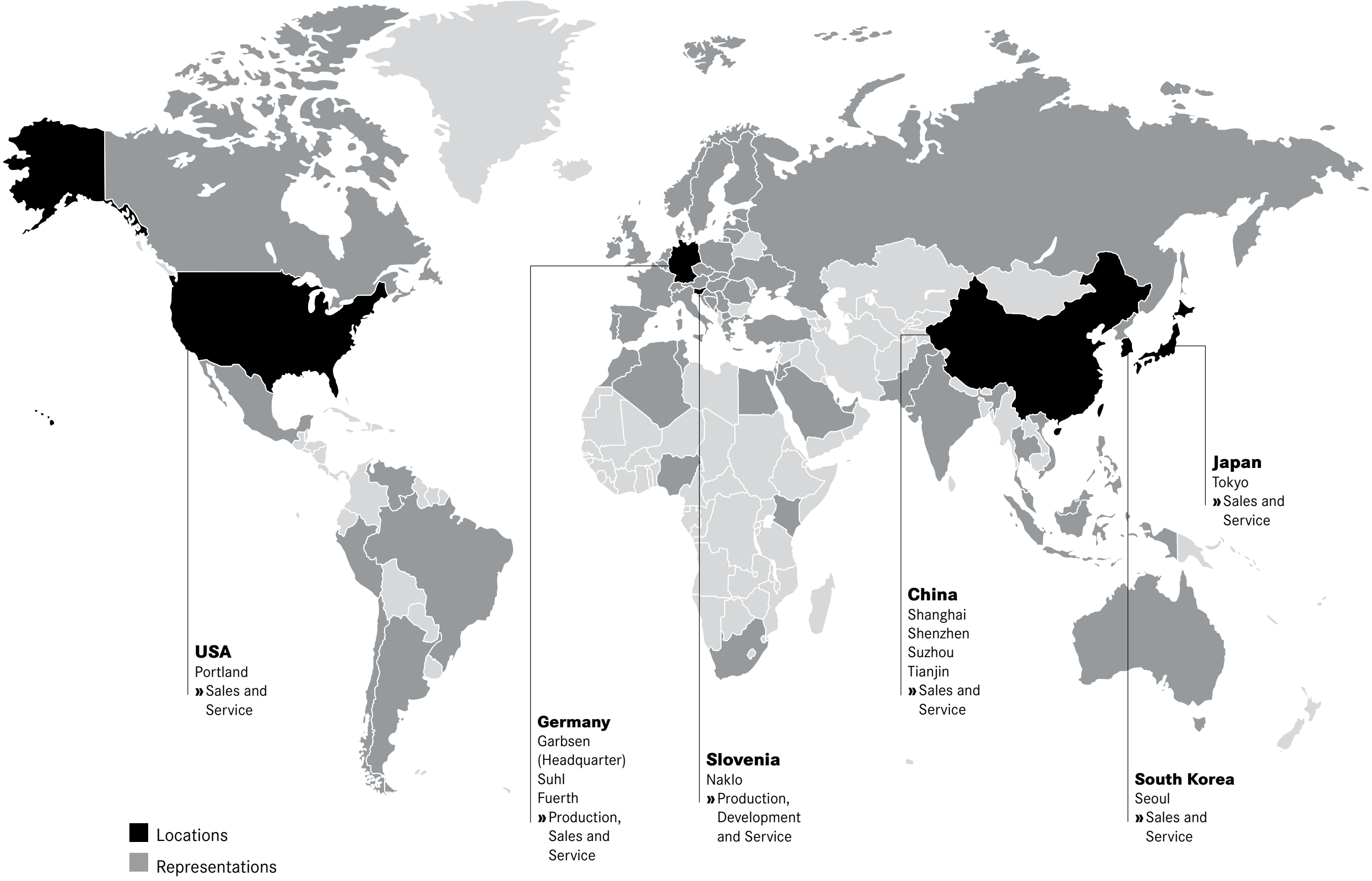
LPKF Laser & Electronics AG is headquartered in Garbsen, near Hanover. We have a broad presence, with locations in Europe, Asia and North America and a total of 688 employees. Our global service network ensures our machines are ready for our customers around the clock.

The shares of LPKF Laser & Electronics AG are listed in the SDAX of the German Stock Exchange.

REVENUE AND EBIT
in EUR million

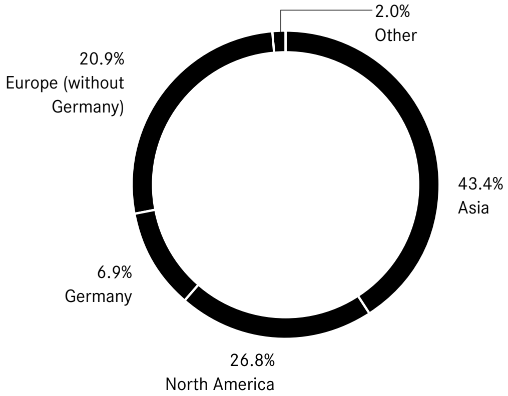


LPKF WORLDWIDE
LOCATIONS & REPRESENTATIONS

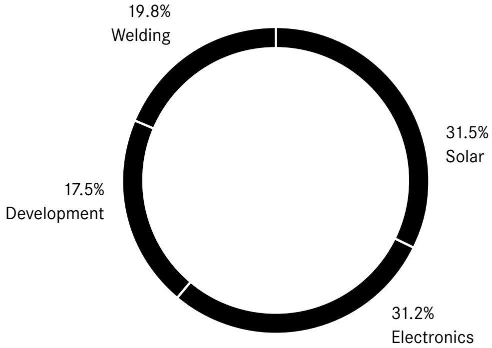


LPKF Laser & Electronics AG is headquartered in Garbsen near Hannover, Germany. We are represented in more than **70 COUNTRIES**, have **10 BRANCHES** in Europe, Asia and North America and with a total of **655 EMPLOYEES** we are broadly positioned worldwide.

» REVENUES BY REGION



» REVENUES BY SEGMENTS



LETTER TO OUR SHAREHOLDERS

DEAR SIR OR MADAM,

Today, we are reporting the financial year 2019 developments and results of LPKF Laser & Electronics AG to you, which have been remarkably positive in all aspects. Independent of that, the world today – in the third week of March 2020 – is in the midst of an unprecedented crisis caused by the global COVID-19 pandemic which affects the outlook for our company at least for the current year.

BUSINESS DEVELOPMENT IN 2019

First off, the financial year 2019: we have accomplished our main goal – to return the technology company LPKF to sustainable profitability and to generate growth that corresponds to the company's potential. Company profit (EBIT) has more than doubled and at the same time, working capital has been reduced by more than half. We have generated profit in all four segments, LPKF has become net debt-free by the middle of the year and has accumulated a substantial net cash reserve in the second half of the year.

The strategic decisions we took, as well as the operational improvements we have pushed throughout the company, are having a sustained positive impact. We are thrilled that our colleagues have taken this path together with us. This has resulted in the significant outcomes in the past financial year:

Revenue has increased by 17% to EUR 140 million. At the same time, earnings before interest and taxes (EBIT) rose by 182% to EUR 19.2 million. LPKF is therefore – fundamentally – on a course to sustainable profitable growth, and on its way to keep creating value while further increasing return on capital and maintaining positive cash flow. To this end, we will continue to expand our global position as a leading technology company with a wide range of applications.

First and foremost, we owe our successful business development in 2019 to our approximately 680 employees worldwide. Their consistently strong commitment, their experience, know-how and creativity are the basis for our success – for that, we thank all our colleagues.

The key figures illustrate the very positive overall development of our business. With revenue growth of 17% to EUR 140 million, we have reached the upper end of our forecast, which we have raised once in the course of the year. At EUR 114 million in 2019, our order intake is down 18% on the previous year, while the order backlog as of December 31, 2019 is at EUR 32 million, down from the prior-year figure of EUR 58 million; this development is driven in part by the different timing of major orders, especially in the Solar segment. The strong revenue growth had a positive impact on profit: At 13.7%, our EBIT margin is significantly higher than in the prior year (2018: 5.7 %).

Return on capital employed (ROCE) more than tripled to 25.5% (2018: 7.0 %). The company has created substantial value for its shareholders in 2019. We are now clearly and systematically moving in the right direction, even if we are still not anywhere near our ultimate goals. There is still much to be done for 2020, regardless of current developments beyond our control.

For 2019, one of our goals was significantly improving capital employed across all segments. We have achieved this goal. An important lever for this was and is active working capital management: in 2019, we have reduced working capital by 55% to EUR 17.1 million. Here, too, decisive factors were clear targets and an open and transparent way of working across internal segment and unit boundaries. On this basis, we can and want to become even better in the future. In the medium term, we want to reduce working capital to approx. 5 - 10% of revenue. With that, LPKF is now in a position to generate additional operating cash flow from strong growth, while not having its earnings consumed by additional capital requirements. This enables us to invest in future technologies, and at the same time sustain profitability and cash flow. The growth of our earnings and the strong improvement in working capital together have led us to generate a total free cash flow of EUR 42,2 million in 2019. While LPKF showed net debt of more than EUR 40 million as recently as the middle of 2018, by contrast we show net cash reserves of EUR 24.5 million at the end of 2019.

The main sources of this turnaround were strong revenue growth in all segments, consistent, targeted efficiency improvements throughout company operations, as well as a significant reduction in working capital. The outcome is a profitable LPKF, which has sufficient financial resources to invest in research & development and in the commercialization of future technologies.

Christian Witt (CFO) und Götz Bendele (CEO)

BUSINESS DEVELOPMENT IN OUR SEGMENTS

The largest contribution to our 2019 growth came from the Electronics segment: revenue increased by 26% year-on-year and earnings (EBIT) from - 1.8% to 16.7% of revenue. This is remarkable, among other things, because a significant portion of the growth was generated from existing products and applications – in other words, ultimately from working better with our customers. Another relevant growth driver is our LIDE technology for microprocessing ultra-thin glass. Here, we have received and delivered further orders for Vitrion systems in 2019, which have made an initial, albeit still modest, revenue contribution. At the end of the year, we have delivered the first highly automated version of our LIDE system for integration into a semiconductor fab to one of the world's leading semiconductor manufacturers. We also received and delivered continuously growing volumes of customer orders for engineering samples (prototypes) in our foundry manufacturing services business. To ensure further growth in this area, we started construction of a clean room factory at the company's headquarters in Garbsen, Germany, in November 2019: a production hall of approx. 800 sqm with an ISO 6 class clean room for manufacturing components made of ultra-thin glass for the electronics and semiconductor industry.

Following a strong year 2018, revenue in the Solar segment has continued to grow by 13% to EUR 44.1 million, with slightly higher EBIT year-on-year. We are the technology and market leader for scribing solutions for thin-film solar modules. This process step contributes significantly to increasing the conversion efficiency and thus to the market value of the modules produced by our customers. Our solution maximizes this effect by minimizing the share of the non-productive „dead" zone of the module surface. We have been able to somewhat reduce our dependence on our largest customer in 2019, and we expect this segment to continue at a high level, while further broadening our customer base. In addition to our solution for all scribe steps for thin-film solar modules with CdTe technology, LPKF now also offers a complete solution for modules with CIGS technology which is expected to be qualified by a customer in 2020. The other new technology in this segment, Laser Transfer Printing (LTP), is now market-ready, but has not yet contributed to 2019 revenue. We expect a contribution to future growth from LTP.

The Welding segment, still below our expectations in 2018, has grown by almost 25% to EUR 27.7 million in 2019 and has generated a profit of EUR 1.1 million, following a loss of EUR 2.9 million in the prior year. This was our explicitly stated goal, and we are pleased that this milestone was reached already in 2019. Among other things, the segment's much stronger customer orientation in conjunction with quick decisions and effective cooperation between the development/design, sales, production and service departments have contributed to this. In addition, this segment's Managing Director position, vacant for some time, was filled externally in October 2019, and we expect further growth impetus from this. In the medium term, we expect additional growth in this segment through technologically differentiated new solutions that create competitive advantage for our customers. For 2020 and subsequent years, we see a fundamentally good basis for further improvement in this segment.

The Development segment is characterized by a continuous and profitable development of its business over many years. At EUR 24.4 million, revenue in the financial year 2019 was almost exactly on a par with the prior year figure. EBIT has reached EUR 2.9 million. With that, we have not yet reached our goal of achieving sustained future growth in this segment, and of participating even more strongly in the growing number of prototypes produced worldwide. Our latest products in this segment – including our new ProtoMat S64/S104 series and the innovative, compact laser system for prototype production, the ProtoLaser ST – have been well-received by the market. We expect further growth contributions from this, as well as from the strengthening of our worldwide presence, which is realized by distributors more than in our other segments.

CHANGES

LPKF is a technology company which, like few others, operates at the absolute leading edge of technological feasibility. This is also true for many of our customers who work with us mainly because we are able to keep up with their often extremely high speed – or even accelerate it. This, by itself, is not new for LPKF; however, we have been focusing much more strongly on the factors which our customers' high speed of innovation is based on. In technology, product and application development, we are systematically increasing our implementation speed. In order processing, we are increasing our speed as well as our flexibility and capacity in terms of the number of units produced. In 2019, for example, we have developed and launched new product variants in several segments in a very short time. In view of the increasing number of customer orders in our Vitrion foundry business, we serve our customers, often R&D departments of ambitious start-ups or large technology companies, in a consistently agile manner, if necessary with a turnaround of a few days. For large orders, we have significantly reduced the necessary lead time and greatly enhanced our peak production capacity – without needing major investment. Finally, especially in those areas where we are facing comparatively strong price pressure, we are increasing our competitiveness through systematic cost-reduction such as design-to-cost. In addition to our technological leadership, these are at least equally important sources of our competitive advantage.

In managing the company, we have defined targets for all segments which are value-oriented but at the same time tangible and easily comprehensible, and we have created a high level of transparency throughout the entire company. This allows our colleagues to check their operational progress at any time and take timely action as needed. We have created this transparency in all areas, and this will continue to be an important element in measurably improving our performance gong forward.

All this is only possible if we can inspire our colleagues for LPKF and make them bring their enthusiasm into their work. This is a question of mindset, way of working together, and appreciation experienced at work. It is clear that this is not limited to a financial participation in the success of the company; however, we are very happy that we were able to make a bonus payment of more than EUR 2 million to our (non-managerial) staff worldwide in 2019 based on our profits; this was a record amount for the company. We have also introduced an employee share purchase program in 2019, which promotes the purchase of LPKF shares by our employees.

At the 2019 annual general meeting, we announced that we would position LPKF such that we are able to invest in technology and pay a dividend. We are pleased that we have succeeded in doing so, and we intend to propose to the annual general meeting on 4 June 2020 that – despite the anticipated effects of the COVID-19 pandemic – a dividend of 10 Eurocents per share be paid once again after four years.

In September 2019, we have explained the growth perspective of our individual segments to institutional investors and analysts at our first Capital Markets Day in Garbsen, Germany. Together with the managing directors of the business units, we showed how LPKF can benefit from the global megatrends such as miniaturization, digitalization, and efficient and environmentally friendly production. Just as important as the performance of our share price is the significant increase in the liquidity of our shares; the average trading volume in the fourth quarter 2019 has increased more than seven times compared to 2018. We are very pleased that the positive development of our business is reflected in our share price as well, and that LPKF was admitted to the SDAX index in February 2020, which we expect will generate interest in our company from new groups of investors.

Overall, LPKF is now well positioned and above all, stable – particularly in terms of its existing financial reserves. Since we started as CEO and CFO almost two years ago, we have argued that a technology company should be debt-free in normal times and have adequate cash reserves. We have reached this goal already in 2019, and we are very happy about that. For this reason, we are confident that LPKF will successfully overcome the challenges posed by the global recession caused by the COVID-19 pandemic.

OUTLOOK

LPKF has made enormous progress in the past year. We have achieved many of our goals, some faster than expected, and we have set ourselves new, ambitious goals. As a technology company, our continued success depends on our ability to keep developing new groundbreaking innovations. In doing so, understanding and addressing the needs of our customers is key. We specifically look for innovations, with which we can deliver a clear competitive advantage to our customers or potential customers, and we are currently working on a number of very interesting projects for our future. We will continue to advance the company with new applications and in new market and customer segments – by establishing new technologies such as LIDE as a standard solution in a number of key application areas, as well as by developing additional new technologies.

At this point in time – in the third week of March 2020 – it is not possible to predict how the COVID-19 pandemic will develop in the coming weeks and months. As a company, we have responded early, first in China and since mid-February at all our worldwide locations. Our teams work from home wherever possible, our locations are divided into sections without physical interaction, and protective measures have been implemented systematically. So far, our business – including production at each of our locations – is going ahead without restrictions. We will do everything we can to protect our employees, their families, our business partners and the company, to minimize the economic impact, and to continue to serve our customers as effectively as possible during this pandemic.

As recently as five weeks ago, we were expecting growing revenue and earnings for the current financial year, assuming a stable development of the global economy; since then, coronavirus disease has developed into a pandemic. Economists now expect a sharp downturn towards recession, followed by recovery. With that, our ability to forecast the current financial year 2020 is severely limited. In the event of a more pronounced recession, we have to anticipate a decline in revenue and earnings for 2020.

For subsequent years, the company continues to expect sustainable, profitable growth in each business unit. In addition, our innovative LIDE technology, whose revenue and profit potential we have reviewed and assessed following progress made in several LIDE customer projects, will add to this growth. This assessment is based on specific expectations for various applications, including in the semiconductor and display segment; in each case coming from corresponding customer projects. With the stronger sales and earnings contribution from LIDE, we now expect consolidated revenue of more than EUR 360 million, and an EBIT margin of over 25%, for 2024, with further growth after that.

2019 was a successful financial year for LPKF that was also full of hard work. We would like to thank the works councils for their constructive cooperation, which is extremely important – especially in addressing together the current challenges posed by the COVID-19 pandemic. We would also like to thank our Supervisory Board for the intensive consultation and the trust placed in us.

Our special thanks go to you, our shareholders, and we hope that you will continue to support LPKF in the future.

Best regards,

Dr. Götz M. Bendele Christian Witt

Garbsen, March 2019

SUPERVISORY BOARD REPORT

DEAR SHAREHOLDERS, LADIES AND GENTLEMEN,

In the 2019 financial year, the efforts of the past months and years brought about positive development in the revenue and earnings of our LPKF Laser & Electronics AG. We would like to take this opportunity to express our thanks to and appreciation for all those involved and thank all of you for the trust you placed in us.

The company can be proud of what it has achieved so far and we on the Supervisory Board are delighted that the changes initiated are bringing about clearly visible successes and confirming that the path we have chosen is the right one. That must spur us on to carry this performance on into the future. Thus, the task at hand remains to continue on the path that we have successfully pursued so far and to bring the cutting-edge technologies that we have developed to volume manufacturing as soon as possible.

The company has no control over risks arising from economic or political changes, for example. Nonetheless, the LPKF Laser & Electronics AG you see today is significantly more powerful and more robust. Changes in industry, such as ever-increasing automation and digitalization, also remain both an opportunity and a risk whereby, from our perspective, we can gladly seize the opportunities and adequately deal with the risks.

SUPERVISION AND CONSULTATION

The Supervisory Board has both constructively and critically monitored the company's business performance over the reporting period and performed the duties incumbent upon it in accordance with the law and Articles of Incorporation. In the 2019 financial year, the Supervisory Board met on eight occasions. All members of the Supervisory Board attended all meetings, with one member of the Supervisory Board taking part in the meeting in May 2019 by telephone.

Details regarding the participation of the Supervisory Board members in the meetings are presented below:

PARTICIPATION OF THE SUPERVISORY BOARD MEMBERS IN THE MEETINGS HELD IN 2019

Name	Meetings	Participated	in %
Dr. Markus Peters (Chairman)	8	8	100
Dr. Dirk Michael Rothweiler (Deputy Chairman from 6 June 2019)	8	8	100
Prof. Dr.-Ing. Erich Barke (until 6 June 2019)	4	4	100
Prof. Dr.-Ing. Ludger Overmeyer (since 6 June 2019)	4	4	100

AVERAGE PARTICIPATION RATE

The Supervisory Board regularly monitored the Management Board's conduct of business during the financial year and advised the Management Board on different aspects of corporate management. The Management Board kept the Supervisory Board informed in a timely manner on issues relating to strategy, planning, business performance, exposure to risk, risk management, and adherence to compliance requirements. If business performance deviated from approved plans, this was discussed with the Management Board. The Supervisory Board was involved in important Group decisions at an early stage. The Management Board submits monthly written reports to the Supervisory Board concerning the earnings and liquidity situation, along with an overview of the business position and exposure to risk.

The members of the Supervisory Board considered the submitted documents and resolutions critically, and also made their own suggestions. To this end, the Supervisory Board had numerous discussions with the Management Board outside the official board meetings. Furthermore, the Chairman of the Supervisory Board exchanged information with the Management Board. Measures requiring approval were submitted to the members of the Supervisory Board in accordance with the Articles of Incorporation and rules of procedure. Furthermore, the Supervisory Board regularly satisfied itself of the legality, propriety and appropriateness of the Management Board's actions. Where necessary, the Supervisory Board was given access to the company's books and records.

MAIN FOCUS OF CONSULTATION

The main areas of focus for consultations in the previous financial year were the current business performance and stabilizing this successful performance in the future. The Management Board kept the Supervisory Board briefed with agreed key management figures; in particular, orders on hand, incoming orders, working capital, liquidity, and earnings. Where appropriate, the Supervisory Board advised improvements or additional measures within the limits of its mandate. Furthermore, detailed advice was given on growth options as well as launching the future technologies developed on the market, the business situation, cash flow and financing, and net working capital.

During the reporting period, a strategy meeting was once again held with the Management Board and the division managers. The Supervisory Board extensively addressed and discussed company strategy. The strategy meeting serves as a basis for corporate planning.

Internal audit measures are an integral part of the corresponding Supervisory Board meetings. Internal audits at LPKF Laser & Electronics AG are outsourced to an auditing firm, which reviews selected areas of the company in accordance with a defined schedule and audit plan. The Supervisory Board is informed of the outcomes of audits. Following consultation, the Supervisory Board has approved the suggested measures where necessary.

PROCUREMENT OF THE AUDIT

LPKF Laser & Electronics AG was legally bound to invite bids for the auditing mandate for the future financial years in accordance with Article 16 of Regulation (EU) No. 537/2014 of the European Parliament and of the Council of 16 April 2014 on specific requirements regarding statutory audit of public-interest entities and repealing Commission Decision 2005/909/EC ("Audit Regulation"). The Supervisory Board has already voluntarily implemented this regulation for the 2019 financial year. Accordingly, the Supervisory Board, which in this respect performs the functions of the audit committee as per Article 16 of the Audit Regulation itself, carried out

Dr. Markus Peters, Chairman of the Supervisory Board

a selection procedure in relation to the auditing mandate in accordance with Article 16 of the Auditing Regulation. On the basis of this selection procedure, the Supervisory Board recommended that either KPMG AG Wirtschaftsprüfungsgesellschaft, Hanover, Germany, or BDO AG Wirtschaftsprüfungsgesellschaft, Hanover, Germany, be selected as the auditor of the financial statements and consolidated financial statements for the 2019 financial year. The Supervisory Board preferred the former because it emerged from the systematic tendering process as the strongest bidder overall. In accordance with the proposal for decision of the Supervisory Board, KPMG AG Wirtschaftsprüfungsgesellschaft, Hanover, Germany, was selected as the auditor of the financial statements and consolidated financial statements for the 2019 financial year at the Annual General Meeting on June 6, 2019.

CORPORATE GOVERNANCE AND DECLARATION OF COMPLIANCE

In 2019, the Supervisory Board once again devoted considerable attention to dealing with the implementation of corporate governance standards. LPKF Laser & Electronics AG's corporate governance is presented in detail in the corporate governance report and the corporate governance declaration. On 30 January 2020, the Management Board and the Supervisory Board submitted the annual declaration of compliance, which reports on any deviations from recommendations, in accordance with Section 161 of the German Stock Corporation Act (AktG). The declaration of compliance refers to the https://www.lpkf.com/en/investor-relations/corporate-governance

version of the German Corporate Governance Code (GCGC) dated 7 February 2017. The declaration of compliance is also publicly available at the companys website The new version of the GCGC dated 16 December 2019 is already being examined by the Management Board and the Supervisory Board. Many new recommendations are already being implemented, while others require careful consideration and internal consultation. The next declaration of compliance in accordance with the new GCGC will be issued as usual in early 2021.

There were no conflicts of interest during the reporting year.

The members of the Supervisory Board are responsible for completing the training and educational measures necessary for performing their roles independently – regarding changes to the legal framework and new technologies, for example – and are supported in this by the company. For targeted ongoing training, the company also offers internal information sessions where necessary. New members of the Supervisory Board can also meet the members of the Management Board or the other members of the Supervisory Board outside board meetings to discuss fundamental and current issues or discuss these issues with them over the telephone and thus gain an overview of the topics relevant to the company.

SUSTAINABILITY

Sustainability remains an important part of corporate strategy and will be the subject of even greater focus in future. The Supervisory Board happily and constructively supports the activities presented in the sustainability report related to LPKF Laser & Electronics AG's corporate, social and environmental responsibility. LPKF Laser & Electronics AG's sustainability report will be available at the website by the end of April 2020 at the latest.

https://www.lpkf.com/en/company/lpkf-group/sustainability

REVIEW OF THE ANNUAL FINANCIAL STATEMENTS

The Management Board prepared the annual financial statements for the 2019 financial year in accordance with the provisions of the German Commercial Code (HGB); the consolidated financial statements in accordance with the regulations of the IFRS, as applicable in the EU, and the additionally applicable provisions of commercial law as per Section 315e of the HGB; and the combined management and Group management report.

Following the decision made at the Annual General Meeting, the Supervisory Board commissioned KPMG AG Wirtschaftsprüfungsgesellschaft Hanover, Germany (KPMG) to audit the annual financial statements and consolidated financial statements for 2019 and it set the key areas of the audit in its meeting on 10 December 2019. After auditing the annual and consolidated financial statements, the auditor issued an unqualified audit opinion on the statements, including the combined management and Group management report. The auditor attended the Supervisory Board meetings on 17 and 20 March 2020 and reported on the audit of the 2019 annual and consolidated financial statements. During these meetings, the auditor explained the net assets, financial situation, and results of operations of the company and of the Group and was available for questioning by members of the Supervisory Board. In addition, after examining the early risk warning system, KPMG confirmed that the Management Board took the measures stipulated by the German Stock Corporation Act in order to identify potential risks endangering the existence of the company.

The annual financial statement documents for LPKF Laser & Electronics AG and the consolidated statement documents as well as KPMG's reports and the Management Board's proposal for the appropriation of profits were made available to the members of the Supervisory Board for inspection and review in a timely manner. There were no circumstances that gave rise to concern about bias on the part of the auditor. As agreed, the auditor reported to the Supervisory Board on other engagements in addition to the standard auditing services.

The Supervisory Board discussed the financial statements, including the combined management and Group management report, and the reports from KPMG in detail with the auditor and reviewed the documents submitted by the Management Board while taking the audit reports into account. Furthermore, the Supervisory Board examined the Management Board's proposal for the appropriation of the net retained profits.

Based on its own review, the Supervisory Board was satisfied that the reports meet the statutory requirements of Sections 317 and 323 of the HGB in particular. The Supervisory Board approved the outcome of the audit and ratified LPKF Laser & Electronics AG's annual financial statements and the consolidated financial statements as presented by the Management Board at the meeting on 23 March 2020. LPKF Laser & Electronics AG's annual financial statements have therefore been adopted.

The Supervisory Board supports the Management Board's proposal for the appropriation of net income. Because of the positive development in free cash flow in 2019, LPKF would like to propose a dividend to the Annual General Meeting for the first time in 4 years. At the time this report was published, there were signs of a global economic downturn due to the coronavirus pandemic, the effects of which are difficult to assess. The Management Board and the Supervisory Board therefore currently intend to propose a dividend of 10 Eurocent per share for the 2019 financial year.

REVIEW OF THE MANAGEMENT BOARD'S REPORT ON RELATIONS WITH AFFILIATED COMPANIES

The Management Board presented the Supervisory Board with its report on relations with affiliated companies (Dependent Companies Report) during the 2019 financial year.

The auditor reviewed the Dependent Companies Report and issued the following opinion: "On completion of our audit and assessment in accordance with professional standards, we confirm that

1. the factual information in the report is correct,

2. the payments made by the Company for the legal transactions listed in the report were not unreasonably high."

The Management Board's Dependent Companies Report and the auditor's report on it were passed on to all members of the Supervisory Board in a timely manner. The Supervisory Board discussed and reviewed the reports at its meeting on 23 March 2020. Following its own review, the Supervisory Board approved the Dependent Companies Report and, furthermore, associated itself with the outcome of the auditor's review of the report. As a result of its review, the Supervisory Board found no reason to object to the Management Board's declaration concerning relations with affiliated companies at the end of the report.

PERSONNEL

The regular terms of office of the Chairman of the Supervisory Board, Dr. Markus Peters, and of the Deputy Chairman of the Supervisory Board, Prof. Erich Barke, on the company's Supervisory Board ended at the close of the Annual General Meeting on 6 June 2019. The Annual General Meeting re-elected Dr. Markus Peters and elected Prof. Ludger Overmeyer as a new member of the Supervisory Board. At the meeting of the Supervisory Board that took place following the Annual General Meeting, Dr. Markus Peters and Dr. Dirk Michael Rothweiler were elected as Chairman and Deputy Chairman of the Supervisory Board respectively.

THANKS

We would like to conclude the Supervisory Board report by thanking and expressing our great appreciation for all employees and the Management Board for all the work they did in the 2019 financial year. We would also like to thank our customers, whose demand for our products and solutions continued to increase in the reporting period.

The works council has represented the interests of the employees in a constructive manner while also paying due regard to the overall company situation at all times. For that, we extend particular thanks to the ladies and gentlemen of the works council.

We would like to take this opportunity to express particular gratitude to our shareholders for their support for LPKF Laser & Electronics AG during the reporting period and beyond.

Garbsen, March 2020

DR. MARKUS PETERS
Chairman of the Supervisory Board

SEGMENT OVERVIEW
OUR INNOVATIVE IDEAS AND SPECIFIC EXPERTISE HAVE ENABLED US TO ACHIEVE MARKET LEADING POSITIONS

DEVELOPMENT

From an idea to a completed printed circuit board in just a few hours – thanks to our LPKF Rapid Prototyping processes, even sophisticated printed circuit boards can be produced quickly and cost-effectively. This means that layouts can be used in the laboratory to produce near-production quality prototypes and small batches.

Users can significantly reduce their processing time with our mechanical or laser-based systems for rapid prototyping without compromising on sensitive individual company layout data. Different laser technologies enable prototypes to be made quickly and precisely out of standard materials from the electronics segment using a space-saving desktop device. Laboratory systems with ultrashort pulse laser technology are used for special applications on high-frequency or biocompatible materials. This system can even be used to create double-sided structures on film material that is less than 10µm in thickness. At the same time, solid materials such as fired ceramics can be cut without putting the material under any thermal stress.

The Development segment caters to a global market with many individual customers. Our customers include the R&D departments of industrial companies, universities, research institutes, schools, electronic design houses and government institutions. For a number of years, we have also offered micromachining systems for research applications outside of PCB prototyping. This gives LPKF the opportunity to tap into new markets beyond pure electronics development (More from page 28).

ELECTRONICS

The Electronics segment encompasses a number of our technologies. They are all used for large-scale production of electronic components and meet the three core requirements of the electronics industry: precision, speed and flexibility.

LPKF MicroLine laser systems cut and drill both flexible and more complex PCB materials with the highest speed and precision. LPKF CleanCut technology enables our customers to achieve extremely clean cuts and gives them great freedom of design (see also from page 20).

Our StencilLasers cut high-precision stencils for solder paste printing. To date, we have secured our position as global market leader in this highly specialized area through consistent further development.

The Electronics segment also includes LDS technology for manufacturing three-dimensional circuit carriers. This allows mechanical and electronic functions to be integrated into injection molded parts.

LIDE technology is one of the Electronics segment’s most exciting innovations. It allows our customers to efficiently manufacture a wide variety of micro etchings in thin glass (see also from page 12).

» WELDING

In the Welding segment, LPKF develops and produces highly efficient laser systems for welding plastics. Our laser systems produce a reliable and visually appealing weld seam that meets the most demanding quality requirements. As a leading technology supplier, we have many years of experience in this area. (see also from page 16).

Our range of solutions for joining plastic components is primarily targeted at automotive suppliers and manufacturers of consumer electronics and medical technology. Laser welding can be used to replace traditional material joining methods such as adhesive bonding. Our customers attach great importance to the easy operation of laser welding machines. We calibrate the systems to produce perfect weld seams quickly and at the touch of a button.

Thanks to the extensive automation interfaces, the Inline systems can be easily and quickly integrated into production lines. The perfect interplay of hardware and software makes a major contribution to the efficient use of the machines – and there are very few steps from the project setup to the finished component.

» SOLAR

LPKF has been developing laser systems to manufacture thin film solar panels for over ten years. The active layers on these panels are deposited homogeneously and then structured.

Our laser systems etch the coated panels with the highest precision and speed. Using LPKF laser technology can significantly increase the energy efficiency of the individual panel. In this way, we are able to offer our customers a unique competitive advantage and have contributed to the fact that solar energy is now produced frequently without subsidies.

The production of thin film solar panels requires a significant degree of technology compared with silicon-based solar cells. At the same time, it requires fewer raw materials and has the best CO_2 footprint in the industry. Additional advantages of thin film solar panels include good low-light performance, a better temperature coefficient and a greater insensitivity to the sun's angle of incidence. This results in good market prospects for thin film technology – and growth potential for our solar business (see also from page 24).

In the Solar segment, we are developing a new technology for printing functional pastes and colors: Laser Transfer Printing (LTP). This digital printing process is a flexible and efficient alternative to the widely used screen printing process. We envisage LTP having applications in the automotive industry in particular, as well as in the manufacture of printed glass and in other sectors.

» AFTER SALES AND SERVICE

Our customers manufacture products in over 70 countries and can rely on our competent service network worldwide. Highly qualified LPKF service technicians provide on-demand support on site, over the telephone, by e-mail or remotely 24 hours a day, seven days a week. Thanks to our regional service centers and spare parts warehouses, we can promptly supply our customers with original spare parts and install them, thus guaranteeing the constant availability of machinery (see also from page 32).

LIDE

Laser Induced Deep Etching creates **deep structures** in thin glass

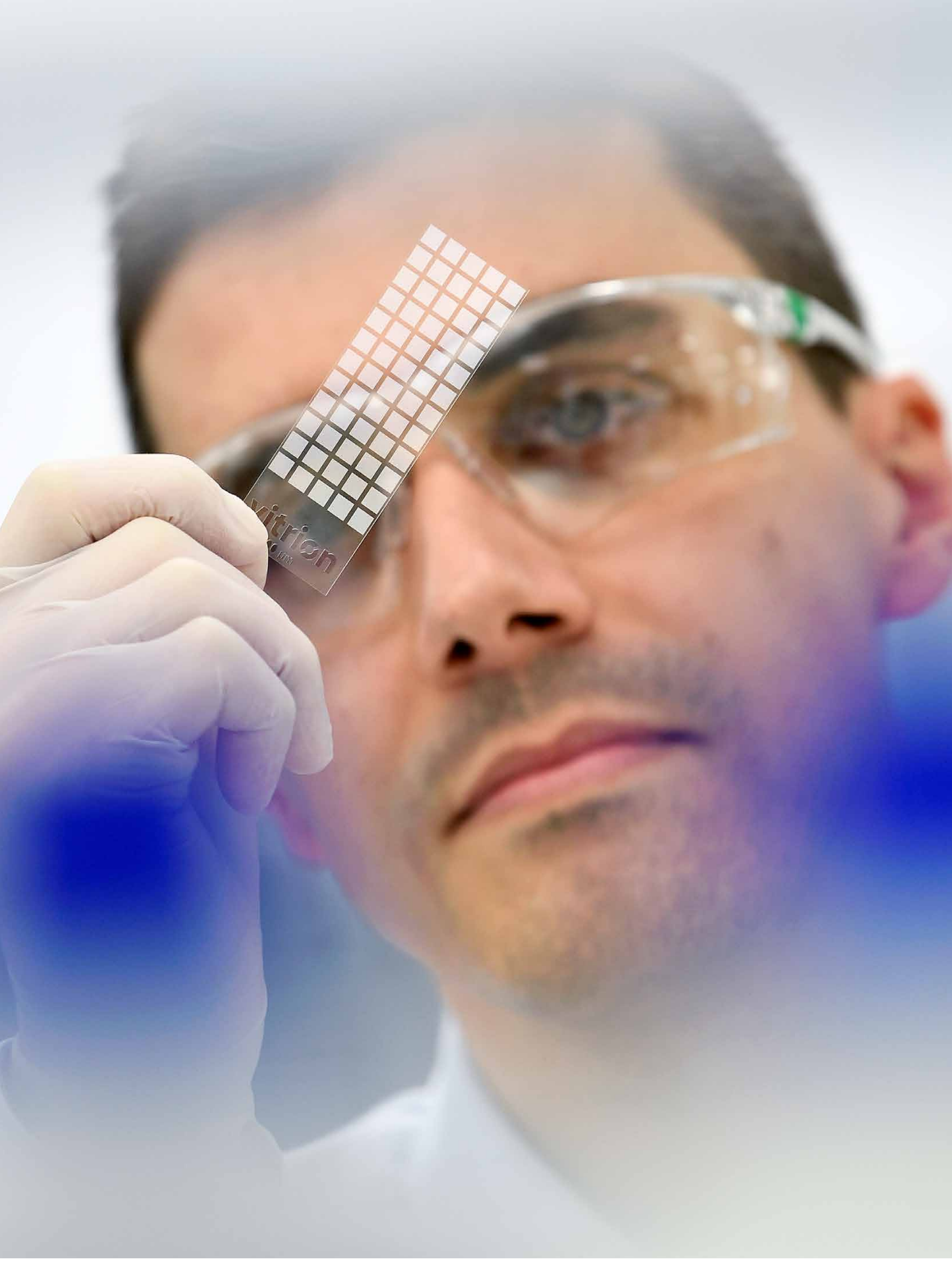
WE ENABLE OUR CUSTOMERS TO UTILIZE

THE **FULL** POTENTIAL OF GLASS.

RAFAEL

LPKF employee

Since August 2019, Rafael is in direct contact with customers and interested parties as Process Developer for LIDE.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GLASS AS A HIGH-TECH MATERIAL

As a technology company, we are very enthusiastic about developing solutions for the customer requirements that tomorrow will bring. The development of LIDE technology is an excellent example of our spirit of innovation and our future potential.

LPKF has developed a method that can be used to create holes in very thin glass without adversely affecting the material properties of the glass. This development was prompted by inquiries from various semiconductor manufacturers that increasingly wanted to use glass in production owing to its outstanding properties. Glass is cost-effective, thermally stable, transparent and insulating. Unlike silicon, glass does not react with many chemical substances. In many areas of integrated circuit fabrication, that is of great benefit. Existing glass microprocessing technologies create defects in the glass, such as microcracks, adversly affecting its material properties to a significant degree. With LIDE, we have overcome this obstacle and enabled the use of glass as an exciting material for high-tech industry.

LIDE AS AN ENABLING TECHNOLOGY

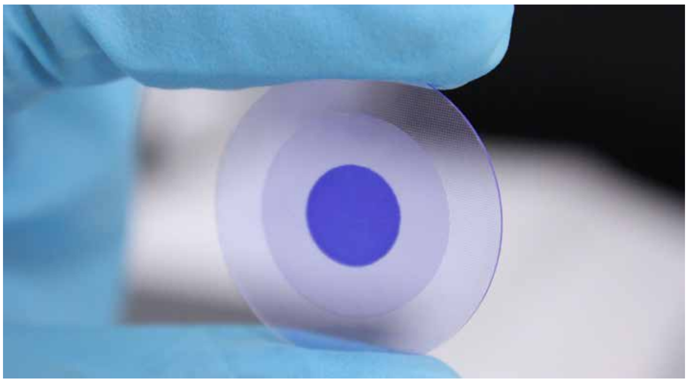
LIDE stands for Laser-Induced Deep Etching. In the process of development, the use of microholes was extended to a wide range of different microstructures. The LIDE process is evolving into an enabling technology for many areas of microsystems technology, such as the production of sensors, MEMS or microchips. As a process developer, Rafael is constantly in direct contact with customers and interested parties: “I present LIDE at conferences and often make initial contact with people there. Normally, that includes very detailed discussions with the interested parties. My goal is to offer customers the best solutions based on the LIDE technology. These conversations give me a unique perspective not only on their specific needs, but also on industry trends in general.”

» FOR ME, THE MOST FASCINATING THINGS ABOUT LIDE ARE ITS **VERSATILITY** AND THE **COMPLEXITY** BEHIND THE PROCESS. « (Sandra)

Sandra has been responsible for precisely implementing customer layouts under cleanroom conditions at the LIDE factory since July 2019.

BENEFITS FOR OUR CUSTOMERS

- LIDE increases efficiency in the production of semiconductor components through the use of cost-effective glass.
- The LIDE process does not adversely affect the stability of the processed glass. Glass can be used for a variety of new applications such as microfluidic diagnostic applications or foldable displays.
- The quality and precision of the structures made using LIDE is considerably higher than those created using other glass microprocessing methods. The size of the structures made can be in the single-digit micrometer range or even lower.
- High aspect-ratio: deep holes are also possible with glass thicknesses of 0.5 – 1 mm.



CHIPS IN SERIES PRODUCTION

In December 2019, we delivered the first LIDE system to a world-leading company from the semiconductor industry. After a certification phase lasting several months, the customer will use the highly automated LIDE facility equipment for the serial processing of glass wafers in a semiconductor factory. This order delivery is an important step into the volume manufacturing of semiconductor components.

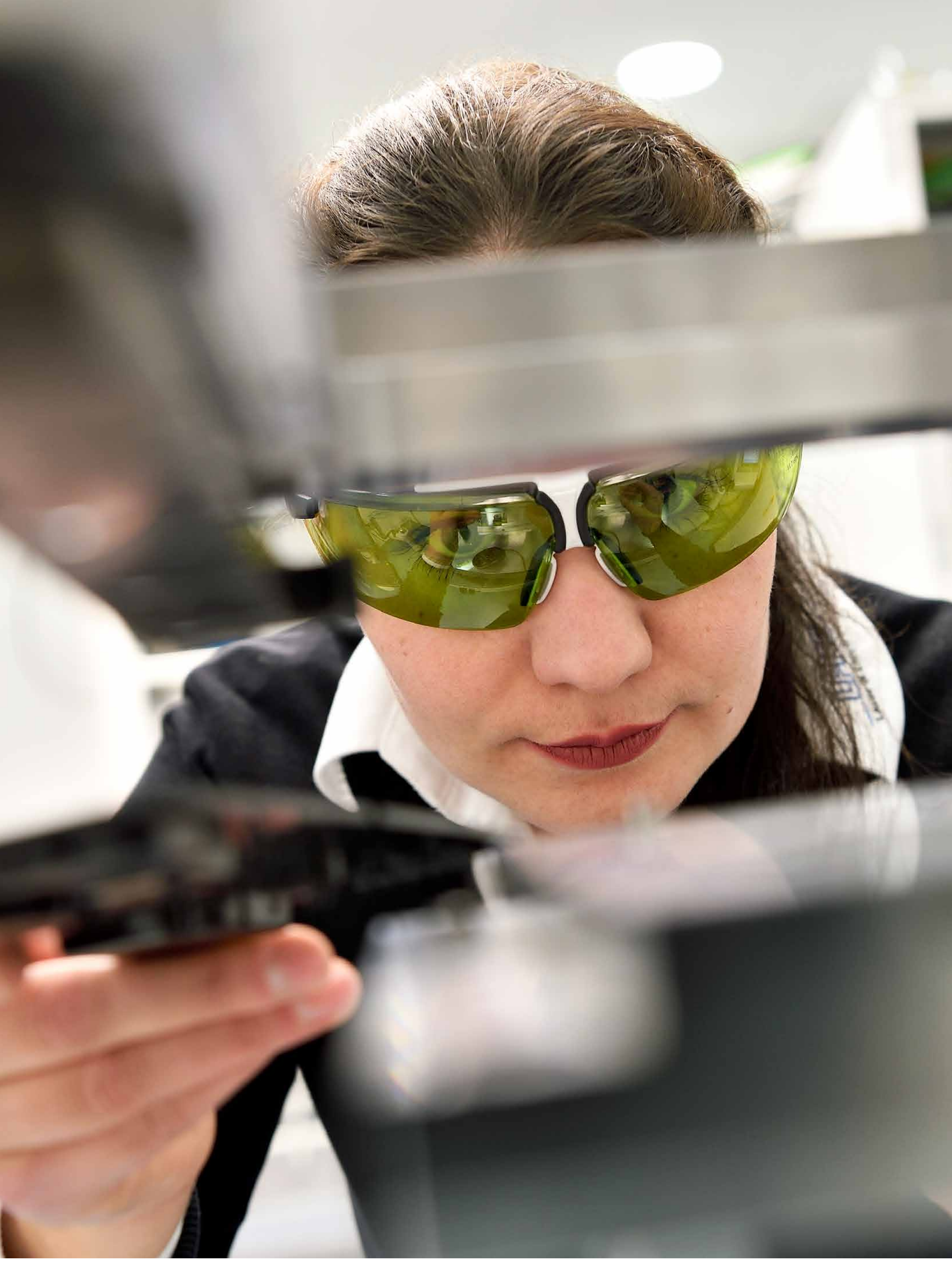
As an operator at the LIDE factory, Sandra is responsible for implementing customer requirements. In doing so, the microelectronics engineer attaches great importance to understanding exactly what is important to the customer. The customer's wishes are implemented with the utmost care in cleanroom conditions.

In late 2019, we began construction work on a cleanroom production facility at our headquarters in Garbsen to enable us to significantly increase our capacity to produce microstructure components out of glass in-house. From here, we will supply even more customers from the semiconductor and electronics industry all over the world with high-precision glass components in 2020.

Alongside the traditional solutions business, this is a significant expansion of our business model toward being an equipment supplier to the semiconductor industry.

Rafael and Sandra are convinced that LIDE will not only help improve the quality of existing products, but also enable developing entirely new ones in various industries.

» I AM **CONVINCED** THAT WITH LIDE, GLASS CAN BECOME AN **OUTSTANDING** MATERIAL FOR MANY APPLICATIONS. « (Rafael)



WELDING

Solutions for plastic welding in volume manufacturing.

WE ENABLE SAFE AND LONG LASTING PRODUCTS.

LORENA

LPKF employee

Lorena is an application engineer for the Welding segment. She is part of our customers' innovation process and is familiar with future trends long before they make it to the market.

GROWTH POTENTIALS FOR WELDING

There are many possible ways to join plastic parts together. The most prevalent methods include adhesive bonding and ultrasonic welding.

In the area of plastics, laser welding was long considered elite and expensive. That has changed fundamentally in recent years. The quality requirements for the joining process in relation to cleanliness, precision and safety as well as design and aesthetics have steadily become more stringent. At the same time, the laser processes for welding have become quicker and more economical. Laser technology creates precise, reliable and durable joints between components – without chemical, thermal or mechanical influences. Laser welding has by now acquired an excellent reputation in the plastics industry and has already succeeded in replacing some of the conventional joining processes in many sectors. But the potential for advancing into other areas remains immense.

For 20 years, we have been developing and producing laser systems for welding plastics. Today, LPKF is one of the world's leading suppliers. With our Welding segment, we primarily target the automotive supply industry, the medical technology sector and manufacturers of consumer electronics. Our machines work with a range of welding techniques such as three-dimensional quasi-simultaneous welding or contour welding. The plastic parts vary as widely in form and size as their applications. We offer our customers state-of-the-art laser technology and flexible solutions for their particular requirements. Our laser systems realize both simple weld seams and complex 3D geometries. As a result, our customers can produce high-quality and visually appealing plastic components quickly and reliably, and boost their own ability to innovate in their respective industries.

In all our markets, we are seeing an increased use of plastics and electronic components such as sensors or MEMS. A good example of this is the electrification of vehicles, which Boban views as a megatrend that will show just how advantageous laser welding is. "Electric cars have even more electronics on board than cars with combustion engines do today," explains the qualified engineer. "That is yielding an unbelievable number of new applications, some of which are possible only as a result of laser welding."

For Boban, deputy head of Sales at the Fürth location, satisfied customers are the primary objective.

» OUR SECRET RECIPE? AN **INNOVATIVE MACHINE PORTFOLIO** COMBINED WITH FAST RESPONSE TIMES. « (Boban)

BENEFITS FOR OUR CUSTOMERS

- Reliable processing and high aesthetic quality.
- No wear and tear and no contamination.
- High cost-effectiveness thanks to short cycle times and large batch sizes.
- Process control through online weld seam monitoring.
- Flexibility thanks to the freely programmable welding contours.
- Significantly reduced tooling costs compared with non-laser-based methods.

PARTICLE-FREE PRODUCTS AND SHORT CYCLE TIMES ARE CURRENTLY THE MAJOR CHALLENGES FOR OUR CUSTOMERS. (Lorena)

We also see a large number of new possible applications and high development potential for laser welding in the medical technology sector and in the area of consumer electronics. ClearJoining is a method of laser penetration welding and is used for medical applications or microfluidics.

ClearJoining overcomes the limitations of actual transmission welding and enables light to also be absorbed in clear components.

The high quality requirements of our customers relate not only to the welding process but also to inspection and documentation. Our systems feature integrated process monitoring.

Different process monitoring methods are employed depending on the material and welding method used. Through a combination of two or more methods and uninterrupted data acquisition, particularly demanding documentation requirements can also be met.

WE ENABLE

SMALLER AND MORE **ROBUST** PRODUCTS.

ELECTRONICS

Solutions for **volume manufacturing** of assembled and non-assembled printed circuit boards (PCBs).

RAFAEL

LPKF employee

Rafael represents LPKF’s ability to innovate. As a project manager, he leads the agile development of new laser systems from their conception to volume manufacturing.

Dirk has known our customers and our technologies for over 20 years. Expertise and experience are the basis for trusting relationships with customers.

» TO REALLY UNDERSTAND CUSTOMERS, YOU NEED TO LOOK CLOSELY LISTEN AND ASK THE RIGHT QUESTIONS. « (Dirk)

SAVING RESOURCES

In electronics manufacturing, there are already a large number of production steps that are carried out using laser technology today. As a driver of innovation, it is not our goal to get involved with as many applications as possible here. We specifically look for demanding tasks that we can redesign with our core competencies and thereby improve considerably.

Separating PCBs from an entire panel is a major task and a challenge for electronics manufacturers. In many areas, mechanical separation methods such as milling, breaking or stamping are still used. However, requirements in relation to processing PCBs are becoming ever more demanding. In comparison with mechanical processes, the laser as a tool offers a series of advantages: it operates without contact or abrasion and neither heats nor stresses the material. This makes it possible to process sensitive electronics. Resources are saved and earnings improved.

16

years of experience in the use of laser-based methods for depaneling accumulated by LPKF.

POTENTIAL FOR CUTTING

In 2004, LPKF became the first provider to develop a laser-based process for depaneling. As a result, we have over 16 years of experience in this specialist field. This experience resides in long-serving employees such as Dirk. As a sales manager, he always forges very close links with customers and incorporates their wishes and requirements directly into development at LPKF. “We have been purposefully working on replacing more and more traditional production methods with laser technology for many years,” says Dirk. “I still see enormous potential there, especially in relation to the cutting of highly sensitive, assembled PCBs. Our customers need to be constantly improving the quality of their products, while also manufacturing them economically. That is exactly where we can help.”

For Rafael, the megatrend of miniaturization and the desire for greater design freedom are important factors. “With our systems, we enable our customers to produce more compactly, cleanly and efficiently,

BENEFITS FOR OUR CUSTOMERS

- The laser process is fully software-controlled. Different materials or cut contours are easily accommodated via adaptation of the processing parameters and paths of the laser. The retooling times in the event of a change in production are reduced considerably.
- No noteworthy mechanical or thermal stress occurs. Even sensitive substrates can be processed with precision.
- The laser beam needs only a few micrometers as a cutting channel, thus allowing more PCBs to be placed on a panel.
- The new LPKF CleanCut technology creates cutting channels that are absolutely clean and distortion-free.

CuttingMaster 3000

while also helping them to achieve product designs that are even smaller and more intricate. In actual fact, many product developments in the area of wearables, for example, were made possible in the first place by our technologies."

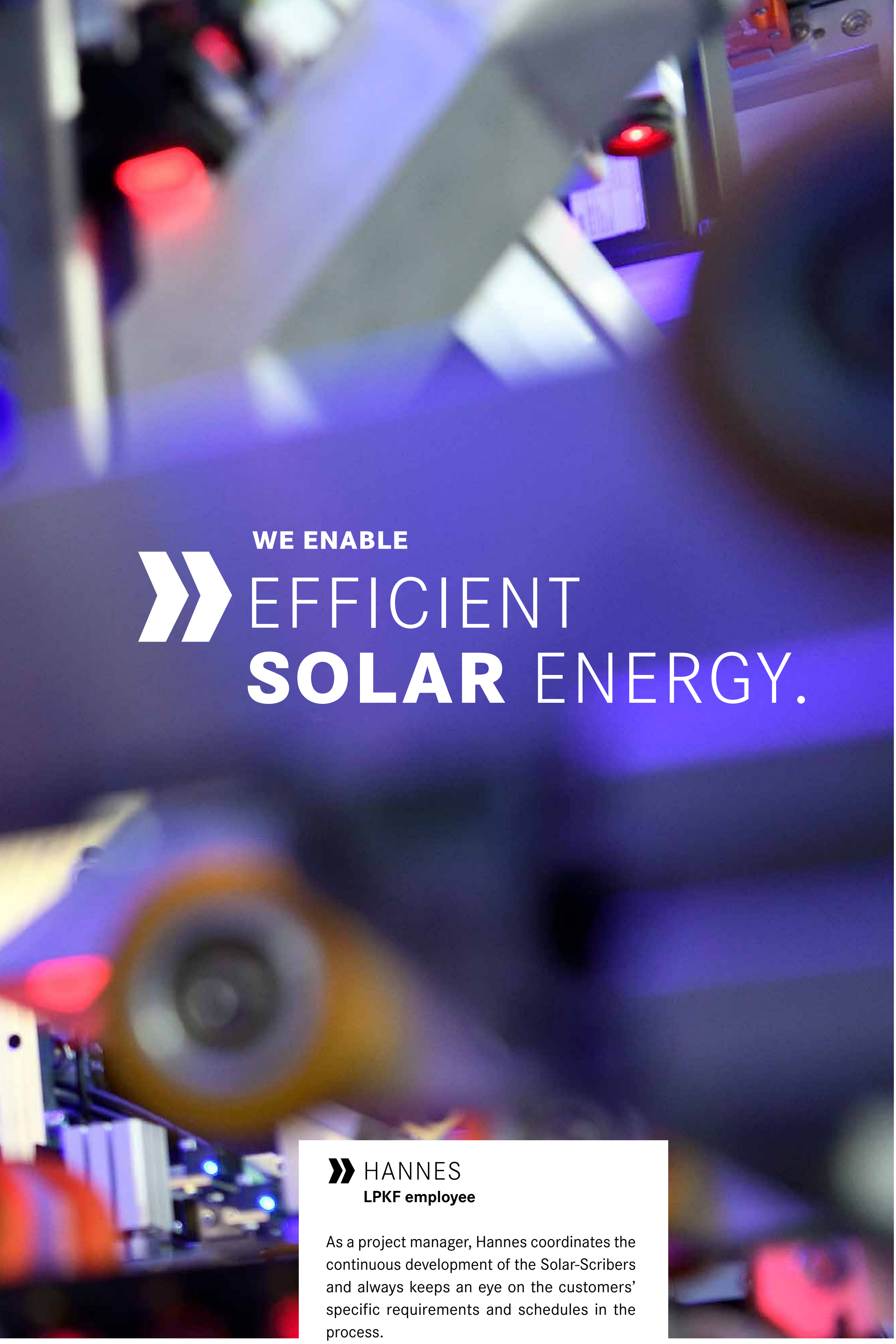
Let us give you an example from our current product range: The latest product family uses ultra-short laser pulses and thereby achieves a "cold cut" in the material.

This allows us to offer our customers a clear competitive advantage as a result of extremely clean cut edges, exact dimensions and considerable material savings in the separation of PCBs. All of this is allied to a high processing speed.

THROUGH PRECISION AND QUALITY, WE ARE DEVELOPING SOLUTIONS FOR THE CONSUMER MARKET OF TOMORROW. (Rafael)

DANIEL
LPKF employee

Together with his colleagues, Daniel ensures that customers receive excellent support and advice from the acceptance of the solar systems in Suhl through to commissioning on site.



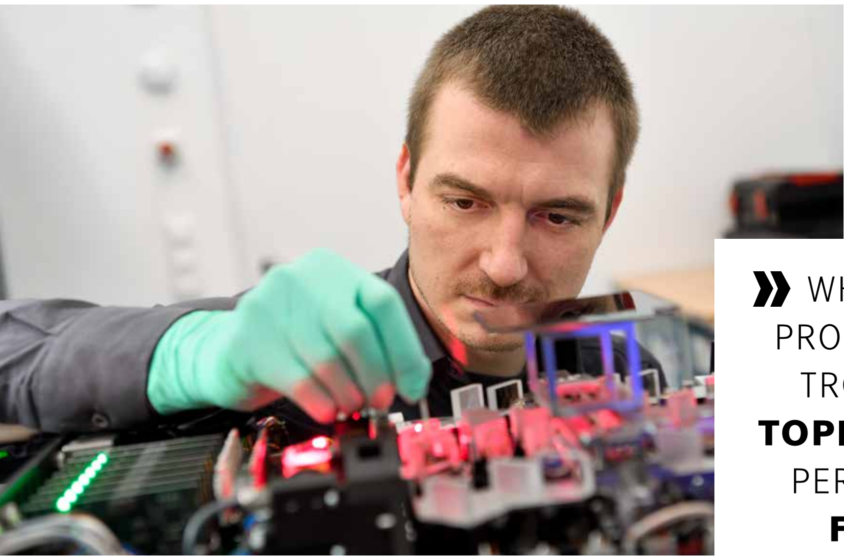
WE ENABLE EFFICIENT SOLAR ENERGY.

HANNES
LPKF employee

As a project manager, Hannes coordinates the continuous development of the Solar-Scribers and always keeps an eye on the customers' specific requirements and schedules in the process.

SOLAR

Solutions for thin-film photovoltaic modules



» WHETHER IT IS LASERS, OPTICS, IMAGE PROCESSING, SOFTWARE OR AXIS CONTROL, UNDERSTANDING **ALL THESE TOPICS** AND GETTING THEM TO WORK IN PERFECT HARMONY **CONTINUES TO FASCINATE** ME TO THIS DAY. « (Hannes)

ENERGY FROM THE SUN

In 2019, climate change clearly came to the attention of politicians, business and the public at large not least due to the "Fridays for Future" movement. How can we meet the world's energy requirements in the future without further exacerbating global warming? Without a doubt, renewable energy sources will play a growing role in the future of our energy supply. At the same time, we will need a lot of innovative technologies in order to utilize energy sources far more efficiently. LPKF is making an outstanding contribution in this area.

Since 2007, we have been developing and producing highly specialized systems for manufacturing thin-film solar cells at the Suhl location. Our Allegro systems incorporate precise and absolutely parallel lines in large coated glass substrates. In doing so, they can compensate for deformations in the material using sensors and intelligent software and ensure optimum structuring results. The precise lines are necessary for dividing the module into individual, functional cells. It is important for the coated active surface to be removed as little as possible by the structuring process.

By using our technology, our customers have succeeded in reducing their production costs per watt of peak power (EUR/Wpeak) ever further.

As the manager for commissioning and installation, Daniel has been in close contact with customers and observed what our systems can accomplish in the field for many years. "With the aid of our laser systems, both the efficiency of the thin-film solar modules and also the throughput of each factory have increased considerably. Around 10 years ago, we had a cycle time of 30 seconds per module with seven beam systems. Today, we can manage a module 3.5 times that size with 2.5 times as many cells in a significantly shorter time!" That has an enormous effect on the performance of the module and therefore on the competitiveness of the manufacturer.

It is not only the employees at the Suhl location that are proud of the fact that LPKF can contribute a real innovation to protect the climate with its laser technology and is also successful as a company. Ultra-precise structuring with LPKF laser systems makes it possible to increase the efficiency of the solar modules significantly, thus making the production of solar power competitive – even without government subsidies.

Our solar business is shaped by many years of successful cooperation with individual customers. They rank among the world's leading manufacturers of thin-film modules. Over the years of extensive work on the technology together with our customers, we have built up experience and expertise that is unique in this market.

Constant development and optimization of the systems are the keys to success. Hannes ensures that we are out in front in terms of technology. "Notionally, we try to be one step ahead of our customers at all times so that we are able to respond to new requirements suitably quickly. With this time saving alone, we give customers a competitive advantage."

We received more new large-scale orders from our long-standing customers in 2019. In addition, we are delighted that orders from new customers have come in. It is our goal to further expand our customer base in the Solar segment.

BENEFITS FOR OUR CUSTOMERS

- Module efficiency: very small “dead zone” at maximum speed thanks to automatic beam diagnostics and performance measurement.
- Accuracy: high process stability due to the dynamic focus of the laser process and automatic path tracking.
- High throughput thanks to the very fast processing speed, a high number of parallel laser beams and optimized handling times.
- High availability as a result of having a system concept that has been consistently proven over many years in production 24/7.
- Flexible system concept that can be adapted to new requirements at any time.

OUTLOOK

- Worldwide demand for electricity will increase by 62% by 2050, or by 1.5% each year.
- Demand for electricity will increase by around 3,950 TWh by 2050 owing to electric vehicles. That corresponds to around 9% of global demand for electricity.
- Demand for electricity in emerging countries will increase by 93% between 2018 and 2050.
- Inexpensive renewable energies and innovative batteries will change the electricity supply fundamentally.
- Solar power is expected to increase from the current 2% share of worldwide electricity generation to 22% in 2050 and thereby record the highest growth among renewable energy sources.

Source: New Energy Outlook 2019. Bloomberg NEF

56 million

Allegro systems take around 56 million pictures each day for quality control purposes.

3 km²

Our customers produce solar panels with a surface area of around 3 km² on a single system in one month.

100 km

An axis in the Allegro system covers approximately 100 km per day.

WE DO NOT LET **ANY CUSTOMERS** DOWN **REGARDLESS** OF THE TIME – DAY OR NIGHT. (Daniel)


WE ENABLE
FAST AND
FLEXIBLE
PROTOTYPING.

LARS

LPKF employee

Product manager Lars talks to scientists and researchers worldwide about innovative future projects. Rapid Prototyping plays a key role in implementation.

DEVELOPMENT

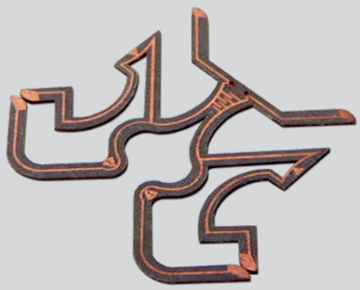
Solutions for in-house PCB prototyping and micromaterial processing.

BENEFITS FOR OUR CUSTOMERS

- We offer our customers solutions for the entire prototype manufacturing process without chemical etching.
- Thanks to our many years of experience, we possess extensive process expertise.
- Customers retain confidential layout data, ensuring that it is protected.
- Developers can test their layouts as often as they wish without having to make use of an external service provider.
- For special applications, prototyping is faster and more cost-effective than PCB service providers.

ProtoLaser R4

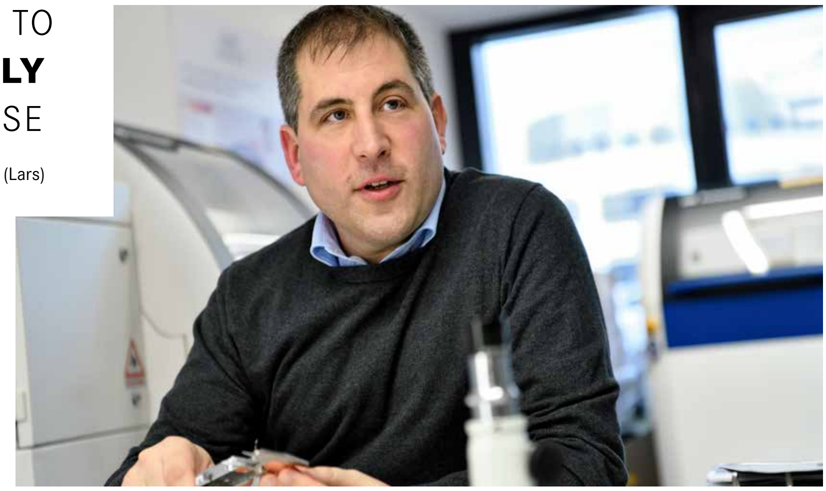
Antenna, structured and cut with LPKF ProtoLaser U4



Global market share:

Around 60%

IT IS FASCINATING TO SEE HOW **CREATIVELY** MANY CUSTOMERS USE OUR SYSTEMS. (Lars)



+70

We sell our products in more than 70 countries.

RAPID PROTOTYPING

The original business idea behind LPKF was to mechanically produce PCB prototypes without using chemicals. The first **L**EITER**P**LATTEN**K**OPIER**F**RÄSE (PCB copy milling cutter) was developed in 1976 and was a small revolution on the PCB market in the 1970s and 1980s. It gave LPKF its name to this day. As a result, we have more than 40 years of experience in developing solutions for the in-house manufacture of PCBs, referred to as “rapid prototyping”. As a market leader, we offer our customers the entire value chain for the manufacture of prototypes or small series. This still includes mechanical ProtoMats, but predominantly also laser-based machines such as the ProtoLaser U4.

The major benefit for our customers is the speed of the rapid prototyping. It has radically reduced the process from the layout to the finished PCB.

In addition, our customers appreciate the confidentiality of the process. The desired prototypes are created directly at the customer’s own laboratory. There is no need for sensitive data to leave the building. Layouts can be amended and tested as desired.

Unlike all the other segments within the Group, the Development segment addresses a global market with a large number of individual customers from industry and from institutes and universities. Our global network of representatives that secures excellent market access for us is of critical importance here.

As one example, LPKF has for a number of years been offering micromachining systems for research applications outside PCB prototyping. This gives us the opportunity to tap into new markets beyond pure electronics development.

For Boštjan, the new generation of the ProtoLaser R4 opens up entirely new opportunities in material machining: “The system has an ultrashort-pulse laser source developed by LPKF. Due to the cold removal of various thin layers with this picosecond laser, the pulse width is so short that virtually no thermal effects occur in the immediate surrounding area of the substrate material, even on flexible materials.”

In Lars’ view, the megatrend of digitalization is an outstanding driving force behind the Development business. “Owing to digitalization, the number of new electronic devices is constantly rising. At the same time, the devices are becoming smaller and more powerful and they need to work in different environmental conditions. That requires investment in research and development.”

RESEARCH IN OUR SIGHTS

We have already made some early investment in new systems for research into various new materials and methods. In the process, we are working closely with material manufacturers and customers. We are extremely well-versed in the processing of a very wide range of materials and, at the same time, have the best tool on offer – the laser. Our ProtoLasers are already being used in the development of promising applications for the future such as satellite solar cells, medical implants and biosensors for wearables.

Our goal is to establish rapid prototyping in the research market as well as in the development market.

» FAST AND CONSTANT INNOVATIONS ARE **THE DRIVERS** OF OUR LONG-TERM SUCCESS AND ENSURE OUR MARKET LEADER POSITION. « (Boštjan)

Effective and efficient operating processes are of crucial importance in today’s competitive environment. At the Naklo site in Slovenia, Boštjan in Operations ensures that everything runs smoothly and to the customer’s absolute satisfaction from order to delivery.

LARS
LPKF employee

Lars coordinates all After Sales and Service activities at the LPKF Group. Through close contact with customers, he knows every detail of their production processes.

AFTER SALES AND SERVICE

THE **MOST IMPORTANT** PERSON HERE AT OUR COMPANY IS **THE CUSTOMER –** AND THEY ARE TREATED AS SUCH, TOO. (Lars)

AFTER SALES AND SERVICE

LPKF has installed a large number of high-performance systems for industrial production around the world. Added to these are prototyping methods that we have been selling in over 70 countries for many years. For our customers, a reliable support structure is a decisive factor in their satisfaction and a key feature in the performance of our products. As a world-leading provider, we offer our customers first-class after-sales support.

Our global Service network operates around the clock. Based at our branches in Europe, the US and Asia, our Service employees are flexible and available to customers at short notice. Our expert Service teams have many years of experience in different production and application areas and regularly undergo further training.

Of course, we use modern remote services to carry out performance analyses and run update functions on our customers' systems. However, if there is ever a major problem, our Service employees will quickly arrive on site.

COMMISSIONING

We offer our customers professional commissioning of their investments so that they can really exploit the potential of the laser systems. To that end, we offer a comprehensive range of user, programming and maintenance courses. With this step forward in knowledge, our customers can react to new challenges from their own clients flexibly at any time. After setting up and commissioning the laser systems, we also support our customers at the start of production. Increasingly, customers are taking advantage of one of our service packages in order to keep their systems available at all times by means of preventive measures.

MAINTENANCE AND CALIBRATION

Our customers should profit from a high level of machine availability and the high level of precision of their systems. To that end, we offer preventive maintenance and calibration.

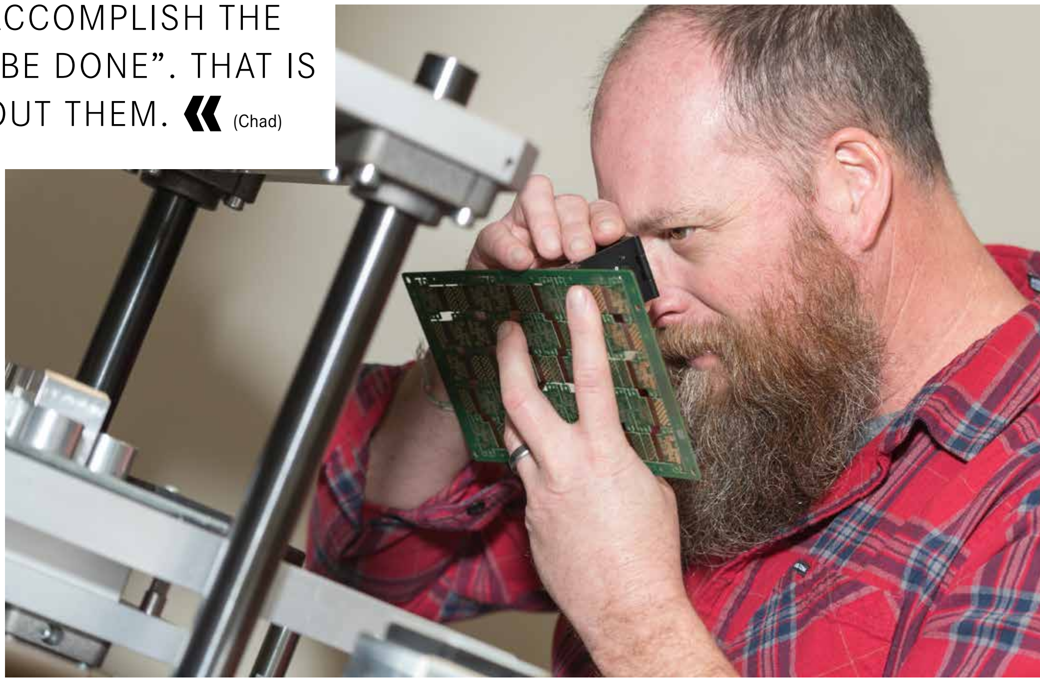
SPARE PARTS

With our original spare parts, our customers produce their goods safely and reliably. Thanks to our decentralized service hubs and warehouses, we can deliver spare parts at short notice. Our service technicians will help customers with selection and installation.

Sascha is responsible for the expansion of service activities in the Development segment. His goal is to achieve customer satisfaction.

» MY TEAM AND I STAND FOR DIRECT, STRAIGHTFORWARD ASSISTANCE. WE ARE ALWAYS THERE AND WE DO **EVERYTHING** POSSIBLE. « (Sascha)

» OUR SYSTEMS ACCOMPLISH THE THINGS THAT "CAN'T BE DONE". THAT IS WHAT I LIKE ABOUT THEM. « (Chad)



Chad is leading service, tech support, applications and engineering of all business units in North America and has never seen a boring day in his 20 years at LPKF.

PROCESS OPTIMIZATION AND UPGRADES

In order to maximize value creation for our customers over the long term and create the best conditions for efficient production, we offer them customized solutions and service packages.

Our customers have the option of optimizing their processes or adapting applications at any time. Thanks to our professional upgrades, they can also reduce costs and become more profitable.

» OUR AFTER SALES AND SERVICE OFFERING

Basic Service

THE ENTRY-LEVEL PACKAGE

- Fast response times to minimize downtime for your machine
- Expert support via e-mail and over the phone
- Remote support free of charge

Classic Service

THE NEXT STEP

- The probability of failure is reduced substantially
- Preventive maintenance protects your investment
- Simple planning thanks to planned maintenance included in the Basic package

Premium Service

THE COMPLETE PACKAGE

- Comprehensive service and full cost control
- Maximum availability for your machine
- Service period of up to 10 years possible
- Basic and Classic packages included

HIGH TECH. HIGH FUN. HIGH SUCCESS.
CURIOUS? WITH US, IT IS A MATTER OF OPINION - AND EMPLOYMENT.

WHO WE ARE AND WHAT MAKES US STAND OUT

As an international technology company, LPKF offers its customers innovative solutions and business relationships that are geared for the long term. LPKF AG has its headquarters in Garbsen, near Hanover, Germany. We are represented in more than 70 countries, have ten branches in Europe, Asia and North America and are highly diversified with a total of 682 employees around the world. Exports account for around 90% of our sales.

In addition to our customers and shareholders, our employees particularly appreciate the fact that, despite its leading position in various markets, LPKF is regarded as a "hidden champion." Being part of our team means:

- working on future technologies with passion and having a significant influence on their success through own ideas,
- improving and surpassing yourself personally and professionally through talent identification and development programs,
- having an international presence and network and delivering top performance to our customers,
- regarding a corporate culture based on openness, trust, reliability and appreciation as something that goes without saying.

To put the skills of our employees to the best possible use, our processes offer a high degree of autonomy to make decisions. This is one of our strengths as a medium-sized high-tech company: Our ability to innovate is based on the inventiveness of our employees. In order to be successful, we need motivated and qualified colleagues who champion the quality of our products and services with a passion. At our company, they receive the necessary creative leeway, responsibility and trust to do so. In addition, we attach importance to an interdisciplinary approach that blends specialist expertise with professional diversity. Being part of the team means being part of the overall picture that LPKF represents. Interesting and varied tasks are always at the heart of that. Curiosity drives us on. We are always working on becoming even better and do not settle for the mentality of doing things the way they have always been done.

Our employees appreciate our talent management offerings, which essentially consist of three key elements: attractive entry opportunities, personal development and an enduring sense of wellbeing. We are conscious that the professional qualifications of our employees are crucial for the success of the company. For that reason, we look for young talents, specialist personnel and managers through a variety of recruiting channels. At the same time, we offer personalized entry opportunities.

Communication is another aspect that sets the dynamic day-to-day business at our company apart. We communicate regularly – online or with messages coming from managers in many cases, but taking a coffee break together is just as much a part of it. Furthermore, we support our employees in their development from day one based on structured initial training, dialog with employees and individual performance appraisals.

It is not only within the company that we attach great importance to cooperation, communication and team spirit. We also stand for openness and cooperation in our interactions with the outside world. Besides funding for school activities, we support pupils with an internship position in fascinating areas of operations with a view to potentially offering them an apprenticeship place at a later date. Similarly, LPKF has once more awarded a number of university scholarships. Our presence at various trade fairs enables interested parties to make contact with our team directly.

In October, we welcomed the Faculty of Mechanical Engineering from Leibniz University Hanover to its new location in Garbsen – in the immediate vicinity of our company premises. The event „Night of mechanical engineering“ provided an opportunity for further networking with pupils, students and graduates. In particular, students are attracted by the highly suitable high-tech topics for final bachelor's and master's theses that we can offer. The combination of practical work, the results of which have the potential to influence the commercial future of LPKF to a certain extent, and the way in which we collaborate offer a great incentive to write an

Success is teamwork: the LPKF team at dragon boat racing in Hanover, Germany academic thesis here at our company. We have already been able to appoint many student employees on a permanent basis upon completion of their studies.

At our company, talent identification is seen as a managerial task. This allows us to ensure that different demands and needs can be met perfectly. Where necessary, multifaceted training can be utilized so that employees are even better prepared for the current and foreseeable requirements in their areas of responsibility.

http://www.lpkf.com/en/company/jobs-careers/

A crucial part of our corporate culture rests upon the values of openness, trust and reliability. Communication on equal terms plays an important role in this respect and is conducive to the working atmosphere. After all, we know that culture is the key. But the general conditions should be pleasant for our employees, too. The main components of this are flexible working time models, possible extended time off and part-time working models.

To us, a modern working environment means not only working in a modern building, but also being able to work from different locations in some circumstances. Then there are the little things that make a significant contribution to our happiness at LPKF. We operate an active health management scheme, whereby we reward activities such as not smoking during the working day and offer fruit, drinks and visits to a gym, for example, free of charge. Fun at work and various events complete what we offer to employees. Depending on the location, social events such as Christmas parties, company runs, dragon boat races, skiing, after-work parties or informal gatherings especially for new employees take place.

LPKF establishes contact with up-and-coming talent at careers fairs

We want to harness and foster the creativity, inventiveness and experience of our employees. Our company suggestion scheme helps with this. Employees can submit their suggestions and thereby collect virtual points that in turn earn the respective department an additional budget for team events. As a result, we not only achieve valuable results, but also increase our agility – true to the spirit of “Explore the future, stay curious”.

The fact that our employees are loyal to their company is demonstrated by our employee share program launched for the first time in 2019. The high participation rate of 47.7% – above average for the industry – is a clear indication of the trust that the employees have in the strategic direction of our company. The financial participation of the employees was subsidized by LPKF and was based on the maxim “A joy that’s shared is a joy made double.”

THIEMO
LPKF employee

As the head of Financial Accounting, Thiemo leads a team of four at the Garbsen location.

WHAT DOES CHANGE MEAN TO YOU?
Thiemo: Change brings both new challenges and new opportunities – not only for the company, but also for each individual. For the most part, it is possible to plan the future only to a limited extent and new opportunities arise again and again. For example, last year I was given the opportunity to take on a management role – a major change for me that has enabled me to gain more experience. When I joined LPKF two and half years ago, I would never have expected to be able to take on managerial responsibility so quickly. I got to grips with the new role very quickly and feel very comfortable in it. I am happy that LPKF is supporting me in my development.

WHAT DOES SEIZING OPPORTUNITIES MEAN TO YOU? WHAT ADDS UP TO SUCCESS FOR YOU?
Thiemo: To me, a positive attitude and a certain openness to change are important steps towards success. You can achieve success on many different levels. A healthy combination of a career and a private life is part of it. In this respect, I think success always depends on your own mindset and the demands you make of yourself, too.

WHAT SETS LPKF APART FROM OTHER EMPLOYERS?
Thiemo: I made a conscious decision to take the job at LPKF and, after more than two years at the company, I am still very happy with my decision. LPKF is a company where you are not held back by rigid corporate structures. Short communication channels – including across departments – and a highly developed team spirit make your job far easier. Everybody has the opportunity to play a part in a wide range of areas. As a result, each person can reach their individual goals and constantly develop.

WHERE DO YOU SEE THE GREATEST POTENTIAL?
Thiemo: The employees are the beating heart of any company. There is a great solidarity between colleagues at LPKF and, thanks to the creativity and the distinct drive to innovate here, LPKF can continue to be very successful in the future, too.

ISABEL

LPKF employee

In her role as project and product manager, Isabel develops high-tech innovations at the Fürth location in Germany.

WHAT WAS YOUR EXPERIENCE OF JOINING LPKF?

Isabel: In a way, joining LPKF was a lateral move for me. My studies in chemistry with a doctorate on the topic of organic solar cells do not really sound like a perfect match for a project management role at a mechanical engineering company. I showed a lot of commitment in order to develop and meet the requirements for my position in what was a new sector for me. When I was looking for a job, I was always trying to find a company that could offer me a fascinating role in a technology-based area as well as a pleasant environment and good teamwork. After the two months of project work, it was clear in my mind that LPKF meets these requirements exactly. As a project manager and product manager for the development of new welding systems, I am very immersed in the technology and the atmosphere and teamwork with my colleagues are superb.

WHAT SUCCESS DURING YOUR TIME AT LPKF ARE YOU PARTICULARLY PROUD OF?

Isabel: I am very proud of all the small successes that I have been a part of here at LPKF – from my own initial training right through to all the progress that we have made as a team in our development projects. From my perspective, establishing a new product management structure in our business unit in recent years was particularly demanding and a great success.

Furthermore, I really like designing and monitoring new processes, systems and communication structures that support our work.

WHAT FASCINATES YOU ABOUT LPKF AS AN EMPLOYER? WHERE DO YOU SEE THE GREATEST POTENTIAL?

Isabel: I believe that the teamwork at this company is extraordinarily good and that there are short communication channels between the departments and even between the individual business units here. My experience at other companies or organizations, by contrast, was that everybody works on their own little island and has only limited contact with other groups or departments.

It is not like that at LPKF. In addition, the expertise that the colleagues in different specialist areas (construction, programming, electronics, optics, etc.) have is incredible. I believe that these two factors hold the greatest potential for the development and growth of LPKF.

TO WHAT EXTENT DOES YOUR JOB HAVE AN INTERNATIONAL FLAVOR?

Isabel: I come from Spain originally. I lived and studied there until 2012 until I decided to do my doctoral dissertation within the framework of an EU project in France and the UK. I had my viva in late 2015, and came to Germany shortly afterwards in early 2016. So you could say that internationality plays a major role in my life and in my job too. When you decide to live and pursue a career abroad, that brings many challenges with it, but also opportunities. With international experience, you develop a certain ability to adapt to new environments and situations and you become acquainted with new verbal and non-verbal communication methods. Therefore, I consider my international profile a positive thing both for me and for LPKF. My colleagues have always made me feel very welcome.

» I AM GLAD THAT I AM ABLE TO FEEL THE VALUE OF MY WORK AT LPKF. « (Martin)

WHAT ARE YOU PARTICULARLY PROUD OF IN RESPECT OF YOUR CAREER AT LPKF?

Martin: In the past, some of our products were not ideal for different reasons. Together with our Applications and Service teams, we succeeded in improving quality drastically. The result was even better than we had expected. Our customers are now highly satisfied with our performance and our highly motivated approach to work. I am glad that I am able to feel the value of my work at LPKF.

WHAT ROLE DOES LPKF PLAY IN YOUR LIFE?

Martin: My life is built on and around my work and it is an important foundation for my self-esteem. In addition, I can lead a good life thanks to my income. For me, LPKF is like a mentor. I have learned a lot here and steadily improved my skills.

» MARTIN
LPKF employee

In his role as a technical application specialist, Martin is responsible for various aspects of operations, including Quality Management in China.

THE LPKF SHARE

THE 2019 STOCK MARKET YEAR

The stock market had a turbulent start to 2019. In the first two quarters in particular, Brexit repeatedly caused setbacks in the markets. But as the year progressed, market participants began to focus once again on reported figures, largely pushing back fears of recession. For better or for worse, the trade dispute between the US and China replaced Brexit as the issue dominating the markets.

With these factors in mind, the year-end results are surprisingly positive, with the MSCI World Index recording the second-best stock market year since 2009 at 25.19%. The DAX contributed a respectable 25.48%, while the MDAX fared even better, reaching an all-time high of 28,643.38 points and closing the year with an increase of 31.15%. This was even slightly exceeded by the SDAX, which posted an increase of 31.58%. The TecDAX closed the 2019 stock market year with a slightly lower performance of 23.05%.

LPKF SHARES

2019 was very positive for LPKF shares. In the first half of the year, the shares were still subject to major market fluctuations. The share price was EUR 5.53 at the beginning of the year before reaching a low of EUR 5.34 on 1 February. It then recovered somewhat and hovered between EUR 9 and EUR 6 until mid-August. By the middle of the year, LPKF had positive company news and reliable quarterly forecasts to report. Following the publication of the half-year figures in mid-August, the share price began to move upward from EUR 7.00 and peaked at EUR 18.30 on 17 December. On 9 September, the forecast for consolidated revenue was raised to between EUR 135 million and EUR 140 million (previously: EUR 130 million and EUR 135 million) and the forecast for the EBIT margin was increased to between 12% and 14% (previously: 8% and 12%). LPKF shares closed the year at EUR 15.80, up 185.71% on the start of the year.

LPKF shares gained 37.43% overall in the first six months of the year (SDAX up 18.9%), with their performance in the second half of the year clearly standing out from the markets with an increase of 107.90% (SDAX up 9.1%).

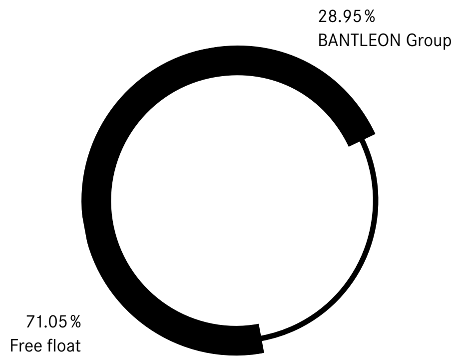
The share performance also reflected demand for LPKF shares, with trading volumes of between 901 and 72,788 shares. On Xetra, an average of 44,394 shares changed hands each day.

SHAREHOLDER STRUCTURE

The subscribed capital of LPKF Laser & Electronics AG is EUR 24,496,546.00. The corresponding number of ordinary shares were approved for the regulated market of the Frankfurt am Main Stock Exchange (Prime Standard). 28.95% of the shares are held by Jörg Bantleon as the anchor shareholder. This also includes the voting rights of German Technology AG, a subsidiary of BANTLEON Bank, which are attributed to Jörg Bantleon. Three other investors hold over 3% of the shares. Shares held by asset managers and trust companies, funds and pension funds, investment companies and foreign investment companies in their respective special funds are not considered to be in fixed ownership. The BANTLEON Group is the exception to this, as it is in the position of being a long-term anchor shareholder and has publicly announced its intention to pursue strategic goals and to have a lasting impact on corporate policy. According to the Deutsche Börse AG definition, 71% of LPKF shares are in free float.

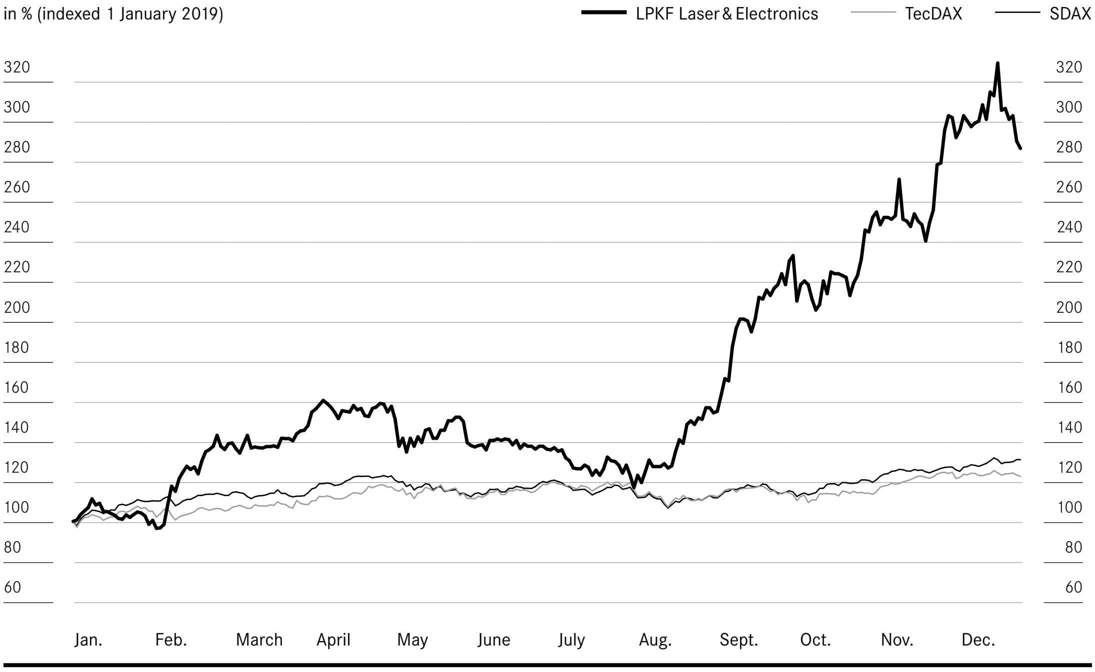
» SHAREHOLDER STRUCTURE DIAGRAM

as of 12 / 31 / 2019



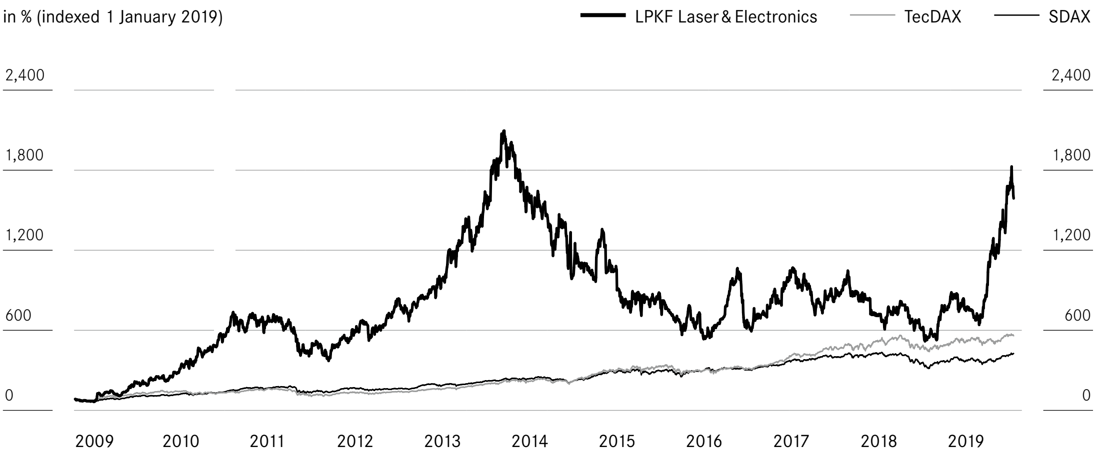
» SHARE PERFORMANCE

in the 2019 financial year compared with TecDAX and SDA



» LONG-TERM PERFORMANCE OF LPKF SHARES 2009–2019

compared with TecDAX and SDAX



Capital Markets Day, on 9.9.2019 in Garbsen

www,lpkf,-com / de / investor-relations / hauptver-sammlung /

ANNUAL GENERAL MEETING AND DIVIDENDS

On 6 June 2019, the scheduled Annual General Meeting of LPKF AG took place in the Hanover Congress Centrum. Around 250 shareholders listened to the report given by the Chairman of the Management Board, Dr. Goetz M. Bendele. 53.72% of the company's share capital was represented there (previous year: 43.35%). All of the management recommendations were approved by the shareholders with an overwhelming majority. Detailed voting results can be viewed at any time on the LPKF-Website.

In agreement with the Supervisory Board, the Management Board has formulated a dividend policy for LPKF AG. The company is planning to propose to the Annual General Meeting that 30% to 50% of the free cash flow be distributed as a dividend. The current corporate situation, economic developments and potential investments, acquisitions or disposals of assets could all lead to a deviation from this policy. Because of the positive development in free cash flow in 2019, LPKF would like to propose a dividend to the Annual General Meeting for the first time in four years. At the time this annual report was published, there were signs of a global economic downturn due to the coronavirus pandemic, the effects of which are difficult to assess. The Management Board and the Supervisory Board therefore currently intend to propose a dividend of 10 Eurocent per share for the 2019 financial year.

INVESTOR RELATIONS ACTIVITIES

The aim of our Investor Relations work is to ensure a fair valuation of LPKF shares by the capital market. We communicate regularly with market participants to create the conditions necessary for this and are as transparent as possible.

As announced, the Management Board has intensified its Investor Relations work in 2019. Press relations have been improved considerably, and many articles about LPKF have appeared in the national business and financial press. Direct communication between the Management Board and investors has also been developed further. In addition to share price, liquidity and therefore the tradability of our shares play an important role in all communication activities. As a result, the average trading volume of LPKF shares on Xetra has more than doubled from 17,344 in the previous year to 44,394 in 2019.

In 2019, LPKF hosted a Capital Markets Day in Garbsen for the first time. Around 50 institutional investors and analysts accepted the invitation, and were impressed by the ambitious growth and return targets and the

LPKF KEY SHARE FIGURES

	2019	2018	2017
Number of shares on 31.12.	24,496,546	24,496,546	22,269,588
Highest price (XETRA)	18.30 EUR	10.48 EUR	10.88 EUR
Lowest price (XETRA)	5.34 EUR	5.10 EUR	6.89 EUR
Closing price at year end (XETRA)	15.80 EUR	5.52 EUR	9.39 EUR
Market capitalization at year end	387.05 Mio, EUR	135.24 Mio, EUR	209.11 Mio, EUR
Share turnover in shares per day (average)	4,394	17,344	42,506
Earnings per share, diluted	0.53	0.33	0.05
Dividend per share*	**0.10 EUR**	0.00 EUR	0.00 EUR

* 2019: Annual General Meeting recommendation

changes introduced by the Management Board. In a series of specialist presentations, company employees outlined the challenges of the individual markets and the solutions that LPKF develops for its customers. During a tour of the company, the guests also had the opportunity to see LPKF's innovative technologies first-hand.

Dr. Goetz M. Bendele, CEO, and Christian Witt, CFO, spoke with institutional investors and analysts at a total of eight investor conferences, gave three presentations at analyst and investor conferences, and held a total of 83 investor meetings.

LPKF shares are covered and rated by the following institutions:

- **Warburg Research**
- **FMR**
- **HSBC**
- **Quirin Privatbank**
- **Hauck & Aufhäuser**
- **EQUI.TS**

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LPKF also maintains regular contact with financial and business journalists. LPKF offers individual press interviews with the Management Board on the publication of quarterly figures to provide shareholders with an independent and comprehensive picture. The Management Board is planning to continue its active communication with the capital market at a high level in 2020.

LPKF SHARES MASTER DATA

ISIN	DE0006450000
Ticker symbol	LPK
Trading segment	SDAX since 18 February 2020
Market places	Frankfurt, Berlin, Bremen, Düsseldorf, Hamburg, Hannover, Munich, Stuttgart
Trading advisor	Oddo Seydler Bank AG
Underwriting syndicate	Bankgesellschaft Berlin AG, Commerzbank AG, DG Bank AG (currently DZ Bank AG), M.M. Warburg & Co. KGaA
First trading day (new market)	30 November 1998
Face value	EUR 1

CORPORATE GOVERNANCE
SUSTAINABLE VALUE CREATION AND EFFICIENT COLLABORATION

The actions of the LPKF Group's management and supervisory bodies are guided by the principles of responsible and good corporate governance. In this section, the Management Board and the Supervisory Board report on issues of corporate governance at LPKF. This section also contains the corporate governance declaration pursuant to Sections 289f and 315d of the German Commercial Code. The corporate governance declaration for the company and the Group is a part of the combined management and Group management report. For the remuneration report, please see page 90 of the combined management and Group management report.

CORPORATE GOVERNANCE DECLARATION AND CORPORATE GOVERNANCE REPORT

COMPOSITION AND PROCEDURES OF THE MANAGEMENT BOARD AND SUPERVISORY BOARD

LPKF AG is a stock corporation incorporated under German law. It operates under a dual management system comprising the Management Board and the Supervisory Board. The Management Board and the Supervisory Board of LPKF AG work closely together in managing and supervising the company.

The LPKF AG Management Board consists of two members with one Chairman. As a management body, they manage the company's business with the aim of creating sustainable value, both on their own responsibility and in the interests of the company. The Management Board fulfills its managerial tasks as a collegial body. Notwithstanding the overall responsibility, the individual members of the Management Board bear individual responsibility for managing the areas assigned to them by Management Board resolutions. The distribution of business among the members of the Management Board is in accordance with the business distribution plan. Information about the areas of responsibility and curricula vitae of the Management Board members are available on the LPKF-Website. The Management Board convenes on a regular basis.

https://www.lpkf.com/en/company/lpkf-group/management

The Supervisory Board advises and monitors the Management Board with regard to its management of the company. It is involved 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 major 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 of the Group's planning, performance and situation, including risk management and compliance in a timely and comprehensive manner, both in writing and at regular meetings. Extraordinary Supervisory Board meetings are convened as necessary should significant events arise. The Supervisory Board has adopted rules of procedure for its own work.

The Supervisory Board reviews how effectively it performs its duties on an annual basis. The efficiency review for the 2019 financial year took place in February 2020 using a questionnaire analysis. The outcome was successful.

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

In the 2019 financial year, the LPKF AG Supervisory Board comprised the following three members who were all elected individually at the Annual General Meeting. The curricula vitae of the Supervisory Board members are available on the LPKF-Website.

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.

Details on the actual membership of the Management Board and the Supervisory Board in the 2019 financial year and disclosures in accordance with Section 285 (10) of the German Commercial Code can be found on page 61 and 94 of the combined management and Group management report. There are no committees.

STIPULATED TARGETS FOR THE PROPORTION OF WOMEN ON THE SUPERVISORY BOARD, THE MANAGEMENT BOARD AND AT THE TWO MANAGEMENT LEVELS BELOW THE MANAGEMENT BOARD

As a listed company that is not subject to the German law on co-determination, LPKF AG is legally required to set targets for the proportion of women on the Supervisory Board, the Management Board and at the two management levels below the Management Board.

The Supervisory Board set a target of one third (33.33%) for the proportion of women on the Supervisory Board. The Supervisory Board set a target of 0% for the proportion of women on the Management Board. Given the current composition of the Management Board with just two members, the current appointment periods of both male Management Board members and the fact that there are no plans to expand the Management Board, the Supervisory Board does not consider it appropriate to set a higher target for the Management Board at this time. The fulfillment date for both of these targets is 26 February 2024.

The Management Board set out targets for the proportion of women at the two management levels below the Management Board. They are 17% for the first level below the Management Board and 23% for the second level below the Management Board. The fulfillment date for both these targets is 30 June 2022.

https://www.lpkf.com/en/company/lpkf-group/management

SUPERVISORY BOARD

Dr. Markus Peters Chairman of the Supervisory Board	Member of the Supervisory Board since 13 July 2017, elected until the end of the 2024 scheduled Annual General Meeting, Chairman of the Supervisory Board since 16 October 2017
Dr. Dirk Rothweiler Deputy Chairman of the Supervisory Board	Member of the Supervisory Board since 14 June 2017, elected until the end of the 2022 scheduled Annual General Meeting, Deputy Chairman of the Supervisory Board since 6 June 2019
Prof. Dr.-Ing. Ludger Overmeyer	Member of the Supervisory Board since 6 June 2019, elected until the end of the 2024 scheduled Annual General Meeting

MANAGEMENT BOARD SUCCESSION PLANNING, DIVERSITY CONCEPT

Together with the Management Board, the Supervisory Board ensures that there is long-term succession planning. In particular, the Supervisory Board conducts open discussions with internal and external candidates for possible appointment to the Management Board of LPKF AG within a reasonable period of time. When deciding who to appoint to the Management Board, the fundamental selection criteria for the Supervisory Board are professional qualifications in the area of responsibility to be taken on, leadership qualities, past achievements and skills acquired, and knowledge of LPKF AG as a company.

In putting together a Management Board, the Supervisory Board aims for diversity consisting primarily of the following aspects:

- Between them, the members of the Management Board should have the knowledge, abilities and professional experience required to properly perform the duties incumbent on them.

- The members of the Management Board must be familiar with the relevant areas of industry. At least individual members of the Management Board should also have knowledge of the laser technology sector and of capital markets and financing. At least the Management Board member with responsibility for finance must have expertise in accounting or auditing and one member of the Management Board should have experience in managing a medium-sized company.

- Diversity should also be taken into account when searching for qualified Management Board members. It should also be recognized that different yet complementary professional profiles and professional and personal experiences, and appropriate representation of both genders on the board will benefit the overall operation of the Management Board.

- As a general rule, members of the Management Board shall be under 65 years of age. The age of Management Board members should therefore be taken into account during selection.

- The Supervisory Board has set the aforementioned target and deadline concerning the proportion of women on the Management Board.

The diversity concept is intended to benefit the overall operation of the Management Board. No matter who the Supervisory Board chooses to appoint to the Management Board, they will do so in the best interests of the company and having taken into account all the relevant factors.

The LPKF Management Board currently comprises two members who are qualified in different areas both professionally and personally. In the opinion of the Supervisory Board, the diversity concept for the Management Board was met during the reporting period.

TARGETS FOR THE COMPOSITION OF THE SUPERVISORY BOARD, SKILLS PROFILE, DIVERSITY CONCEPT

The Supervisory Board has defined objectives with regard to its composition. This includes a skills profile that is taken into account when proposing new candidates for the Supervisory Board and a diversity concept.

Between them, the members of the Supervisory Board should have the knowledge, abilities and professional experience required to perform the duties incumbent on them. Between them, the members of the Supervisory Board must be familiar with the sector that the company operates in.

Steps should be taken to ensure that the members of the Supervisory Board have at least the following knowledge and experience: (i) familiarity with the company’s sector, (ii) knowledge in multiple defined areas, (iii) expertise in accounting or auditing for at least one member of the Supervisory Board, (iv) international experience. In this way, the individual qualifications of the individual members complement each other in the achievement of this aim.

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

The international activities of LPKF AG are reflected in election proposals to the Annual General Meeting. In addition to the ability to speak and write English, the benchmark here is professional experience acquired in other internally active German and foreign companies, whether in management or supervisory bodies, as well as an understanding of global economic issues. The criterion of internationality does not necessarily require one or more Supervisory Board members to hold foreign citizenship, German citizens can also contribute the desired range of 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 the German Corporate Governance Code as amended on 7 February 2017. For the purposes of this recommendation, at least a majority 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 company, 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.

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 or have a personal relationship with a significant competitor.

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

c) Definition of an age limit

The age limit for members of the Supervisory Board was set at under 70 years of age at the time of election.

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

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

e) Consideration of diversity

The composition of the Supervisory Board of LPKF AG should, as broadly as possible, reflect a spectrum of professional expertise and experience in various areas relevant to the company. Concerning the proportion of women on the Supervisory Board, the Supervisory Board has set the aforementioned target and deadline.

The aforementioned aims and the diversity concept are intended to benefit the overall operation of the Supervisory Board.

There were no conflicts of interest in the financial year just ended. Each member of the Supervisory Board ensures that they can devote the requisite amount of time to the role.

With the exception of the proportion of women, which has been targeted to 26 February 2024, the current composition of the Supervisory Board corresponds to the targets set by the Supervisory Board and complies with the diversity concept and the skills profile.

Between them, the Supervisory Board members are familiar with the relevant company sector for which they have responsibility, and there is more than one member with expertise in the area of accounting or auditing and with international experience. In addition, the body is comprised of at least a majority of members who are independent of a controlling shareholder, as determined by the Supervisory Board.

The Supervisory Board considers its current members Dr. Markus Peters, Dr. Dirk Michael Rothweiler and Prof. Ludger Overmeyer to be independent of the Management Board and the company. The latter two members are also considered independent of a controlling shareholder, both on the basis of independence as defined in the German Corporate Governance Code.

DISCLOSURES ON CORPORATE GOVERNANCE PRACTICES

RISK MANAGEMENT

The Management Board of LPKF AG has set up a comprehensive Group-wide reporting and control system that makes it possible to record, assess and manage risks. This system is continuously refined, adjusted to changing parameters and reviewed by the auditors of the financial statements. The Management Board informs the Supervisory Board on a regular basis of existing risks and their development. Details of risk management within the LPKF Group are in the risk report, which is part of the Group management report. This contains the report on the accounting-related internal control and risk management system.

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. These values are expressed in exemplary behavior towards employees, business partners, shareholders and the public. LPKF's understanding of compliance includes observing 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 Group employees. Compliance is anchored in internal processes and there is a Group-wide compliance structure. Employee training courses are held on the Group-wide Compliance Code and on general compliance issues. This should ensure the prevention of compliance infringements across the whole Group.

https://www.lpkf.com/en/company/lpkf-group/compliance-management

The Compliance Office holds regular meetings to discuss current topics, sometimes in the presence of the professional officers.

Reliable reporting channels for internal and external stakeholders help to ensure that possible irregularities can be reported confidentially. Internal auditing is also used for this purpose. To obtain knowledge of any possible compliance violations, LPKF provides internal and external whistleblowers with contact channels, which are listed on the LPKF-Website. These can be used to contact the compliance officer or independent legal counsel. Additional contact details for employees can be found in the Compliance Code, on the intranet and on notices posted at the company.

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

LPKF LASER & ELECTRONICS AG DECLARATION OF COMPLIANCE WITH THE GERMAN CORPORATE GOVERNANCE CODE FOR THE 2020 FINANCIAL YEAR IN ACCORDANCE WITH SECTION 161 OF THE GERMAN STOCK CORPORATION ACT

LPKF implements the recommendations and suggestions of the German Corporate Governance Code (GCGC), with few exceptions. On 30 January 2020, the Management Board and the Supervisory Board jointly issued the 2020 declaration of compliance pursuant to Section 161 of the German Stock Corporation Act. The declaration was made permanently available to the public on LPKF AG's website.

The following declaration of compliance refers to the current version of the German Corporate Governance Code (GCGC) of 7 February 2017, as published in the Federal Gazette on 24 April 2017.

The Management Board and Supervisory Board declare that LPKF Laser & Electronics AG has complied and will continue to comply with the recommendations of the GCGC since issuing its last declaration of compliance. The following few exceptions were or are valid:

1. No stipulation of a severance pay cap agreed for Management Board member contracts in the event of premature termination of Management Board activities (Section 4.2.3 (4) and (5) GCGC)

Because they only run for a maximum of three years, Management Board member contracts do not contain a cap on severance pay. If a Management Board member's contract is terminated prematurely without good cause, remuneration is limited to no more than the remaining contractual period. For this reason, the Supervisory Board did not see any need to agree on a severance pay limit of two years' remuneration when concluding the contract.

2. No formation of Supervisory Board committees (Section 5.3.1, 5.3.2 and 5.3.3 GCGC)

In the case of three members, committees are not considered appropriate. Upon agreement, members of the Supervisory Board are entrusted with special tasks related to specific topics and report to the entire Supervisory Board.

Garbsen, 30 January 2020

DR. MARKUS PETERS
on behalf of the Supervisory Board

DR. GOETZ M. BENDELE
on behalf of the Management Board

The new version of the GCGC dated 16 December 2019 is already being examined by the Management Board and the Supervisory Board. Many new recommendations are already being implemented, while others require careful consideration and internal consultation. The next declaration of compliance in accordance with the new GCGC will be issued in early 2021.

SHAREHOLDERS AND ANNUAL GENERAL MEETING

The shareholders of LPKF AG exercise their co-determination and control rights at the Annual General Meeting, which takes place at least once a year. It resolves all matters determined by law. 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 are unable to attend in person have the option of appointing a bank, a shareholders' association, one of the proxies appointed by LPKF AG who are bound by instructions or any other agent as their proxy to exercise their voting right.

The invitation to the Annual General Meeting as well as the reports, documents and information required by law for the Annual General Meeting 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.

TRANSPARENCY

LPKF regularly informs capital market participants and interested members of the public about the economic situation of the Group and any new circumstances. The annual report, the half-yearly financial report and the quarterly financial reports are published within the specified deadlines. Press releases and, where applicable, ad hoc announcements provide information on current events and new developments. All of the information is published via suitable electronic media such as e-mail and the Internet. The website www.lpkf.com 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, the annual report, quarterly financial reports, the annual financial press conference and analyst conferences. The calendar is published well in advance of the scheduled events and is made available on LPKF AG's website.

SHARE TRANSACTIONS OF MEMBERS OF THE COMPANY'S CORPORATE BODIES

LPKF AG publishes information on directors' dealings on the Internet and reports this to the relevant supervisory authorities. There were no reportable directors' dealings in the 2019 financial year.

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 annual and 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 report are discussed by the Supervisory Board and the Management Board prior to publication. The consolidated financial statements and the annual financial statements of LPKF AG were audited by KPMG AG Wirtschaftsprüfungsgesellschaft, Hanover, Germany, the auditor appointed by the 2019 Annual General Meeting. The audit reports were signed by German public auditors Alexander Eichstaedt (since the 2019 annual financial statements) and Alexandra Prenzler (since the 2019 annual financial statements).

The audits were conducted in accordance with German auditing standards, taking into account the generally accepted German standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer. The audits also covered risk management and compliance with the reporting obligations defined for corporate governance pursuant to Section 161 of the German Stock Corporation Act.

The company 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 audits covering the 2019 financial year.

Garbsen, 17 March 2020

DR. MARKUS PETERS
on behalf of the Supervisory Board

DR. GOETZ M. BENDELE
on behalf of the Management Board

COMBINED MANAGEMENT REPORT
FOR THE LPKF GROUP AND LPKF AG

BASIC INFORMATION ON THE GROUP

GROUP STRUCTURE AND BUSINESS MODEL

LPKF Laser & Electronics AG (LPKF) is a global technology company with an export share of more than 90% and customers in over 70 countries. The company primarily develops laser-based solutions for dynamic markets such as the electronics industry, the automotive supply industry, the solar industry, the semiconductor industry, medical technology, research institutions and universities.

LPKF was established in 1976 and has over 40 years of experience as a developer and supplier of innovative capital goods for industrial companies and research institutions. Since 2019, the company has also been manufacturing micro-structured components made of glass for the semiconductor industry.

Research and development is of paramount importance for LPKF. Many of its innovations and further developments are created in close partnership with customers. To maintain its ability to innovate, every year the company invests around 10% of its revenue in in-house R&D activities. Development and production activities are based in Europe.

The LPKF Group has four business segments and maintains a broad-based product portfolio. The company's mission is to give its customers a competitive advantage through the use of innovative technology. With this in mind, LPKF is spearheading the transition from traditional to laser-based production methods in specific markets, and is enabling the development of innovative end products in a number of areas.

LPKF Laser & Electronics AG is headquartered in Garbsen near Hanover, Germany. The company has a broad global presence, with a workforce of 682 people based at locations in Europe, Asia and North America. LPKF's shares are listed in the SDAX of the German Stock Exchange.

Legal structure of the Group

As of 31 December 2019, LPKF had nine subsidiaries, which, together with the parent company, form the group of consolidated companies. The former wholly owned subsidiary LaserMicronics GmbH was merged with the parent company in the 2019 financial year. Under the LaserMicronics brand, LPKF continues to supply production services to customers.

Legal structure of the Group

LPKF LASER & ELECTRONICS AG
GARBSEN / Germany

Production subsidiaries	Sales and service companies
LPKF WeldingQuipment GmbH **Fürth /** Germany (100 %)	**LPKF Distribution Inc.** **Tualatin (Portland) /** US (100 %)
LPKF SolarQuipment GmbH **Suhl /** Germany (100 %)	**LPKF Laser & Electronics Trading (Shanghai) Co., Ltd. Shanghai /** China (100 %)
LPKF Laser & Electronics d.o.o. **Naklo /** Slovenia (100 %)	**LPKF (Tianjin) Co. Ltd.** **Shanghai, Tianjin, Suzhou, Shenzhen /** China (100 %)
	LPKF Laser & Electronics K.K. **Tokyo /** Japan (100 %)
	LPKF Laser & Electronics Korea Ltd. **Seoul /** Korea (100 %)
	LPKF Laser & Electronics Hong Kong Ltd. **Hongkong /** China (100 %)

Operating segments
The management and control of the LPKF Group is independent of the Group's legal structure. LPKF AG carries out top-level Group functions such as strategic business development and innovation management and performs core activities in the areas of controlling, investor relations, HR, accounting, legal, internal audit, risk management, compliance, marketing, strategic purchasing and management systems.

Sales, service, production and development activities are handled by separate business units in each segment. In LPKF's most important markets outside Germany, sales and service functions are also provided through regional sales companies in close collaboration with business unit management.

In the 2019 financial year, LPKF operated in the following segments:

DEVELOPMENT

Systems for printed circuit board development and research

WELDING

Systems for plastics welding

ELECTRONICS

Systems for electronics production and the manufacture of glass components

SOLAR

Systems for the production of solar cells and for Laser Transfer Printing

Development

In the **Development** segment, LPKF supplies practically all the electronic equipment that developers require to manufacture and assemble printed circuit board prototypes largely without the use of chemicals. In addition to the development departments of industrial companies, the company primarily supplies public organizations such as research institutes, universities and schools.

Electronics

LPKF's **Electronics** segment manufactures systems that are primarily used in production in the electronics industry. These include laser systems for cutting print stencils (StencilLasers) and laser systems for cutting and drilling rigid and flexible printed circuit boards. The Electronics segment also includes LIDE technology (Laser Induced Deep Etching) developed by LPKF. The LIDE business encompasses both the development and sale of laser systems for high-precision structuring of very thin glass and the production of glass components using the company's own LIDE systems.

This segment also includes the company's process expertise for the manufacture of three-dimensional, injection molded circuit carriers using the laser direct structuring (LDS) method as well as other future applications for the electronics and semiconductor industries.

Welding

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

Solar

In the **Solar** segment, LPKF develops and produces laser systems (LaserScribers) that are used for structuring thin-film solar cells for various thin-film technologies. The customer base of this segment includes international solar cell manufacturers. This segment also includes laser systems for the digital printing of functional pastes and inks (Laser Transfer Printing, LTP).

The Other segment, which contained non-operating components such as expenses of the holding company function, foreign exchange expenses and income, was dissolved at the start of the 2019 financial year and these components were distributed among the segments.

LPKF competes with a different set of competitors in each segment and in each product group. These competitors range from multinational corporations to smaller, regional providers who often operate in just one market.

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 manufactured in Garbsen, Germany. Welding segment production takes place in Fürth, Germany. Solar and LTP systems are produced in Suhl, Germany.

In principle, LPKF does not acquire complete systems from third parties. If system components are purchased from outside the Group, there are several suppliers available in most cases.

PRODUCTION COMPANIES

COUNTRY	CITY	FUNCTION	FOCUS AREA
	Garbsen	Group headquarters, production, development, sales and services	Electronics segment • Cutting and drilling, LIDE, LDS Development segment • Systems for prototyping
	Fürth	Production, development, sales and services	Welding segment • Systems for plastic welding
Germany	Suhl	Development, sales, production and services	Solar segment • Systems for structuring large surfaces • Systems for digital printing of functional pastes
Slovenia	Naklo	Production, development and services	Development segment Systems for prototyping Laser sources

Sales
Global sales, especially in important regions such as China, Japan, North America and South Korea, are handled by subsidiaries. Overall, the Group is represented by subsidiaries or distributors in 71 countries.

MANAGEMENT AND CONTROL

Organization of management and control
The Management Board represents the company and is responsible for running it. The members of LPKF AG's Management Board are appointed by the Supervisory Board. The Supervisory Board may withdraw appointments for good cause.

The Supervisory Board has determined that certain transactions require its approval.

The Annual General Meeting may make decisions on management issues only 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 by 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 a resolution to be passed by a majority of the share capital represented, a simple majority of the share capital represented will suffice, unless the law mandates a larger majority.

The following persons were members of the Management Board of LPKF AG in the 2019 financial year:

- Dr. Goetz Matthias Bendele (CEO)
- Christian Witt (CFO)

In the 2019 financial year, the Supervisory Board consisted of the following members:

- Dr. Markus Peters (Chairman)
- Prof. Dr.-Ing. Erich Barke (Deputy Chairman) until 6 June 2019
- Dr. Dirk Rothweiler (Deputy Chairman since 6 June 2019)
- Prof. Dr.-Ing. Ludger Overmeyer since 6 June 2019

Relevant legal factors
The company and each of its segments are subject to the general legal requirements applicable to listed companies. Beyond this, no special legal provisions apply.

STRATEGY

Strategic framework
Megatrends
The following megatrends are playing a decisive role in the transition from traditional to laser-based production methods:

- Miniaturization: Miniaturization is continuing apace. Electronic devices are becoming increasingly smaller, more powerful and more efficient. The precision of the laser means that materials can be processed on a micrometer scale.
- Digitalization: As electronic and non-electronic devices become more powerful and more multifunctional, this increases the number of electronic components – including antennas, sensors and MEMS – they require.
- Efficiency: Efficient production is of paramount importance to customers. LPKF technologies aim to reduce process costs and material costs.
- Freedom of design: Product design is increasingly becoming a primary differentiator of electronic devices. Laser flexibility maximizes freedom of design when developing new products.
- Sustainability: Customers are having to meet ever more stringent quality requirements in production. Consumers are placing increasing importance on a clean environment. Laser technology aims to make production processes cleaner and more efficient and to increase the durability of end products.

Vision

The LPKF Group is driven by the vision that innovative technology is going to sustainably change the world of electronics production. At the same time, the design and manufacture of electronic devices are becoming increasingly centered around people.

LPKF has derived three central functions from this vision for the Group:

1. Pioneer: LPKF is spearheading the transformation from traditional production methods to laser technology, thereby opening up new opportunities in product design and production.

2. Solution provider: LPKF delivers high-precision, laser-based solutions for manufacturing.

3. Production service provider: LPKF manufactures and sells micro-structured components made of glass.

Success factors

The company's success is based on a deep understanding of customer requirements that has been cultivated from years of experience and on in-house process expertise that has been developed over time. Expertise in engineering, software, physics, chemistry and Group-wide machine software platforms are equally important contributing factors to the company's success. Added to this are its high capacity for innovation and its understanding of the laser microprocessing of different materials.

Another key success factor is LPKF's focus on the following core competencies and the interplay between them:

Core competencies

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

Corporate responsibility

For the LPKF Group, sustainability means acting responsibly, achieving business success as well as ecological and social progress, and working to secure the future of the company.

https://www.lpkf.com/en/company/lpkf-group/compliance-management

Independence of individual markets as a result of broad positioning

On the basis of its core competencies, LPKF addresses different markets whose innovation requirements are largely independent of the economic and technology cycles of individual sectors.

Mission statement

All activities of the LPKF Group are geared toward the success of its customers. All major activities and decisions are aimed at improving the competitiveness of the Group's customer base through technological advancement and efficiency gains. Strengthening LPKF in the long term serves the interests of all customers, business partners, employees and shareholders. For this reason, strong emphasis is placed on strengthening the Group's innovation resources and ensuring profitability.

LPKF is a technology group. The company aspires to shape technological progress and gain leading market positions by focusing its energies on its core competencies. A sense of professional partnership and fair treatment characterizes relationships with customers, suppliers and representatives as well as the working relationships among employees within the LPKF Group. As an international group, LPKF strives for understanding other cultures and philosophies and always places the Group's interests above those of its individual subsidiaries.

Product quality is one of the keys to customer satisfaction. LPKF encourages employee training as a way of sustaining the high quality of its products and ensures that its employees recognize their direct and indirect responsibility for customer satisfaction.

LPKF makes an active contribution to reducing waste by using largely laser-based production methods. LPKF designs its products and internal processes to be as environmentally friendly as possible. Health and well-being are the foundations for a successful business. 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 product development processes. 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. The company's sense of corporate responsibility also includes the fact that LPKF employees are required to obey applicable laws whenever and wherever appropriate, respect ethical principles and pursue sustainability. The LPKF Compliance Code supports the company's employees in this endeavor.

Corporate objective

LPKF's objective is to achieve long-term business success through sustainable, profitable growth. This success is underpinned by a long-term business orientation and near-term business management. The Group's business activities place just as much emphasis on the long-term development of the Group as they do on short-term monitoring of key figures so that it can act quickly in the event of any undesirable developments.

A key factor for LPKF is maintaining its ability to innovate so that it can carry on developing and commercializing ever more new and innovative solutions for its customers. The organization is vigorously aligned towards serving its customers. In addition to operational strength and speed, research and development work is of primary importance.

Strategic alignment of the operating business

Strategic alignment of the company

The megatrends of miniaturization and digitalization require lasers as highly precise tools for the production of electronic components. As an experienced and innovative laser specialist, LPKF supplies important key technologies for many growth industries. The company's broad portfolio of products and services contributes to boosting efficiency and conserving resources. Alongside the traditional solutions business, LPKF also supplies production services through its foundry. The company uses its own systems to produce high-precision components made of glass for customers in the semiconductor and electronics industries. 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. This positioning gives LPKF many advantages over competitors who often operate in just one market or as regional suppliers. By addressing a range of markets, LPKF reduces its dependence on the cycles of individual industries. This makes it much easier to compensate for economic fluctuations. This approach requires the integration of all business processes with potential synergies.

LPKF Group cross-departmental functions are shared across the segments, including areas such as development, procurement and innovation management, or within the administrative departments such as HR and finance. In its core regional markets, LPKF provides sales and service support to all the segments via its own subsidiaries. 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 manufacture of printed circuit board prototypes. Its activities are centered around mechanical and increasingly laser-based systems that undergo continuous development. In the Development segment, LPKF addresses a global market with many individual customers from the industrial sector and universities. Many customers invest on the basis of an R&D budget. The Development segment can draw on a global network of distributors, who in many cases are longtime partners of the company and able to secure outstanding options for market entry. Despite already having a high market share, the Management Board is seeing solid growth rates in this segment due to new products and applications. As one example, for a number of years LPKF has been offering micromachining systems for research applications outside of PCB prototyping. This gives it the opportunity to tap into new markets beyond pure electronics development.

The Electronics segment caters to markets that are associated with the production and processing of electronic components as well as the semiconductor industry. The Electronics segment offers its customers systems for cutting, structuring and drilling a wide variety of materials with a high level of precision and speed. The Electronics segment operates in highly dynamic markets where there are opportunities for short-term major orders from individual customers. Since 2019, it has also offered LIDE technology as a production service (foundry) in addition to selling equipment. This business is to be expanded over the coming years. In all important key markets for this segment, LPKF has a strong presence with its own subsidiaries and partners.

In the Welding segment, LPKF develops, produces and markets laser systems for welding plastics. This segment primarily targets the automotive supply industry, the medical technology sector and manufacturers of consumer electronics. Laser welding can be used to replace traditional material joining methods in various sectors, generating a lot of market potential. Qualities that set LPKF apart include its broad and often unique range of products, its superior product quality, its wealth of process expertise, its short lead times and its global service network.

The Solar segment includes all activities in connection with the high-precision laser machining of large surfaces. This is where LPKF develops, manufactures and markets systems for structuring thin-film solar modules. Thanks to the longstanding collaboration with one particular major customer, LPKF has gained a leading position in the surface treatment of thin-film solar modules, which has given this customer a competitive advantage. The precision and speed of the Allegro systems are two of LPKF's key differentiators in the solar market. LPKF continues to work on expanding the customer base. As well as pursuing a broader customer base in the solar market, the development of new markets outside the solar industry will be helpful here. LPKF is targeting the market for printing functional pastes with its new LTP technology. 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. To this end the company is not only guided by input from customers and markets, but also explores its own ideas for innovations that present relevant benefits for customers. All existing products are reviewed at least once a year to see if their continuation makes sense from a commercial point of view.

Service is a core component of the corporate strategy and of what the company offers its customers and, as such, is supplied and reported within each segment. LPKF offers its customers a broad spectrum of services via its global service network. The service business was strengthened and expanded in 2019.

Corporate management

LPKF Group key figures

LPKF manages its business performance using key figures and ratios at various reporting levels. The following section outlines the most important key figures that LPKF uses:

- Revenue
- EBIT (earnings before interest and taxes) and EBIT margin
- Net working capital and net working capital ratio
- Free cash flow (FCF)
- ROCE (return on capital employed)
- Error rate

In 2019, LPKF added **FREE CASH FLOW** as a new key financial performance indicator. FCF is an indicator of a company's self-financing capability and its ability to pay a dividend from the cash flow for the period. Free cash flow is the sum of cash flow from operating activities and cash flow from investing activities.

LPKF has developed targets for these financial key figures and ratios through strategic and operational planning processes, and these are reviewed annually. The applicable targets for the reporting year are listed for the relevant period.

EBIT: The Group's 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): EBIT / (intangible assets + property, plant and equipment + inventories + trade receivables – trade payables – advances received).

Net working capital: It is calculated from inventories plus trade receivables less trade payables and advances received. It reflects the net capital tied up in the reported items.

Net working capital ratio: This key figure gives net working capital as a proportion of revenue, as in a changing business scenario the net capital tied up generally changes as well.

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 target achievement is calculated by means of linear interpolation between the initial value and the minimum value of the error rate.

Aside from the error rate, no other significant non-financial key performance indicator was used for managing the Group in the 2019 financial year.

Explanatory notes on the non-financial performance indicators for the LPKF Group are included in the separate non-financial consolidated report.

https://www.lpkf.com/en/company/lpkf-group/sustainability

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

		2019 target	**2019**	2018	2017	2016	2015
Revenue	EUR million	130–135	**140.0**	120.0	102.1	91.1	87.3
EBIT	EUR million	10.4–16.2	**19.2**	6.8	4.0	−6.8	−3.7
EBIT margin	in %	8.0–12.0	**13.7**	5.7	3.9	−7.4	−4.3
ROCE	in %	10–15	**25.5**	7.0	4.1	−6.8	−3.5
Net working capital	EUR million	36.0–44.0	**17.1**	37.9	33.3	35.2	40.3
Net working capital ratio	in %	28–33	**12.2**	31.6	32.6	38.7	46.2
Free cash flow	EUR million	10.0–17.0	**42.2**	5.8	n / a	n / a	n / a
Error rate	in %	< 70	**48**	70	78	73	60

Target / actual comparison of planning and implementation

During the 2019 financial year, the Management Board revised its forecast upward. The company issued its first forecast for 2019 as a whole on 6 February 2019. At that time, consolidated revenue was expected to be between EUR 130 million and EUR 135 million and the EBIT margin between 8% and 12%. On 9 September 2019, the forecast for consolidated revenue was raised to between EUR 135 million and EUR 140 million and the forecast for the EBIT margin was increased to between 12% and 14%.

With revenue of EUR 140.0 million, the Group significantly exceeded the forecast issued a year ago and achieved the higher figure in the most recently issued forecast. The EBIT margin of 13.7% is within range of the most recent guidance.

At 25.5%, ROCE is above the target range for 2019, which can be attributed to higher profitability and the significant reduction in capital employed.

The net working capital target was surpassed at the end of the year. At EUR 17.1 million or 12.2% of revenue, the Group significantly exceeded the target range specified.

Free cash flow at EUR 42.2 million was much higher than the projected range. Improved earnings and the reduction in net working capital both had a highly positive effect on this figure.

The quality costs target was also achieved as the error rate had improved considerably year-on-year.

NON-FINANCIAL STATEMENT

In 2014, the European Parliament and EU member states adopted a directive (the CSR Directive) to expand the reporting scope of large publicly traded companies, credit institutions, financial services institutions and insurance companies. The main aim of the Directive is to increase transparency regarding ecological and social aspects of companies in the EU. This 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 starting in the 2017 financial year.

LPKF AG is complying with its CSR reporting requirement by submitting a separate non-financial consolidated report.

LPKF AG's separate non-financial consolidated report will be published on the website within the legally stipulated period no later than 30 April 2020.

www.lpkf.com/en/company/lpkf-group/sustainability

RESEARCH AND DEVELOPMENT

Focus of R&D activities

Research and development (R&D) is of considerable importance for LPKF as a technology company. Innovations decisively influence the future performance and hence the business success of the LPKF Group.

The primary strategic aim of R&D activities is to establish, maintain or develop the company's position as an innovation leader within the relevant sectors. New products are designed to exhibit differentiators, which are then secured via patents. The benchmark for development activities is strengthening the customers' profitability.

During the 2019 financial year, development activities focused more intensely on new products and technologies in order to bring to market competitive products in the short and medium term. There was an increased drive to secure the key differentiators of these new developments via patents. Moreover, the quality of the development process has continued to improve with the implementation of agile project management techniques.

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

R&D expenses, investments and key figures

Continuous investment in near-to-market developments is crucial to a technology-oriented group such as LPKF.

In 2019, development expenses amounted to EUR 12.5 million, which is equivalent to some 9% of revenue.

LPKF capitalized EUR 4.0 million development expenses as intangible assets in the reporting year (previous year: EUR 3.9 million), which equates to a capitalization ratio of 34% (previous year: 33%). Amortization of capitalized development expenses amounted to EUR 2.9 million in 2019 (previous year: EUR 3.7 million).

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

EUR million	» 2019	2018	2017	2016	2015
R&D expenses *	12.5	11.7	11.1	11.4	9.9
As % of revenue	8.9	9.7	10.9	12.5	11.3
R&D employees	143	141	155	159	179

* Current R&D expenses include amortization of capitalized development expenses of EUR 2.9 million.

R&D results

The Electronics segment developed several new products in 2019. Two new StencilLasers were added to the product portfolio for thinner stencil sheets (microcuts) and thicker sheets (powercuts). A cost-efficient system for depaneling, the CuttingMaster, was developed and brought to a market-ready stage. The range of applications for micro-structured glass was expanded in the LIDE business area. For mass production in the semiconductor business area, an automated loading and unloading system, the Vitrion Semi, was developed.

In the Development segment, work continued on redesigning the SMCU IV system control unit. The successor unit, the SMCU V, is expected to offer additional functions for future generations of machinery and lower production costs. The PicoX laser module was also finished in 2019. It will be used in the product revision of the ProtoLaser R4 and will replace a laser source purchased from an external supplier. The ProtoLaser R4 project is currently in the implementation phase, and a functional model is in operation. New software releases were also completed in the Development segment with the intention of equipping the entire portfolio of milling and laser equipment – including some older system types – with standardized software.

Development activities in the Solar segment continued to focus on processes for machining CIGS solar modules. New activities here involved the perovskite material class. The latest generation of structuring machines was further optimized and important features were added. Initial preparatory work for a new generation of equipment got underway. The LTP business area focused on finalizing the LPKF Callisto large-format printer for the digital printing of functional pastes. The product definition for an integration print head, LPKF Io, was introduced with a view to developing additional areas of application (e.g. printed electronics) for LTP. Technology development was intensified whith efforts to develop a modular system that will enable a wider selection of printable inks and pastes for LTP.

The Welding segment forged ahead with its activities to finalize new systems for welding 3D components and radially symmetric components. Additional features were added to the new software architecture.

REPORT ON ECONOMIC POSITION

OVERVIEW OF THE COURSE OF BUSINESS

Macroeconomic environment

Global economic growth momentum declined further in 2019. Calculations by the Kiel Institute for the World Economy (IfW) put GDP growth at 3.0% last year, the lowest figure since the 2009 recession. The forecasts were scaled back over the course of 2019. The reasons given for this included a weak industry and subdued global trade, caused by factors such as heightened political uncertainty worldwide due to trade disputes and a trend to deglobalization.

There was a further slowdown in the economic development of advanced economies in 2019, which, according to the IfW, posted GDP growth of just 1.9% compared with 2.3% in the previous year. GDP growth contracted from 2.9% to 2.3% in the US, and from 1.9% in 2018 to 1.2% in 2019 in the eurozone. Japan's GDP rose slightly from 0.8% in 2018 to 1.2% in 2019. In the UK, growth remained on par with the previous year at 1.4%.

Germany's Federal Statistical Office reported economic growth of just 0.6% in 2019.

Emerging economies saw modest economic growth in 2019, with GDP rising by 4.1%. The figure given by the IfW for 2018 was 5.0%. China, the largest of the emerging economies and the second-largest economy in the world, garnered a lot of attention in 2019 owing to the trade dispute with the US. The latest figures from China's National Bureau of Statistics put economic growth at just 6.1% in 2019, the lowest growth rate on record since 1990.

Sector-specific environment

In addition to the macroeconomic environment, the business performance of LPKF Laser & Electronics AG is also influenced by individual sectors including the electronics industry and consumer electronics in particular, the automotive industry, the solar industry and the plastics industry. Key trends in these sectors for 2019 are outlined below.

The consumer electronics industry saw a decline in the sales of smartphones in 2019. The market research institute Gartner estimates a global decline of 2% to 1.52 billion devices last year.

The German Automobile Industry Association (VDA) describes 2019 as a challenging year for the international automotive industry. While the European and Brazilian markets performed better than they did last year, China, Japan, India and Russia reported declining sales. Within Europe, which posted growth of 1% overall, Germany reported a significant increase of 5%. Sales in China, on the other hand, declined for the second year in a row, falling by 10% in 2019. There were declines in sales of 1% in the US, 13% in India and 2% in Japan.

Global photovoltaic capacity was expanded further in 2019, but new installations were lower than expected due in particular to the situation in China. Bloomberg New Energy Finance (Bloomberg) estimates an output of 120.6 gigawatts (GW) in 2019. The weak expansion of capacity led to an oversupply of components and thus to continued price pressure. Next to monocrystalline and polycrystalline solar cells, especially lighter-weight and cheaper thin-film modules, which generate power even in low lighting conditions, are becoming more significant. They currently account for just under 5% of the global solar panel market. The US and Germany are the technology leaders in this sector.

According to the information service IHS Markit, in 2019 the plastics industry benefited from increasing demand but was also affected by the economic slowdown.

The calculations of the industry association Verband Deutscher Maschinen- und Anlagenbau e. V. (VDMA) suggest that in 2019 the German engineering industry suffered a production downturn of around 2% and incoming orders fell by 9%. It cited factors such as trade disputes, protectionism, Brexit and structural change in the automotive industry.

Effects on the LPKF Group
The macroeconomic environment deteriorated significantly over the past year, as did the relevant sectors for LPKF. Only the solar industry reported positive development in 2019.

As far as demand for the LPKF Group's products is concerned, technological progress is a more important factor than the economy. The LPKF Group's positive business performance suggests that the revenue was not unduly affected by the economic influences that have been discussed. The performance of the euro against other key currencies was conducive to LPKF AG's export activities.

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

Results of operations
Development of revenue
In the 2019 financial year, the LPKF Group significantly exceeded the previous year's revenue of EUR 120.0 million, generating consolidated revenue of EUR 140.0 million. This represents an increase of 17%, which was driven by three of the four business segments. The **ELECTRONICS SEGMENT** reported an upturn of 26% due to several major orders for cutting systems and the first significant revenue streams in the LIDE business area, and generated revenue of EUR 43.7 million compared with EUR 34.6 million in the previous year. The **WELDING SEGMENT** likewise closed the year successfully with a year-on-year revenue increase of 25% (2018: EUR 22.2 million). The **SOLAR SEGMENT** nearly caught up by the Electronics segment as the highest revenue generator, but still remains the highest revenue driver having achieved growth of 13% to EUR 44.1 million. Revenue in the **DEVELOPMENT SEGMENT** remained on par with the previous year at EUR 24.5 million.

The following table shows the revenue by region:

in %	» **2019**	2018
Asia	43.4	40.9
Germany	6.9	10.7
Europe excl. Germany	20.9	26.6
North America	26.8	20.6
Other	2.0	1.2
Total	**100.0**	100.0

The Group's export rate rose slightly year-on-year and is now 93.1% (2018: 89.3%). As was the case last year, the rest of Europe share is slightly misleading in that a proportion of the machines for European customers were installed in Asia. In this respect, Asia remains the most important market for LPKF by a clear margin.

Segment performance

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

EUR million		Electronics	Development	Welding	Solar	Other	**»Total**
External revenue	2019	43.7	24.5	27.7	44.1	0.0	**140.0**
	2018	34.6	24.3	22.2	38.9	0.0	**120.0**
EBIT	2019	7.4	2.9	1.1	7.8	0.0	**19.2**
	2018	0.8	4.2	−1.6	8.4	−5.0	**6.8**

Growth in revenue in the Welding segment generated a positive EBIT figure. The decline in EBIT in the Development segment is due to a changed product mix.

Development of orders

At EUR 114.0 million, incoming orders during the reporting period were 18% lower than in the previous year. Orders on hand at the end of the year of EUR 32.3 million were almost half the previous year's figure of EUR 58.4 million. The decrease is primarily attributable to the Solar, Electronics and Welding segments.

Development of main income statement items

In own work capitalized, EUR 4.0 million was recognized for the development costs of products and software. At EUR 4.0 million, other operating income was up slightly on the previous year's figure. This was mainly due to a payment arising from the settlement of a legal dispute.

The material cost ratio relative to revenue and changes in inventory declined slightly year-on-year from 39.7% to 38.9%. The product mix is an important factor here. Greater revenue was generated in the Electronics and Solar segments through higher-margin products. In the Solar segment the share of trade goods went down. The share of write-downs in cost of materials decreased year-on-year from EUR 1.7 million to EUR 0.5 million.

At EUR 44.7 million, staff costs were slightly above the previous year's figure of EUR 44.3 million. In addition to an increase in the number of employees, higher variable compensation was also payable. However, one-off expenses of EUR 2.3 million were incurred in the previous year. The staff costs ratio, being staff costs in relation to revenue, declined considerably once again from 36.9% in the previous year to 32.0% in the current year.

Depreciation decreased to EUR 7.7 million in 2019 (previous year: EUR 8.1 million). The first-time application of IFRS 16 resulted in a depreciation expense of EUR 0.7 million. This contrary development is almost entirely due to the decrease in scheduled depreciation of capitalized development costs. Depreciation of other non-current assets went down only slightly.

Other operating expenses were the same as in the previous year at EUR 21.7 million. It should be noted here that lease expenses were almost entirely eliminated through the transition to IFRS 16. There were also reductions in exchange losses (down EUR 0.4 million) and legal and consulting costs (down EUR 0.2 million). By contrast, there were slight increases in travel expenses (up EUR 0.3 million), insurance and duties (up EUR 0.3 million) and in losses of receivables (up EUR 0.3 million).

There was a significant rise in Group EBIT overall. Last year's EBIT figure was EUR 6.8 million, whereas this year's figure was EUR 19.2 million. This brought the EBIT margin to 13.7% compared with a margin of 5.7% in 2018.

Strong free cash flow over the past year meant that credit facilities were not utilized, which is reflected in the further improved financial result.

Deferred tax assets from losses carried forward were again utilized in the past financial year. The tax ratio was 29.9%, and consolidated net profit for the year after taxes came to EUR 13.1 million compared with EUR 8.0 million in the previous year.

Multi-period overview of results of operations

		» 2019	2018	2017	2016	2015
Revenue	EUR million	140.0	120.0	102.1	91.1	87.3
EBIT	EUR million	19.2	6.8	4.0	−6.8	−3.7
Material cost ratio	in %	38.9	39.7	33.4	34.9	28.6
Staff cost ratio	in %	32.0	36.9	41.0	48.2	50.1
Tax ratio	in %	29.9	−33.2	61.8	−16.4	20.9
EBIT / employee	EUR thousand	28.3	10.2	5.3	−9.0	−4.7

Financial position

Principles and goals of financial management

External funding sources available to LPKF AG include the issue of shares and the raising of 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 AG. Derivatives are used only to hedge foreign exchange rates and interest rates. The European companies optimize their liquidity 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:

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See statement of cash flows in the consolidated financial statements, page 96

EUR million	» 2019	2018
Cash flow from operating activities	48.0	11.5
Cash flow from investing activities	−5.8	−5.7
Cash flow from financing activities	−14.5	1.8
Change in cash and cash equivalents due to changes in foreign exchange rates	−0.1	0.1
Change in cash and cash equivalents	27.7	7.6
Cash and cash equivalents on 1 Jan.	3.7	−4.0
Cash and cash equivalents on 31 Dec.	31.3	3.7
Composition of cash and cash equivalents:		
Cash on hand, bank balances	31.3	3.7
Overdrafts	0.0	0.0
Cash and cash equivalents on 31 Dec.	**31.3**	3.7

The Group's cash and cash equivalents rose significantly from EUR 3.7 million at the end of the previous year to EUR 31.3 million. This was due predominantly to the strong free cash flow. A much improved net profit in connection with the reduction of trade receivables in particular resulted in cash flow from operating activities of EUR 48.0 million. This figure was reduced by EUR 5.8 million due to the use of funds in investing activities. Free cash flow was also used to reduce external debt. Three loans totaling EUR 11.1 million were paid off early. Even after this unscheduled use of funds, cash and cash equivalents of EUR 31.3 million remained.

Long-term financing is used for non-current assets. Long-term fixed interest periods are generally agreed.

The Group has committed credit facilities of up to EUR 25 million for operating equipment which were available in full on the balance sheet date.

At the end of the financial year, the financial position can be considered as extremely solid, allowing the Group to realize even a large portion of its investing activities using its own resources.

Multi-period overview of financial position

EUR million	» 2019	2018	2017	2016	2015
Free cash flow	42.2	5.8	3.3	−1.8	−3.6
Net debt to banks	−24.5	16.3	37.7	39.9	37.3

(-) Credit (+) Debit

Net assets

Analysis of net assets and capital structure

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

	» 31.12.2019		31.12.2018	
	EUR million	in %	EUR million	in %
Non-current assets	64.1	50.1	64.8	50.3
Current assets	63.9	49.9	64.0	49.7
Assets	**128.0**	**100.0**	128.8	100.0
Equity	90.8	70.9	77.7	60.3
Non-current liabilities	8.8	6.6	18.5	14.4
Current liabilities	28.4	22.5	32.6	25.3
Equity and liabilities	**128.0**	**100.0**	128.8	100.0

In the case of intangible assets and other property, plant and equipment, additions and depreciation were at the previous year's level. In addition, rights of use were accounted for in accordance with IFRS 16. This resulted in an overall slight increase in non-current assets. On the other hand, there was a decrease in deferred taxes due to the use of recognized deferred taxes from losses carried forward. Altogether, this resulted in a decrease in non-current assets of EUR 0.7 million.

Of the current assets, inventories went down significantly year-on-year despite the increase in revenue. Trade receivables also declined to a third of the previous year's figure. Other current assets were almost unchanged against the previous year, while cash and cash equivalents were nine times higher. These developments had a material impact on net working capital, which fell from EUR 37.9 million in the previous year to EUR 17.1 million. The added factor of the sharp rise in revenue drove the net working capital ratio down from 31.6% to just 12.2%, a figure never before seen at LPKF.

The positive net profit brought the equity ratio up from 60.3% in 2018 to 71.0%. Liabilities to banks declined considerably as a result of a significant reduction in long-term loans through both scheduled and early repayments. Other current liabilities decreased by a total of EUR 4.2 million, mainly due to a reduction in advances received. Beyond this, the structure of the income statement has not changed significantly.

Multi-period overview of net assets

		2019	2018	2017	2016	2015
ROCE	in %	25.5	7.0	4.1	−6.8	−3.5
Net working capital	EUR million	17.1	37.9	33.3	35.2	40.3
Net working capital ratio	in %	12.2	31.6	32.6	38.7	46.2
Days sales outstanding	days	44	78	67	63	64

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

Capital expenditure

In the 2019 financial year, EUR 5.8 million was invested in intangible assets and property, plant and equipment, which was significantly higher than in the previous year. Investment in development projects for products increased slightly, while investment in property, plant and equipment mainly related to the replacement of operating equipment. Work got underway in December on construction of the clean room production facility for LIDE products in Garbsen. LPKF will invest around EUR 5 million in the first expansion phase of this project.

Employees

Highly qualified and motivated staff is a key to success for a technology group like LPKF. Therefore, the LPKF Group's basic philosophy is to acquire motivated and well-trained employees and retain them on a long-term basis. To further consolidate and expand the Group's development areas additional targeted recruitment took place again in 2019. The Group continued to step up its activities in terms of personnel development so as to be prepared for future requirements. LPKF trains mechatronic technicians, industrial business assistants, IT specialists, product designers and technical drafters in order to acquire properly qualified junior staff. The Group employed 43 trainees at the reporting date (2018: 34); the number of trainees is expected to remain stable over the coming years.

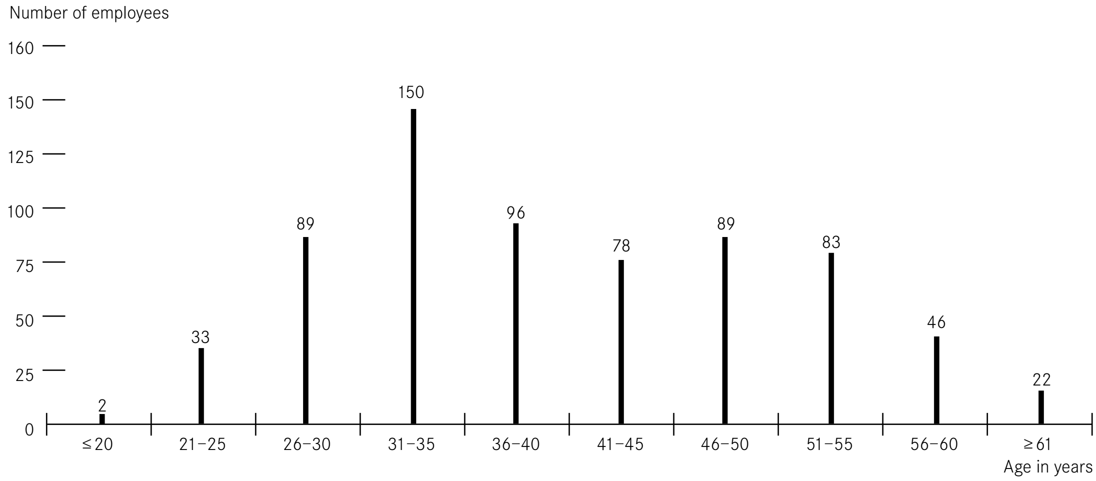
Levels of sick leave and employee turnover are important indicators of employee motivation and employee retention. At 4.4%, the sick leave percentage in the LPKF Group was below the average for the metal working and electronics industry in Germany (2018: 5.7% – source: https://de.statista.com/statistik/daten/studie/6159/umfrage/krankenstand-in-der-metall–und-elektroindustrie-seit-1991/). The Group's employee turnover level went down from 13.6% to 10.1% in 2019.

The average age of the workforce at the LPKF Group was 40.7 years (previous year: 40.6).

www.lpkf.com/en/company/jobs-careers

Age structure analysis in years, LPKF Group (excluding trainees)

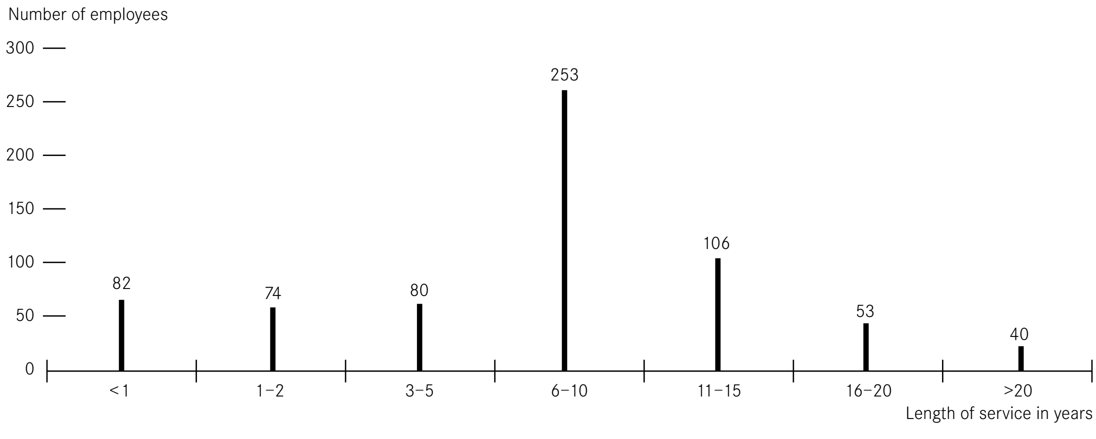
GROUP AGE STRUCTURE



An analysis of the length of service of LPKF Group employees shows an average of 8.5 years (previous year: 8.2 years). LPKF has a healthy mix of experienced and new employees.

Distribution of length of service in years, LPKF Group (excluding trainees)

LENGTH OF SERVICE IN GROUP



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

NET ASSETS, FINANCIAL POSITION AND RESULTS OF OPERATIONS 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) and are published in the Federal Gazette. The single entity is managed based on 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 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.

The subsidiary LaserMicronics was merged with LPKF AG with effect from 1 January 2019. The previous year's figures are adjusted in the income statement to ensure comparability.

Results of operations

In the 2019 financial year, LPKF AG improved its revenue from EUR 50.4 million to EUR 60.0 million. The total increase of 19% was driven exclusively by the Electronics segment, which increased its revenue from EUR 30.4 million in the previous year to EUR 38.7 million. As was the case last year, there was high demand for cutting systems in particular and a further increase in sales to one particular major customer. With a figure of EUR 17.5 million in 2019 the Development segment slightly exceeded the previous year's revenue of EUR 17.4 million. The percentage of revenue generated internationally was 85.8% (previous year: 85.5%).

Other operating income improved significantly year-on-year, from EUR 2.2 million to EUR 4.3 million. This can be attributed primarily to a merger gain from LaserMicronics GmbH of EUR 1.0 million and a payment from a legal dispute amounting to EUR 0.8 million. There was also a rise in foreign exchange rate gains (up EUR 0.2 million) and income from the reversal of provisions (up EUR 0.2 million) in 2019.

The material cost ratio went down from 47% to 42% year-on-year. The main reason for this was an improvement in margins in the Electronics segment. Inventory write-downs and scrappage amounted to EUR 0.3 million in 2019 (previous year: EUR 1.1 million).

Personnel expenses increased to EUR 18.6 million in the current financial year (2018: EUR 16.7 million). The number of employees also went up. There were an average number of 226 employees working at LPKF AG in 2018, and an average of 237 in 2019. There were no expenses for severance and leave of absence in 2019 (previous year: EUR 1.2 million). Instead, Christmas bonuses and variable remuneration of EUR 2.2 million were paid out to the workforce on account of the improved business situation. The personnel expenses ratio declined to 31% from 33% in the previous year.

There was only a slight increase in depreciation of fixed assets year-on-year to EUR 2.8 million (previous year: EUR 2.7 million). Other operating expenses increased from EUR 14.3 million in the previous year to EUR 16.3 million. The main items of expense were sales commissions (up EUR 0.7 million), expenses for affiliated companies (up EUR 0.7 million) and outgoing freight (up EUR 0.2 million). There were also prior-period expenses of EUR 0.3 million for a write-down on a receivable.

The positive revenue performance meant that LPKF AG achieved EBIT of EUR 1.2 million in 2019 (2018: EUR −4.7 million). The financial result includes distributions from LPKF Inc. and LPKF d.o.o. totaling EUR 4.7 million (2018: EUR 1.5 million). Due to profit and loss transfer agreements with LPKF SolarQuipment GmbH and LPKF WeldingQuipment GmbH, LPKF AG received total positive contributions to earnings of EUR 10.5 million from the two companies (previous year: EUR 16.1 million). This drove earnings before taxes up to EUR 16.1 million (previous year: EUR 2.9 million). After taxes, this constitutes a net profit of EUR 12.7 million (previous year: EUR 6.4 million).

LPKF AG income statement

EUR million	» 2019	2018
Revenue	60.0	50.4
Changes in inventory	−0.5	0.0
Other own work capitalized	0.1	0.0
Other operating income	4.4	2.2
Cost of materials	25.1	23.6
Personnel expenses	18.6	16.7
Depreciation, amortization and write-downs	2.8	2.7
Other operating expenses	16.3	14.3
Operating result	**1.2**	−4.7
Financial result	**14.9**	7.6
Income taxes	3.4	−3.5
Earnings after taxes	**12.7**	6.4
Other taxes	0.0	0.0
Net profit	**12.7**	6.4
Accumulated losses brought forward from the previous year	6.2	−0.2
Net retained profits	**18.9**	6.2

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

Net assets and financial position

On 31 December 2019, LPKF AG's total assets were EUR 96.9 million, EUR 5.8 million higher than in the previous year (EUR 91.1 million). A total of EUR 1.1 million was invested in tangible and intangible assets in 2019 (previous year: EUR 0.5 million). The additions related to both technical equipment for applications and replacement of operating equipment. Construction of a production site for LIDE products at the Garbsen location also got underway. The merger of LaserMicronics as of 1 January 2019 increased LPKF AG's fixed assets by EUR 0.5 million. As depreciation exceeded capital expenditure, there was a decline in fixed assets overall.

There was a substantial reduction in capital tied up in inventories and receivables year-on-year. Inventories went down by EUR 1.5 million and trade receivables by EUR 5.9 million – despite the increase in revenue. Receivables from affiliated companies were also down significantly year-on-year; they mainly comprise financial receivables that are primarily attributable to profit transfers. This positive development combined with the good earnings situation resulted in a significant rise in cash and cash equivalents to EUR 27.2 million compared with EUR 0.8 million in the previous year. As a result of earnings in the past financial year tax loss carryforwards were utilized such that total deferred tax assets were reduced from EUR 7.8 million to EUR 5.6 million.

Net profit of EUR 18.9 million resulted in a considerable rise in equity in 2019, and the equity ratio reached 73.0% (previous year: 63.7%). The early repayment of loans with a combined total of EUR 11.1 million led to a substantial reduction in debt. At the balance sheet date, there were still two mortgage-backed loans, which were repaid as scheduled. Liabilities to banks amounted to EUR 3.2 million as of the balance sheet date compared with EUR 13.6 million in the previous year. Other liabilities primarily include liabilities to affiliated companies resulting from both supply and service agreements and financing. Total liabilities now amount to EUR 20.6 million compared with EUR 29.7 million in the previous year.

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

	31.12.2019		31.12.2018	
	EUR million	in %	EUR million	in %
Long-term assets	36.3	37.5	37.8	41.5
Short-term assets	60.6	62.5	53.3	58.5
Assets	**96.9**	**100.0**	91.1	100.0
Equity	70.8	73.0	58.1	63.8
Long-term liabilities	5.0	5.2	12.6	13.8
Current liabilities	21.1	21.8	20.4	22.4
Equity and liabilities	**96.9**	**100.0**	91.1	100.0

The good business performance and the use of cash inflow to reduce liabilities to banks resulted in a positive change to the net assets and capital structure. The net assets and financial position of LPKF AG can be described as extremely solid due to the high equity ratio and unutilized credit facilities.

Capital expenditure

Capital expenditure totaling EUR 1.1 million was primarily made up of replacement of office equipment and assets under construction.

Employees

LPKF AG had 253 employees as of the balance sheet date, 36 more than in the previous year. However, it should be noted here that 19 of these employees came from the merger of LaserMicronics alone.

Dividend

LPKF AG's dividend policy sets down that 30% to 50% of free cash flow should be distributed as a dividend, taking into account that the current corporate situation, economic developments and potential investments, acquisitions or disposals of assets may all lead to a deviation from this policy.

Because of the positive development in free cash flow in 2019, LPKF would propose a dividend to the Annual General Meeting like to for the first time in 4 years. At the time this annual report was published, there were signs of a global economic downturn due to the coronavirus pandemic, the effects of which are difficult to assess. The Management Board and the Supervisory Board therefore currently intend to propose a no dividend of 10 Eurocent per share for the 2019 financial year.

Risk report

The business performance 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 5) of the combined management report.

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See risk report on page 79

OVERALL ASSESSMENT OF THE GROUP'S ECONOMIC SITUATION

The Management Board, which was newly appointed in 2018, has carried out an earnings improvement program and introduced a number of strategic and operational measures aimed at sustaining the technology company's profitability. The considerable improvement in nearly all the reporting figures for 2019 is testament to the successful implementation of these measures.

Consolidated revenue was increased by 17% in 2019. In tandem with this, working capital was reduced by over half, debt was lowered further and a substantial net cash position was achieved. This has also significantly improved the company's financial position.

At the end of 2019, orders on hand were much lower than in the previous year, although there was a marginal improvement over the course of the year. There was no change in the order situation at the time this management report was prepared. The Management Board is monitoring this very carefully, especially considering the unclear macroeconomic outlook, the economic repercussions of the coronavirus (COVID-19) outbreak and the opportunities arising from the changing market environment. On the whole, there is still a strong interest in LPKF's solutions. The Management Board has introduced measures to boost sales further and actively drive forward the commercialization of new products.

SUPPLEMENTARY REPORT

DISCLOSURES ON PARTICULARLY SIGNIFICANT EVENTS

Please see the notes to the consolidated financial statements for reportable events after the end of the reporting period.

REPORT ON OPPORTUNITIES

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 for 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.

The business units and specialist product and innovation managers (Group Development) systematically seek out new technologies and applications. 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.

Opportunities also arise from improved market penetration, service and further operating improvements. These opportunities are systematically collected, analyzed and addressed by customer relationship management. The earnings improvement program was successfully brought to a close in 2019 and transferred into a continuous improvement process.

If it is likely that opportunities will materialize, they are included in the planning and outlook for the coming years. The opportunities listed in the following 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 in the following can make a substantially positive contribution to earnings.

OPPORTUNITIES

Further development of the existing product portfolio

LPKF updates its 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 ability to innovate for the future by closely networking its development departments with product managers, sales and service, as well as providing a suitable annual R&D budget of approximately 10% of revenue. The continuous development of the product portfolio can lead to changes in the product mix. These changes present risks as well as opportunities.

New technology breakthroughs / expansion into new markets

In addition to its established markets, LPKF also focuses on attractive new markets that offer promising 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 continuous market and technology monitoring is to identify market opportunities at an early stage. Based on this monitoring, technology studies are conducted, which provide an opportunity to register industrial property rights on completely novel solutions, among others.

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 its corporate strategy. Nonetheless, the company also pursues opportunities for external growth that could come from acquiring patents, companies or personnel with strategically relevant expertise.

Impact of the megatrends of miniaturization and digitalization

The production methods developed by LPKF enable the miniaturization of components and often have commercial and quality advantages compared with conventional production techniques. 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 in-house development and to launch new products. This benefits sales of LPKF products to development laboratories. Both the increasing digitalization of production and LPKF's intensive development activities are making laser-based machinery ever more attractive to customers than established technologies, including for mass production.

Independence of individual markets as a result of broad positioning

LPKF's strategy to build on its core competencies and expand into different markets has a potentially stabilizing effect against the backdrop of cyclical markets. The various markets served by LPKF often have asynchronous and different industry cycles. This strategy also offers low sensitivity to the technological cycles of LPKF's own products.

Improving market penetration

LPKF works to continuously improve its market penetration in different regions and sectors, and for potential applications and customer groups. Experience and customer relationships are exploited to find additional areas of application and sales potential. Going forward, LPKF intends to systematize, further expand and generally professionalize this systematic, often comprehensive market development approach in order to achieve more profitable growth with both new and successfully established products. This includes the sale of machinery, services and – increasingly – production services as well.

Operating improvements

Potential for improvements in costs and use of the company's capital is continuously monitored and actively pursued. This includes improving working capital and cash flow over the long term. The already high level of overall cost discipline throughout the company is being maintained. Programs aimed at reducing inventories and trade receivables are continuing. These measures make a significant contribution to maintaining and enhancing the company's competitiveness and profitability.

Business organization

The consistent alignment of the corporate structure to the corporate strategy has created one of the key conditions for exploiting opportunities for further growth. The Group's organization and internal processes are continually future-proofed, made leaner and faster, and focused on market proximity and profitable growth. Going forward, LPKF intends to derive further benefit from the size of the Group, use economies of scale more intensively and, at the same time, make company administration leaner and more efficient.

RISK REPORT

DESCRIPTION OF THE INTERNAL CONTROL SYSTEM

Overview

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

The ongoing development of the ICS involves analyzing the company's functional areas on an ongoing basis, e.g. through audits, workshops and internal audits, and assessing the probability of losses occurring in these areas and the extent of potential losses.

The Management Board organizes the structure of the individual units and constantly adjusts workflows based on the findings gathered from the ICS. Essential principles that apply include separation of functions, the principle of dual control and restricted access to IT systems. Examples of these can be seen in signature regulations, process workflows, approval requirements for significant transactions and IT access authorizations.

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

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

Risk management system
Risk management is pursued actively at LPKF, as is opportunity management, which is treated separately. The company employs a number of reporting tools for this.

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. This ensures that risks are identified and controlled proactively. The risk management system is interlinked with compliance management.

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. In the 2019 financial year, just one audit was conducted at LPKF AG as a result of the new internal audit tender and the adjustment of the audit plan that this entailed.

The risk early warning system in particular is always a fundamental element in the planning and implementation of LPKF's business strategy. Strategic planning and the associated reporting system are particularly important.

The Management Board of LPKF AG is responsible for risk policy and the internal control and risk management system. The second- and third-level local management staff implement these control functions in each of the Group's organizational units. 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 Management Board and the Supervisory 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. The risk manager reports directly to the Management Board. The risk management system is subject to scheduled inspections via internal auditing. In addition, the risk early warning system is reviewed annually by the auditor with regard to potential risks to the Company's continued existence.

As in previous years, in the 2019 financial year existing and potential risks were reassessed and the reporting system was reviewed to ascertain its efficiency in managing risks. A database-supported reporting system has been installed.

Description of the main features of the internal control and risk management system relevant to the accounting process (Section 289 (5) German Commercial Code)
The internal control and risk management system relevant for the accounting process is designed to ensure proper accounting and the associated financial reporting.

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

The LPKF Group fundamentally applies the dual control principle on the basis that the general division of administration, execution, accounting and approval functions and the sharing of these functions across different employees and / or departments reduces the possibility of fraud. As a manual control it also underlies the process descriptions, signature regulations, guidelines and work instructions.

Since 2019, the local finance functions have been reporting directly to the central head of financing at the headquarters.

Key corporate governance functions, Group accounting and internal auditing are based at the LPKF AG at the Group headquarter.

The risks arising from possible incorrect reporting by subsidiaries and the publication of erroneous financial reports in particular are recorded by the risk management system and monitored regularly. Further explanatory notes on the risk management system can be found in section 7.

The entries recorded at LPKF AG and the subsidiaries provide the data used to prepare the consolidated financial statements. LPKF secures the quality of this data by selecting suitable staff, regularly training employees and enlisting the help of specialists. 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 that is separate from the ERP system to which only a limited group of authorized persons at the headquarters has access. 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) of the German Stock Corporation Act on 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.

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

However, despite these measures, personal judgments, defective controls and criminal acts in particular cannot be fully excluded. 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 the facts in the accounts.

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 have changed since the previous year.

The following risks in particular are given high priority*:

Specific risk	Qualitative probability of occurrence		Possible financial effects	
	Category	In %	Category	Loss amount
Dependence on individual customers	possible (less likely)	over 25% and up to 50% (up to 25%)	significant	over EUR 5 million
Technological developments	less likely (possible)	up to 25% (over 25% and up to 50%)	moderate	up to EUR 5 million
Market acceptance	possible	over 25% and up to 50%	significant (moderate)	over EUR 5 million (up to EUR 5 million)
Personnel risks	less likely (possible)	up to 25% (over 25% and up to 50%)	significant (moderate)	over EUR 5 million (up to EUR 5 million)

* Previous year's figures are shown in parentheses if they have changed.

The general business risks reported in the previous year are no longer a high priority due to the reduced probability of occurrence. However, they are monitored regularly along with all other risks and reassessed where necessary. To provide an overview of the possible general business risks, they are set out below alongside the high priority risks.

The financial risk reported in the previous year is no longer considered a high priority given the company's stable financial situation, and so is no longer reported on here. Other risks that are currently unknown or that are currently (still) considered negligible could also have a negative impact on business.

Dependence on individual customers

Cause

There is a clear revenue focus on Asia, and China in particular. While this reflects prevailing market conditions, it has resulted in the Group's growing dependence on international customers that base most of their manufacturing in China. In the Solar segment, larger-scale projects are often completed with a small number of customers. For some time now, one major customer has dominated significant parts of this business. In the Electronics segment, too, there is 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.

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 losses in connection with cancellations and payment defaults.

Effects on economic situation

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 utilized by other business units. Taking into account the overall circumstances, the occurrence of this risk is considered possible. Due to the current order situation, any possible loss is categorized as significant (see table on specific risks).

Technological developments / market acceptance

Cause

As a technology company, LPKF primarily supplies manufacturing solutions for current technical issues. There is a risk that the demand for LPKF's manufacturing technologies will be adversely affected by changes in end customer markets or that markets will not accept the new technologies developed by LPKF at all or only to a limited degree. In the markets, some of which can be quite cyclical, 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, particularly if these techniques prove to be technologically and / or economically advantageous.

The competitive situation and rapidly changing technological requirements are associated with risks that apply to all the segments. LPKF's success depends significantly 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 Management Board and the Supervisory Board is an integral part of the risk management system to review the sustainable value of new developments and integrate these findings in the product strategy. This follow-up also involves the business unit heads and technology management. The development of high-quality products in a structured, expeditious flow of development projects is underpinned 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. This approach has made it 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 situation

On the whole, innovation is critically important for the LPKF Group. The competitive situation and rapidly changing technological requirements call for a flexible and dynamic development process. The probability of occurrence of risks related to technological development is currently considered less likely with moderate financial effects. The probability of occurrence of risks related to market acceptance is currently viewed as possible, and the financial effects are considered significant (see table on specific risks).

Personnel risks

Cause

Demand for qualified technical personnel in the mechanical engineering and the manufacturing industry in general – especially for high-tech companies – is extremely high. The situation with regard to finding suitable candidates to fill positions has become more demanding in recent years as a result of the growing skills shortage, particularly in technical departments, even though LPKF's reputation and technology make it an attractive employer – particularly for engineers and software developers.

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See table "specific risks" on page 82

Due to the fact that LPKF's staff are highly qualified, all segments are exposed to the risk of losing key employees with important expertise 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 at the company. Particular emphasis is placed on individual flexibility, compensation that reflects performance and a good working environment. Executives have an important role to play in maintaining employee satisfaction and retaining staff. Leadership issues have been the focal point of many discussions and meetings, including at management events. HR marketing was scaled up over the reporting period and will continue to be expanded in the future to position LPKF on the labor market as an attractive employer among small and medium-sized high-tech mechanical engineering firms. Systematic personnel development was stepped up again in 2019 and new concepts were added to what the company currently has to offer. These will come into effect in subsequent years.

Effects on economic situation

Thanks to its attractive working environment, contacts with universities and the company's growing profile in the laser sector, LPKF has had problems attracting adequately trained staff only in a few cases to date. Strong demand for internships and traineeships and the number of unsolicited applications received are evidence of this. However, there continues to be a risk in all segments associated with the loss of key employees with important expertise as a result of head hunting. The probability of this risk occurring is currently estimated as less likely. The financial effects can be described as significant (see table on specific risks).

General business risks

Cause

LPKF operates internationally in a fast-paced and ever-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 are cyclical, with particularly strong fluctuations in the electronics industry as well as the automotive and solar industries.

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

LPKF is also exposed to risks associated with a rapidly changing technological environment. The availability of high-quality components enables new players to bring to market cost-efficient competitive products or alternative techniques.

The systematic development of new technologies and business segments is generally associated with the risk that the planned business model may fail to meet its targets. There is also the risk that new technologies may not be accepted by the market overall or may be accepted only after a considerable time lag.

Product liability risks in connection with patents and warranty of title arise to different degrees in all segments. There is also the risk that recall costs may be incurred.

Increasingly long lead times and occasional bottlenecks in the supply chain also need to be factored into purchasing. This can lead to delays in delivery and, in the worst cases, to contractual penalties.

Last but not least, risks may also arise from possible changes in laws, e.g. with respect to the import of capital goods to China or to other important markets such as the US.

Measures

In order to continue expanding the various business areas, 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 will also be invested in the new and further development of products for the future.

In order to compensate for fluctuations in the utilization of capacities, LPKF is focusing on flexible structures in production and on collaboration between the LPKF production locations. In addition, peak capacity utilization levels are covered by way of external production service providers and recourse to temporary workers. In the case of lower capacity utilization 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 on a broader basis in the medium term. To date, projects have been sampled and the first system has been sold.

The Solar segment is experiencing excellent capacity utilization, but it is dependent on additional major projects coming up in the future. A new technology, the LTP process, was also developed for the digital printing of functional pastes. The first revenue contributions are anticipated from 2020 onwards. LTP is expected to reduce the Solar segment's dependence on the solar industry in the long term.

Existing product liability risks are covered by insurance policies where possible. The same applies to potential product recalls.

Effects on economic situation

On account of the measures already in place and in the pipeline, occurrence of the risks described above is classed as very low, such that these general business risks are no longer considered a high priority.

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

LPKF is exposed to foreign currency risks on account of its strong export focus and its international customer base. 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. Transactions with American customers are often billed in USD. If business transactions are invoiced in euros, exchange rate volatility can have an indirect impact on LPKF's competitiveness because most of its competitors are not from the eurozone and material costs at LPKF are incurred in euros.

Measures

Foreign currency risks in the operating and financial areas of the company are monitored and reported on continuously. LPKF engages in hedging in the form of forward exchange transactions to protect itself against exchange rate risks from foreign currency transactions. This part of risk management is handled centrally by the parent company in Garbsen, Germany, also on behalf of subsidiaries, if required. 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 situation

Fluctuations in exchange rates can have a moderately positive or negative effect on earnings and on competitiveness. Counter measures are permanently reviewed and implemented as far as possible.

IT risks

Cause

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

Measures

By implementing redundant IT infrastructures, LPKF protects itself against risks that may 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 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 reporting and serve as a planning and decision-making tool for future risk management. There is a separate budget planning for IT security at LPKF.

Effects on economic situation

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

MANAGEMENT'S ASSESSMENT OF THE GROUP'S RISK SITUATION

The sectors relevant to the company exhibited different trends during the financial year just ended. Economic research institutes are forecasting a slight upturn in global economic growth year-on-year in 2020. On the whole, planning reliability and the foreseeability of business trends continue to be low in most business segments. Financial risks are significantly lower as a result of the positive revenue and earnings performance in the 2019 financial year. However, the various individual risks have only 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.

At the time this management report was prepared, particular attention was paid to possible risks arising from coronavirus disease. The continuing spread of the virus has prompted LPKF to set up an internal task force, which will provide advice on the current situation and steps taken to protect employees on a continuous basis and implement any measures announced. As part of its global sourcing strategy, LPKF procures components from Chinese manufacturers. These are mainly optical and electronic components that are used in modules or end customer applications. As part of its risk management strategy, LPKF is continuously monitoring the supply chain to identify any potential risks. Suitable measures are defined and introduced on the basis of a risk assessment. The catalog of measures relating specifically to COVID-19 include monitoring and identifying at-risk suppliers, increased communication within the affected supply chains, short-notice stock flow adjustments and the use of alternative components. Overall, the company expects the pandemic to have an impact on business in the current financial year, although the extent of this impact cannot yet be estimated. Order and sales risks are currently discussed weekly by the Management Board individually with all business unit managers and appropriate measures are derived.

LPKF AG's auditor also reviewed the risk early warning system in accordance with the German Stock Corporation Act.

REPORT ON EXPECTED DEVELOPMENTS

OVERALL ASSESSMENT OF THE GROUP'S EXPECTED DEVELOPMENT

Economic environment

Economic experts are anticipating modest global economic growth in 2020, with growth rates slightly higher than in the previous year. These forecasts had been revised downward as well. The IfW is expecting growth of 3.1% in the current year and 3.4% in 2021.

It is projecting growth of just 1.4% in 2020 and 1.7% in 2021 for advanced economies. With US economic output having been more subdued over the past year, the growth rates for 2020 and 2021 have been scaled back further to 1.5% and 1.7%. For both this and next year, GDP growth in the eurozone will be in line with the previous year. The IfW is projecting growth of 1.2% for 2020 and 1.5% for 2021.

The German economic downturn observed in 2019 will slow in the current year. The IfW is anticipating slightly higher GDP growth of 0.7%. For 2021, the experts are forecasting an upturn with an increase in economic output of 1.5%.

Even emerging economies will experience moderately positive growth in line with the global economy this year and the next. For 2020, the IfW is anticipating GDP growth of 4.5%, compared with 4.1% in 2019. In 2021, this figure will rise to 4.8%. According to a current forecast by Deutsche Bank, China's economy will grow by 6.1% in 2020, as it did the year before. The IfW and rating agency Fitch, on the other hand, anticipate growth of just 5.9%. This figure is expected to be at a similarly low level in 2021 as well. In light of its increased significance, the effects of the coronavirus on economic development are expected to be bigger than they were for the SARS virus 17 years ago, when China's economic growth declined by 1%.

The economy is being impacted by heightened political uncertainty. Demographic developments, deglobalization as a result of growing protectionism and Brexit, which saw nearly a sixth of economic output and around an eighth of the population exit the EU, are all having an effect. Germany, which is highly dependent on exports, is one of the most impacted countries.

The business success of LPKF is not just influenced by economic developments, but also by trends in the electronics industry and consumer electronics in particular, the automotive industry, the solar industry and the plastics industry.

After the decline in the electronics industry in the past year, Gartner is expecting smartphone sales to pick up by 3% in 2020 to 1.57 billion units with the introduction of 5G technology.

Industry experts are expecting global automotive markets to continue to suffer into 2020 as a result of persistently weak demand in China, the biggest automotive market accounting for 25% of business. The European Automobile Manufacturers' Association (ACEA) is expecting the EU to experience its first decline in seven years. It is expecting registrations to fall by around 2%.

IHS Markit is expecting newly installed photovoltaic output worldwide to increase by 14% to 142 GW in 2020. Continued positive development is anticipated for Europe as well. Reasons for this include the growing importance of renewable energies and falling prices for PV modules. Of all the PV modules, a significant upturn for thin-film modules in particular is expected. 2020 will be the first year in which solar parks are installed without subsidies in Germany.

A new study by IHS Markit suggests that the plastic consumption of the plastics industry will double from its current level of 185 million tonnes to close to 400 million tonnes by 2030. Factors contributing to this include growth of the global economy and demand for new lightweight materials in automotive manufacturing and new applications in medical technology and electrical engineering.

Calculations by the German Federal Statistical Office, the industry association VDMA and PwC estimate revenue for the German engineering industry of approximately EUR 223 billion in 2020. This represents a further marginal decrease of around 1.3% year-on-year for the highly export-driven industry. Production is expected to decline by roughly 2%, as it did last year. The impact of international political risks is a major contributing factor to this deteriorating picture.

Shortly before the completion of this management report, IfW Kiel reduced its previous forecast for Germany 2020 by 1.2 percentage points due to the corona pandemic and upwards by 0.8 percentage points for the coming year. As a result of the corona virus, the Institute expects a severe economic slump, followed by a strong countermovement. The economic experts also expect GDP in the euro zone to fall by 1%. Globally, the negative effects of the virus are said to be particularly strong in Europe and in Asia. Even under optimistic assumptions about the further course of the pandemic, the growth rate of global production in 2020 is likely to fall from 3% to 2% overall. According to the IfW, this forecast is subject to considerable uncertainty and is based on the most likely assumption that the pandemic will abate by mid-year and that there will then be noticeable economic catch-up effects.

Group performance

The strategic focus of LPKF Laser & Electronics AG is on the development of innovative technologies that have the potential to sustainably change products, components and production in the electronics and semiconductor industries and beyond.

Thanks to the positive revenue and earnings performance in the 2019 financial year, the company's financial situation has improved further. LPKF is able to expand its operating activities further through a stronger focus on customer needs, operational improvements, and investments in the development of new technologies and applications. The LPKF Group's high degree of diversification reduces its dependence on individual market segments.

The Management Board continues to see significant potential to increase the company's revenue and earnings. This potential arises from the technologies that LPKF has mastered, its ability to integrate them in high-performance solutions, the extraordinary expertise of its employees and the resulting value contribution for its customers.

The Management Board anticipates the following developments in 2020 and beyond:

- Megatrends such as miniaturization, digitalization and clean production methods are helping to establish the laser as a dominant tool.
- Demand among customers for efficient, laser-based solutions for the production of components and products remains high. The number of applications is growing.
- LIDE technology is being used for the first time for volume manufacturing, e.g. in the semiconductor, display and other industries.

In the wake of the economic slowdown, a stabilization and slight uptick in economic development is expected for 2020 and 2021 – prior to consideration of the transitory effects of COVID-19. The electronics, semiconductor and solar industries, among others, are likely to contribute to positive business development for the Group.

The Management Board will continue to drive forward the company's growth through targeted measures:

- LPKF will continue to invest in technological development in order to extend its leading position in laser-based micromaterial processing. In doing so, the company is addressing the specific parameters that drive business success for its customers, thereby creating a tangible competitive advantage for them.
- The company will ramp up its sales activities and continue to build up market penetration in the individual segments.
- After-sales service will be further expanded as an additional growth platform.
- The Management Board will also target potential growth through M&A activities, but only where the value enhancement generated by these activities is clearly identifiable.
- LPKF as a company will retain its agility and flexibility so that it is able to respond quickly to a range of macroeconomic developments.

Overall, LPKF expects further profitable growth in the long term, even in a volatile economic environment. The company is – and will remain – well positioned financially, and has the necessary funds for investments and further growth.

Development of significant indicators and outlook

2019 FINANCIAL YEAR

Revenue reached EUR 140.0 million in the 2019 financial year, exceeding the previous year's figure by 17%. This revenue performance combined with cost discipline led to an increase in EBIT from EUR 6.8 million in the previous year to EUR 19.2 million. The EBIT margin climbed from 5.7% to 13.7%.

ROCE reached 25.5%, far outstripping the target figure. Measures aimed at reducing working capital, particularly with regard to inventories and receivables, were extremely successful and led to a substantial reduction in capital employed.

There was a considerable improvement in capital tied up in working capital over the past financial year. It reached EUR 17.1 million by the end of the reporting period. Increased revenue helped to reduce the net working capital ratio significantly from 31.6% to 12.2%.

At EUR 114.0 million, incoming orders during the reporting period were 18% lower than in the previous year (EUR 139.8 million). Orders on hand also declined to EUR 32.3 million at the end of the year (down 45%). This is dampening the prospects for a satisfactory first quarter to 2020.

2020 FINANCIAL YEAR

Until February 2020, the Management Board expected growing sales and earnings for the current year in a stable global economy; since then, coronavirus disease (COVID-19) has expanded into a global pandemic. Economic experts now expect a sharp economic slump followed by a countermovement. The ability to make forecasts for the current year 2020 is therefore severely limited. In the event of a deeper recession, the Management Board expects a decline in revenue and earnings for the current year.

The company expects a slight reduction in working capital and a stable development of the error rate compared to 2019. ROCE will essentially follow the earnings trend.

CORPORATE GOVERNANCE DECLARATION

The corporate governance declaration pursuant to Section 289a of the German Commercial Code is part of the combined management report. The declaration is available for the public on LPKF AG's **website** and included in the corporate governance report.

TAKEOVER-RELATED DISCLOSURES

The takeover-related disclosures required under Section 289a and Section 315a of the German Commercial Code are shown below. The subsequent explanation of these disclosures also meets the requirements of an explanatory report as defined in Section 176 (1) sentence 1 of the German Stock Corporation Act.

COMPOSITION OF SUBSCRIBED CAPITAL

On 31 December 2019, LPKF AG's subscribed capital was EUR 24,496,546.00. The share capital is made up of 24,496,546 no-par value ordinary bearer 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 and (with the exception of own shares) one vote at the Annual General Meeting. The rights and obligations of the no-par shares comply with the relevant requirements of the German Stock Corporation Act, specifically in Sections 12, 53a et. seq., 118 et. seq. and 186. Both the exercising of voting rights and the transfer of shares are subject solely to legal limits.

DIRECT AND INDIRECT INTERESTS IN THE SHARE CAPITAL EXCEEDING 10% OF THE VOTING RIGHTS

Direct or indirect interests in the share capital exceeding 10% of the voting rights are disclosed in the notes to the annual and consolidated financial statements.

LEGAL REGULATIONS AND PROVISIONS OF THE ARTICLES OF INCORPORATION ON APPOINTING AND DISMISSING MEMBERS OF THE MANAGEMENT BOARD AND ON AMENDING THE ARTICLES OF INCORPORATION

The regulations 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 of the 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.

MANAGEMENT BOARD AUTHORIZATIONS TO ISSUE AND BUY BACK SHARES

The Management Board was authorized by resolution of the scheduled Annual General Meeting on 28 May 2015, subject to the Supervisory Board's prior approval, to buy back own shares until 27 May 2020 corresponding in total 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 own shares so acquired for all statutory purposes; and, in particular cases, to disapply shareholders' rights to tender or subscribe such shares, respectively, in connection with buybacks and subscriptions. This authorization was not utilized up to the balance sheet date.

In December 2019, LPKF bought back a total of 10,266 shares via a middleman under an employee participation program pursuant to Section 71 (1) no. 2 of the German Stock Corporation Act. The shares were transferred to employees in line with the program terms and conditions.

By the resolution adopted by the Annual General Meeting on 31 May 2018, the Management Board is authorized to increase the share capital once or repeatedly until 30 May 2023 with the approval of the Supervisory Board by up to a total of EUR 5,567,397.00 by issuing up to 5,567,397 new no-par value bearer shares in return for contributions in cash or in kind (Authorized Capital 2018). Shareholders shall generally be granted a pre-emption right. However, the Management Board was authorized, in certain cases and within certain capital limits, to disapply shareholders' pre-emption rights. This

https://www.lpkf.com/fileadmin/mediafiles/user_upload/company/investor-relations/corporate-governance/reports-decalarations/en/declaration-of-compliance-2020.pdf

authorization was partially utilized in August 2018 by way of a capital increase through issuing 2,226,958 new no-par value shares from Authorized Capital 2018 in exchange for contributions in cash and excluding shareholders' pre-emption rights; the share capital was increased by EUR 2,226,958.00. Authorized Capital 2018 is still EUR 3,340,439.00 and the capital limit on excluding shareholders' pre-emption rights is fully used up for all existing authorizations. This authorization was not utilized in the past financial year.

The company's share capital is contingently increased by up to EUR 5,567,397.00 through issuing up to 5,567,397 new no-par value bearer shares (Contingent Capital 2018 / I) in connection with the authorization resolved by the Annual General Meeting on 31 May 2018 to issue warrant bonds and / or convertible bonds up to 30 May 2023 with a total nominal value of up to EUR 80,000,000.00, with the option to disapply pre-emption rights in certain cases and within certain capital limits. The contingent capital increase will only be implemented to the extent that the bearers or creditors of warrant bonds and / or convertible bonds utilize their warrant or conversion rights or fulfill their conversion obligations or the company exercises an option instead of paying the amount of money due for no-par value shares of the company. The Management Board did not utilize this authorization in the past financial year.

More detailed information can be found in the relevant enabling resolution.

CHANGE-OF-CONTROL PROVISIONS

LPKF has come to an agreement with its financing banks that, in the event of a change of investor or anchor shareholder, agreement should be reached on continuation of any contract. If an agreement is not reached, the bank shall have the right to terminate the contract.

The other disclosures required by Sections 289a and 315a of the German Commercial Code relate to circumstances that do not exist at LPKF AG.

REMUNERATION REPORT

The Management Board consists of a Chairman of the Management Board (CEO) and a Chief Financial Officer (CFO). Dr. Goetz M. Bendele was appointed as Chairman of the Management Board on 1 May 2018. On 1 September 2018, Mr. Christian Witt was appointed as the Management Board member with responsibility for finance. In both cases, the contracts are for three years.

BASIC FEATURES OF THE REMUNERATION SYSTEM

The Supervisory Board of LPKF AG adopted a resolution regarding the current remuneration system for Management Board members on 20 March 2018. The remuneration system aims to align the interests of the shareholders and those of the Management Board more closely. This means that the Management Board's remuneration is closely linked to an increase in the company's value. In addition, the system is oriented toward return on investment, cash flow and long-term value increase. It combines profitability, liquidity and sustainable growth targets and is geared toward capital market requirements.

Criteria for the appropriateness of Management Board remuneration include the responsibilities of the respective Management Board members; personal performance; the economic situation, success, future prospects and sustainable development of the company; and the customary level of 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 Management 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 comparison. The remuneration of the Management Board is based on performance and calculated such that it is both appropriate and competitive, offering a strong incentive for committed and successful work.

The remuneration structure consists of a fixed basic remuneration, two short-term and one long-term variable components, as well as incidental benefits (benefits in kind). As stipulated in the German Stock Corporation Act and the Corporate Governance Code, the higher proportion of the remuneration is allotted to variable remuneration components, which have a predominantly perennial assessment base.

NON-PERFORMANCE-BASED COMPONENTS

The fixed non-performance-based remuneration comprises both the basic salary, which is paid in equal monthly installments, and benefits. The benefits include a company car for both official and private use, health and care insurance contributions and, for Management Board member Christian Witt, a contractually agreed contribution toward trips home.

PERFORMANCE-BASED COMPONENTS

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

Remuneration component Options (LTI) is designed as a long-term incentive and remuneration components ROCE (STI 1) and Cash Flow (STI 2) are designed as short-term incentives (STI). The variable remuneration components are based on different performance indicators, which incentivize a swift reorientation of the company and, at the same time, reward sustainable value creation in particular. The LTI, STI 1 and STI 2 remuneration components are based on ambitious targets, independent of budget planning, the achievement of which is the deciding factor for the amount of the remuneration component in question.

SHORT-TERM INCENTIVES (STI)

STI 1 corresponds to the performance indicator ROCE. Payment for STI 1 is made in cash for the relevant financial year after approval of the consolidated financial statements. The amount of STI 1 is graded depending on target achievement; a payment is made only if a minimum ROCE figure of 8% (floor) is achieved. The target figure is a ROCE of 18% and the cap is 30%.

STI 2 corresponds to the ratio of cash flow to average total capital. Payment for this performance indicator is also made in cash following approval of the consolidated financial statements in the following year. The amount of STI 2 is graded, the target figure is 13%, the floor is 8% and the cap is 21%.

If there is a negative ROCE or cash flow the following year, this loss will subsequently be taken into consideration and STI 1 and STI 2 will be reassessed in light of the negative ROCE and / or cash flow. Any overpayments will be repaid by the Management Board members. In addition, extraordinary developments are not included in the calculation of STI 1 and STI 2.

LONG-TERM INCENTIVES (LTI)

A long-term bonus plan has been created as LTI (Options) and is a value-oriented performance target. Details are given 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 are the development of the LPKF Group's value added and share price performance. LTI is therefore directly tied to the achievement of profitable growth and to a long-term increase in company value. The method used to calculate the ROCE figure used is identical to that of the target figure in STI 1.

In detail, LTI is designed as follows: Fictitious shares, known as phantom stocks, are granted to the Management Board members annually in a contractually stipulated amount. The number of phantom stocks corresponds to the individual amount stated, divided by the average closing price of LPKF shares in the first quarter of the year in which the shares are allotted. The scheme runs for three years. Once this performance period elapses, the beneficiaries are entitled to a disbursement amount, the calculation of which depends on the final number of phantom stocks. The final number of phantom stocks is calculated by multiplying the number of originally allocated phantom stocks by a performance factor that is dependent on the average value added of the LPKF Group during the relevant performance period. The amount to be paid out is in turn calculated by multiplying the final number of phantom stocks by the average share price of LPKF Laser & Electronics AG for the first quarter following the end of the relevant performance period. This is capped at four times the amount to be granted; this is the maximum shown in the benefits table. Advance payments are not available. There is also no minimum agreed bonus.

The benefits for the 2019 reporting year are presented in the tables below, alongside the minimum and maximum amounts that can be reached. The amount to be granted is stated for LTI Options.

BENEFIT AMOUNTS IN THE REPORTING YEAR

BENEFITS GRANTED (PLANNED)

	Dr. Goetz M. Bendele Chief Executive Officer Since 1 May 2018				Christian Witt Chief Financial Officer Since 1 September 2018				Total
in EUR thousand	2018	» 2019	(Min)	(Max)	2018	» 2019	(Min)	(Max)	» 2019
Fixed remuneration	160	240	240	240	67	200	200	200	440
Incidental benefits	8	13	13	13	7	24	24	24	37
Total	168	**253**	253	253	74	**224**	224	224	**477**
One-year variable remuneration									
STI 1 ROCE	33	90	0	150	17	90	0	150	180
STI 2 Cash flow	33	130	0	150	17	130	0	130	260
Multi-year variable remuneration									
LTI options 2018 (3 years)	50	n / a	0	200	22	n / a	0	87	72
Number of phantom stocks (units)	5,550	n / a	0	n / a*	2,405	n / a	0	4,810	7,905
LTI options 2019 (3 years)	n / a	75	0	300	n / a	65	0	260	140
Number of phantom stocks (units)	n / a	11,111	0	22,222	n / a	9,630	0	19,260	20,741
Other									
Total	116	**295**	0	780	56	**285**	0	627	**652**
Cost of benefits	0	0	0	0	0	0	0	0	0
Total remuneration	284	**548**	253	1,033	130	**509**	224	851	**1,129**

* n/a: no cap on the number of phantom shares

BENEFITS RECEIVED FOR THE REPORTING YEAR

In compliance with the recommendations of the GCGC, the benefits received for the reporting year and the previous-year period are stated in the tables below.

BENEFITS RECEIVED (ACTUAL)

	Dr. Goetz M. Bendele Chief Executive Officer Since 1 May 2018		Christian Witt Chief Financial Officer Since 1 September 2018		Total
in EUR thousand	2018	» 2019	2018	» 2019	» 2019
Fixed remuneration	160	240	67	200	440
Incidental benefits	8	13	7	24	37
Total	168	**253**	74	**224**	**477**
One-year variable remuneration					
STI 1 ROCE	0	0	0	0	0
STI 2 Cash flow	0	0	0	0	0
Multi-year variable remuneration					
LTI options 2018 (3 years)	0	0	0	0	0
LTI options 2019 (3 years)	0	0	0	0	0
Other		0			
Total	0	**0**	0	**0**	**0**
Cost of benefits	0	0	0	0	0
Total remuneration as per GCGC (benefits received)	168	**253**	74	**224**	**477**

The members of the Management Board received total remuneration of EUR 477 thousand in the 2019 financial year (2018: EUR 1,296 thousand). EUR 477 thousand of this was attributed to fixed remuneration components, including incidental benefits that were fully paid out in the 2019 reporting year. The significant reduction in Management Board remuneration is due to the departure of the Management Board members Lange, Bentz and Dr. Bieniek in 2018.

COMMITMENTS TO MEMBERS OF THE MANAGEMENT BOARD UPON DEPARTURE

If the appointment of a member of the Management Board ends early on account of his death while in office, the fixed monthly remuneration shall still be paid to his heirs for a period of three months.

The company did not make any performance-based pension commitments to the current members of its Management Board in the 2019 financial year.

TOTAL REMUNERATION OF FORMER MEMBERS OF THE MANAGEMENT BOARD

Provisions were recognized for EUR 617 thousand (previous year: EUR 573 thousand) in pension commitments (pension plan, disability pension and widow's pension) to former members of the Management Board and their survivors.

A total of EUR 17 thousand (previous year: EUR 17 thousand) in retirement pensions was paid to a former member of the Management Board in 2019.

In addition, non-competition payments of EUR 81 thousand were paid in 2019 to former Chairman of the Management Board Dr. Ingo Bretthauer as part of his post-contractual non-competition clause. According to the contractual agreement, this corresponds to 50% of the last average monthly basic salary paid. Former member of the Management Board Bernd Lange received a non-competition payment of EUR 94 thousand for a post-contractual non-competition clause. In April 2019, departing Management Board members received their bonuses for 2018; this amounted to a total payout of EUR 297 thousand. Mr. Lange was paid EUR 123 thousand, Dr. Bieniek, was paid EUR 85 thousand and Mr. Bentz was paid EUR 89 thousand.

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, which is specified by resolution of the Annual General Meeting and is payable after the end of the financial year. If the appointment period does not correspond to a financial year, the remuneration is payable pro rata temporis. 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 on 2 June 2016, the fixed basic remuneration of each member of the Supervisory Board was set at EUR 32 thousand effective from 1 January 2017.

The remuneration of the Supervisory Board is as follows:

in EUR thousand	» 2019	2018
Dr. Markus Peters (Chairman)	64	64
Dr. Dirk Rothweiler (Deputy Chairman from 6 June 2019)	41	32
Prof. Dr.-Ing. Erich Barke (Deputy Chairman until 6 June 2019)	21	41
Prof.Dr.-Ing. Ludger Overmeyer (from 6 June 2019)	18	n / a
Total	**144**	137

SUPERVISORY BOARD

Dr. Markus Peters (Chairman)
- Head of Finance and Investment of German Technology AG, Hanover, Germany
- Member of the Board of Directors of LPKF Distribution Inc., Portland, US

Prof. Dr.-Ing. Erich Barke (Deputy Chairman from 1 June 2018) until 6 June 2019
- Retired professor of Leibniz University Hanover, Germany, Formerly: President of Leibniz University Hanover, Germany
- Member of the Supervisory Board of the following companies:
  - Esso Deutschland GmbH, Hamburg, Germany
  - ExxonMobil Central Europe Holding GmbH, Hamburg, Germany
  - hannoverimpuls GmbH, Hanover, Germany

Dr. Dirk Rothweiler (Deputy Chairman from 6 June 2019)
- CEO of First Sensor AG, Berlin, Germany

Prof. Dr.-Ing. Ludger Overmeyer (from 6 June 2019)
- University professor and head of the Institute of Transport and Automation Technology at Leibniz University Hanover, Germany
- Member of other statutory supervisory boards:
  - Member of the Supervisory Board of Viscom AG, Hanover, Germany (listed company)

FINAL MANAGEMENT BOARD DECLARATION CONCERNING THE REPORT ON RELATIONS WITH AFFILIATED COMPANIES AS PER SECTION 312 OF THE GERMAN STOCK CORPORATION ACT

We hereby declare that LPKF AG received an appropriate payment for each of the legal transactions listed in the report on its relations with affiliated companies according to the circumstances that were known to us at the time the legal transactions were performed. Other measures subject to mandatory disclosure have neither been taken nor omitted.

Garbsen, Germany, 20 March 2020


DR. GOETZ M. BENDELE CHRISTIAN WITT

CONSOLIDATED AND ANNUAL FINANCIAL STATEMENTS

FOR THE LPKF GROUP AND LPKF AG

CONSOLIDATED INCOME STATEMENT
FROM 1 JANUARY TO 31 DECEMBER 2019

in EUR thousand	Note	2019	2018
Revenue	1	140,034	119,960
Changes in inventories of finished goods and work in progress		-803	847
Other own work capitalized	2	4,336	4,309
Other operating income	3	4,022	3,707
		147,589	128,823
Cost of materials	4	54,209	47,955
Staff costs	5	44,747	44,294
Depreciation and amortization	6	7,697	8,054
Loss allowances as per IFRS 9	25	-25	15
Other operating expenses	7	21,715	21,681
Operating result (EBIT)		**19,246**	6,824
Finance income	8	22	5
Finance costs	8	518	855
Earnings before taxes		**18,750**	5,974
Income taxes	9	5,601	−2,067
Consolidated net profit		**13,149**	8,041
Of which			
Shareholders of the parent company		*13,149*	*8,041*
Non-controlling interests		*0*	*0*
		13,149	8,041
Earnings per share (basic)	21	0.54 EUR	0.35 EUR
Earnings per share (diluted)	21	0.54 EUR	0.35 EUR

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

FROM 1 JANUARY TO 31 DECEMBER 20189

in EUR thousand	Note	2019	2018
Consolidated net profit		**13,149**	8,041
Revaluations (mainly actuarial gains and losses)		−55	−7
Deferred taxes		13	13
Sum total of changes that will not be reclassified to the income statement in the future		−42	6
Fair value changes from cash flow hedges		0	12
Fair value changes from cash flow hedges reclassified to the income statement		0	−12
Currency translation differences		−1	−37
Sum total of changes that will be reclassified to the income statement in the future if certain conditions are met		−1	−37
Other comprehensive income after taxes		**−43**	−31
Total comprehensive income		**13,106**	8,010

CONSOLIDATED STATEMENT OF FINANCIAL POSITION
AS OF 31 DECEMBER 2019

AKTIVA

in EUR thousand	Note	**12/31/2019**	12/31/2018
INTANGIBLE ASSETS			
Immaterielle Vermögenswerte	**10**		
Goodwill		74	74
Development costs		14,841	13,775
Other intangible assets		1,015	1,362
		15,930	15,211
Property, plant and equipment	**10**		
Land, similar rights and buildings		36,757	37,769
Technical equipment and machinery		2,807	3,469
Other equipment, operating and office equipment		2,464	3,084
Advances paid and construction in progress		539	0
Right-of-use assets IFRS 16		2,150	0
		44,717	44,322
Receivables and other assets			
Trade receivables	12	290	200
Other assets	13	55	31
		345	231
Deferred taxes	**15**	**3,160**	5,054
		64,152	64,818
CURRENT ASSETS			
Inventories	**11**		
(System) parts		6,984	12,811
Work in progress		5,236	5,496
Finished products and goods		6,794	7,192
Advances paid		139	216
		19,153	25,715
Receivables and other assets			
Trade receivables	12	11,035	30,544
Income tax receivables	13	260	354
Other financial assets		575	0
Other non-financial assets	13	1,494	3,652
		13,364	34,550
Cash and cash equivalents	**14**	**31,343**	3,709
		63,860	63,974
Total		**128,012**	128,792

PASSIVA

in EUR thousand	Note	12/31/2019	12/31/2018
EQUITY			
Subscribed capital	16	24,497	24,497
Capital reserve		15,463	15,463
Other retained earnings		10,194	10,236
Share-based payment reserve		490	490
Foreign currency translation reserve		300	301
Net retained profits		39,893	26,744
		90,837	77,731
NON-CURRENT LIABILITIES			
Provisions for pensions and similar obligations	17	346	267
Other provisions	18	0	0
Non-current liabilities to banks	19	4,846	17,444
Deferred income from grants	3	533	578
Lease liabilities IFRS 16		2,086	0
Other non-current liabilities		91	0
Deferred taxes	15	1,028	203
		8,930	18,492
CURRENT LIABILITIES			
Tax provisions	18	398	388
Other provisions	18	5,396	4,880
Current liabilities to banks	19	1,966	2,603
Trade payables	19	5,612	6,877
Contract liabilities	1	9,958	12,762
Other liabilities	19	4,915	5,059
		28,245	32,569
Total		**128,012**	128,792

CONSOLIDATED STATEMENT OF CASH FLOWS
FROM 1 JANUARY TO 31 DECEMBER 2019

in EUR thousand	Note	**» 2019**	2018
Operating activities			
Consolidated net profit/loss		13,149	8,041
Income taxes		5,601	2,067
Interest expense		518	855
Interest income		−22	−5
Depreciation/amortization of non-current assets		7,697	8,054
Gains/losses from the disposal of non-current assets		21	85
Changes in inventories, receivables and other assets		26,806	−12.430
Changes in provisions		594	1,111
Changes in liabilities and other equity and liabilities		−4,166	8,139
Other non-cash expenses and income		598	816
Income from interest		22	5
Paid income tax		−2,777	1,097
Cash flow from operating activities		**48,041**	11,507
Investing activities			
Investments in intangible assets		−4,027	−3,968
Investments in property, plant and equipment		−1,770	−1,758
Revenue from the disposal of assets		6	51
Cash flow from investing activities		**−5,791**	−5,675

in EUR thousand	Note	2019	2018
Cash flow from financing activities			
Interest paid		−478	−855
Payments for the purchase of non-controlling interests		−816	0
Proceeds from transfers to equity		0	16,201
Proceeds from the raising loans		0	0
Payments for repaying loans		−13,235	−13,595
Cash flow from financing activities		**−14,529**	1,751
Change in cash and cash equivalents			
Change in cash and cash equivalents due to changes in foreign exchange rates		−87	136
Change in cash and cash equivalents		27,721	7,583
Cash and cash equivalents on 01/01		3,707	−4,012
Cash and cash equivalents on 12/31		**31,341**	3,707
Composition of cash and cash equivalents			
Cash and cash equivalents		31,343	3,709
Overdrafts		−2	−2
Cash and cash equivalents on 12/31	**20**	**31,341**	3,707

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
FROM 1 JANUARY TO 31 DECEMBER 2019

in EUR thousand	Subscribed capital	Capital reserve
As of 01/01/2019	**24,497**	**15,463**
Consolidated total comprehensive income		
Consolidated net profit		
Revaluations (mainly actuarial gains and losses)		
Deferred taxes on changes recognized directly in equity		
Currency translation differences		
Consolidated total comprehensive income	**0**	**0**
Transactions with shareholders		
As of 12/31/2019	**24,497**	**15,463**

in EUR thousand	Subscribed capital	Capital reserve
As of 01/01/2018	22,270	1,489
Consolidated total comprehensive income		
Consolidated net profit		
Change from measurement of cash flow hedge reserve		
Reclassification of cash flow hedge reserve to the income statement		
Revaluations (mainly actuarial gains and losses)		
Deferred taxes on changes recognized directly in equity		
Currency translation differences		
Consolidated total comprehensive income	**0**	**0**
Transactions with shareholders		
Proceeds from capital increases		13,974
Use of authorized capital	2,227	
As of 12/31/2018	**24,497**	**15,463**

	Other retained earnings	Share-based payment reserve	Foreign currency translation reserve	Net retained profits	**Equity**
	10,236	**490**	**301**	**26,744**	**77,731**
				13,149	13,149
	–55				–55
	13				13
			–1		–1
	–42	**0**	**–1**	**13,149**	**13,106**
	10,194	**490**	**300**	**39,893**	**90,837**

	Other retained earnings	Share-based payment reserve	Foreign currency translation reserve	Net retained profits	**Equity**
	10,230	490	338	18,703	**53,520**
				8,041	8,041
					12
					–12
	–7				–7
	13				13
			–37		–37
	6	**0**	**–37**	**8,041**	**8,010**
					13,974
					2,227
	10,236	**490**	**301**	**26,744**	**77,731**

CONSOLIDATED NOTES
FOR THE LPKF GROUP AND LPKF AG

CONSOLIDATED NOTES
2019 CONSOLIDATED FINANCIAL STATEMENTS

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 that was established and is headquartered in Germany. Its registered office is at:

Osteriede 7
30827 Garbsen

These consolidated financial statements were approved for publication by the Management Board on 20 March 2020.

B. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS

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

The consolidated financial statements were prepared on the basis of historical cost, limited 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 2019 financial year:

Standard / Interpretation		Mandatory application	Effects
IFRS 16	Leases	01 / 01 / 2019	See B. IFRS 16 Leases
IFRIC 23	Uncertainty over Income Tax Treatments	01 / 01 / 2019	See E (c) Income taxes
Amendment to IFRS 9	Prepayment Features with Negative Compensation	01 / 01 / 2019	No effects
IAS 19	Changes in relation to plan changes, -reductions or -compensations	01 / 01 / 2019	No effects
IAS 28	Long-term Interests in Associates and Joint Ventures	01 / 01 / 2019	No effects
Annual Improvements	Annual Improvements Cycle 2015–2017	01 / 01 / 2019	No effects

The following standards that were amended, revised or issued prior to the reporting date were not yet applied in the 2019 financial year:

Standard/Interpretation		Mandatory application
Amendment to IFRS 10 and IAS 28	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture	Still pendi

As of 31 December 2019

IFRS 16 LEASES

IFRS 16 is mandatory for annual periods beginning on or after 1 January 2019. The standard contains comprehensive rules concerning the identification of 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.

In the transition to IFRS 16, LPKF AG decided to apply the practical expedient, allowing it to retain assessments of which transactions are leases. LPKF AG applied IFRS 16 only to contracts that were previously identified as leases. Contracts that were not identified as leases as defined in IAS 17 and IFRIC 4 were not assessed to determine whether a lease by the IFRS 16 definition existed. Consequently, the definition of a lease in IFRS 16 was applied only to contracts that were entered into or changed on or after 1 January 2019.

Only operating leases were used at the LPKF Group to date. This included vehicle leases and rental leases. As such, these assets were not recognized previously.

IFRS 16 eliminates the distinction between operating and finance leases for the lessee. In the future, the lessee must recognize the right-of-use asset and a corresponding lease liability for all leases. Recognition exemptions are made for short-term leases with a term of 12 months or less and leases for low-value assets with an original price of USD 5,000 or less.

The value of the right of use corresponds to the amount of the lease liability on initial recognition plus any initial direct costs of the lessee. The right of use is subsequently measured at amortized cost. 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 of 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 position and results of operations. See sub-item 10.3 Leases for more information.

The implementation of IFRS 16 will therefore result in changes to the consolidated financial statements. However, the effects of first-time application are deemed to be minimal as it applies mainly just to movable non-current assets. Most of the companies within the Group have their own capitalized property.

RECONCILIATION AS OF THE TRANSITION DATE OF 1 JANUARY 2019

Right-of-use assets and lease liabilities of EUR 1,938 thousand were recognized as a result of the first-time application of IFRS 16 as of 1 January 2019. The capitalization of right-of-use assets in the 2019 financial year produced additional amortization expenses of EUR 712 thousand and eliminated lease expenses of EUR 629 thousand. Interest expense on lease liabilities amounted to around EUR 40 thousand.

IFRS 16 was applied for the first time using the modified retrospective method. Accordingly, the corresponding figures for the previous period were not adjusted.

For the measurement of lease liabilities from operating leases, LPKF AG discounted the lease payments using the incremental borrowing rate as of 1 January 2019. This was 2.3% for property leases and 1.7% for movable asset leases.

The effects at the date of transition are summarized in the table below.

In EUR thousand	» 01/01/2019
Right-of-use assets (property, plant and equipment)	1,938
Deferred tax assets	0
Lease liabilities	2,938
Retained earnings	0

In EUR thousand	» 01/01/2019
Obligations from operating leases as of 31 December 2018, as disclosed in the consolidated financial statement pursuant to IAS 17	2,043
Discounted using incremental borrowing rate as of 01/01/2019	**1,938**
Unrecognized leases for which the underlying asset is of low value pursuant to exemption	1,938
Unrecognized leases for which the lease term ends within 12 months of the date of initial application pursuant to exemption	0
Extension options that will be exercised with reasonable certainty	0

BASIS OF CONSOLIDATION

As of 31 December 2019, LPKF had nine subsidiaries, which, together with the parent company, form the group of consolidated companies. In addition to the Group's parent company, LPKF Laser & Electronics AG, Garbsen, the following subsidiaries have also been included in the consolidated financial statements:

Name **Full consolidation**	Registered office	Equity interest (previous year) in %
LPKF SolarQuipment GmbH	Suhl, Germany	100.0 (100.0)
LPKF WeldingQuipment GmbH	Fürth, Germany	100.0 (100.0)
LPKF Laser & Electronics d.o.o.	Naklo, Slovenia	100.0 (100.0)
LPKF Distribution Inc.	Tualatin (Portland), US	100.0 (100.0)
LPKF (Tianjin) Co. Ltd.	Shanghai, China	100.0 (100.0)
LPKF Laser & Electronics Trading (Shanghai) Co. Ltd.	Shanghai, China	100.0 (100.0)
LPKF Laser & Electronics (Hong Kong) Ltd.	Hong Kong, China	100.0 (100.0)
LPKF Laser & Electronics K.K.	Tokyo, Japan	100.0 (100.0)
LPKF Laser & Electronics Korea Ltd.	Seoul, Korea	100.0 (100.0)

The legal structure of the LPKF Group did not change in the 2019 financial year, with the exception of the merger of LaserMicronics GmbH with LPKF AG with retrospective effect from 1 January 2019.

With the authorization of the Annual General Meeting on 28 May 2015, a profit transfer agreement with a five-year term effective retrospectively from 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 2 June 2016, LPKF WeldingQuipment GmbH signed a profit transfer agreement with LPKF Laser & Electronics AG that became effective retrospectively from 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) of the German Commercial Code and, to the extent possible, made use of the exemption rule.

C. CONSOLIDATION PRINCIPLES

The consolidated financial statements are based on the financial statements as of 31 December 2019 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 associate company when it has power over the associate company, risk exposure or rights to variable returns arise from its investment in the associate company and LPKF AG has the ability to use its power over the associate company such that this affects the amount of the associate company's variable returns. Consolidation of an associate company begins on the day on which LPKF AG gains control over the entity. It ends when LPKF AG loses control over the associate company.

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.

Identifiable assets, liabilities and contingent liabilities 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 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 the income statement.

Intra-Group transactions, balances and unrealized gains and losses from transactions between Group companies are eliminated. Deferred taxes are recognized for consolidation measures affecting profit or loss.

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 as profit or loss. The fair value of an associate, joint venture or financial asset is the fair value determined upon initial recognition. In addition, all amounts recognized in other comprehensive income in relation to that entity are accounted for on the same basis as would be required if the parent company had directly disposed of the related assets or 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; this is defined as the currency of the economic environment in which the entity mainly operates. For LPKF AG's subsidiaries, the functional currency is the same as the local currency in the country in which the subsidiary is domiciled.

If the annual financial statements of a subsidiary are prepared in a different functional currency to 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 historic exchange rate. Expenses and income are translated at the average annual exchange rate. Translation differences are recognized directly in equity as a currency translation reserve until the subsidiary is disposed of. Foreign currency effects from the translation of transactions are recognized either in other operating expenses (exchange rate losses) or in other operating income (income from currency translation differences).

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

1 euro = currency x	Closing rate		Average rat	
	» 12/31/2019	12/31/2018	**» 2019**	2018
US dollar	USD 1.1234	USD 1.1450	USD 1.1196	USD 1.1815
Chinese renminbi yuan	CNY 7.8205	CNY 7.8751	CNY 7.7339	CNY 7.8074
Hong Kong dollar	HKD 8.7473	HKD 8.9675	HKD 8.7558	HKD 8.2599
Japanese yen	JPY 121.94	JPY 125.85	JPY 122.06	JPY 130.41
South Korean won	KRW 1,296.28	KRW 1,277.93	KRW 1,304.90	KRW 1,299.25

E. MATERIAL ACCOUNTING AND MEASUREMENT ESTIMATES AND ASSUMPTIONS

Sämtliche Schätzungen und Beurteilungen werden fortlaufend aktualisiert und basieren auf historischen Erfahrungen 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 events 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) INTANGIBLE ASSETS AND PROPERTY, PLANT AND EQUIPMENT

Material assumptions and estimates relate 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 Section H. “Consolidated statement of financial position”.

(B) 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 obligations is largely dependent on the life expectancies on which it is based and the choice of discount rate, which is recalculated every year. The discount rate is based on the interest rate paid on high-quality corporate bonds in the currency in which the benefits are paid and the maturities of which correspond to the pension obligations. Key parameters in the calculation of provisions for anniversary payments and termination benefits are employee turnover and salary growth. 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.

(C) 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 definitively 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 definitively 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, expected business performance and 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.

(D) 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 based on the market conditions existing on the reporting date.

(E) REVENUE RECOGNITION ESTIMATES

The realization of revenue from warranty extensions is based on estimates with regard to the utilization of warranty services. These are based on past experience.

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 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 etching of plastic circuit carriers.
- Welding comprises systems for laser beam welding of plastic components.
- The Solar segment develops and produces laser scribers for the etching 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.

There is insignificant inter-segment 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 by taking into account impairment losses on goodwill, but without taking into account the financial result and taxes.

- The investments, depreciation and amortization including impairment losses refer to property, plant and equipment and intangible assets including goodwill.

Unless indicated otherwise, the figures reported are the figures after consolidation.

in EUR million		Electronics	Development	Welding	Solar	» **Total**
Revenue (before consolidation)	2019	43.7	27.5	27.7	44.1	143.0
	2018	34.6	27.1	22.2	38.9	122.8
External revenue	2019	43.7	24.5	27.7	44.1	140.0
	2018	34.6	24.2	22.2	38.9	120.0
Operating result (EBIT)	2019	7.4	2.9	1.1	7.8	19.2
	2018	−0.6	3.0	−2.9	7.3	6.8
Depreciation and amortization (non-current assets)	2019	1.9	1.0	2.0	0.6	7.7
	2018	3.2	1.5	2.3	1.0	8.1
Write-downs (inventories)	2019	0.3	0.1	0.1	0.0	0.5
	2018	1.2	0.1	0.0	0.4	1.7
Structure in % (external revenue)	2019	31.2	17.5	19.8	31.5	100.0
	2018	28.9	20.2	18.5	32.4	100.0

Revenue of EUR 41 million in the Solar segment and EUR 28 million in the Electronics and Welding segments was generated from two individual customers. In the previous year, revenue of EUR 36 million and EUR 19 million was generated from these individual customers.

The Other segment was dissolved in the 2019 financial year. To ensure comparability with the reporting period, the corresponding previous year’s figures for EBIT (EUR −5.0 million) were distributed among the four primary segments.

Write-downs on inventories are shown under cost of materials.

GEOGRAPHICAL SEGMENTS

Reporting reflects the four main geographical regions in which the Group operates.

	External revenue				Assets		Non-current assets	
	2019		2018		**2019**	2018	**2019**	2018
	in EUR million	in %	in EUR million	in %	in EUR million		in EUR million	
Germany	9.7	6.9 %	12.8	10.7 %	103.4	107.2	55.7	57.6
Irland	18.1	12.9 %	17.5	14.6 %	0.0	0.0	0.0	0.0
Rest of Europe	11.1	7.9 %	14.4	12.0 %	6.0	6.2	4.2	3.8
USA	37.2	26.6 %	24.7	20.6 %	7.5	6.4	2.1	2.2
Rest of North America	0.3	0.2 %	0.0	0.0 %	0.0	0.0	0.0	0.0
China	25.8	18.4 %	12.6	10.5 %	9.0	6.6	1.6	1.0
Vietnam	13.9	9.9 %	23.4	19.5 %	0.0	0.0	0.0	0.0
Rest of Asia	21.1	15.1 %	13.1	10.9 %	2.1	2.4	0.5	0.2
Other	2.8	2.0 %	1.5	1.3 %	0.0	0.0	0.0	0.0
» Total	**140.0**	**100.0 %**	120.0	**100.0 %**	**128.0**	128.8	**64.1**	64.8

G. CONSOLIDATED INCOME STATEMENT

1. REVENUE

Revenue breakdown

The core business of the LPKF Group is the sale of equipment and systems used by customers in production and development. In the sale of equipment and systems, revenue is generated at a specific time and is thus recognized on transfer of control.

Revenue recognized over time stems from service contracts, which mainly include maintenance contracts and warranty extensions.

in EUR million		Electronics	Development	Welding	Solar	**» Total**
External revenue (total)	2019	43.7	24.5	27.7	44.1	140.0
	2018	34.6	24.2	22.2	38.9	120.0
Time point of revenue recognition						
Equipment and systems (at a specific time)	2019	42.5	24.3	27.7	44.1	138.6
	2018	33.5	24.0	22.1	38.8	118.5
Service contracts (over time)	2019	1.2	0.2	0.0	0.0	1.5
	2018	1.1	0.2	0.1	0.1	1.5

Contract balances

in EUR million	» 12/31/2019	12/31/2018
Contract assets	0.0	0.0
Contract liabilities (by term)	10.0	12.8
up to one year	9.9	12.6
between one and five years	0.1	0.2
Revenue from performance obligations that were met in earlier periods	1.1	0.0

Contract assets arise from claims for consideration on services rendered. There were no contract assets in the 2019 financial year.

Contract liabilities arise from advances received prematurely, i.e. before completion of the contracted service. Once the contracted service has been performed, contract liabilities are recognized as revenue.

As of 31 December 2019, contract liabilities amounted to EUR 10,044 thousand (previous year: EUR 12,762 thousand). Of this amount, EUR 2,402 thousand (previous year: EUR 1,277 thousand) are from revenue from service contracts recognized over time and EUR 7,642 thousand (previous year: EUR 11,485 thousand) are from services rendered at a specific point in time.

During the 2019 financial year, there were no significant or substantial changes to the balances of contract assets and contract liabilities other than those listed in the table.

There has been no impairment of contract assets during the current reporting period.

Performance obligations

LPKF Group performance obligations arise from the sale of equipment and systems and from service contracts with customers.

In the sale of equipment and systems, the performance obligation is fulfilled upon delivery to the customer.

Service contracts with customers mainly comprise maintenance contracts and warranty extensions. Revenue is realized when the service is performed or over the duration of the and is recognized in profit or loss.

LPKF employs the IFRS 15.121 a) practical expedient if the original expected duration of the contract is one year or less. This applies to both the sale of equipment and service contracts with a duration of one year or less. The transaction price of unsatisfied (or partially unsatisfied) performance obligations with a duration of more than one year amounts to EUR 87 thousand and corresponds to contract liabilities with a corresponding duration. The revenue for these will be recognized between 2021 and 2023.

The payment received generally corresponds to the invoice price and does not contain significant financing components. The terms of payment are between 30 and 45 days.

2. OTHER OWN WORK CAPITALIZED

Own work capitalized by the Group concerned equipment of EUR 4,337 thousand (previous year: EUR 4,309 thousand). This comprised own work for technical equipment and machinery used by Group companies for production as well as prototype development projects capitalized during 2019, 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 are met. Other development costs that do not meet these criteria are expensed on an accrual basis. Development costs expensed in prior periods are not capitalized in subsequent reporting periods. Capitalized development costs are reported as intangible assets and amortized on a straight-line basis over their useful life, not exceeding three years, from the date on which they become usable. This is reported under depreciation and amortization on intangible assets and property, plant and equipment.

3. OTHER OPERATING INCOME

in EUR thousand	**» 2019**	2018
Income from currency translation differences	816	800
Income from the reversal of provisions	644	777
Research and development grants	504	594
Income from insurance payments	31	142
Reversal of deferred item income from grants	45	49
Income from the reversal of loss allowances	129	21
Income from asset disposals	6	0
Other	1,848	1,324
	4,022	**3,707**

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. In the financial year, these were mainly the German Federal Ministry of Education and Research, the project company Jülich and VDI Technologiezentrum. Grants 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 non-current assets that 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 government grants for building costs in Suhl totaling EUR 943 thousand. The periodic reversal of these government grants for building costs is reported in the item “Reversal of deferred item income from grants” in the amount of EUR 45 thousand (previous year: EUR 49 thousand). Income from the reversal of provisions consists mainly of the reversal of provisions for guarantees and warranties.

4. COST OF MATERIALS

in EUR thousand	**» 2019**	2018
Cost of (system) parts and purchased goods	52,792	46,654
Cost of purchased services	1,417	1,301
	54,209	**47,955**

Cost of materials includes write-downs on inventories in the amount of EUR 501 thousand (previous year: EUR 1,736 thousand).

5. STAFF COSTS AND EMPLOYEES

in EUR thousand	» 2019	2018
Wages and salaries		
Expenses for wages	38,151	37,113
Other	31	963
	38,182	38,076
Social security costs and pension costs		
Employer's contribution to social security	6,086	5,786
Pension costs	274	251
Employer's liability insurance association	204	181
	6,565	6,218
	44,747	44,294

There were ongoing pension payments of EUR 17 thousand (previous year: EUR 17 thousand) arising from pension obligations in the 2019 financial year (also see note 17).

The workforce is distributed as follows:

	As of reporting date		Annual average	
in EUR thousand	**» 12/31/2019**	12/31/2018	**» 2019**	**2018**
Production	171	158	167	163
Sales	124	120	126	120
Development	143	141	139	147
Service	100	100	101	98
Administration	144	136	142	143
	682	**655**	**675**	**671**

6. DEPRECIATION AND AMORTIZATION

Depreciation and amortization of the various non-current assets is shown in the statement of changes in non-current assets (note 10).

7. OTHER OPERATING EXPENSES

in EUR thousand	» 2019	2018
Travel, meals/entertainment	3,307	3,034
Third-party work	2,361	2,457
Legal and consulting expenses	1,675	1,836
Advertising and sales expenses	1,840	2,150
Repairs, maintenance, operating materials	1,862	1,520
Consumables, development and purchased development services	1,281	1,289
Rent, ancillary rental costs, leases, land and building costs	1,172	2,119
Insurance, contributions, duties	962	781
Exchange rate losses	911	1,289
Vehicle costs	714	704
Sales commissions	566	471
Investor relations	544	474
Telephone, postage, fax	529	527
Trade fair costs	479	617
Voluntary benefits, training and further education	455	529
Addition to loss allowance on receivables and losses on receivables	446	170
Expenses for warranties	297	281
Bank charges	259	181
Financial statement preparation, publication and auditing costs	257	295
Office supplies, books, software	167	155
Supervisory Board remuneration incl. reimbursement of expenses	145	164
Other	1,486	938
	21,715	21,681

In 2019, total research and development costs or the effect on the income statement amounted to EUR 12,574 thousand (previous year: EUR 11,672 thousand), in addition to EUR 3,574 thousand for materials and other costs (previous year: EUR 2,846 thousand). They also contained EUR 9,010 thousand (previous year: EUR 8,826 thousand) in additional costs for staff as well as depreciation/amortization, among other things.

8. FINANCIAL RESULT

in EUR thousand	» 2019	2018
Finance income		
Other interest and similar income	22	5
Finance costs		
Interest and similar expenses	–518	–855
	–496	**–850**

Other interest income arose from overnight and time deposits totaling EUR 22 thousand (previous year: EUR 5 thousand). Other interest expense of EUR 466 thousand (previous year: EUR 826 thousand) was incurred in connection with long-term loans and short-term money market loans.

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 or in other comprehensive income (OCI). In this case, the taxes are recognized directly in equity.

in EUR thousand	» 2019	2018
Corporate income tax and solidarity surcharge	2,284	1,053
Trade tax	584	276
	2,868	1,329
of which related to prior period	13	172
Deferred taxes	2,733	–3,396
	5,601	–2,067

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 11,0% to 33,8% for deferred taxes (previous year: 11.0% to 33.8%) and 11,0% to 33,8% for current taxes (previous year: 11.0% to 33.8%).

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 anticipated to current tax expense:

in EUR thousand	» 2019	2018
Consolidated profit/loss before income taxes	18,751	5,974
Anticipated tax expense 30,8% (previous year: 30.8%)	5,775	1,840
Effect of different tax rates	−413	−284
Effect from unrecognized deferred tax assets	−42	−3,652
Effects of legal tax rate changes	0	6
Tax-free income	−23	−154
Trade tax additions and deductions	4	18
Tax effect of non-deductible operating expenses	76	91
Prior-period tax effects	−13	78
Other differences	−237	−10
Effective tax expense 29,9% (previous year: −34.6%)	**5,601**	**−2,067**

The tax rate applied for the reconciliation presented above corresponds to the corporate tax rate of 30,8% (previous year: 30.8%) 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 is derived from the non-recognition of deferred tax assets on tax loss carryforwards and temporary differences of EUR 131 thousand (previous year: EUR 265 thousand) and from the opposite effects as a result of the use of previously unrecognized tax losses and temporary differences of EUR 89 thousand (previous year: EUR 29 thousand) and the reinstatement of tax losses carried forward of EUR 0 thousand (previous year: EUR 3,889 thousand).

H. CONSOLIDATED STATEMENT OF FINANCIAL POSITION

ASSETS

10. NON-CURRENT ASSETS

The following statement of changes in non-current assets shows the changes in the individual items:

2019	Cost					
in EUR thousand	As of 01/01/2019	Currency differences	Addition	Reclassi-fication	Disposal	**» As of 01/01/2019**
Intangible Assets						
Goodwill	74	0	0	0	0	74
Development costs	43,097	0	3,962	0	976	46,083
Other intangible assets	11,479	0	65	0	217	11,327
	54,650	0	4,027	0	1,193	**57,484**
Property, Plant and Equipment						
Land, similar rights and buildings	50,170	37	164	0	160	50,211
Technical equipment and machinery	12,488	−7	593	23	464	12,633
Other equipment, operating and office equipment	14,287	4	474	−23	571	14,171
Advances paid and construction in progress	0	0	539	0	0	539
Right-of-use assets IFRS 16	1,938	0	924	0	40	2,822
	78,883	34	2,694	8	1,235	**80,376**
	133,533	34	6,721	8	2,430	**137,860**

Depreciation/Amortization					Residual Carrying Amounts	
As of 01/01/2019	Foreign exchange differences	Addition	Disposal	**As of 12/31/2019**	**As of 12/31/2019**	Previous year
0	0	0	0	0	74	74
29,322	0	2,896	976	31,242	14,841	13,775
10,117	0	411	217	10,311	1,015	1,362
39,439	0	3,307	1,193	41,553	15,930	15,211
12,401	1	1,358	305	13,455	36,757	37,769
9,019	12	1,343	548	9,826	2,807	3,469
11,203	1	976	473	11,707	2,464	3,084
0	0	0	0	0	539	0
0	0	712	40	672	2,150	0
32,623	14	4,389	1,366	35,660	44,717	44,322
72,062	14	7,696	2,559	77,213	60,647	59,533

The following table shows the corresponding figures from the previous year:

2018	Cost					
in EUR thousand	As of 01/01/2018	Currency differences	Addition	Umbuchung	Disposal	As of 12/31/2018
Intangible Assets						
Goodwill	74	0	0	0	0	74
Development costs	39,202	0	3,895	0	0	43,097
Other intangible assets	11,414	0	73	0	8	11,479
	50,690	0	3,968	0	8	**54,650**
Property, Plant and Equipment						
Land, similar rights and buildings	49,682	108	386	0	6	50,170
Technical equipment and machinery	11,865	18	1,003	0	398	12,488
Other equipment, operating and office equipment	14,153	10	369	0	245	14,287
Advances paid and construction in progress	0	0	0	0	0	0
	75,700	136	1,758	0	649	**76,945**
	126,390	136	5,726	0	657	**131,595**

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 with the recoverable amount at each reporting date. The goodwill is depreciated 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 on goodwill in 2019, as in the previous year.

	Depreciation/Amortization					Residual Carrying Amounts	
	As of 01/01/2018	Foreign exchange differences	Addition	Disposal	As of 12/31/2018	As of 12/31/2018	Previous year
	0	0	0	0	0	74	74
	25,661	0	3,661	0	29,322	13,775	13,541
	9,588	0	537	8	10,117	1,362	1,826
	35,249	0	4,198	8	39,439	15,211	15,441
	11,040	20	1,341	0	12,401	37,769	38,642
	8,006	12	1,306	305	9,019	3,469	3,859
	10,198	6	1,208	209	11,203	3,084	3,955
	0	0	0	0	0	0	0
	29,244	38	3,855	514	32,623	44,322	46,456
	64,493	38	8,053	522	72,062	59,533	61,897

Development costs

Own capitalized development costs are also amortized over their useful life on a straight-line basis. Borrowing costs are not capitalized, but are expensed in the period in which they are incurred. The item is broken down by segment as follows:

in EUR thousand	**2019**	2018
Electronics	5,792	5,728
Development	2,518	2,299
Welding	2,854	3,273
Solar	3,677	2,475
	14,841	13,775

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.

Reviews to determine whether write-ups are required for intangible assets written down in the past are conducted as of each reporting date, except for goodwill. No write-ups were necessary during the reporting year.

For software and development costs, a useful life of three years was assumed as planned.

10.2 Property, plant and equipment

Property, plant and equipment are measured at cost less accumulated straight-line depreciation. Borrowing costs are not capitalized, but are expensed in the period in which they are incurred. 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 depreciated 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 depriciation 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:

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

Bank loans totaling EUR 6,660 thousand (previous year: EUR 9,595 thousand) are secured by land and buildings.

10.3 Leases
LPKF AG acts solely as a lessee. Additional information is provided to indicate the effects of this on net assets, financial position and results of operations. This is outlined in the following table.

in EUR thousand	» 2019
Write-downs of right-of-use assets	**712**
of which for property leases	264
of which for movable asset leases	448
Additions to right-of-use assets	**964**
of which for property leases	427
of which for movable asset leases	497
Carrying amounts of right-of-use assets on 31 December 2019	**2,150**
of which for property leases	1,339
of which for movable asset leases	811
Expenses for leasing low-value assets	83
Interest expense on lease liabilities	40
Total cash outflow for leases	816

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

System components relate mainly to raw, auxiliary and operating materials.

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, but are expensed in the period in which they are incurred. Inventories are measured using the weighted average cost formula. Inventories were written down below cost to their net realizable value and scrapped in the amount of EUR 501 thousand (previous year: EUR 1,736 thousand).

12. TRADE RECEIVABLES

in EUR thousand	» 2019	2018
Nominal amount of receivables	11,955	31,081
Loss allowances for non-credit-impaired receivables	–95	–120
Loss allowances for credit-impaired receivables	–534	–217
Receivables after loss allowances, discounts and currency losses	**11,326**	30,744

The carrying amount of the receivables is EUR 290 thousand (previous year: EUR 200 thousand) and concerns receivables with remaining maturities of more than one year. Items recognized in foreign currencies are measured at the middle spot foreign exchange rate as of the reporting date.

There was no income from the recovery of derecognized receivables in the 2019 financial year, as was the case in the previous year. See the risk management notes in Section 25 for more information on default risks for trade receivables.

13. OTHER NET ASSETS AND INCOME TAX RECIVABLES

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

in EUR thousand	» 2019	2018
Input tax receivables	809	2,099
Income tax receivables	259	354
Deferred income	411	508
Other	904	1,076
Total	**2,383**	4,037

Rights to reimbursement of corporate income and trade taxes are reported in income tax receivables.

14. CASH AND CASH EQUIVALENTS

Cash and cash equivalents consist primarily of bank balances and 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.

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

DEFERRED TAX ASSETS

in EUR thousand	2019	2018
Tax loss carryforwards	4,982	6,974
Intangible assets	132	165
Property, plant and equipment	453	453
Trade receivables	43	32
Provisions	764	367
Elimination of intercompany profits and other deductible temporary differences	545	1,160
Other liabilities	121	368
Other	45	0
Offsetting with deferred tax liabilities	−3,925	4,465
Total	3,160	**5,054**

DEFERRED TAX LIABILITIES

in EUR thousand	2019	2018
Capitalized development costs	4,428	4,135
Property, plant and equipment	407	441
Trade receivables	101	92
Other	17	0
Offsetting with deferred tax assets	−3,925	−4,465
Total	**1,028**	203

The recoverability of the deferred tax assets from loss carryforwards is based on the multi-year planning calculations of the probable future taxable profits of the German fiscal unity in particular.

EUR 3,350 thousand (previous year: EUR 3,768 thousand) in deferred tax assets and EUR 958 thousand (previous year: EUR 964 thousand) in deferred tax liabilities will be realized within the next twelve months.

For entities that, in the reporting period or in the previous year, made a tax loss, deferred tax assets in the amount of EUR 0 thousand (previous year: EUR 3,958 thousand) are capitalized because planning assumes the achievement of taxable profits.

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 3,821 thousand (previous year: EUR 4,270 thousand). Of these tax losses carried forward, EUR 967 thousand (previous year: EUR 508 thousand) will expire within the next five years and EUR 1,891 thousand (previous year: EUR 2,143 thousand) will expire within the next six to ten years.

No deferred tax liabilities were recognized on temporary differences of EUR 1,051 thousand (previous year: EUR 1,068 thousand) related to investments in subsidiaries and branches.

EQUITY AND LIABILITIES

16. SUBSCRIBED CAPITAL

Share capital
The company's share capital is EUR 24,496,546 and is divided into 24,496,546 no-par value ordinary bearer shares (no-par shares) each with a pro-rata interest of EUR 1.00.

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

Authorized capital
By the resolution adopted by the Annual General Meeting on 31 May 2018, the Management Board is authorized to increase the share capital once or repeatedly until 30 May 2023 with the approval of the Supervisory Board by up to a total of EUR 5,567,397.00 by issuing up to 5,567,397 new no-par value bearer shares in return for contributions in cash or in kind (authorized capital). Shareholders shall generally be granted a pre-emption right. The shares can also be acquired by one or more banks or companies determined by the Management Board as defined in Section 186 (5) sentence 1 of the German Stock Corporation Act with a commitment to offer them to shareholders for subscription (indirect pre-emption right).

However, the Management Board is authorized, with the approval of the Supervisory Board, to disapply the pre-emption rights of shareholders

- to exclude fractional amounts from shareholders' pre-emption 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-emption rights may not exceed a total of 10% of the share capital, neither at the time 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-emption rights in direct or corresponding application of Section 186 (3) sentence 4 of the German Stock Corporation Act 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-emption rights in corresponding application of Section 186 (3) sentence 4 of the German Stock Corporation Act;

- 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 expertise 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/or 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 100% 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-emption rights may not exceed a pro-rata interest in the share capital in the total amount of EUR 200,000.00.

In any case, the authorization to disapply shareholders' pre-emption rights is limited insofar as after exercising the authorization the sum of shares issued while disapplying shareholders' pre-emption 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 this authorization takes effect nor when it is exercised. The following count toward the aforementioned 10% limit:

- own shares that are sold during the period in which this authorization is in effect while disapplying shareholders' pre-emption 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-emption rights, and
- new shares issued during the period in which this authorization is in effect on the basis of other permitted authorized capital while disapplying shareholders' pre-emption 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 Incorporation 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 utilized in the 2019 financial year (previous year: increase by EUR 2,226,958.00 by issuing 2,226,958 no-par value shares in exchange for contributions in cash). The remaining authorized capital stays the same at EUR 3,340,439.00.

Own 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 own 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 own shares so acquired for all statutory purposes; and, in particular cases, to disapply shareholders' rights to tender or subscribe such shares, respectively, in connection with buybacks and subscriptions.

This was not utilized as of the reporting date.

2019 employee participation program
From 10 to 12 December 2019, LPKF AG bought back on the capital market a total of 10,266 no-par value own shares, each with a pro-rata interest of EUR 1.00 in the share capital, under an employee participation program, and transferred them to the participating employees through an intermediary.

The average buyback price was EUR 16.7151 per share. The total amount came to EUR 171,596.76. The shares have a two-year lock-up period.

LPKF AG created an incentive to participate in the employee participation program by fully subsidizing employee payments up to a maximum amount of EUR 360.00 per employee. The resulting expense of EUR 171.6 thousand was recognized under staff costs.

17. PROVISIONS FOR PENSIONS AND SIMILAR OBLIGATIONS

Post-employment pension benefits
Germany has a statutory defined contribution national pension scheme for employees that pay pensions contingent on income and contributions made. The company has no benefit obligations other than the payment of its contributions to the statutory pension insurance entity. Some of the Group's employees have also taken out policies with a private insurer or a benevolent fund as part of the company pension plan and based on a shop agreement. 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 pension benefits in the statement of financial position comprise only defined benefit obligations to former Management Board members of the parent company for which fixed pension 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 reporting 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:

in EUR thousand	» 2019	2018
Present value of the defined benefit obligation at beginning of period	**719**	734
Current service cost	0	0
Interest expense	12	12
Pension payments	−17	−17
Actuarial gains (−) and losses (+)	98	−10
Present value of the defined benefit obligation at end of period	**812**	719
Plan assets		
Reinsurance cover	−414	−334
Securities	−432	−395
Deficit (net liability (+))/excess (net asset (-)) shown in the statement of financial position	**−34**	−10

Development of net liabilities/assets:

in EUR thousand	» 2019	2018
Net assets at beginning of period	**10**	56
Total amount in the income statement	0	1
Total of the revaluations recognized in OCI	7	−63
Benefit payments	0	0
Employer contributions	17	16
Net assets at end of period	**34**	10

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

in EUR thousand	» 2019	2018
At beginning of period	**729**	790
Interest income from plan assets	12	13
Cost of/income on plan assets without interest income	105	−73
Payments from plan assets	−17	−17
Funded by the employer	17	16
At end of period	**846**	729

The plan assets are made up as follows:

	» 2019		2018	
in EUR thousand	Absolute	Percentage	Absolute	Percentage
Equity instruments	0	0 %	0	0 %
Debt securities	432	51 %	395	54 %
Other	414	49 %	334	46 %
Total	**846**	**100 %**	729	100 %

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

The following amounts were recognized in the income statement:

in EUR thousand	» 2019	2018
Current service cost	0	0
Interest income from plan assets	12	13
Interest expense on the obligation	–12	–12
Total effect on earnings in the income statement	**0**	1

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

in %	» 2019	2018
Discount rate as of 12/31	0.90	1.70
Future salary increases	0.00	0.00
Future pension increases	1.75	1.75
Expected return on plan assets	0.90	1.70
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 into account the changes in the yields of non-current fixed-income instruments. The allocations to plans for post-employment benefits and pension payments payable in the financial year ending 31 December 2019 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:

12/31/2019 in EUR thousand	Up to 1 year	Between 1 and 5 years	Between 5 and 10 years	» Total
Pension benefits	17	46	174	237

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

Baseline values	
Discount rate	0.9 %
Pension trend	1.75 %
DBO	EUR 811,683

Sensitivities	Revalued DBO	Percentage change in the DBO
Discount rate plus 0.5%	EUR 749,806	−7.62 %
Discount rate minus 0.5%	EUR 881,171	8.56 %
Pension trend plus 0.25%	EUR 837,639	3.20 %
Pension trend minus 0.25%	EUR 786,582	−3.06 %

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 become 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 41 thousand are expected in the next five years.

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

in EUR thousand	**2019**	2018
Present value of the defined benefit obligation at beginning of period	**267**	329
Current service cost	18	21
Interest expense	6	6
Benefit payments	−15	−30
Benefit changes	0	0
Actuarial gains (-) and losses (+)	69	−59
Present value of the defined benefit obligation at end of period	**345**	267

The following amounts were recognized in the income statement:

in EUR thousand	» 2019	2018
Current service cost	18	21
Interest expense on the obligation	6	6
Total amount in the income statement	**24**	27

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

Baseline values	
Discount rate	0.90%
Salary trend	2.00%
DBO	EUR 345,522

Sensitivities	Revalued DBO	Percentage change in the DBO
Discount rate minus 0.5%	EUR 373,153	8.00%
Discount rate plus 0.5%	EUR 320,635	−7.20%
Salary trend minus 0.5%	EUR 320,826	−7.15%
Salary trend plus 0.5%	EUR 372,640	7.85%

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. Other provisions are recognized at their estimated settlement value in accordance with IAS 37 and tax provisions at their estimated settlement value in accordance with IAS 12.

Tax provisions concern the following:

in EUR thousand	» 2019	2018
Corporate income tax and solidarity surcharge	0	177
Trade tax	398	211
	398	388

Current income tax liabilities for current periods are measured at the amounts that are expected to be paid to the respective tax authorities based on the respective tax rates applicable on the reporting date.

STATEMENT OF CHANGES IN PROVISIONS

in EUR thousand	As of 01/01/2019	Utilization	Currency differences	Reversals	Additions	**As of 12/31/2019**
Pension provisions and similar obligations	267	14	0	0	93	346
Tax provisions	388	374	0	0	384	398
Bonuses	1,460	1,456	1	3	1,451	1,451
Guarantees and warranties	1,846	1,495	1	307	1,581	1,624
Other	1,574	1,202	0	334	2,279	2,317
Total	5,535	4,541	2	644	5,788	**6,140**

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. This 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. Payment requires beneficiaries to 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. The final number of phantom stocks is determined at the end of the performance period. The performance period amounts to at least four years, but can be extended to five, or no more than six years, upon the request of an individual beneficiary. The final number of phantom stocks 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 price 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 payment 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 an option pricing model. 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 the 2019 financial year is EUR 59 thousand (previous year: EUR 3 thousand), which comes from tranches six and seven. No provision is made for tranches two to five due to the resultant performance factors.

The following parameters were used in the option pricing model (modified Black Scholes (Merton) model) for determining the fair value as of 31 December 2019:

	6. Tranche 2017	7. Tranche 2018
Expected volatility	60%	60%
Risk-free interest rate	0.00% p,a,	0.00% p,a,
Expected remaining maturity	1 year and 7 months	2 years and 7 months
LPKF share price as of 30 Dec. 2018	EUR 15.80	EUR 15.80
Initial price of LPKF shares	EUR 9.58	EUR 7.02
Number of phantom stocks at the allotment date	7,663	5,660

Under the long-term incentive program for the Management Board, in 2018 the previous members of the Management Board waived in full their claims to the 2014 and 2015 tranches. There are no claims relating to the 2016 and 2017 tranches. The claims to the 2018 tranche were paid in full in a lump-sum on termination of the employment relationship. All obligations under the long-term incentive program for previous members of the Management Board were thus settled at the beginning of the 2019 financial year.

The following parameters were taken into account in the option pricing model for the new Management Board incentive program:

Tranche 2018: Number of phantom stocks at the allotment date: 7,954.

Tranche 2019: Number of phantom stocks at the allotment date: 20,741.

The provision recognized for the new incentive program for Management Board members is EUR 220 thousand.

	1. Tranche 2018	2. Tranche 2019
Allotment value	EUR 72 thousand	EUR 140 thousand
Final price of LPKF shares	EUR 16.52	EUR 17.54
Initial price of LPKF shares	EUR 9.01	EUR 6.75
Phantom stocks at the allotment date	7,954	20,741
Amount of provision	EUR 80 thousand	EUR 140 thousand

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 in the income statement using the effective interest rate method.

The breakdown of the liabilities by remaining maturities is shown in the statement of changes in liabilities below:

TYPE OF LIABILITY

in EUR thousand		**Total amount**	Liabilities with a remaining maturity of Up to 1 year	1 to 5 years	More than 5 years	Secured amounts	Type of collateral
	2019	6,812	1,966	4,846	0	6,660	*
Liabilities to banks	2018	20,047	2,603	17,199	245	19,597	*
	2019	5,616	5,612	4	0	0	–
Trade payables	2018	6,877	6,877	0	0	0	–
	2019	10,044	9,957	87	0	0	–
Contract liabilities	2018	12,762	12,559	203	0	0	–
	2019	4,915	4,915	0	0	0	–
Other liabilities	2018	5,059	5,059	0	0	0	–
	2019	**27,387**	22,450	4,937	0	6,660	–
	2018	**44,745**	27,098	17,402	245	19,597	–

* Land charge, assignment of receivables and security assignment of inventories (from 2017).
The carrying amount of the inventories pledged as collateral as of the reporting date is EUR 14,295.

All loans were issued in euros. They are earmarked for financing new construction, purchases of property, investments to expand capacities, and equipment. The loan maturity dates range from June 2020 to December 2024. The agreed interest rates are between 1.0% and 2.4%. No overdraft facilities were utilized at the reporting date of 31 December 2019.

Contract liabilities include advances received in the amount of EUR 7,642 thousand (previous year: EUR 11,485 thousand). The previous year's figure also included EUR 20 thousand from swap and forward transactions in USD. They were repaid in full in the 2019 financial year.

I. OTHER DISCLOSURES

20. STATEMENT OF CASH FLOWS

Cash flow from operating activities 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. Cash flows from investing and financing activities, on the other hand, are calculated using the direct method. The total is the change in cash and cash equivalents. This 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 subject to an insignificant risk of changes in value.

RECONCILIATION FOR LIABILITIES FROM FINANCING ACTIVITIES AS PER IAS 7

			Non-cash changes			
2019 in EUR thousand	01/01/2019	Cash changes	Acquisitions	Currency-exchange-related changes	Fair value changes	**12/31/2019**
Non-current loans	17,444	−12,598	0	0	0	4,846
Current loans	2,603	−637	0	0	0	1,966
of which overdraft facilities	*2*	*0*	*0*	*0*	*0*	*2*
Lease liabilities	1,938	−816	964	0	0	2,086
Assets held as collateral for non-current loans	0	0	0	0	0	0
Total	21,985	−14,051	964	0	0	**8,898**

			Non-cash changes			
2018 in EUR thousand	01/01/2018	Cash changes	Acquisitions	Currency-exchange-related changes	Fair value changes	**12/31/2018**
Non-current loans	20,044	−2,600	0	0	0	17,444
Current loans	20,953	−18,350	0	0	0	2,603
of which overdraft facilities	*7,357*	*−7,355*	*0*	*0*	*0*	*2*
Lease liabilities	0		0	0	0	0
Assets held as collateral for non-current loans	0	0	0	0	0	0
Total	40,997	−20,950	0	0	0	**20,047**

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.

in EUR thousand	» 2019	2018
Number of shares, undiluted	24,496,546	23,011,907
Number of shares, diluted	24,496,546	23,011,907
Consolidated net profit/loss (in EUR thousand)	13,149	8,041
Adjusted consolidated profit/loss (in EUR thousand)	13,149	8,041
Basic earnings per share (in EUR)	0.54	0.35

An error occurred in calculating the number of shares in the 2018 consolidated financial statements. The capital increase by 2,226,958 shares that was carried out in August 2018 was taken into account in the calculation of the number of shares in the full amount by mistake instead of simply on a pro rata basis as four twelfths. This was also reflected in earnings per share, which was reported as EUR 0.33 instead of EUR 0.35. Both figures have since been corrected.

22. DIVIDEND PER SHARE

Because of the positive development in free cash flow in 2019, LPKF would like to propose a dividend to the Annual General Meeting for the first time in four years. At the time this annual report was published, there were signs of a global economic downturn due to the coronavirus pandemic, the effects of which are difficult to assess. The Management Board and the Supervisory Board therefore currently intend to propose a dividend of 10 Eurocent per share for the 2019 financial year.

23. TRANSACTIONS WITH RELATED PARTIES

A loan agreement between LPKF AG and Mr. Jörg Bantleon (structural investor with de-facto control) with a credit line of EUR 20.0 million at fair market conditions was canceled in the 2019 financial year. LPKF AG did not take up the agreement in 2019, and so did not incur any expenses for it.

As of the reporting date, LPKF AG had EUR 119 thousand in liabilities to members of the Supervisory Board (previous year: EUR 137 thousand).

Apart from these, there were no other receivables from or liabilities to, nor were any payments or benefits granted to, related parties or LPKF Group companies. 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 of the 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 non-compliance with the recommendations, were made permanently available to the public on the company's website (https://www.lpkf.com/fileadmin/mediafiles/user_upload/company/investor-relations/corporate-governance/reports-decalarations/en/declaration-of-compliance-2020.pdf).

www.lpkf.com/
www.lpkf.com/de/investor-relations/corporate-governance/

25. FINANCIAL INSTRUMENTS

Classification of financial assets and liabilities

The financial instruments reported in the LPKF consolidated statement of financial position comprise trade receivables, cash and cash equivalents, **INVESTMENT PRODUCTS**, trade payables, liabilities to banks as well as other assets and liabilities under contractual agreements.

Financial assets are measured at fair value, net of any transaction costs, at the settlement date. Trade receivables, on the other hand, are initially recognized at the transaction price. Subsequent measurement of financial assets varies depending on classification.

Within the classification of financial assets, IFRS 9 differentiates between debt instruments and equity instruments. LPKF AG's consolidated financial statements do not include any equity instruments.

The first step in classifying debt instruments is to analyze how the entity manages the relevant financial instruments in order to realize cash flows from them (business model test). The cash flows to be realized are analyzed to determine whether they originate primarily from the **HOLDING** or **SELLING** of financial assets or from a **COMBINATION OF THE TWO**. The second step is to analyze the contractual cash flows to determine whether the financial asset meets the core principle of a normal lending arrangement. This is the case when the contractual cash flows of a financial asset give rise to payments on specified dates that are solely payments of **PRINCIPAL** and **INTEREST** on the principal amount outstanding.

Based on the business model test and the cash flow criterion, the Group's financial assets are predominantly classified under the "at amortized cost" category. Derivatives and **INVESTMENT PRODUCTS**, on the other hand, do not meet the cash flow criterion and should therefore be assigned to the "at fair value through profit or loss" category. Income and expenses related to the financial assets are recognized in profit or loss.

At initial recognition, financial liabilities are measured at fair value plus any transaction costs. They are subsequently measured at amortized cost using the effective interest rate method. Transaction costs are taken into account when calculating the effective interest rate. Income and expenses related to the financial liabilities are recognized in profit or loss.

			IFRS 9 carrying amount				
in EUR thousand	Measurement category as per IFRS 9	Carrying amount as of 12/31/2019	Amortized cost	Fair value through other comprehensive income	Fair value through profit or loss	Fair value as of 12/31/2019	Fair value hierarchy level
ASSETS							
Cash and cash equivalents	AC	31,343	31,343	–	–	31,343	–
Trade receivables	AC	11,326	11,326	–	–	11,326	–
Investment products	FVtPL	575		–	575	575	2
Total		43,244	42,699	–	575	43,244	–
EQUITY AND LIABILITIES							
Trade payables	FLAC	5,616	5,616	–	–	5,616	–
Liabilities to banks	FLAC	6,812	6,812	7,034	–	7,014	2
Other interest-free liabilities	FLAC	1,028	1,028	–	–	1,028	–
Lease liabilities under IFRS 16	n/a	2,086	2,086	–	–	2,086	–
Total		15,542	15,542	7,034		15,764	–

Aggregated by measurement category (EUR thousand):

Measurement category as per IFRS 9	Carrying amou
AC	42,699
FVtPL	575
FLAC	13,456
n/a	2,086
Total	58,786

Amortized cost (AC)
Fair value through profit or loss (FVtPL)
Financial liabilities at amortized cost (FLAC)
Not to be classified (n/a)

			IFRS 9 carrying amount				
in EUR thousand	Measurement category as per IFRS 9	Carrying amount as of 12/31/2018	Amortized cost	Fair value through other comprehensive income	Fair value as of 12/31/2018	Fair value hierarchy level	Fair value hierarchy level
ASSETS							
Cash and cash equivalents	AC	3,709	3,709			3,709	
Trade receivables	AC	30,744	30,744			30,744	
Investment products	FVtPL	0	0			0	2
Total		34,453	34,453			34,453	
EQUITY AND LIABILITIES							
Trade payables	FLAC	6,877	6,877			6,877	
Liabilities to banks	FLAC	20,047	20,047			20,047	2
Other interest-free liabilities	FLAC	142	142			142	
Lease liabilities under IFRS 16	n/a	0	0			0	
Derivative financial liabilities	–	–	–	–	–	–	
Derivatives – without hedge accounting	FVtPL	20			20	20	
Total		27,068	27,048		20	27,068	

Aggregated by measurement category (EUR thousand):

Measurement category as per IFRS 9	Carrying amount
AC	34,453
FVtPL	20
FLAC	27,048
n/a	0
Total	**61,521**

As far as possible, the Group uses observable market data to determine the fair value of an asset or liability. Based on the inputs used in the measurement, the fair values are assigned to different levels of the fair value hierarchy:

Level 1: Quoted (unadjusted) prices on active markets for identical assets or liabilities.

Level 2: Measurement parameters other than quoted prices included within level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).

Level 3: Measurement parameters for assets or liabilities not based on observable market data.

The Group recognizes reclassifications between different levels of the fair value hierarchy as of the end of the reporting period in which the change occurred. There were no transfers between different levels of the fair value hierarchy in 2019 or the year before.

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 fair value of investment products and liabilities to banks was determined by discounting future cash flows with risk-adjusted interest rates corresponding to the respective term.

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

In EUR thousand		**» 2019**	2018
Amortized cost	(AC)	–135	–653
Fair value through profit or loss	(FVtPL)	–384	–12
Financial liabilities at amortized cost	(FLAC)	–518	–855
		–1,037	–1,520

The net gains and losses from financial instruments measured at amortized cost include changes in loss allowances, gains and losses on disposal, payments received, reversals of write-downs on loans and receivables as well as currency translation.

Hedging policy and risk management

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 IFRS 9 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. As of 31 December 2019, there were no hedge relationships with hedge accounting.

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 specialist 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 risk

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. 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 hedged only 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 issued in euros. Sales in North America are invoiced in USD. Cash flows in other foreign currencies are required in some cases. As far as possible, the Group pays for its procurement in USD, thus applying a natural hedge philosophy. In net terms, however, this does give rise to USD cash inflows. Foreign currency forward contracts are used to hedge net 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 almost entirely offset each other 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 effects.

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

Based on a net foreign currency exposure of EUR –2,465 thousand, if the euro had risen by 10% against the US dollar, earnings before income taxes would have been increased by EUR 199 thousand. A 10% decline in the euro would have reduced earnings (before income taxes) by EUR 244 thousand.

Interest rate risk

Variable interest rates give rise to cash flow risks that affect cash and cash equivalents. Based on a risk exposure of EUR 31,343 thousand, an increase in interest rates by 25 basis points yields a gain of EUR 44 thousand, while a decrease in interest rates by 25 basis points yields a loss of EUR 22 thousand. Given low interest rates, the sensitivities were determined using a hypothetical change by 25 basis points. The low interest rate sensitivities relative to cash and cash equivalents largely stem from low-interest cash and cash equivalents.

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

Liquidity risk

The liquidity risk concerns the risk of not being able to satisfy existing or future payment obligations due to a lack of cash. This risk is managed centrally 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 pool 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. In the event of a significant financing requirement, 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.

FINANCIAL LIABILITIES MATURITY BREAKDOWN

in EUR thousand		**» Carrying amount as of 12/31**	Up to 1 year	Between 1 and 5 years	More than 5 years
Trade payables	2019	5,643	5,639	4	0
	2018	6,877	6,877	0	0
Financial obligations and loans	2019	6,812	1,966	4,846	0
	2018	20,047	2,603	17,199	245
Other interest-free liabilities	2019	1,028	1,028	0	0
	2018	142	142	0	0
Lease liabilities under IFRS 16	2019	2,086	0	2,086	0
	2018	0	0	0	0
Derivative financial instruments	2019	0	0	0	0
	2018	20	20	0	0

Credit risk

The LPKF Group's operating business and some of its financing activities expose it to default risks. Outstanding receivables from the operating business are monitored on an ongoing, decentralized basis by the segments and subsidiaries. Default risks are accounted for by appropriate loss allowances. There are no significant counterparty credit risks by customer group or geographical region. Loans and receivables are hedged in part through credit insurance or bank guarantees (LC).

The maximum default risk for financial assets normally corresponds to the carrying amount. There is also EUR 272 thousand in payment commitments from banks (letters of credit) to cover trade receivables. This leaves solely the credit risk of the collateral provider. In addition, EUR 8,612 thousand in trade receivables is securitized through credit default insurance. 72% of the trade receivables are securitized and 28% are not. The maximum default risk for trade receivables is therefore 28% of the carrying amount.

Impairment model for financial assets

Impairment is based on the expected loss model. The amount of the impairment is measured as the difference between the carrying amount of a financial asset and the present value of the estimated future cash flows, discounted at the effective interest rate. Impairment losses are recognized directly in profit or loss under respective impairment loss items. The expected credit losses are adjusted as of the end of each reporting period to reflect changes in the credit risk since initial recognition of the respective instrument.

General approach

The general approach to the impairment model as per IFRS 9 contains three stages:

Stage 1 (low default risk)

At the date of addition, all financial instruments are categorized as stage 1. An exception to this is financial instruments that are already impaired at the date of addition. These financial instruments do not exist at LPKF. The loss allowance is based on the value of the expected credit losses over the next 12 months. The expected credit risk is based on historic and current information as well as future-oriented estimates.

Stage 2 (significant default risk)

If a stage 1 financial instrument is subject to a significant increase in its credit risk, then it is reclassified as stage 2. As long as there is no rebuttable presumption, contractually agreed payments that are more than 30 days past due constitute a significant increase in credit risk. The loss allowance is based on the value of the expected losses over the remaining maturity. The expected credit risk is based on historic default rates and is adjusted by individual expectations.

Stage 3 (credit impairment)

A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset occur. Indicators of this might be significant financial difficulties on the part of the debtor or an enhanced probability that the debtor will become bankrupt. If there are no other indications in the relevant case, the LPKF Group assumes that a financial asset is credit-impaired when it is more than 90 days past due.

Depreciation, amortization and write-downs

The LPKF Group assumes that a financial asset has defaulted if the receivable is unrecoverable, e.g. if the given debtor is bankrupt. The gross carrying amount of a defaulted financial asset is subsequently written down when the Group has no reasonable expectations of recovering the financial asset in its entirety or a portion thereof.

Within the LPKF Group, the general approach to the impairment model as per IFRS 9 is used for cash and cash equivalents and other financial assets. The losses that may be incurred as a result are immaterial to the LPKF Group.

Simplified approach

In accordance with IFRS 9, a simplified approach is used for current trade receivables. Accordingly, the receivables are to be assigned to stage 2 on initial recognition and an assessment of a significant increase in credit risk is not required.

The LPKF Group uses an impairment matrix to determine the expected losses for current trade receivables. The default rates used in this matrix are based on historic default rates and are adjusted by future-oriented estimates. The historic default rates are updated and the future-oriented estimates are reanalyzed on each reporting date. Currently, LPKF is dealing with an economic downturn in Asia, its most important sales market. Furthermore, there is a risk discount that increases the applied default risk.

The time bands used in the impairment matrix to determine the expected losses are as follows:

Days past due	Gross value of receivables in EUR	Credit-impaired
Current	9,407	No
1–30 days past due	1,104	No
31–60 days past due	498	No
61–90 days past due	213	No
More than 90 days past due	733	Yes
Total	11,955	

The changes in loss allowances on trade receivables were as follows in the reporting year:

Loss allowances recognized on trade receivables and loans in EUR thousand	**» 2019**	2018
As of 1 Jan.	337	302
+/− Stage 2 loss allowances	−25	15
+/− Stage 3 loss allowances	317	26
− Depreciation, amortization and write-downs	0	6
As of 12/31	629	337

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 provide other interested parties with services due to them. Maintaining 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 90,789 thousand and borrowings of EUR 40,340 thousand as of 31 December 2019.

26. DISCLOSURES PURSUANT TO SECTION 315E OF THE GERMAN COMMERCIAL CODE

The requirements of Section 315e of the 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:

Dr. Goetz M. Bendele	Strategy, Sales, Human Resources, Marketing
Christian Witt	Finance, Investor Relations, Compliance and Legal Affairs

The remuneration of the Management Board is performance-based and consists of a fixed component and variable, performance-based salary 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 the 2019 financial year were paid total remuneration of EUR 477 thousand (2018: EUR 1,296 thousand). This consisted entirely (2018: EUR 932 thousand) of fixed remuneration components, including incidental benefits that were fully paid out in the 2019 reporting year. Variable remuneration components were not paid out in the reporting year (2018: EUR 366 thousand).

Expenses relating to the setting-up of provisions for share-based payments as defined in IAS 24.17 (e) of EUR 220 thousand were also recognized for members of the Management Board in the financial year , an amount of EUR 440 thousand was set aside for the 2019 bonus. The fair value of the share-based remuneration at the allotment date was EUR 15 thousand.

Commitments to members of the Management Board upon departure
A post-contractual non-competition clause for a period of twelve months after departure is in place for members of the Management Board irrespective of whether the departure was ordinary or extraordinary.

If the appointment of a member of the Management Board ends early on account of his death while in office, the fixed monthly remuneration shall still be paid to his heirs for a period of three months.

The company did not make any performance-based pension commitments to the current members of its Management Board in the reporting period.

Total remuneration of former members of the Management Board
Provisions were recognized for EUR 617 thousand (previous year: EUR 573 thousand) in pension commitments (pension plan, disability pension and widow's pension) to 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 2019.

Non-competition payments totaling EUR 175 thousand were also paid to two former members of the Management Board. In addition, in April 2019 departing Management Board members received their bonuses for the past financial year. The amount totaled EUR 297 thousand.

28. DISCLOSURES ON SUPERVISORY BOARD REMUNERATION

Dr. Markus Peters Chairman	Head of Finance and Investment of German Technology AG, Hanover, Germany
Dr. Dirk Rothweiler Deputy Chairman	CEO of First Sensor AG, Berlin, Germany
Prof. Dr.-Ing. Erich Barke Deputy Chairman from 1 June 2018 until 6 June 2019	Retired Professor at Leibniz University, Hannover formerly: President of Leibniz University, Hannover Member of the supervisory boards of the following companies: Esso Deutschland GmbH, Hamburg ExxonMobil Central Europe Holding GmbH, Hamburg hannoverimpuls GmbH, Hanover
Prof. Dr.-Ing. Ludger Overmeyer	Professor and head of the Institute of Transport and Automation Technology at Leibniz University Hanover, Germany Member of the Supervisory Board of Viscom AG, Hanover, Germany

Each member of the Supervisory Board receives fixed basic remuneration for each full financial year of membership on the Supervisory Board, which 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 on 2 June 2016, the fixed basic remuneration of each member of the Supervisory Board was set at EUR 32 thousand effective from 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 out in the remuneration report, which is part of the Group management report.

29. AUDITOR FEES INVOICED DURING THE FINANCIAL YEAR

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:

in EUR thousand	**» 2019**	2018
Audits of financial statements	155	140
of which prior-period	0	8
other assurance services	0	0
Other services	26	18
	181	158

30. EVENTS AFTER THE REPORTING PERIOD

The spread of the coronavirus is an event of particular significance which occurred after the end of the 2019 financial year and is not included in the income statement for 2019 or in the balance sheet as at 31 December 2019. Due to the existence of an unusually high level of uncertainty, we are currently unable to conclusively assess the associated economic consequences for our company.

Beyond this, no events occurred after the end of the 2019 financial year that are of particular significance for the Group's net assets, financial position and results of operations.

Garbsen, Germany, 20 March 2020

LPKF Laser & Electronics Aktiengesellschaft

The Management Board

DR. GOETZ M. BENDELE

CHRISTIAN WITT

RESPONSIBILITY STATEMENT (BALANCE SHEET OATH)

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 net assets, financial position and results of operations 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, 24 March 2020

LPKF Laser & Electronics Aktiengesellschaft

The Management Board

DR. GOETZ M. BENDELE

CHRISTIAN WITT

INDEPENDENT AUDITOR'S REPORT
TO LPKF LASER & ELECTRONICS AKTIENGESELLSCHAFT, GARBSEN

REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND OF THE COMBINED MANAGEMENT REPORT

OPINIONS
We have audited the consolidated financial statements of LPKF Laser & Electronics Aktiengesellschaft, Garbsen and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2019, and the consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the financial year from 1 January 2019 to 31 December 2019, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the combined management report of LPKF Laser & Electronics Aktiengesellschaft for the financial year from 1 January 2019 to 31 December 2019. In accordance with German legal requirements we have not audited the content of those components of the combined 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) HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at 31 December 2019, and of its financial performance for the financial year from 1 January 2019 to 31 December 2019, and

- the accompanying combined management report as a whole provides an appropriate view of the Group's position. In all material respects, this combined 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 opinion on the combined management report does not cover the content of those components of the combined management report specified in the "Other Information" section of the auditor's report.

Pursuant to Section 322 (3) sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the combined management report.

BASIS FOR THE OPINIONS
We conducted our audit of the consolidated financial statements and of the combined management report in accordance with Section 317 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 [Institute of Public Auditors in Germany] (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 Combined 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 evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the combined 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 2019 to 31 December 2019. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, we do not provide a separate opinion on these matters.

Capitalization of development costs
Please refer to section G.2 in the notes to the consolidated financial statements for information on capitalized development costs.

THE RISK FOR THE FINANCIAL STATEMENTS
Capitalized development costs amounted to EUR 14.8 million as of 31 December 2019, representing 11.3% of total assets.

The development costs relate to development projects for prototypes. Development costs are capitalized if the requirements of IAS 38 are met. Research costs are recorded as expenses.

The examination of the capitalization requirements under IAS 38 for projects under development is complex and based on a number of discretionary assumptions. These include, in particular, the forecast cash flows, technical feasibility, the discount rates used and the allocation of costs by origin. Against this background, there is a risk for the financial statements that an intangible asset has been recognized although the requirements have not been met

OUR APPROACH TO THE AUDIT
We have gained an understanding of the company's process of capitalizing development costs through explanations provided by accounting staff and an appreciation of the Group's accounting guidelines. We have examined the control implemented in this process with regard to the fulfilment of the capitalization requirements for effectiveness. The documentation on which the capitalized development work is based was evaluated on a random basis. For the projects in the sample, we examined the recognition criteria in accordance with IAS 38 and verified the valuation on the basis of the attributable costs. To this end, we discussed the expected cash flows with the persons responsible for planning. By reconciling them with other internally available forecasts, we ensured their internal consistency. We have reconstructed the discount rate on which the valuation is based.

OUR CONCLUSIONS
The capitalization of development work is in accordance with the provisions of IAS 38 and the assumptions and parameters used by the company are appropriate.

OTHER INFORMATION
The Management board respectively supervisory board are responsible for the other information. The other information comprises the following components of the combined management report, whose content was not audited:

- the Group Corporate Governance Statement, which is included in Section 7 of the Combined Management Report, and

- the separate non-financial consolidated financial statements expected to be available to us after the date of this audit opinion, which are referred to in the combined management report.

The other Information includes also the remaining parts of the annual report.

The other information does not include the consolidated financial statements, the audited content of the combined management report and our associated audit opinion.

Our opinions on the consolidated financial statements and on the combined management report do not cover the other information, and consequently we do not express an 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 combined management report information audited for content or our knowledge obtained in the audit, or

- otherwise appears to be materially misstated.

RESPONSIBILITIES OF MANAGEMENT AND THE SUPERVISORY BOARD FOR THE CONSOLIDATED FINANCIAL STATEMENTS AND THE COMBINED MANAGEMENT REPORT

Management is 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) 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, management is 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, management is 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, management is responsible for the preparation of the combined 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, management is responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a combined 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 combined 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 combined management report.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND OF THE COMBINED 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 combined 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 opinions on the consolidated financial statements and on the combined management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 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 combined 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 combined 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 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 combined management report in order to plan audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.

- Evaluate the appropriateness of accounting policies used by management and the reasonableness of estimates made by management and related disclosures.

- Conclude on the appropriateness of management's 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 combined management report or, if such disclosures are inadequate, to modify our respective 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 IFRS as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the combined management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our opinions.

- Evaluate the consistency of the combined management report with the consolidated financial statements, its conformity with law, and the view of the Group's position it provides.

- Perform audit procedures on the prospective information presented by management in the combined management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by management 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 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 declare that the 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).

In addition to the audit of the financial statements, we have provided the following services for the Group companies that were not disclosed in the consolidated financial statements or the combined management report:

In addition to the audit of the consolidated financial statements and the annual financial statements, we conducted various audits of the annual financial statements of subsidiaries. We have audited the separate non-financial consolidated report for the 2018 financial year and provided other certification services. Furthermore, we conducted forensic investigations at a subsidiary.

GERMAN PUBLIC AUDITOR RESPONSIBLE FOR THE ENGAGEMENT

The German Public Auditor responsible for the engagement is Alexander Eichstaedt.

Hannover, 23 March 2020

KPMG AG
Wirtschaftsprüfungsgesellschaft

[Original German version signed by:]

Eichstaedt	Prenzler
Wirtschaftsprüfer	Wirtschaftsprüferin
[German Public Auditor]	[German Public Auditor]

INCOME STATEMENT
FROM 1 JANUARY TO 31 DECEMBER 2019

in EUR thousand	2019	2018
Revenue	60,032	50,387
Change in inventories of finished and unfinished products	–500	60
Other own work capitalized	141	0
Other operating income	4,343	2,193
	64,016	52,640
Cost of materials		
Costs for raw, auxiliary and operating materials and for purchased goods	25,056	23,583
Staff costs		
Wages and salaries	15,989	14,461
Social security costs and pension costs (of which pension costs: EUR 107 thousand; previous year: EUR 115 thousand)	2,626	2,267
Depreciation, amortization and impairment losses		
Depreciation and amortization of non-current assets and property, plant and equipment	2,810	2,723
Depreciation of current assets, in as far as it exceeds usual depreciation	0	0
Other operating expenses	16,337	14,310
	62,818	57,344
Income from investments (of which from affiliated companies: EUR 4,670 thousand; previous year: EUR 1,457 thousand)	4,670	1,457
Other interest and similar income (of which from affiliated companies: EUR 91 thousand; previous year: EUR 189 thousand)	101	184
Income from profit transfers	10,533	8,060
Costs of loss absorption	0	1,410
Depreciation of financial assets	50	0
Interest and similar expenses	351	678
Taxes on income and earnings	3,366	–3449
Earnings after tax	12,735	6,406
Other taxes	42	43
Net profit	**12,693**	6,364
Retained earnings from the previous year	6,159	–205
Retained profit	**18,852**	6,159

BALANCE SHEET
AS OF 31 DECEMBER 2019

ASSETS

in EUR thousand	**2019**	2018
NON-CURRENT ASSETS		
Intangible assets		
Software	466	250
Usage rights	20	24
	486	774
Property, plant and equipment		
Land, similar rights and buildings	16,189	16,867
Technical equipment	1,597	1,895
Other equipment, operating and office equipment	1,952	2,373
Advance payments made on assets under construction	0	539
	20,778	21,135
Financial assets		
Shares in affiliated companies	15,582	15,658
	15,582	15,658
	36,346	37,567
CURRENT ASSETS		
Inventories		
Raw, auxiliary and operating materials	4,658	5,801
Unfinished products	1,067	1,105
Finished products and goods	2,080	2,396
Advance payments	18	12
	7,823	9,314
Receivables and other assets		
Trade receivables (of which with remaining maturities of more than one year: EUR 290 thousand; previous year: EUR 200 thousand)	3,326	9,204
Receivables from affiliated companies	15,721	24,293
Other assets	446	1,620
	19,493	35,117
Cash on hand, bank balances and checks	22,179	789
	54,495	45,220
Deferred income	**235**	340
Deferred taxes	**5,632**	7,816
Capitalized differences from asset offsetting	**229**	156
	96,937	91,099

EQUITY AND LIABILITIES

in EUR thousand	2019	2018
EQUITY		
Subscribed capital	24,497	24,497
Capital reserves	16,160	16,160
Retained earnings		
Statutory reserve	41	41
Other retained earnings	11,200	11,200
	11,241	11,241
Retained profit	18,852	6,159
	70,750	58,057
PROVISIONS		
Pension provisions	0	0
Tax provisions	399	193
Other provisions	3,136	2,677
	3,535	2,870
LIABILITIES		
Liabilities to banks	3,173	13,599
Advances received on orders	626	1,734
Trade payables	3,170	3,249
Liabilities to affiliated companies	12,977	10,516
Other liabilities	626	642
(of which taxes: EUR 210 thousand; previous year: EUR 310 thousand)		
(of which in conjunction with social security: EUR 14 thousand; previous year: EUR 15 thousand)		
	20,572	29,740
Accruals and deferred income	**1,678**	0
Deferred taxes	**402**	432
	96,937	91,099

GLOSSARY
OF SPECIALIST TERMS

CAPITAL EMPLOYED
Capital employed calculated as fixed assets and working capital.

CDTE (CADMIUMTELLURID)
A highly efficient semiconductor, used in the manufacture of thin glass solar modules, an alternative to CIGS solar cells.

CIGS
(ALSO KNOWN AS CIGSSE OR CIS)
CIGS is a thin-film technology for solar modules and is an abbreviation for the following elements used: copper, indium, gallium, sulfur and selenium.

EBIT
Earnings before interest and taxes.

EBITDA
Earnings before interest, taxes, depreciation and amortization.

EBIT MARGIN
Ratio of earnings before interest and taxes to revenue.

FTE (FULL-TIME-EQUIVALENT)
FTE represents the value that a full-time employee produces in an equivalent period of time.

LDS PROCESS
(LASER DIRECT STRUCTURING)
A laser-based manufacturing process for three-dimensional plastic circuit carriers (MIDs) that can also perform mechanical functions.

LEVERAGE RATIO
Debt ratio (net debt/EBITDA)

LIDE (LASER INDUCED DEEP ETCHING)
Process for precision machining on glass. LIDE enables the production of extremely precise holes and structures at high speed in glass and includes the TGV process.

LTP PROCESS
(LASER TRANSFER PRINTING)
A process for digital printing of functional pastes as an alternative to screen printing.

MEMS
(MICRO-ELECTROMECHANICAL SYSTEMS)
MEMS are tiny components that combine logic elements and micromechanical structures in a single chip. They can process mechanical and electrical information. They can be sensors, for example.

NET INDEBTEDNESS
Long-term and current liabilities to banks, less cash and cash equivalents.

PCB
Printed circuit board

RAPID PROTOTYPING
A process for the chemical manufacture of near-production-quality printed circuit board prototypes in laboratories.

ROCE
(RETURN ON CAPITAL EMPLOYED)
The return on capital employed is calculated as EBIT divided by capital employed.

STENCIL LASER
A laser system used for cutting fine, high-precision openings in stainless steel stencils. Stencils are used to print solder paste precisely onto printed circuit boards.

TGV PROCESS (THROUGH GLASS VIA)
A laser process for putting ultra-fine holes into glass (see LIDE).

THIN-FILM SOLAR MODULES
Thin-film solar modules are created by coating glass panels or films with extremely thin layers. Each layer is divided into strips by the laser, so that a series connection of cells is realized in the finished module.

WACC
In the semiconductor industry, photovoltaics industry and the world of micromechanics, a wafer is a circular or square disc, about 1 mm thick, which is the substrate on which electronic or micromechanical components or photoelectric layers are manufactured using different technical processes.

VALUE ADDED
Value added is calculated as follows: (ROCE-WACC) *capital employed

FINANCIAL CALENDAR

03/24/2020
Publication of 2019 annual financial report
(Online analyst conference)

05/05/2020
Publication of the 3-month financial report 2020

06/04/2020
Annual General Meeting

08/05/2020
Publication of 2019 half-year financial report 2020

10/29/2020
Publication of the 9-month financial report 2020

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