Annual Report 1999

LPKF Laser & Electronics AG

Key Group figures

	1999	1998	1997
Turnover (in DM millions)	38,6	31,9	29,6
EBIT	9,5	8,1	8,0
Cash-flow	7,6	5,4	6,4
Investments	5,6	2,5	2,3
Earnings per share (in DM millions)	2,10	1,90	1,89
Turnover according to countries (in DM millions)			
Domestic	8,5	8,4	7,1
Rest of Europe	8,1	8,3	6,7
North America	11,4	7,6	7,3
Asia	10,1	7,3	7,1
Others	0,2	0,3	0,3
Turnover according to products (in DM millions)			
Laser	17,2	15,6	12,8
Rapid Prototyping	17,1	13,4	14,1
Stencils	3,4	2,1	1,9
Others	0,9	0,8	0,8
Staff	122	92	85

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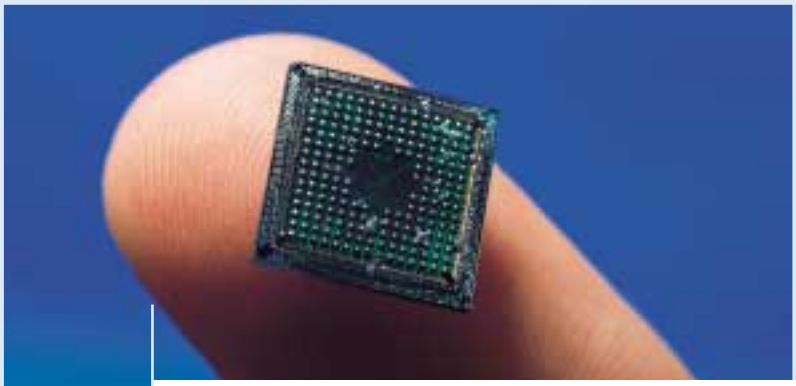
LPKF director Bernd Hackmann

Opening remarks by the Chairman of the Directors' Board



LPKF Chairman of the Directors' Board Bernd Hildebrandt

Dear shareholders,

1999 was the first „normal" financial year of LPKF Laser & Electronics as a stock corporation. It demonstrated that you our shareholders, and us, the board of directors, are going hand in hand on a successful journey: the rather conservative prognoses for sales and earnings came in almost on the dot. The increase in our share price richly rewarded this policy – to the great satisfaction of the shareholders. The board of directors respects the high expectations that this places on its activities and feels even more strongly bound to honour the trust graphically demonstrated in this way.

The numerous discussions and meetings we have held in recent months with investors and analysts created two main impressions:

On the one hand, there is clearly a great deal of interest in our company – interest which is continuing to grow. Experts obviously have enormous faith in our potential. On the other hand, there is also a greater level of understanding of what our high-tech products are, and what they can achieve.

This confirms to me that the priority I have set on making our products and strategies more transparent to our shareholders and the analysts is bearing fruit. We are therefore also using this annual report to present and explain our innovative ground-breaking products.

Naturally, we are benefiting from today's miniaturisation trend. The current boom in mobile phones – whose end is nowhere in sight because of innovations including SMS and WAP applications – has given a considerable boost to our business. The most important success criterion for our company is to be in the market at the right time with the right products. We have succeeded in fulfilling this maxim.

Because product cycles are continuing to become shorter and shorter, circuit designers – wherever they are around the world – must be able to transform their product ideas into product reality as fast as possible. Time-to-market and time-to-profit are not hollow buzz words – they are critical for the success or failure of new projects.

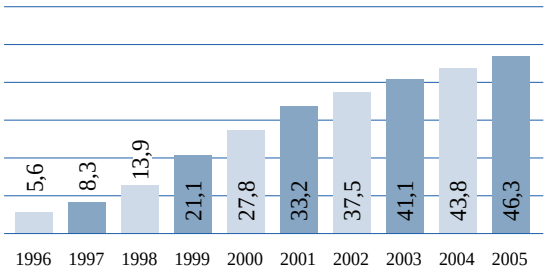
As the market leader world-wide for rapid prototyping in the electronics industry, we set the standards. In-house prototyping is increasingly becoming an absolute must for electronics designers. And this is pre-

cisely the message we are getting across in our marketing. Our products make week-long periods of waiting for prototype circuits a thing of the past. The more than 50 per cent increase in incoming orders in 1999 confirms that this message has also hit home. The potential for sales in this respect are therefore enormous. And since we are the only manufacturer of laser technology for ultra-fine conductor path prototypes, our success seems pre-programmed.

The assembly of chips on circuit boards requires print stencils to ensure extremely precise transfer of the solder to the circuit board. This is already feasible, and in the near future, will be indispensable for the whole electronic production process. This is another area where LPKF sets the standards with its laser-cut stencils. The electronics industry throughout the world knows that this technology dramatically reduces the number of rejects during circuit board assembly. This brings its own benefits for the microelectronics growth markets such as telecommunications, computing, medical technology and control engineering.

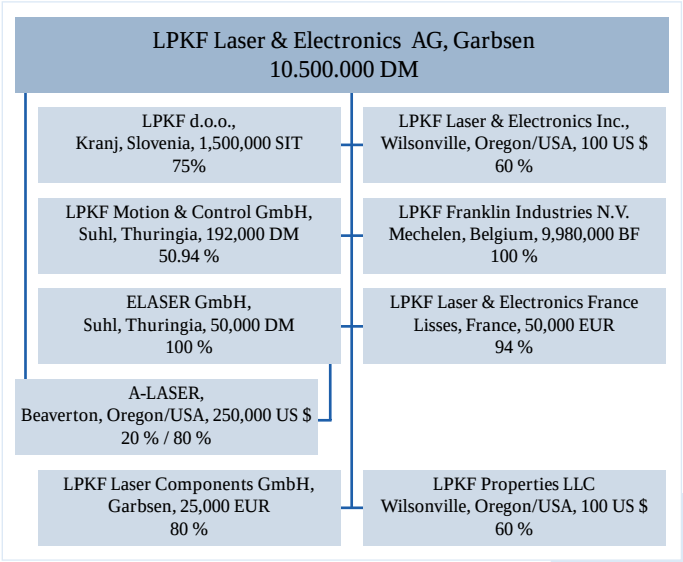
Naturally, extremely high levels of precision are also demanded by the printed circuit board itself. It must be able to accommodate ever smaller electronic compo-

Increase in the number of mobile phone users in Germany in millions
(Source: Plica Marktforschung Analyse, Munich)



nents. An enormous amount of technical effort is being expended by other companies in searching for compromise solutions for the production of chemically etched conductor path structures between 50 µm and 100 µm with low levels of rejects.

The new laser-structured printed board methods developed by LPKF, and already on the market, have set new technical standards.



Naturally, a certain amount of time is required before a completely new technique can establish itself in the market. Numerous discussions with electronics companies have, however, confirmed that we are on the right path. This is true for the currently strongly growing market for flexible printed boards, as well as later for the production of three-dimensional conductor path structures – another area where we are also right at the forefront.

One thing is certain: LPKF has never and will never rest on its laurels. Our strategy is to continuously set new technological standards, and to become and remain market leader. The IPO has enabled us to speed up the realisation of our objectives by investing in production equipment and comprehensive global marketing. The foundations of our commercial activities are the „traditional“ product groups – Rapid Prototyping and StencilLaser – which boast strong growth rates. With our MicrolineLaser, we have succeeded in introducing a new technology into the field of laser-supported circuit micro-structuring whose impact on the electronics production market currently knows no bounds.

These innovative skills make us a highly sought after cooperation partner. The first technical-strategic partnership contracts have already been concluded: with Mania AG and Atotech Deutschland, a subsidiary of the major French Elf Aquitaine industrial group. More contracts are under negotiation. The business is and continues to be very exciting.

Hannover, 23 March 2000

Bernd Hildebrandt

Management report for the LPKF Group for the 1999 financial year

Description of the course of the business

Development of the sector and the overall economy

The world-wide market volume for the production of electronic hardware will exceed the US $ 1 trillion barrier for the first time in 2000. The figure in 1999 was US $ 980 billion. Over the last 40 years, this corresponds to an average annual growth rate of more than 11 %. According to VDMA, this growth rate will mean a production volume of approx. 2 trillion dollars by 2005.

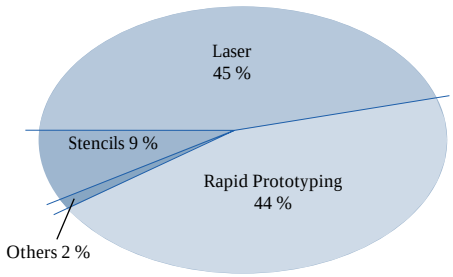
The global printed circuit board market can be used as an indicator of LPKF's potential. This has grown world-wide by an average of 6 – 8 per cent per year. The German market has failed to keep up with this development. Its growth in 1998 (the latest data available) was only 2.8 per cent according to ZVEI. The main thrust of this growth will continue to be telecommunications, data processing, and automobile electronics.

The trend is increasingly shifting towards production technologies for new semi-conductor generations. The proportion of CSP-type chips, which currently lies at around 2 per cent, will grow rapidly to account for 20 per cent by 2005. LPKF MicrolineLaser technology in particular will benefit from this development.

Innovation cycles in the electronics industry are now around two years, i.e. the product becomes obsolete over this period. These ever shorter periods mean stronger growth in the number of new developments and thus good potential business for LPKF in Rapid Prototyping.

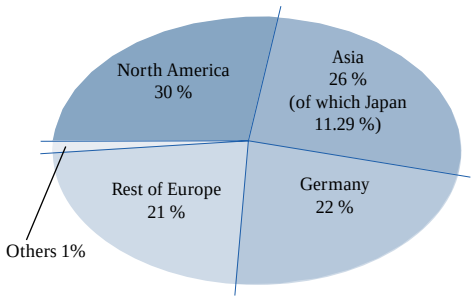
Turnover development

Turnover in Rapid Prototyping, and in particular the circuit board plotters, grew by a healthy 26.8 per cent in the reporting period. A new world-wide standard was set with the new ProtoMat C 30 model which was launched in April/May.



The proceeds in the StencilLaser segment increased by 9.1 per cent, including the supply of spare parts and services. The new hardware sales were the same level as the previous year. The sale of polymer StencilLasers had not begun in 1999. However, polymer stencils were sold by the Elaser subsidiary on the basis of a service contract and had a positive effect on the market launch. The first sales are expected in 2000.

The planned launch of the MicrolineLaser was postponed from the fourth quarter 1999 to the first quarter of the new financial year. A sales contract agreed verbally in December within the medical sector was confirmed in writing in January 2000. Turnover per country was divided up as follows:



The turnover distribution per country is well balanced and represents a good risk distribution. There is no particular dependency on any country or major company.

Production and procurement

The production of circuit board plotters and accessories, as well as laser sources in the reported financial year continued at LPKF Slovenia d.o.o./Kranj at a much higher standard of quality. Some of the technical improvements and new designs were realised on site. Procurement prices have remained largely stable. Single components are largely procured direct by LPKF d.o.o. Final control and final assembly remains the responsibility of LPKF Laser & Electronics AG in Garbsen. Standardisation according to ISO is planned for 2000. There are currently no other definable risks with respect to production and procurement.

Investments

The construction of new buildings at the head office in Garbsen was begun in autumn 1999 (total volume approx. DM 4.5 million) with the aim of completing the work by September 2000. A MicrolineLaser system was also completed and is currently used for producing samples and marketing purposes. The investment totalled DM 0.4 million.

DM 1.06 million was invested in hardware for research and development at the Garbsen headquarters and at the Lage technical college in Lippe/Lemgo, our research and development partner. Investments are planned in the 2000 financial year for laser system research and development, and in particular the 3D-MID laser. In addition, investments are also planned for quality control.

A new office building was constructed in the USA for LPKF Laser & Electronics Inc. to provide the space required to meet the increase in turnover. The office building belongs to LPKF Properties LLC in which LPKF Laser & Electronics AG has a 60 per cent share.

Elaser GmbH in Germany has acquired an 80 per cent stake in A-Laser Inc. This secures the introduction of new production processes into the USA. A-Laser's main responsibilities in 2000 are the introduction of polymer stencils into the US and the sale of these systems via LPKF AG.

Financing measures

All of the R&D costs and investments were paid for by the funds generated by the IPO at the end of 1998. The acquisition of stakes in companies as well as capital investments for new start-ups were also financed by this injection of capital. The companies involved here are

A-Laser/Oregon, LPKF Motion & Control/Thüringen, LPKF Franklin/Belgium, as well as the start-up, LPKF France S.A.R.L./Paris. The funds were also used to pay back all of the medium and long-term loans.

The new building in Garbsen is externally-financed on the basis of a long-term loan.

Personnel

The number of staff increased from 92 to 122 in the 1999 financial year. Most of the new staff are involved in production, sales, engineering or administration. There is still no problem in recruiting good technically trained staff.

Report on the affiliated companies

Elaser GmbH

Turnover in 1999 was at a similar level to 1998. An increase in turnover is expected in 2000 on the back of the polymer stencils. Elaser GmbH acquired an 80 per cent share in A-Laser Inc. A move which reflects its strategic importance. The LPKF Group now holds 100 per cent of the company.

A-Laser Inc.

The company is scheduled to introduce new products and production methods into the US with its end customer service. Its main priority in 2000 is the introduction of polymer stencils into the US.

LPKF Motion & Control GmbH

The stake was increased to 51 per cent. The company is well on target in terms of production. Development has been intensified by employing new staff. New control systems and drives for the co-operation agreements with Atotech and Mania are currently being worked on.

LPKF d.o.o.

The quality of the circuit board plotter systems delivered by LPKF d.o.o. was considerably improved on the basis of new designs generated by the Slovenian company. These improvements simultaneously reduced the production costs of the new series. This drop in price will be passed on to the end users at the same time as maintaining the existing margin. This will further support the distribution of the products world-wide.

The production of laser sources for the StencilLaser was successfully continued. In addition, new laser components are also being developed in Slovenia.

When the company was established in 1994, one of the factors in favour of the location was the favourable tax regime. However, these tax advantages have been retrospectively annuled, and the company was issued with a demand for the payment of back taxes. LPKF considers this demand to be unjustified and has instigated legal proceedings.

LPKF Laser Components GmbH

This company was established to support the transfer of laser technology expertise in collaboration with a Russian partner.

LPKF Laser & Electronics Inc.

The company acts as a distribution and service partner for the Group in North America. It strongly boosted the sales of Rapid Prototyping in particular. A former

employee of LPKF Laser & Electronics AG has been running the company as general manager since summer 1999.

LPKF Properties LLC

The business purpose of this recently established company is to provide LPKF Laser & Electronics Inc. with real estate. It owns the new company offices purchased in 1999 which are currently used by LPKF Laser & Electronics Inc.

LPKF France S.A.R.L.

Established in 1999, this company will initially be primarily involved in the distribution of circuit board plotter systems in France. Business has already begun. Michel Douezy, managing director, is already familiar with our products, having previously distributed them in France as a sub-agent.

LPKF Franklin Industries N.V.

The company finished the financial year with a loss. The remaining shares in the company were acquired to speed up re-structuring and to push the company back into profit. These measures will not take effect until 2000.

Research and development

Research and development is pushing ahead intensively with the structuring projects for the ultra-fine conductor path industry involving microline system technology. Market launch is prognosed for 2000. The 3D-MID research project was successfully wound up with a presentation at LPKF AG headquarters on 19 July 1999 attended by the Premier of Niedersachsen and the German Minister of Education and Research, along with all of the project partners – 18 companies and 4 university departments. The project resulted in the development of a 3D laser system (including controls) with 8 axes for the structuring of three-dimensional housing components. The most important outcome of the project is the development of a laser-activatable thermoplastic material for the additive – and therefore pro-environment – selective metal plating of plastics such as polypropylene.

This was demonstrated by a pilot plant for the production of injection moulded granulate. The current production capacity is around 40 tons per year. This capacity is adequate to provide samples to interested companies, as well as for the production of medium-sized series of 3D-MIDs.

The transfer of the R&D results generated so far to high temperature thermoplastics should be possible from 1 October 2000 as part of the follow-up „MECHATRONIK“ project funded by the German Ministry of Education and Research. In addition, work will also be carried out on further developing the 3D-MID laser system for ultra-fine conductor path structuring.

Development work is also being carried out on laser systems for the production of polymer stencils and for the processing of flex circuits.

The trend towards electronic circuit miniaturisation, and thus the utilisation of high-precision laser systems,

moved ahead even faster in the reported financial year than LPKF had previously forecast. The investment in development in the last four to five years will therefore be paid back at increasingly high levels in the near future.

A very high market acceptance of the flex and 3D laser technologies which have been developed is predicted on the basis of the demand situation in the printed circuit board sector. A certain time lag may also be involved here which could have an impact on the start of sales of the Microline and 3D laser systems.

Dr. Jörg Kickelhain, LPKF director

Risk management system / Y2K conversion / conversion to the Euro

The business environment in which our company operates is characterised by increasing market globalisation, a more dynamic competitive situation, as well as the rising complexity of the technologies involved. The „Law on control and transparency in business“ (KonTraG) is intended to improve the legal basis for stock corporation risk management systems and internal control systems.

The establishment of a more efficient and forward-looking risk management structure is an important task for LPKF Laser & Electronics AG, and one which will add value. The primary objective is not the avoidance of all risks, but to identify and evaluate risks. Risk analysis forms the basis for the development of active control within a global risk strategy.

The existing instruments will be continuously improved and reconfigured to identify and control risks.

LPKF Laser & Electronics AG appreciated the complexity and significance of the Y2K problem at an early stage and systematically tackled the problems involved ahead of time. As a result, no complications arose with its products or with its suppliers.

The creation of the European Economic and Currency Union on 1 January 1999, and the introduction of the Euro as the common currency, are important steps on the way to realising a common European market. At LPKF, it has been possible to handle orders in Euros since the second quarter of 1999. The conversion of the Group currency to Euros took place on 1 January 2000.

Business report

Business in 1999 ran according to plan overall and can be described as positive. Important factors for the course of our business in future are the co-operation agreements concluded in December 1999 with Atotech GmbH/Berlin and Mania AG/Weilrod. These co-operation agreements will lead to the development of new laser systems which are forecast to have a strong impact on business development in the coming years.

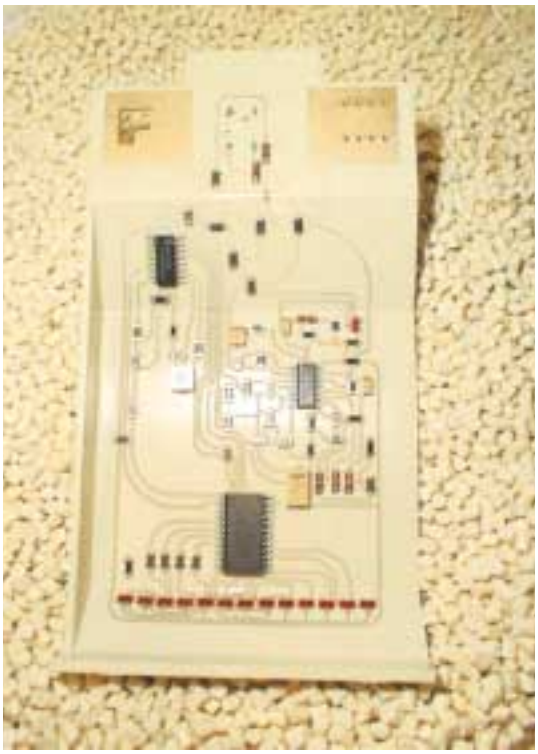
The company's asset and financial situation is excellent. It provides us with the flexibility to push ahead with the planned R&D projects and market launches. The expansion of our service network and other planned investments can also be financed from our own resources. There are no current plans for any capital increases. These would only be necessary from today's point of view in the light of major acquisitions or a rapid, unusually high growth in the laser system business.

The company's earnings situation is good and in line with the budgets.

No major risks are foreseen reflecting the further development of the asset and financial situation or the earnings situation.

Outlook

The future development of the company will be significantly characterised by highly-innovative development work. This effects technologies still at the beginning of the development pipeline, as well as systems and processes which are nearly ready for launching on the market. The technological risks and uncertainties of market acceptance discussed above go hand in hand with the enormous opportunities that the electronics growth market opens up to LPKF. Under certain circumstances, this can make it necessary to make rapid and flexible changes to the budget figures during the course of the financial year.



Significant events

A contract for a MicrolineLaser system was concluded at the end of the financial year. This marks a significant breakthrough in the launch of this new technology.

Garbsen, February 2000

LPKF Laser & Electronics AG

Bernd Hildebrandt

Bernd Hackmann

Dr. Jörg Kickelhain

Governing bodies

Shareholders' Meeting

↓

Supervisory Board

Klaus Sülter (Chairman),
Dr. Heino Büsching (Deputy Chairman),
Udo B. Hartmann

↓

Board of Directors

Bernd Hildebrandt (Chairman),
Bernd Hackmann,
Dr. Jörg Kickelhain

Report of the supervisory board

This is the second report presented by the supervisory board since the conversion of the company to a stock corporation.

Even in the period before the conversion, the members of the supervisory board co-operated closely and intensively with the management. This close collaboration has been continued and intensified even further since the conversion. The period during which our company was converted and the associated institutionalisation of the supervisory board, as laid down by corporate legislation, was paralleled by major legislative changes to the existing stipulations. One of the new regulations in this context is the KonTraG, which considerably enlarges the responsibilities of the supervisory board and the management with respect to the shareholders and employees, not to mention the public

at large. However, these changes did not in effect cause any major modification to the nature and procedures involved in carrying out our activities: the collaboration with the management was always characterised by high levels of trust and efficiency. The priority is therefore to continue to work along these lines.

The supervisory board came together for more meetings and discussions during the reported financial year than laid down by law and the memorandum and articles of association. In its frequent contacts with the management, which were initiated either at the request of the supervisory board or the board of directors, it supported the board of directors with its advice, and discussed and influenced the course of the company's business activities. In this way, the supervisory board rigorously pursues its philosophy that it and the board of directors form a de facto decision-making alliance. The decisions which have to be met by the board of directors are preceded by informal discussions with in-depth exchanges of opinion. This also enables the supervisory board to efficiently perform its supervisory and advisory functions. It also allows the business expertise of each member of the supervisory board, gathered in the course of their professional activities, to be optimally combined with the technical expertise of the board of directors. Important decisions can therefore be reached on the basis of a broad and well-founded knowledge base. The very satisfactory development of the company in the reported financial year in particular is undoubtedly due in part to the practical collaboration between the supervisory board, board of directors and the employees - in compliance with the laws and the memorandum and articles of association, and the associated rights, obligations and responsibilities.

A powerful motivating force for the supervisory board to continue its work in the above mentioned manner is the positive level of awareness of the company in its business sector, amongst trade associations, and last but not least, amongst interested members of the public. A great deal of attention is paid here to carrying out properly co-ordinated public relations work tailored to the relevant markets and market partners. The aim is to nurture the company's image and its corporate culture, as well as its appropriate adaptation to changing circumstances. This activity also demands efficient investor relations work to enable shareholders and analysts to have rapid access to information on significant activities of relevance to the company's share price.

The supervisory board has completely fulfilled its supervisory and regulatory obligations with respect to the board of directors as laid down in company law and the memorandum and articles of association. This is particularly true for the establishment of a risk management system by the board of directors.

Also in compliance with the legislation, the board of directors – with the support of the supervisory board – has also fulfilled its obligation to publicly report on the development of its business activities in accordance with the regulations and to appropriately report on any existing risks and their potential influence on the company. Another of the supervisory board's prime responsibilities in collaboration with the board of directors is to strengthen and secure the future viability of the company. This involves the company achieving the highest possible levels of flexibility to enable it to successfully react to the increasingly demanding marketplace. The value of customer-related and customer-oriented product development is well recognised and is being expanded and intensified.

The supervisory board held plenary meetings during the reported financial year on 4 February, 26 March, 11 June, 19 August and 7 December 1999. The main items on the agenda in the February and March meetings were the 1998 annual financial statements and passing the appropriate resolutions. Other priorities discussed during the meetings concerned necessary investments, strengthening our position in future markets, as well as intensifying research and development activities. One of the management's long-pursued strategies to provide a solid platform for the company's business activities, and act as a springboard for controlled growth, is collaboration with and/or the acquisition of suitable companies, or the establishment of strategic alliances when a shareholding or a take-over is either inappropriate or impossible. The additional capacity acquired in this way is used to optimally serve the market, generate production synergy effects, and to consolidate research and development work.

The supervisory board wholeheartedly supports these efforts and plays an active part in the associated decision making, both in line with its legal obligations, as well as in its position as the board of directors' most important advisory body. The supervisory board is happy to report that co-operation contracts have been concluded with substantial companies: Atotech GmbH, Berlin, a subsidiary of Elf Aquitaine, France, and Mania AG, a „New Market" company. The supervisory board supports the board of directors in prudently pursuing this policy because the need for companies to have an appropriate size and strength is important, not only in the light of the increasing integration of the European market, but also to withstand the global changes affecting all sectors of the economy. The company's policy must reflect this situation. We are able to report that we are carefully following these developments and will utilise all the opportunities available to enhance the position of our company.

The supervisory board engaged SOCIETÄTS TREUHAND GmbH, Wirtschaftsprüfungsgesellschaft, Hannover, with the task of auditing the 1999 annual financial statements. The 1999 annual financial statements were audited and received their unqualified certificate of confirmation.

The auditor took part at the meeting of the supervisory board on 23 March 2000 and reported on its audit on the annual financial statements and provided supplementary information.

The supervisory board itself examined the annual financial statements, the management report, and the proposal for the appropriation of profits and approved the annual financial statements.

The supervisory board also approved the proposal for the appropriation of the net income for the year of DM 4,253,736.88 as follows:

a) DM 1,050,000.00 to pay a dividend of DM 0.50 per share entitled to a dividend

b) to carry forward the remaining net income for the year.

The consolidated financial statements, the consolidated management report, and the report by the Group auditor were also presented and approved at the meeting attended by the board of directors and the auditor.

The supervisory board thanks the board of directors, and all of the employees for their dedication and their efforts on behalf of the company.

Hannover/Garbsen, 23 March 2000

On behalf of the supervisory board:

Klaus Sülter, Chairman

What does LPKF do?

Example: mobile phone production

3D-MID

Creating ultra-fine conductor paths directly on three-dimensional plastic components:

This LPKF laser structuring technology is the only one of its kind in the world.

Rapid Prototyping

Creating fully-functioning prototypes of an assembled printed circuit board within 24 hours:

LPKF supplies the technology and the hardware.

Chip Size Packaging

Bonding-on tiny chips using a flexible circuit carrier:

The LPKF MicrolineLaser can create structures which are five times finer than the current standard.

SMD Stencils

Using ultra-fine stencils for the highly-precise printing of circuit boards with solder:

LPKF laser-cut stencils reduce the proportion of rejects during mass production.

Electronics growth market – LPKF's home market

The electronics industry has boasted growth rates in recent years that are the envy of other industrial sectors. Electronic hardware with an annual turnover of US $ 980 billion represents the world's largest integral market. Rapid growth has not only characterised the volume of business, but also the speed of development: products on the market today are obsolete within around 2 years. The ever shortening production cycles raise the time pressure felt by the electronics designers: projects which only a few years ago took six to eight months to pass through the production pipeline, must be realised today within only a few weeks. „Time-to-market" and „time-to-profit" are now the highest priorities to be met by electronics laboratories. Given the extremely short time frames involved, it now no longer appears adequate for orders to be given to a subcontractor to produce prototype printed circuit boards or for printed circuit board assembly. The trend is therefore irreversibly towards in-house prototyping with the specification that all of the process steps from CAD development to fully assembled circuit boards can be carried out on-site.

Complete solutions for in-house prototyping

LPKF is the only company in the world to provide complete solutions for in-house prototyping. LPKF technology now makes it possible for a fully functioning prototype of, for instance, a mobile phone, to be developed and produced in a company's own electronics laboratory. From CAD data conversion, through the insulation plotting of the printed circuit boards, throughplating, fine-pitch printing, pick-and-place assembly and reflow soldering, LPKF as the Rapid Prototyping market leader not only supplies the hardware required, but also provides the process know-how needed for manufacturing a fully-assembled fine-pitch SMD printed circuit board within one day. This completely dispenses with subcontracting services. Long waiting times and additional expenses are a thing of the past. Development costs are slashed dramatically.

Miniaturisation – trend towards laser technology

In addition to the fast market cycles, electronics designers are also tackling the challenge of the ever increasing miniaturisation of conductor paths. The trend here is being forced by the rapid developments in mobile phone technology - including SMS and WAP technology - and the consumer demand that portable electronics (including pagers and laptops) must be light, small and powerful. At the same time, more and more complex functions need to be integrated within a single device. Electronics designers are therefore faced with the task of incorporating increasingly complex circuits within a diminishing amount of space. LPKF has harnessed the potential of this trend to develop a technology which creates ultra-fine conductor path structures for the prototyping of ultra-fine circuits. This technology uses lasers suitable for laboratories: the LPKF ProtoLaser system can already create 50 µm conductor path structures.

Multilayer now also possible during prototyping

It is impossible to achieve the above mentioned miniaturisation in many cases without augmenting one or two sided printed circuit boards with multilayer circuits. Because of the lower capacity utilisation and the associated higher costs, it was barely feasible in the past to incorporate multilayer technology during prototyping. Multilayer technology involves the stacking and throughplating of several printed circuit board layers, and has long been standard practice during mass production. The inability to create multilayer prototypes in the past meant having to rely on subcontractors. LPKF has solved this problem and can now supply the technology and the associated complete process know-how for the rapid and cost-effective production of multilayer circuits in electronics laboratories.

Breakthrough: laser technology for SMD stencils

Production equipment for printed circuit boards - and for SMD production in particular - have an estimated market volume today of around US $ 5 billion. The electronics industry forecasts an increase to around US $ 11 billion by 2003. In addition to prototyping, LPKF also has a share of the mass production market on the basis of its StencilLaser technology. Today, around 70 per cent of all electronic assemblies world-wide use SMD technology. The soldering of SMD components plays a key role in the mass production assembly of printed circuit boards. Precise metal stencils established themselves as the industry standard for the reliable, fast and space-saving printing of printed circuit board series with solder.

LPKF already set new standards for the mass production of stencils at the beginning of the nineties. By utilising laser technology for the first time in this process, LPKF has succeeded in significantly enhancing the quality of the solder stencils which were previously all made using chemical etching techniques. One of the problems of production using chemical etching is the relatively high reject rate associated with the imprecise „chemical cuts“ – a critical production factor with a direct impact on the bottom line. The StencilLaser technology developed by LPKF makes it possible to cut more highly precise stencils without the use of chemical methods. This significantly reduces reject rates. As a result, this environmentally-friendly and reliable alternative for the mass production of solder stencils has successfully established itself in the market.

Highest precision thanks to new materials

LPKF's commitment to the research and development of laser technology has succeeded in recent years in producing polymer stencils – another breakthrough in

SMD stencil production. The LPKF StencilLaser Polymer now makes it possible for the first time to make solder stencils out of wafer-thin plastic instead of metal. This material enhances laser cutting quality even further and improves printing properties. The ultra-high precision of the cut edge and the positioning accuracy again reduce printing reject rates by a factor of 10. It also increases the number of print cycles at the same time as enabling the creation of significantly finer structures.

Chip Size Packaging – room for tomorrow's technology

Another successful area of application of LPKF laser technology is in installation and connection technology (packaging). A comprehensive switch in technology for chip connections is in sight in the near future given the increasing miniaturisation and incorporation of more and more features in one device. The electronics industry is unanimous that Chip Size Packaging technology (CSP) is the only way to create the printed circuit boards of tomorrow. The previous standard and relatively expensive method of chip bonding is replaced in this way by a space-saving rerouting of the contacts onto an interposer – a finely-structured miniature motherboard – which enables the central routing of connections. In addition to dramatically reducing chip geometries and weight reduction, this method also makes it possible to increase the number of connections. Whilst the proportion of chips incorporating CSP today is only around 2 per cent, it is forecast to increase to 20 per cent by 2005.

The micro-structuring required when manufacturing the interposer, as well as the conductor paths leading to the interposer, will most probably only be possible in future by the application of laser technology. With its MicrolineLaser technology, LPKF has already created the tools required at the threshold of this growth market. The MicrolineLaser allows fine-line structures to be achieved at a 20 µm scale - levels of miniaturisation five times smaller than the previous standard.

Flexible circuits

MicrolineLaser technology is also successfully used in the production of fine-line flex-circuits, used in particular in telecommunications, camcorders, watches, medical hardware and notebooks. Bendable and foldable printed circuit board films, which can be flexibly moulded to the shape of the device, replace the rigid circuit boards and enable even more miniaturisation.

A quantum jump into the 3D world

With the development of 3D-MID technology, LPKF has opened the door to a new dimension. The aim of 3D technology is to integrate a device's mechanical and electronic components. In collaboration with university scientists and other industrial partners, it has been possible for the first time to create ultra-fine circuit carriers on an injection moulded basis. The housing itself carries the conductor paths. In several applications, this innovation will mean that printed circuit boards can be dispensed with altogether. It also opens up new functional and design possibilities in a broader range of applications from telecommunications to medical technology, from computer production to car making. The latest example of its successful application is the work on integrating the aerial within the housing of a portable phone.

Thanks to its forward-looking corporate policy, and research and development activities which have already created the technological foundations for the technological trends of tomorrow, LPKF is in excellent shape to play a leading role in the ever changing marketplace. The priorities in the development of new technologies always also include ecological aspects in addition to the technical and economic facets of a market dominated by increasing miniaturisation and shorter cycles.

Contents

Statement of income

	Notes		31.12.1999 TDM	1998 TDM
Sales	(1)		**38,619**	**31,932**
Increase in finished goods and work-in-process			851	115
Own work capitalised	(2)		2,950	576
Other operating income	(3)		2,017	2,079
			44,437	34,702
Cost of materials	(4)	9,314		10,085
Personnel expenses	(5)	11,385		7,884
Depreciation and amortisation costs and other write-offs on intangible assets and plant and equipment	(6)	3,016		2,077
Other operating expenses	(7)	11,390	35,113	8,988
			9,324	5,668
Income from investments	(8)		–275	–200
Profit/loss from ordinary operations			9,049	5,468
Taxes on income	(9)		4,429	2,450
Consolidated net income			4,620	3,018
Minority interests			212	146
Consolidated result			**4,408**	**2,872**
Earnings per share (in DM)	(28)		2,10	1,37
Earnings per share – diluted (in DM)	(28)		2,00	1,31

Tabulation of the changes in shareholders' equity for the financial year ended 31 December 1999 (previous year in brackets)

	as at 1.1.1999 TDM	Capital-increase out of company funds TDM	Payments-resulting from the capital increase TDM	Dividend payment to shareholders TDM	Consolidated result TDM	Differece from currency translations TDM	as at 31.12.1999 TDM
Capital subscribed	10,500	–	–	–	–	–	10,500
	(650)	(4,350)	(5,500)	–	–	–	(10,500)
Capital surplus	17,100	–	21	–	–	–	17,121
	(2,740)	(–2,740)	(17,100)	–	–	–	(17,100)
Earnings reserves	–	–	–	–	–	–	–
Statutory reserves	–	–	–	–	–	–	–
Reserves for own shares held	–	–	–	–	–	–	–
Reserves related to the articles of association	–	–	–	–	–	–	–
Other earnings reserves	(212)	(–212)	–	–	–	–	(0)
Net income for the year	4,252	–	–	–	4.408	–	8,660
	(5,678)	(–1,398)	–	(–2.900)	(2.872)	–	(4,252)
Foreign currency translation adjustment	–159	–	–	–	–	493	334
	(119)	–	–	–	–	(–278)	(–159)
Total	31,693	–	21	–	4.408	493	36,615
	(9,399)	(0)	(22,600)	(–2.900)	(2.872)	(–278)	(31,693)

Balance sheet

Assets

	Notes	TDM	31.12.1999 TDM	31.12.1998 TDM
Fixed assets				
Intangible assets	**(10)**			
Software		91		84
Goodwill		1,397		35
Development services		3,146		551
Rights of use		1,115		1,007
		5,749		
Tangible assets	**(10)**			
Land and leasehold rights		5,431		3,103
Technical equipment, plant and machinery		2,605		2,959
Other equipment, fixtures, fittings and equipment		3,191		1,108
Advance payments and plant and machinery in process of construction		1,804		808
		13,031		
Financial assets	**(10)**			
Shares in affiliated companies		36		36
Investments in associated companies				1,026
Advance payments on investments				409
Other loans		7		2
		43	**18,823**	
Current assets				
Inventories	**(11)**			
Raw materials and supplies		2,151		438
Work-in-process		820		598
Finished goods		9,831		6,596
Advance payments		269		833
		13,071		
Accounts receivable and other assets				
Trade accounts receivable	(12)	6,076		4,548
Accounts due from affiliated companies				
Accounts due from other group companies				514
Other assets	(13)	1,665		1,524
		7,741		
Marketable securities		**117**		
Cash on hand, postoffice bank accounts, cash in other banking accounts	**(14)**	**12,875**	**33,804**	**17,158**
Deferred charges and prepaid expenses	**(15)**		**67**	**144**
Deferred tax assets	**(16)**		**375**	**85**
Total Assets			**53,069**	**43,566**

Balance sheet

Liabilities and shareholders' equity

	Notes	TDM	31.12.1999 TDM	31.12.1998 TDM
Shareholders' equity				
Capital subscribed	**(17)**	**10,500**		**10,500**
Capital surplus	**(18)**	**17,121**		**17,100**
Earnings reserves, other earning reserves				
Net income for the year	**(19)**			
Retained earnings		4,252		4,252
Consolidated result		4,408		
			36,281	
Foreign currency translation adjustment			334	**–159**
Minority interests	**(20)**		**2,163**	**902**
Provisions and accrued liabilities				
Provisions for pensions	(21)	439		324
Accrued taxes	(22)	1,589		79
Other provisions and accrued liabilities	(22)	1,330	3,358	1,153
Liabilities				
Debenture loans	**(24)**	462		
Liabilities due to banks	**(23)**	3,310		6,448
Advance payments received on account of orders				446
Liabilities due to affiliated companies				
Trade accounts payable		2,094		1,536
Accounts due to other group companies				185
Other liabilities		3,787	9,653	544
Deferred charges and prepaid expenses			**62**	**91**
Deferred item, contributions	**(3)**		**274**	
Deferred tax assets	**(25)**		**944**	**165**
Total liabilities			**53,069**	**43,566**

Cash flow statements in accordance with IAS 7

	Notes	1999 TDM	1998 TDM
Operating activities			
Net profit for the year		4,620	3,017
Depreciation of fixed assets		3,016	2,077
Other expenses not relating to payments		–3	–285
Changes in inventories and accounts receivable and other assets		–2,669	–3,875
Changes in other liabilities		2,378	–735
Cash flow operating activities	**(**26**)**	7,341	199
Investment activities			
Fixed asset investment, property, plant and equipment and intangible assets		–8,950	–3,377
Investments in subsidiaries	(27)	1,545	
Advance payments for shareholdings			–409
Payments received on the disposal of fixed assets		40	273
Cash flow from investment activities		–7,365	–3,513
Financial activities			
Dividend paid			–2,900
Payment by shareholders			22,600
Equity requirement for convertible bond		21	
Minority shares			–108
Change in long-term bank borrowings		–4,701	–626
Cash flow from financial activities		–4,680	18,966
Changes in cash and cash equivalents			
Exchange rate related changes in financial resources		37	28
Changes in cash and cash equivalents		–4,703	15,652
Cash and cash equivalents as at 1st January		16,788	1,109
Cash and cash equivalents as at 31st.December		12,122	16,788
Composition of cash and cash equivalents			
Liquid assets (Cash)		12,875	17,158
Liabilities on current bank accounts		–753	–369
Cash and cash equivalents		12,122	16,788

Notes to the consolidated statements 1999

Principles governing the preparation of the consolidated financial statements

The consolidated financial statements of LPKF Laser & Electronics AG, Garbsen, for the year ending 31st December 1999 have been drawn up in accordance with uniform accounting and evaluation principles. The standards of the International Accounting Standards Committee (IASC) were applied as valid on the balance sheet date.

The first consolidated financial statements in accordance with IAS regulations were drawn up for the year ending 31st December 1996, whereby the relevant effects of application of the IAS regulations on figures from previous years were accorded due consideration in the balance brought forward as per 1st January 1996.

The consolidated financial statements for 1997 were based on the consolidated financial statements drawn up in accordance with the German Commercial Code (HGB). Adaptations to IAS were effected where necessary. Since 1998, the consolidated financial statements have been exclusively drawn up according to IAS.

The fiscal year corresponds to the calendar year. The consolidated financial statements have been drawn up in German Marks.

Scope of consolidation

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

Notes to the consolidated financial statements 1999

Name	Domicile	Holding %	Acquired
Full consolidation			
ELASER Gesellschaft für Elektronik, Laser und Automation GmbH	Suhl/Thuringia	100.0	1989
LPKF d.o.o.	Kranj/Slovenia	75.0	1995
Franklin Industries N.V.	Mechelen/Belgium	100.0	1999
LPKF Laser & Electronics Inc.	Wilsonville/USA	60.0	1999
A-Laser Inc.	Beaverton/USA	100.0	1999
LPKF Motion & Control GmbH	Suhl/Thuringia	50.9	1991
LPKF Properties LLC	Wilsonville/USA	60.0	1999
LPKF France S.A.R.L.	France	94.0	1999
LPKF Laser Components GmbH	Garbsen	80.0	1999
Equity-consolidation (GuV)			
LPKF Motion & Control GmbH (up to end of 1999)	Suhl/Thuringia	50.9	1991

The changes to the consolidated companies in 1999 are as follows: LPKF Laser & Electronics Inc. and A-Laser Inc. were fully consolidated at the beginning of the year as a result of the acquisition of additional shares, and LPKF Motion & Control GmbH was fully consolidated for the 1999 financial year as a result of the acquisition of additional shares on 31.12.1999. In addition, majority shareholdings were also acquired during the financial year in the new company set-ups, LPKF Properties LLC, LPKF France S.A.R.L. and LPKF Laser Components.

Principles of consolidation

The basis for the consolidated financial statements was provided by the annual financial statements of the companies included in the consolidated financial statements as drawn up according to standard rules for the year ending 31st December 1999.

For the purposes of capital consolidation, the acquisition costs of investment values are offset against the equity values for the respective companies at date of acquisition.

Any difference which arises is assigned to the assets and liabilities to the extent to which the current value differs from the book value. Any remaining debit difference is shown as goodwill and written off over 5 years.

Intercompany results, expenses and income, accounts receivable and accounts payable between the fully consolidated companies have been eliminated.

Deferred taxes are booked according to the liability method on all of the temporary differences between the tax values and the book values of the assets and liabilities. The income taxes are calculated in compliance with the valid laws and directives.

Financial Instruments

The reported financial instruments comprise liquid assets, participations, trade accounts receivable, trade accounts payable and other external financing and financial assets. The various accounting methods are explained under the relevant entries.

Foreign currency translation

Translation of the foreign companies' financial statements is effected according to the functional currency method. In effecting this translation into German Marks, the assets and debts were translated at a middle exchange rate at balance sheet date. Expenses and income were translated at the average annual rate. The conversion differences are shown under shareholders' equity as foreign currency translation adjustments without any effect on net income.

	Reporting date rate		Average rate	
In DM	31.12.1999	31.12.1998	31.12.1999	31.12.1998
100 FF	29,81640	29,8180	29,81640	29,8290
100 BF	4,84838	4,8483	4,84838	4,8476
10,000 Slovenian Tolar	98,5702	103,9900	100,6223	94,4269
1 US $	1,94881	1,6730	1,8357	1,7592

Notes to the consolidated financial statements 1999

Statement of income

1. Sales

Sales are always only booked when the service has been carried out or when the goods and products have been delivered. The breakdown of sales according to product groups and regional markets is presented in the following segment reporting.

Segment reporting

Annual financial statement data must be segmented according to divisions and regions in compliance with IAS 14 (segment reporting). The segmentation is oriented to the internal reporting. The aim of segment reporting is to make the earning power and potential of each of the Group's activities more transparent.

The business segments comprise the following activities:

- Rapid Prototyping involves the further development, production and marketing of circuit board plotters for the world market.
- Laser Systems includes all systems such as the StencilLaser, MicrolineLaser and other new laser technologies.
- The Stencils business segment includes all the activities carried out by Elaser and A-Laser which manufacture stencils for conductor path printing.
- The others segment involves all of the smaller activities such as marketing special software packages in Belgium etc.

To make these figures conformable with the consolidated figures, the intra-group entries are eliminated in a special column. Individual activities which cannot be assigned to any particular business segment are reported in the "Not distributed" column. There are no internal sales between the segments.

The segment data were determined as follows:

- The segment results were determined taking into consideration goodwill depreciation, but without taking into consideration the financial results or taxes.
- The investments and depreciations refer to tangible and intangible assets including goodwill.
- The company segment assets and the segment liabilities comprise the attributable assets necessary for the operation and/or the debt capital but excluding any interest-bearing entitlements, liabilities, financial resources or taxes.

TDM		Laser Systems	Rapid Prototyping	Stencils	Other	Not distributed	Eliminated	Total
External sales	1999	17,178	17,058	3,431	952			38,619
	1998	15,594	13,451	2,101	786			31,932
Segment results	1999	819	1,041	1,194	121	6,042	108	9,325
	1998	2,100	1,875	342	129	1,127	95	5,668
Operating assets	1999	14,228	14,480	1,774		22,587		53,069
	1998	7,934	9,711	1,198		24,723		43,566
Liabilities	1999	1,915	5,661	3,745	367	10,589	–5,489	16,788
	1998	1,236	2,060	1,557	257	7,515	–911	11,714
Investments	1999	2,890	2,607	2,404		2,595		10,496
	1998	876	958	281		1,591		3,706
Depreciations	1999	990	494	539		993		3,016
	1998	609	400	426		642		2,077
Other expenses not	1999					3		3
related to payments	1998					285		285

TDM		Germany	Rest of Europe	North America	South America	Asia	Other	Total
External sales	1999	8,484	8,119	11,386	284	10,065	–	38,619
	1998	8,394	8,307	7,590	225	7,334	82	31,932
Operating assets	1999	40,018	5,685	7,366				53,069
	1998	39,221	4,345					43,566
Investments	1999	5,692	718	4,086				10,496
	1998	2,748	958					3,706

Notes to the consolidated financial statements 1999

2. Own work capitalised

In connection with six projects involving laser development (TDM 2,537) and a Rapid Prototyping development project, development costs (TDM 280) were shown in the assets section of the balance sheet during the financial year in accordance with IAS 9 because the conditions of IAS 9 were cumulatively fulfilled.
The depreciation period is five years.

3. Other operating income

	1999 TDM	1998 TDM
Grants for research and development	1,107	1,671
Allocation to the deferred item for contributions	–298	0
Release of deferred item for contributions	24	0
Exchange gains	578	84
Leasing and rental income	114	39
Utilization of warranty reserves	190	0
Others	303	285
	2,018	2,079

The grants for research and development involve public sector contributions and are awarded for costs incurred in the financial year (expenditure grants). Because a proportion of the grants apply to development costs shown in the assets section of the balance sheet in the financial year (TDM 298), a liabilities-side deferred item for contributions was formed for the proper reporting of the performance during the period. This was released (TDM 24) in accordance with the lifetime of the relevant capitalised development work.

4. Cost of materials

	1999 TDM	1998 TDM
Cost of raw materials, consumables and supplies and of purchased goods for resale	8,379	9,396
Cost of purchased services	940	689
	9,319	10,085

5. Personnel expenses and employees

	1999 TDM	1998 TDM
Wages and salaries		
Salaries	8,901	6,056
Wages	715	367
Other	142	151
	9,758	6,577
Social security and pension costs		
Employer's contribution to statutory social security	1,420	954
Workmen's compensation board	66	36
Pension costs	144	320
	1,630	1,310
	11,388	7,884

The breakdown of the employees is as follows at 31st December:

	1999	1998
Production	34	22
Distribution	29	18
Research and Development	22	22
Engineering and Administration	37	30
	122	92

Part-time employees and five trainees also continued to be employed by LPKF Laser & Electronics AG as at 31.12.1999.

6. Depreciation of intangible and tangible fixed assets

The depreciation and amortisation costs and other write-offs effected for the different groups of fixed assets are shown in the analysis of fixed assets (10).

Notes to the consolidated financial statements 1999

7. Other operating expenses

The other operating expenses are structured as follows:

	1999 TDM	1998 TDM
Expenses involved with going public	0	2,197
Investor relations	380	0
Advertising and distribution expenditure	3,535	2,731
Research and development	803	807
Services	1,021	382
Postage, telephone, facsimile	374	358
Legal and consultancy costs	162	322
Rent, leasing	622	344
Exchange losses	243	163
Business gifts, entertainment expenses, travel	821	642
Others	3,429	1,042
	11,390	8,988

8. Financial results

	1999 TDM	1998 TDM
Income from associated companies	201	255
Other interest and similar income	524	176
Interest and similar expenses	–1,000	–631
	–275	–200

9. Taxes on income

	1999 TDM	1998 TDM
Corporation tax and solidarity surcharge	3,457	1,483
Trade tax on earnings	591	582
Deferred taxes	381	385
	4,429	2,450

The corporation tax of the parent company for 1999 was calculated on the basis of a proposal made by the board of directors for the appropriation of the net income for the year. When preparing the consolidated financial statements, a corporation tax rate of 30 per cent was used for the valuation of the deferred taxes on the assets side and on the liabilities side in accordance with the recommendation of the Hauptfachausschuss (HFA) of the Institut der Wirtschaftsprüfer (IDW).The actual tax expenditure in the financial year is affected by a contested tax back payment amounting to TDM 550 demanded from the Slovenian subsidiary. This has been taken into consideration in the tax provisions.

Transfer from expected to actual taxation expenditure

	1999 TDM	1998 TDM
Consolidated net income for the year before income taxes	9,049	5,468
Anticipated taxation expenditure (38 %)	3,439	2,078
Taxation increase as a result of retention	329	466
Taxation expenses unrelated to the accounting period	550	–
Taxation rate variances amongst the subsidiaries	112	–85
Other variances	–1	–9
Actual taxation expenditure	4,429	2,450

Notes to the consolidated financial statements 1999

Balance sheet

Assets

10. Fixed assets

The following overview shows the development of the individual fixed asset items:

	Acquisition and production costs						
	Balance 1.1.1999 TDM	Additions from consolidations TDM	Currency differences TDM	Additions Transfer TDM	Restructuring TDM	Disposals Transfer TDM	as at 31.12.1999 TDM
Start-up and business expansion expenses	**2**	**0**	**0**	**0**	**0**	**2**	**0**
Fixed asets							
Intangible assets							
Software	545	120	0	55	0	0	720
Goodwill	86	0	0	1,636	0	0	1,722
Development services	551	0	0	2,817	0	0	3,368
Rights of use	1,158	0	23	361	0	0	1,542
Advance paid on intangible assets	0	0	0	0	0	0	0
	2,340	120	23	4,869	0	0	7,352
Tangible assets							
Land and leasehold rights and buildings	3,846	142	1	1,801	556	0	6,346
Technical equipment, plant and machinery	5,671	3	0	1,008	-304	0	6,378
Other equipment, fixtures, fittings and equipment	4,779	1,528	111	2,037	511	237	8,729
Advance payments and plant and machinery in process of construction	808	1,023	0	781	-763	45	1,804
	15,104	2,696	112	5,627	0	282	23,257
Financial assets							
Shares in affiliated companies	36	0	0	0	0	0	36
Investments in associated companies	1,026	0	0	170	0	1,196	0
Advance payments on investments	409	0	0	0	0	409	0
Other loans	2	0	0	5	0	0	7
	1,473	0	0	175	0	1.605	43
	18,919	2,816	135	10,671	0	1,889	30,652

The goodwill arising from company acquisitions (capitalised differences arising from capital consolidation) are reported on the assets side of the balance sheet and reduced by scheduled straight line depreciation over the respective lifetimes in a performance-related way. The depreciation of goodwill from the acquisition of companies is reported in the „Depreciations“ entry. The goodwill additions in the financial year arose from the acquisition of companies as described under section 27.

Software is valued as an intangible asset at the acquisition cost reduced by scheduled depreciation. The goodwill was established in the course of consolidation and capitalised in accordance with IAS 22. The development services shown in the assets section of the balance sheet for six laser developments and one Rapid Prototyping development are evaluated according to the personnel costs and material costs involved.

The rights of use are valued on the basis of the cost of acquisition.

The tangible assets are valued at acquisition or production costs reduced by scheduled straight line depreciation. Land is not depreciated.

The production costs cover the costs of direct materials and the material overheads and the manufacturing costs and manufacturing overheads. Low value tangible fixed assets worth less than DM 800 are written off in full in the year of acquisition.

Notes to the consolidated financial statements 1999

Consolidated fixed asset movement schedule of
LPKF Laser & Electronics AG, Garbsen, for the period
from 1st January to 31st December 1999 in accordance with IAS standards

			Accumulated depreciation					Net book value	
as at 1.1.1999 TDM	Additions from consolidations TDM	Currency differences TDM	Allocation TDM	Restructuring TDM	Releases TDM	as at 31.12.1998 TDM		31.12.1999 TDM	Prev. year TDM
2	**0**	**0**	**0**	**0**	**2**	**0**		**0**	**0**
461	96	0	72	0	0	629		91	84
51	0	0	274	0	0	325		1,397	35
0	0	0	222	0	0	222		3,146	551
150	0	–1	278	0	0	427		1,115	1,007
0	0	0	0	0	0	0		0	0
662	96	–1	846	0	0	1,603		5,749	1,677
743	0	1	171	0	0	915		5,431	3,103
2,712	3	0	1,170	–112	0	3,773		2,605	2,959
3,671	1,057	46	830	112	178	5,538		3,191	1,108
0	0	0	0	0	0	0		1,804	808
7,126	1,060	47	2,171	0	178	10,226		13,031	7,978
0	0	0	0	0	0	0		36	36
0	0	0	0	0	0	0		0	1,026
0	0	0	0	0	0	0		0	409
0	0	0	0	0	0	0		7	2
0	0	0	0	0	0	0		43	1,473
7,790	1,156	46	3,017	0	180	11,829		18,823	11,128

The following expected lives are assumed:

	years
Software	3
Goodwill	5
Development services	5
Rights of use	5
Buildings	25
Outside facilities	10
Technical equipment, plant and machinery	3–10
Other equipment, fixtures, fittings and equipment	3–10

The shareholding in Franklin Industries B.V., Netherlands, which is shown under the financial investments, is to be sold/liquidated and has thus not been included in the consolidation in accordance with IAS 27.13 (a).

11. Inventories

The inventories are valued at their acquisition or manufacturing costs or the lower net realisable values.
The raw materials and supplies and the finished goods are valued by using the average cost method. The manufacturing costs for the finished goods and work-in-process include manufacturing costs, manufacturing overheads, direct material costs and material overheads.

12. Trade accounts receivable

	1999 TDM	1998 TDM
Nominal amount of accounts receivable	6,118	4,611
Provision for doubtful accounts	./. 11	./. 22
Lump-sum allowance	./. 32	./. 41
Accounts receivable after provisions	6,075	4,548

The trade accounts receivable are shown in the balance sheet at the nominal value. Adequate provision has been made for concrete and latent risks of non-payment.

13. Other assets

	1999 TDM	1998 TDM
Short-term loans	208	22
Value added tax	445	572
Trade tax	0	178
Reinsurance	150	120
Other	862	159
	1,665	1,524

TDM 150 fall due after one year.

14. Liquid assets

The liquid assets comprise cash on hand of TDM 18 (previous year: TDM 14), as well as cash in other banking accounts of TDM 12,857 (previous year: TDM 17,096).
Liquid assets for the purposes of financial accounting encompass cash on hand and cash in banking accounts reduced by short-term liabilities due to banks. The balance sheet contains separate entries for assets and debts.

15. Deferred charges and prepaid expenses

The deferred charges and prepaid expenses primarily comprise rent and insurance paid in advance to the sum of TDM 49 (previous year: TDM 84).

16. Deferred tax asset

The capitalised deferred tax asset encompasses deferred taxes primarily on the basis of losses carried forward, intra-group profits and the inclusion of a special entry for contributions. Deferred taxes on the assets side and the liabilities side were calculated using the tax rate corresponding to the corporate income tax burden. The deferred taxes on the liabilities side were solely entered with respect to capitalised development work. The development of the deferred taxes is as follows:

Deferred taxes on the assets side

	1999 TDM	1998 TDM
Tax loss carry forward	116	–
Special item	82	–
Intra-group profit elimination and other deductible temporary differences	177	85
	375	85

Deferred taxes on the liabilities side

	1999 TDM	1998 TDM
Capitalised equity requirement	944	165

Liabilities

17. Capital subscribed

The share capital was initially increased according to the resolution by the shareholders of 11 March 1998 by TDM 4,350 from TDM 650 to TDM 5,000 by converting reserves. The entry in the commercial register was effected on 2nd June 1998.
According to the general meeting resolution of 30th October 1998, the share capital was increased further by TDM 5,500 from TDM 5,000 to TDM 10,500 on the basis of a cash contribution by issuing 1,100,000 shares to create a total of 2,100,000 bearer stock. The new shares were issued at an accounting nominal value of DM 5 per share without a premium.

18. Capital surplus

The capital surplus results from the premium paid from the issue of shares in the parent company in the previous financial year plus the option price of the convertible bond in the current financial year.

19. Authorised capital/contingent capital

On the basis of the general meeting resolution of 13 October 1998, the board of directors was empowered with the approval of the supervisory board to increase the share capital up to TDM 2,500 by the issue of new shares once or several times against cash contributions or contributions in kind. This authorisation is valid up to 13 October 2003. In addition, contingent capital totalling TDM 500 was authorised as part of a staff share participation scheme on the basis of convertible bonds. The issue of 100,000 convertible bonds was fully taken up, with the approval of the supervisory board, by the board of directors and employees of the company and its affiliated companies. The DM 5 nominal value bonds entitle their owners to exercise a conversion right to acquire a new share in LPKF Laser & Electronics AG with a calculated share of the share capital of LPKF Laser & Electronics AG of DM 5. The conversion price for the acquisition of such a share will be calculated on the basis of a formula reflecting a comparison of the increase in value of LPKF's shares compared to the German share index (DAX). When exercising the conversion right to acquire a share, a cash payment must be made corresponding to the amount the conversion price exceeds the proportional nominal amount of the bond being converted.

The term of the convertible bond is five years (maturity date 29 December 2003) with an annual interest rate of 5 per cent. The earliest possible conversion time is after the ordinary annual general meeting in the 2001 financial year. The outside capital share of the convertible bond was set at market value taking into consideration a fair market interest rate and increases during the term by the interest rate amount. The board of directors and supervisory board of the parent company propose the payment of a dividend of DM 0.50 per share and to carry over the remaining net income for the year.

20. Minority interests

The minority interest with respect to shares in subsidiaries has developed as follows:

	1999 TDM	1998 TDM
As at 1st January	902	864
Additions	1,261	38
As at 31st December	2,163	902

The changes result from the share in the Group's year-end result accruing to outside shareholders, from changes resulting from currency translation and from initial consolidation measures.

21. Provisions for pensions

Germany has a statutory contribution-orientated basic pension system for employees which pays out pensions dependent on income and effected contributions. In other countries, there are performance-orientated pension obligations dependent on the legal, taxation and economic conditions in each country in question, and which are normally based on the length of the period of employment and the salary of the employee.
The provisions for pensions have been established exclusively for the pension commitments relating to the executive board members of the parent company (TDM 345). In addition, performance related pensions relating to foreign subsidiaries are also reported. Calculation has been effected in accordance with the standard international method (projected unit credit method). The calculation of the pension obligation of the German parent company has been effected on the basis, the "guidelines" issued by Dr. Klaus Heubeck, allowing for future pension adjustments at the rate of 2 %. The discount factor stands at 7 %.

22. Tax provisions and other provisions

Provisions are set up for legal or effective obligations which arose in the past when it appears possible that the fulfilment of the obligations could lead to an outflow of Group resources, and when it is possible to make a reliable estimate of the size of the obligation.

	1999 TDM	1998 TDM
Corporation tax	1,337	74
Trade tax	252	0
Solidarity surcharge	0	5
	1,793	79

Deferred taxes on the liabilities side are reported separately and discussed under section 16.

	1999 TDM	1998 TDM
Bonuses	549	545
Guarantees	358	280
Holidays	244	157
Other	179	171
	1,330	1,153

Provisions In TDM	as at 01.01.1999	Utilisation	Release	Addition	as at 31.12.1999
Provisions for pensions	324	–	–	115	439
Accrued taxes	79	35	–	1,545	1,589
Bonuses	545	545	–	549	549
Holidays	157	157	–	244	244
Guarantees	280	280	–	358	358
Other	171	171	–	179	179
Total	1,556	1,188	–	2,990	3,358

23. Liabilities

The table below shows a summary of the liabilities broken down according to remaining terms:
Summary of liabilities (in TDM) with a remaining term of

Type of liability	Total amount	Up to 1 Year	1 to 5 Years	More than 5 Years	Secured amount	Type of security
Liabilities due to banks	3,310 (6,448)	287 (1,318)	780 (2,627)	2,243 (2,503)	3,057 (5,891)	* (*)
Convertible bond	462 (446)	– (446)	462 (–)	– (–)	– (–)	– (–)
Trade accounts payable	2,094 (1,536)	2,094 (1,536)	– (–)	– (–)	– (–)	– (–)
Other liabilities	3,787 (544)	3,774 (544)	– (–)	– (–)	– (–)	– (–)
	9,653 (9,159)	3,529 (4,029)	1,242 (2,627)	2,243 (2,503)	3,057 (5,891)	– (–)

* Land charge, certified land charge, assignment of machinery and equipment by way of security

Further notes on liabilities:
The amount due to banks includes long-term borrowings to the amount of TDM 3,616 which are subject to interest at a rate of 3.75 % p.a. to 6.25 % p.a..

Original loan in TDM	Interest rate p.a.	Term
53	5,25 %	07/97 – 05/00
101	6,25 %	02/98 – 12/01
1,286	3,75 %	09/99 – 09/09
2,250	5,85 %	10/99 – 10/09

24. Debenture loan
The debenture loan involves a convertible bond discussed in section 19.

25. Deferred tax assets
Deferred taxes were reported as deferred tax assets on the liabilities side on the basis of reporting the development services as assets. The deferred taxes were calculated on the basis of the tax rate corresponding to the corporate income tax burden.

Other information

26. Cash flow statement
The cash flow from operating activities includes tax payments to the amount of TDM 2,961 (previous year: TDM 2,910) as well as interest paid totalling TDM 999 (previous year: TDM 593) and interest received of TDM 523 (previous year: TDM 175).

27. Company acquisitions
On 1st January 1999, LPKF Laser & Electronics AG acquired another 20 % of LPKF Laser & Electronics Inc., a distribution company in Oregon/USA, to increase its stake to 60 %.
On 1st January 1999, Elaser GmbH, a 100 % subsidiary of LPKF Laser & Electronics AG, acquired 80 % of the shares in A-Laser Inc., a stencil service company in Oregon/USA, so that LPKF Laser & Electronics AG holds 20 % of the company's shares and Elaser GmbH now holds 80 % of the company's shares.
With effect from 31st December 1999, LPKF Laser & Electronics AG acquired an additional 0.9 % stake in LPKF Motion & Control GmbH based in Suhl/Thuringia and now holds a 50.9 % stake.
On 1st October 1999, LPKF France S.A.R.L. was established as a distribution company for the French market. LPKF Laser & Electronics AG has a 49.0 % stake in this company.
LPKF Laser Components GmbH was also established at this time. This is a trading company for laser components, headquartered in Garbsen. LPKF Laser & Electronics AG has an 80 % share in this company.
Also at this time, LPKF Properties LLC was established in Oregon/USA. This company leased the new office building to LPFK Laser & Electronics Inc. LPKF Laser & Electronics AG has a 60 % stake in this company.

TDM	**A-Laser**	**LPKF Inc.**	**LPKF M & C**	**LPKF Franklin**	**Total**
Purchase price	2,345	409	36	159	2,949
Settled value of the portion of the net assets acquired	1,014	237	8	54	1,313
Goodwill	1,331	172	28	105	1,636

Determination of the net acquisitions

TDM	**A-Laser Group share**	**LPKF Inc. Group share**	**LPKF M & C Group share**	**LPKF Franklin Group share**	**Total**
Fixed assets	272	236	1,152		1,660
Inventories	239	421	1,401		2.061
Accounts receivable and other assets	436	676	343		1,455
Liquid assets	607	581	552		1,740
Deferred charges and pre-paid expenses			24		24
Provisions and accrued liabilities	–122	–102	–204		–428
Borrowings			–1,179		–1,179
Trade accounts payable		–627	–1,065		–1,692
Other liabilities	–259		–186		–445
Deferred charges					
Equity valuation of an investment	–158	–474	–419		–1,051
Shares held by third-parties		–474	–411	54	–831
Settlement value of the net acquisition					
Excluding goodwill	1,014	237	8	54	1,313
Goodwill	1,331	172	28	105	1,636
Total net assets	2,346	409	36	159	2,950
Excluding liquid assets	607	581	552		1,740
Outstanding purchase price installment	2,346				2,346
Advanced payment towards the purchase price		–409			–409
Outflow of funds associated with the company acquisitions	**–607**	**–581**	**–516**	**159**	**–1,545**

28. Earnings per share

The undiluted earnings per share is determined according to IAS 33 as a quotient of the consolidated net income attributable to the shareholders of LPKF Laser & Electronics AG and the number of shares in circulation in the financial year.
Dilution of the earnings per share applies when the average number of shares in circulation is increased by including the issue of potential shares in connection with the LPKF Laser & Electronics AG convertible bond issue. Convertible bonds always dilute the earnings.

	1999	1998
Number of shares, undiluted	2,100,000	2,100,000
Number of shares, diluted	2,200,000	2,200,000*)
Consolidated earnings (in TDM)	4,408	2.872
Elimination of the interest expenditure for the convertible bond	17	
Elimination of the taxation effect on the interest expenditure for the convertible bond	–7	
Undiluted earnings per share (in DM)	2.10	1.37
Diluted earnings per share (in DM)	2.00	1.31

*) to optomise the comparison, a matching fictitious option right was assumed for the previous year for the number of shares in circulation.

29. Dividend per share

Dividends are only taken into consideration after proposals on the appropriation of profits have been resolved at the annual general meeting. A dividend of DM 0.50 per share will be proposed for the 1999 financial year at the annual general meeting on 15.06.2000. This dividend will be taken into consideration in the 2000 annual financial statements as an appropriation of profit.

30. Transactions of affiliated companies and related parties

Affiliated companies	**TDM**
Zeltra Naklo d.o.o., Slovenia	
purchased deliveries and services	1,179
PMV d.o.o., Slovenia	
purchased deliveries	503

The managing director and shareholder of a subsidiary owns 80 % of Zeltra naklo d.o.o. shares. The remaining 20 % of the shares are owned by an executive of the subsidiary. Materials and equipment, goods for resale and services to the sum of TDM 1,179 were purchased from this related party in 1999.
The managing director and shareholder of a subsidiary has a 50 % shareholding in PMV d.o.o. In 1998, business relations with this company covered development and production services and leasing to the amount of TDM 503.
A member of the supervisory board provided legal advice in 1999 totalling TDM 21. In addition, two close relatives of shareholders in the parent company were also employed as salaried employees.

31. Other disclosures

The conditions according to § 292a HGB to exempt a company from the obligation of preparing consolidated annual financial statements according to German accounting standards have been fulfilled. The consolidated annual financial statements follow the rules laid down by the Contact Committee of the European Commission, and in particular the European Union guidelines on consolidated accounting (Directive 82/349/EU). They include the following variances from the German Commercial Code regulations with respect to accounting methods, valuation methods and consolidation methods:

- Capitalisation of development costs
- Accounting the convertible bond at present value
- Capitalization of deferred taxes on tax losses carry forward

LPKF Laser & Electronics AG has been exempted from the obligation of preparing its annual financial statements according to the German Commercial Code:

Other financial obligations

Other financial obligations involve obligations associated with the construction of new office buildings in Garbsen totalling TDM 2,305 in 2000.

The **board of directors** are:

Mr. Bernd Hildebrandt chairman
Mr Dipl.-Ing. Bernd Hackmann
Dr. Jörg Kickelhain

The remuneration of the board of directors totalled TDM 1,845.

The **members of the supervisory board** are:

Klaus Sülter	Power of attorney for Cura Consult GmbH (chairman) IPO Partner-Consult AG, Wiesbaden (chairman of the supervisory board)
Dr. Heino Büsching	Lawyer / tax advisor (deputy chairman) IPO Partner-Consult AG, Wiesbaden (deputy chairman)
Udo B. Hartmann	Managing director of BB-Kapitalbeteiligungsgesellschaft mbH Advisory board of Breitfeld & Schlieckert GmbH, Karben

The remuneration of the supervisory board totalled TDM 127, of which TDM 28 involved work carried out in the 1998 financial year.

32. Events after the balance sheet date

A contract for a MicrolineLaser system was concluded after the balance sheet date. This is considered to be a breakthrough in the launch of this new technology.

Hannover, 1st March 2000
LPKF Laser & Electronics AG

Bernd Hildebrandt | Bernd Hackmann | Dr. Jörg Kickelhain

Report of the independent auditors

We have audited the consolidated financial statements of LPKF Laser & Electronics AG comprising the balance sheets, statement of income, changes in shareholders' capital account, the cash flow statements and the note to the consolidated financial statements for the business year from 1st January to 31st December 1999. The maintenance of the books and the preparation of the consolidated financial statements in accordance with the International Accounting Standards (IAS) of the IASC, are the responsibility of the board of directors of the company. Our responsibility is to express an opinion on whether these consolidated financial statements comply with IAS based on our audit. Some of the separate financial statements included in the consolidated financial statements were audited by other auditors. In so far as our opinion is based on figures involving these separate financial statements, it refers exclusively to the opinion made by these auditors. The figures in question involve approx. 28 per cent of the consolidated balance sheet total and 35 per cent of the consolidated turnover. We conducted our audit in accordance with German auditing regulations and the generally accepted standards for the audit of financial statements promulgated by the Institute der Wirtschaftsprüfer (IDW) and the International Standards on Auditing (ISA). Those standards require that we plan and perform the audit in such a way that it can be judged with reasonable assurance whether the consolidated financial statements are free of any major misstatements. As part of this audit, substantiation has to be obtained for the valuation and other information in the consolidated financial statements on a test basis within the framework of the audit. The audit includes assessing the accounting principles used, and significant estimates made by the board of directors, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provides a reasonable basis for our opinion. On the basis of the knowledge gained from the audit, as well as the confirmation statements by the other auditors, we are convinced that the consolidated financial statements in accordance with IAS give a true and fair view of the net assets, financial position and results of operations of the Group as well as the payment flows in the business year.
Our audit, which according to German auditing regulations, also includes the Group management report for the financial year from 1st January to 31st December 1999, has not led to any restrictions. We are convinced that, on the whole, the Group management report overall provides a suitable understanding of the Group's position and suitably presents the risks of the future development. In addition, we confirm that the consolidated financial statements and the Group management report for the business year from 1st January to 31st December 1999 fulfil the conditions for exempting the company from the obligation to prepare its consolidated financial statements and Group management report according to German law.

Hannover, 17th March 2000

SOCIETÄTS TREUHAND GMBH
Wirtschaftsprüfungsgesellschaft

Dr. W. Gebler
Wirtschaftsprüfer
(Auditor)

Dr. M. Schellhorn
Wirtschaftsprüfer
(Auditor)

Annual financial statements of LPKF Laser & Electronics AG

Annual financial statements of LPKF Laser & Electronics AG, Garbsen
as at 31st December 1999

Balance sheet

Assets

	TDM	31.12.1999 TDM	Previous year TDM
Fixed assets			
Intangible assets			
Software	43		84
Rights of use	140		175
	183		
Tangible assets			
Land and leasehold rights and buildings	3,744		3,103
Technical equipment, plant and machinery	1,411		1,633
Other equipment, fixtures, fittings and equipment	1,700		783
Advance payments and plant and machinery in process of construction	781		808
	7,636		
Financial assets			
Shares in affiliated companies	1,303		402
Loans to affiliated companies	769		0
Investments	0		167
Other loans	0		409
	2,072	9,891	
Current assets			
Inventories			
Raw materials and supplies	40		18
Work-in-process	0		172
Finished goods	8,947		6,341
Advance payments	670		833
	9,657		
Accounts receivable and other assets			
Trade accounts receivable	3,711		4,044
Accounts due from affiliated companies	2,805		304
Accounts due from other			
Group companies	0		514
Other assets	1,042		1,380
	7,558		
Cash on hand, postoffice bank accounts, Cash in other banking accounts	**10,424**	27,639	**16,459**
Deferred charges and prepaid expenses		25	**87**
		37,555	**37,716**

Annual financial statements of LPKF Laser & Electronics AG

Annual financial statements of LPKF Laser & Electronics AG, Garbsen
as at 31st December 1999

Balance sheet

Liability and shareholders' equity

	TDM	31.12.1999 TDM	Previous year TDM
Shareholders' equity			
Capital subscribed	10,500		10,500
Capital surplus	17,121		17,100
Net income for the year			
Retained earnings	1,534		50
Net income	2,719		1,484
		31,874	
Provisions and accrued liabilities			
Provisions for pensions	345		331
Accrued taxes	399		79
Other provisions and accrued liabilities	983		1,101
		1,728	
Liabilities			
Debenture loan, of which convertible DM 500,000	500		0
Liabilities due to banks	1,937		4,767
Advance payments received on account of orders			446
Trade accounts payable	631		743
Accounts due to affiliated companies	423		606
Accounts due to other			
Group companies	0		185
Other liabilities	462		324
thereof for taxes (TDM 162)			
thereof for social security (TDM 171)			
		3,953	
		37,555	**37,716**

Annual financial statements of LPKF Laser & Electronics AG

Statement of income

	TDM	31.12.1999 TDM	Previous year TDM
Sales		32,140	28,265
Decrease/increase in finished goods and work-in-process		756	–546
Own work capitalised		134	25
Other operating income		2,036	1,934
Aggregate operating performance		35,066	29,678
Cost of materials			
a) Cost of raw materials and supplies and of purchased goods for resale	13,656		11,425
b) Cost of purchased services	0		0
Personnel expenses			
a) Wages and salaries	6,978		5,457
b) Social security, pension and other benefit costs thereof for pensions: DM 120,667.85 (TDM 378)	1,116		1,197
Depreciation and amortisation costs and other write-offs on intangible assets and plant and equipment	1,380		1,192
Depreciation and amortisation costs and other write-offs on current assets	3		55
Other operating expenses	7,590	30,723	4,853
		4,343	5,499
Income from investments	175		122
thereof from affiliated companies: DM 174,857.14 (TDM 54)	0		
Income from profit and loss transfer agreements	444		340
Municipal trade tax participation of Federal and State Government passed on to a subsidiary in an integrated group	108		90
Other interest and similar income	451		
thereof to affiliated companies: DM 41,196.32 (TDM 43)			78
Interest and similar expenses			
thereof to affiliated companies: DM 0.00 (TDM 0)	352	826	450
Profit/loss from ordinary operations		5,169	5,679
Extraordinary income		0	0
Extraordinary expenses		0	2,197
Extraordinary profit		5,169	3,482
Taxes on income	2,437		1,985
Other taxes	13	2,449	13
Net income		2,719	1,484
Retained earnings brought forward from the previous year		1,534	50
Net income for the year		4,253	1,534

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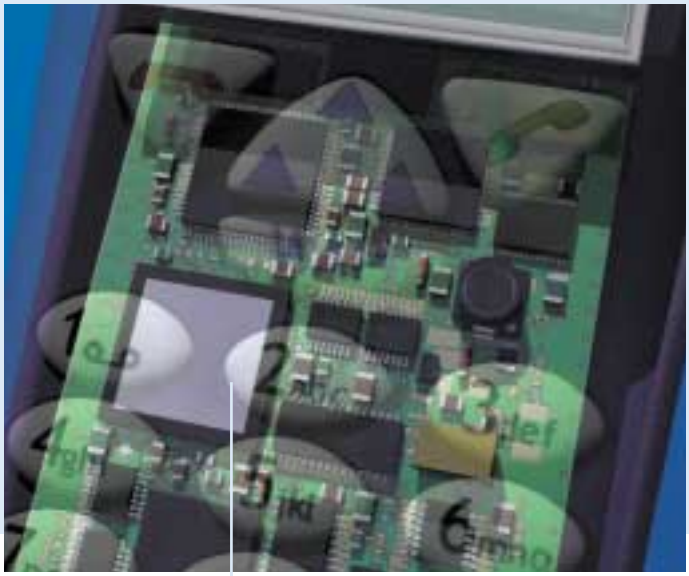

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