

Offering Prospectus/Company Report 1998

for the Neuer Markt of the Frankfurt Stock Exchange
(Non binding Translation)

IPKF Laser &
Electronics AG

Offering Prospectus/Company Report

for the admission of

2,100,000 bearer shares

in the form of no-par-value unit shares

(notional nominal value per unit share: DM 5.-)

DM 10,500,000.-

each carrying full dividend rights for the financial year 1998, i.e. as of January 1, 1998

– Securities Code Number 645 000 –

plus up to

100,000 bearer shares

in the form of no-par-value unit shares

(notional nominal value per unit share: DM 5.-)

DM 500,000.-

in respect of the conversion rights extending to October 13, 2003, into no-par-value ordinary bearer shares created from a conditional capital reserve and carrying full dividend rights for the financial year in which the application to convert becomes effective,

of

LPKF Laser & Electronics Aktiengesellschaft, Garbsen

to the Geregelter Markt (Second Trading Segment) and Admission to Trading on the Neuer Markt of the Frankfurter Wertpapierbörsen (FWB Frankfurt Stock Exchange)

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LPKF Group at a glance¹

**Two year overview
IAS-consolidated financial statements²**

	1996	1997	Change 1997 from 1996 (in %)
Selected data from the income statement, in million DM			
Total sales	23.0	29.6	28.6
Cost of materials	7.4	9.5	27.9
Personnel expenses	6.4	7.5	17.5
Depreciation	1.7	1.8	5.4
Income from ordinary activities	6.5	7.2	9.8
Consolidated profit for the year	4.1	4.4	7.0
Cash-flow	5.7	6.4	11.4
EBIT	6.9	8.0	16.6
Selected data from the balance sheet, in million DM			
Fixed assets	8.9	9.4	5.7
Current assets	13.2	12.3	-7.0
Equity	5.0	9.4	87.3
Provisions	3.3	2.2	-31.4
Liabilities	13.4	9.6	-27.9
Balance sheet total	22.4	22.2	-1.0
Equity ratio in %	22.4	42.4	-
Employees			
Employees (at December 31, of respective year)	70	85	21
Trainees	5	5	0

¹ In this Prospectus, the terms "LPKF AG" and "the Company" identify LPKF Laser & Electronics Aktiengesellschaft. References to "LPKF", the "LPKF Group" or "Group" all relate to LPKF AG and its affiliated companies. All numerical values quoted in this Prospectus refer, unless specifically stated otherwise, to the information provided in the financial statements for the LPKF Group prepared in accordance with International Accounting Standards (IAS).

² In this connection, please see the section "Explanatory notes to the key figures for financial year 1997 in comparison".

Risk Factors

Before deciding to buy shares, prospective investors should read and consider carefully all the specific risk factors described below in conjunction with the other information presented in this Offering Prospectus/Company Report (hereinafter also referred to as "Prospectus").

Market Conditions and Competitors

Although the market segments in which LPKF is active, i.e. the fields of rapid prototyping (machines for producing prototype circuit boards) and lasers (laser devices for materials cutting), only comprise a small number of suppliers, but it is characterized by intense competition between them. In the rapid prototyping business, it is only possible to expand into significant new customer groups by offering lower entry prices. LPKF accordingly seeks to increase the scale of its production in order to reduce its unit manufacturing costs and make its products affordable to new layers of purchasers. Whether and to what extent this approach will permit the division to increase its turnover remains uncertain however, since it is possible that its competitors will also bring similarly low-price models to market. In the field of laser technology, the Company is in competition with significantly bigger enterprises such as Lumonics Inc., for whom cutting lasers are just one of their many businesses. These companies have the financial resources to engage in research and development on a significantly larger scale than is possible for the Company, and also to survive long investment phases without the need for earnings from laser cutting machines.

Changes in Technology

LPKF manufactures products which are of crucial importance for various phases of the process of developing and manufacturing electronic devices. The possibility cannot be ruled out that changes in the processes for developing electronic devices or manufacturing circuit boards could have a negative impact on demand for the Group's products. There is also a risk that LPKF's competitors could develop new technologies which compete with the Group's products, and which either permit prototype circuit boards to be produced more quickly and cheaply or which perform the tasks hitherto performed by cutting lasers with an even greater degree of precision. In this eventuality, LPKF would be obliged to acquire licenses in the technologies concerned from their competitors or seek refuge in other products or markets. There is a risk that LPKF will not be able to obtain access to new technologies on acceptable terms or will be unable to identify promising new products or markets.

Research and Development

LPKF's business success is particularly dependent on its ability to keep pace in technological terms with the ever more demanding requirements imposed by the developers and manufacturers of electronic devices. LPKF has made inventions in the fields of both rapid prototyping machines and laser technology on which it has been granted or has applied for patent protection.

This currently allows the Group to maintain its position in the market. A significant number of personnel essential to the Company's successful research and development activities are not directly employed by LPKF AG, but are instead either employed by subsidiary or affiliated companies or work on a self-employed basis. For

instance, some of the development engineers who provide expertise in the manufacture of motors and control systems are employees or directors or LPKF Motion & Control GmbH of Suhl, in which LPKF AG holds only 50% of the equity. In spite of the close relations which prevail between LPKF AG and this company, the possibility cannot be ruled out that LPKF Motion & Control GmbH will in future take on contracts from other companies, including rivals of LPKF AG, or will transfer its research and development effort to fields which are of no interest to the Company. Essential development work in the field of laser technology is performed by employees of LPKF d.o.o. in Slovenia. This company is a joint venture between a Slovenian businessman, Mr Zepic, and the Company, in which the Company holds 75% of the shares. In the event that Mr Zepic or his son, who is shortly to take over the management of LPKF d.o.o., decided that they no longer wished to collaborate with the Company, this would create the risk of a reduced contribution from LPKF d.o.o. to the LPKF Group's research and development activity. In addition, the vital software essential for data conversion and controlling circuit board plotters and cutting lasers is almost all produced by an external service provider. If this supplier were to withdraw from the business or decide to work exclusively for the Company's competition, the Company would be unable to prevent this as the supplier is not tied by any long-term contracts. Negative consequences for the Company's business would be a probability in either event.

Economic and exchange rate risks

As a consequence of the transfer of the transfer of the production and development of electrical machinery and devices to other countries, the demand for the company's products for use in developing and manufacturing printed circuit boards is stronger abroad than in Germany. The Company derived approximately 76% of its sales revenues from outside Germany in 1997. LPKF is consequently highly dependent on the state of the business climate in its foreign markets and, to the extent that it is unable to bill in deutschmarks abroad, highly vulnerable to exchange rate fluctuations. The economic crisis in the Company's key Asian markets has already had a perceptible impact on its sales, especially the sales of its expensive rapid prototyping machines and StencilLasers. A further deterioration of the economic climate in the countries which are the main producers of electronic devices, principally the USA and Asia, could have a negative impact on the Company's sales and earnings. To safeguard itself against exchange rate risks in its foreign markets, the Company has engaged in currency hedging transactions to a certain extent in the past. It intends to continue to do so in line with the expansion of its business activity and also to hedge its risks longer-term in future.

Dependence on skilled staff

The successful realization of LPKF's corporate goals is particularly dependent on its ability to attract highly qualified employees in management, research and development, and distribution and marketing, and to retain them long-term.

There is a great need for qualified staff throughout the high-tech sector. However, in the key fields of physics, electrical engineering, electronics and production engineering which are important for the Company, there is currently an ample supply of qualified specialist personnel, so that the Company has so far been able to fill any vacancies without difficulty. Nevertheless, as in

other sectors, there is a real risk that competitors will attempt to poach some of LPKF's research and development staff. If key personnel were to be enticed away, this could have a negative impact on the effectiveness of the Company.

Potential product liability risk

The laser systems which LPKF designs and installs produce the stencils used to assist the inserting of electronic components onto printed boards, the "assembly" stage of the mass production of integrated circuits. If the systems suffered lengthy operating stoppages in the customer manufacturing companies' factories, their boards would soon be unusable for assembly and production of their finished devices would rapidly come to a standstill. LPKF therefore has to ensure that the systems it sells operate without breaking down and that any problems which arise can be remedied within the shortest possible time. Their systems also have to comply with the most demanding quality requirements even when operated non-stop, since even slight variances can result in inaccuracies in the cut stencil which can in turn generate problems at the subsequent assembly stage. If this happens, the manufacturing company faces the threat of substantial losses. The Company is of the opinion that its products satisfy the demanding requirements placed on them and that it is either adequately insured or has set aside adequate internal provisions to cover any residual risks. Although the Company has never yet had to pay compensation to a customer, the possibility cannot be excluded that the Company will be exposed to product liability claims in future and that in the event of very large claims, the insurance cover and the internal provisions will prove inadequate. This eventuality could create a considerable burden on the Company. There is also the risk that even a minor product liability claim could damage the reputation of the systems produced by LPKF and thereby undermine its market position.

Tax situation

The most recent external tax audit of the Company covered the years through to 1990. The Company believes that the tax returns prepared and submitted together with its tax advisers were complete and correct. Therefore, in the event of a tax audit, it does not expect any significant changes to tax assessments which could result in payment of tax arrears. Nevertheless, it is possible that differing perceptions of facts and circumstances could result in demands for back tax by the tax authorities in the future. (In this connection, please refer also to the section "LPKF Aktiengesellschaft" Executive bodies of the Company".)

Lack of a public market, fixing of selling price, volatility of market price

Before the public offering, there was no public market for the Company's shares. The selling price will be fixed by DG BANK Deutsche Genossenschaftsbank AG in agreement with the Company using the order book created during the bookbuilding process.

No guarantee can be given that the selling price of the shares will correspond to the price at which the shares will be traded on the Neuer Markt of the FWB Frankfurt Stock Exchange subsequent to the offering, or that active trading in the shares will result and continue after the offering. The number of free float shares, changes in the operating result of the Company and its competitors, and changes in the general business environment in the industry, economy or financial markets can cause substantial fluctuations in the price

of the shares. In general, securities markets have experienced considerable fluctuations in price and turnover volumes in the past. This is particularly true of the Neuer Markt of the FWB Frankfurt Stock Exchange, on which the Company's shares are to be traded after it goes public. Such fluctuations could have positive or negative effects on the share price in future, regardless of the operating result or financial situation of the Company.

Reliability of opinions and forecasts

The opinions and forecasts reproduced in this prospectus are exclusively the opinions and forecasts of LPKF and its management. Opinions and forecasts are statements which use terms and expressions such as "expect", "believe", "assume", "are of the opinion" and similar formulations. They reflect the current view of the Company's management with regard to possible future developments which are however uncertain in their outcome and therefore subject to risk. A number of factors could produce a wide variance between the predicted situation and the circumstances which actually transpire. Neither its management nor LPKF guarantees the correctness of the opinions and forecasts reproduced in this prospectus.

The Neuer Markt

The Neuer Markt is designed to provide access to the capital market particularly for innovative, fast-growing, small to medium-sized companies (also referred to as "issuers" in this section). This officially recognized and supervised trading segment of the Frankfurter Wertpapierbörsen (FWB Frankfurt Stock Exchange) has been operating since March 10, 1997.

The Neuer Markt is targeted at private and institutional investors who are willing to take risks.

All trading of shares listed on the Neuer Markt takes place exclusively at the FWB Frankfurt Stock Exchange. Neuer Markt shares are traded through open outcry on the floor of the FWB Frankfurt Stock Exchange but also through the new XETRA electronic trading system. The Neuer Markt's trading model combines a central order book maintained by a private broker (ledger broker) who establishes the price, with "Betreuer" or "designated sponsors" who provide liquidity when bids cannot be met from the order book. The "designated sponsor" act as market makers during the trading sessions, i.e. they quote ask and bid prices on request. Provided a quotation request has been submitted to that effect, shares can be traded on the Neuer Markt throughout the trading sessions subject to continuously quoted prices (variable price trading). The minimum unit quantity for variable-price trading of Neuer Markt stocks has been set at 1 share since April 1, 1998. In addition, it is standard practice to fix a daily published price for every Neuer Markt share at a specified time each trading day. Transactions through the Neuer Markt are settled on the second business day after their conclusion.

In addition to satisfying the admission requirements for the "Geregelter Markt" (Second Trading Segment), an issuer which wishes its shares to be admitted for trading on the Neuer Markt must in all cases also meet the following additional admission requirements:

- Minimum free float after listing should be 20% (25% if possible);
- Ordinary shares must be the primary class of share;
- Annual financial statements must be prepared in German and English complying with IAS (International Accounting Standards) or US GAAP (US Generally Accepted Accounting Principles);
- At least 50% of the placement must derive from a capital increase;
- The existing shareholders should undertake not to dispose of any shares for at least six months after admission to listing;
- The issuer must accept the "Übernahmekodex" (German Takeover Code) published by the relevant authority (Börsensachverständigen Kommission);
- The anticipated market value of the shares admitted for trading must be at least ECU 5 million.

In addition, the following ongoing requirements apply to issuers:

- Preparation of quarterly reports in German and English;
- Publication of annual financial statements no later than three months, and publication of quarterly reports no later than two months after the relevant closing date;

- Publication of an annual corporate action calendar with all relevant dates;
- Presentations to analysts at least once a year;
- Publication of changes in the shareholdings of members of executive bodies, with separate disclosures for the Managing and Supervisory Boards, at least once a year;
- Appointment of at least two permanent Betreuer (sponsors).

Betreuer (sponsors) are either companies authorized to trade on the Frankfurter Wertpapierbörsen or dealers who function as market makers during trading sessions. The duties of the Sponsor include:

- Continuous provision of firm bid and ask prices;
- Immediate execution of customer orders;
- Limitation of the bid/ask differential (spread) to a maximum of 5%;
- At least 50% of requests for the share by the ledger broker to a Betreuer must result in a bid/ask limit response;
- Regular analysis of the issuer from a capital market viewpoint;
- Advice to the issuer to ensure ad hoc publicity requirements are met and to provide continuous information coverage for its investors.

Notes on taxation

Taxation in the Federal Republic of Germany

The following section does not claim to present a comprehensive list of all tax considerations which could be of relevance in the acquisition of shares. The information provided is based on the tax regulations still effective in the Federal Republic of Germany at the time of preparation of this Prospectus; it is anticipated that these will be subject to substantial changes next year as part of a fundamental tax reform.

These notes cover only the tax treatment of dividends, profits resulting from disposals, and gifts and inheritances. Since it would be impossible to comprehensively discuss all of the related taxation issues, the information presented does not address specific constellations of circumstances which could be of significance to individual purchasers of the shares.

Potential investors are strongly advised to seek the advice of their own tax advisors in the event of doubts about taxation.

Taxation of shareholders with unlimited tax liability

a) Income and corporation tax

Dividends paid by an Aktiengesellschaft (a public limited company) whose registered place of business is in the Federal Republic of Germany to its shareholders in Germany are subject to income or corporation tax on the gross dividend (cash dividend plus corporation tax imputation credit). In addition, the cash dividend (gross dividend minus corporation tax imputation credit) is subject to an investment income tax of 25%, which can be offset against tax liability as part of the tax assessment process.

Since January 1, 1995, a Solidaritätszuschlag ("solidarity surcharge") has been levied in addition to income or corporation tax and investment income tax; this surcharge currently amounts to 5.5%. The tax levied on dividends is thereby increased to 26.375% (investment income tax plus 5.5% of investment income tax).

As part of the tax assessment procedure, the investment income tax and the solidarity surcharge levied on this tax are offset against the total tax liability. The same applies to the corporation tax that was paid by the Company and levied on dividends in the corporation tax imputation procedure. This prevents double taxation of the Company's and the shareholder's profits. The result is that dividend income is taxed only at the individual income or corporation tax rate to which the shareholder is subject.

For example, if the Company approves the distribution of a dividend amounting to DM 70.-, the shareholder receives a cash amount of DM 51.54, or the total dividend less the withheld investment income tax of DM 17.50 and the solidarity surcharge on this tax of DM 0.96. The withheld taxes (investment income tax plus solidarity surcharge) amounting to DM 18.46 and DM 30.- for the corporation tax paid by the Company are credited against the shareholder's individual tax liability. If the shareholder's personal tax liability is greater than the imputation amounts, he/she owes tax; if the reverse situation applies, a tax refund is due.

Persons resident for tax purposes who receive income from capital assets as part of their personal assets,

are granted a savers tax allowance and an overall allowance for income-related expenses totaling DM 6,100.- or DM 12,200.- (single/married respectively). The gross dividend (cash dividend plus corporation tax imputation credit) is offset against this allowance. Provided an exemption application is submitted to the financial institution managing the securities account, the gross amount of the dividend is paid out regularly, provided that a sufficient amount of the allowance remains unused.

b) Taxation of profits on disposals

Gains from the disposal of shares held as part of the business assets of a shareholder resident in Germany are as a rule subject to taxation.

Gains from the disposal of privately held shares are only subject to income tax if

aa) disposal takes place within six months of acquisition of the shares. A tax allowance of DM 1,000.- per year is granted on these windfall profits. Speculative losses can be offset against windfall profits up to the full amount of the windfall profits that the taxpayer achieved in the same calendar year, or

bb) if the shareholder directly or indirectly held a significant interest in the nominal capital of the company (i.e. one exceeding 25%) at any time during the last five years. In this case, the profit from disposal is considered to be the amount by which the disposal price less disposal costs exceeds the acquisition price. Within certain limits, the profit from disposal is not subject to tax.

c) Inheritance and gift tax

The acquisition of shares by a living person by way of a gift or as inheritance on account of death is only subject to German inheritance or gift tax if the testator or donor was a resident of Germany pursuant to Section 2 of ErbStG (German Inheritance Tax Law).

For family members and relatives, allowances in varying amounts are applicable. If the shares are held as business assets, a tax allowance of DM 500,000 is granted in the event of inheritance or acquisition by way of succession.

d) Wealth tax

As the situation now stands, wealth tax will not be levied for assessment periods after January 1, 1997 until further notice, because the new legislation required by the German Federal Constitutional Court due to the unconstitutionality of certain provisions of the Wealth Tax Law had not been passed by December 31, 1996.

Taxation of shareholders with limited tax liability (non-residents for tax purposes)

a) Income and corporation tax

Shareholders who are residents of countries other than Germany are subject to a limited tax liability on their income from dividends in Germany, if the beneficiary of the dividend has his/her habitual residence, company management, or registered place of business in Germany. However, the tax liability is considered to have been discharged on payment of investment income tax plus the solidarity surcharge.

This means that the cash dividend is subject to an investment income tax of 25% plus a solidarity surcharge amounting to 5.5% of the investment income tax levied, as is the case with shareholders who are residents of Germany. However, in numerous double

taxation agreements, the right of the source state to levy a withholding tax is limited to a ceiling rate or is suspended. If this tax is lower than the investment income tax charged in the Federal Republic of Germany (currently 25%) plus solidarity surcharge, the non-resident shareholder may claim a reduction in the investment income tax. However, this reduction will only be granted in the form of a refund by the German tax authorities. Applications should be directed to the Federal Office of Finance, Friedhofstrasse 1, 53221 Bonn, Germany.

Shareholders with a limited tax liability are eligible neither for a corporation tax imputation credit, nor for a savers tax allowance.

On the other hand, where the shares belong to the assets of a business establishment or a permanent business facility in the Federal Republic of Germany maintained by the non-resident shareholder, taxes are levied as in the case of a shareholder resident in Germany who holds shares within the assets of a business establishment in Germany. (For more information, please see the section entitled "Taxation of shareholders with unlimited tax liability") In this case, shareholders with limited corporation tax liability are subject to a reduced corporation tax rate of 42% (plus a solidarity surcharge amounting to 5.5% of the corporation tax).

b) Taxation of profits from disposal

Gains from the disposal of shares held by a shareholder with limited tax liability are not subject to German income tax, unless

- the shares belong to a business establishment or a permanent business facility in the Federal Republic of Germany, or
- the shareholder directly or indirectly held an interest in the share capital of a domestic Kapitalgesellschaft (public limited company) exceeding 25% at any time during the last five years, and no exemption based on a putatively applicable double taxation agreement exists.

c) Inheritance and gift tax

The acquisition of shares held by shareholders with limited tax liability by way of a lifetime gift or as inheritance on account of death is only subject to German inheritance or gift tax if

- the testator, donor or recipient was a resident of Germany pursuant to Art. 2 of the ErbStG (German Inheritance Tax Law), or
- at the time of transfer to the recipient, the shares belonged to the assets of a business establishment or a permanent business facility in the Federal Republic of Germany belonging to the shareholder, or
- the shareholder, either individually or together with other persons associated with him/her, directly or indirectly held an interest in the nominal capital of the company amounting to at least 10%.

d) Wealth tax

As in the case of shareholders resident in Germany, wealth tax will not be levied for assessment periods after January 1, 1997 until further notice.

General information

Liability for the content of this Offering Prospectus/Company Report

LPKF Aktiengesellschaft and the underwriting banks assume liability for the contents of this Offering Prospectus/Company Report in connection with Art. 77, and Arts. 45ff. of the Börsengesetz (German Stock Exchange Act), and herewith state that to the best of their knowledge, the information contained in this Offering Prospectus/Company Report is accurate, and that no material circumstances have been omitted.

Inspection of documents

The Annual Reports and Interim Reports of the Company, as well as the public Company-specific documents cited in this Offering Prospectus are available from/may be inspected at the premises of LPKF AG, Osteriede 7, 30827 Garbsen, Germany, and at DG BANK Deutsche Genossenschaftsbank AG, Am Platz der Republik, 60265 Frankfurt am Main, Germany (hereinafter also referred to as "DG BANK") during regular business hours.

Subject of the Offering Prospectus/Company Report

The subject of the Offering Prospectus are the bearer shares of LPKF AG ("the shares"), specifically

- 2,100,000 no-par-value ordinary bearer shares (unit shares) each endowing a notional entitlement in the Company's registered capital of DM 5.-, equivalent to a total value of DM 10,500,000.-, each carrying full dividend rights as from financial year 1998, plus
- up to 100,000 no-par-value ordinary bearer shares (unit shares) each endowing a notional entitlement in the Company's registered capital of DM 5.-, equivalent to a total value of DM 500,000.-, in respect of the conversion rights extending to October 13, 2003, into no-par-value ordinary bearer shares created from a conditional capital reserve and carrying full profit-sharing rights for the financial year in which the application to convert becomes effective.

The admission of the total of up to 2,200,000 no-par-value ordinary bearer shares (unit shares) to the Geregelter Markt (Second Trading Segment) with admission to trading on the Neuer Markt of the Frankfurter Wertpapierbörsse (FWB Frankfurt Stock Exchange) was applied for on October 29, 1998. The listing order was received on November 19, 1998. Trading in the above-mentioned ordinary bearer shares is expected to commence on November 30, 1998.

Placement

A banking consortium with DG BANK Deutsche Genossenschaftsbank AG as lead manager, and comprising DG BANK, Bankgesellschaft Berlin AG, Commerzbank AG and M.M.Warburg & Co. KGaA, has underwritten DM 1,500,000.-/300,000 unit shares from the capital increase against cash contributions of October 30, 1998 and DM 750,000.-/ 150,000 unit shares from the current shareholders' holdings, and has assumed the responsibility for placing these shares with a wide group of investors as part of a public offering in the period between November 24 and November 26, 1998 inclusive (with reservation of the right to curtail the offering period).

Additionally, up to 45,000 unit shares out of the total placement volume are subject to a right of preferential subscription by employees and investors associated with LPKF. Any of these shares not taken up on this privileged basis will be included in the main placement.

The existing shareholders have granted the consortium banks an option in the event of oversubscription to call on up to a further 67,000 bearer unit shares each endowing a notional entitlement in the Company's registered capital of DM 5.-, equivalent to a total value of DM 335,000.- as a "greenshoe" facility. This option can be exercised in full or in part at any time within 30 days of the start of trading in the shares.

The above-mentioned total of up to 517,000 unit shares will be offered by means of a book building process within a price range of DM 53.- to DM 62.- per unit share.

The final placement price at which all the up to 517,000 unit shares will be settled, is expected to be fixed on November 27, 1998 by means of the order book created during the bookbuilding process and is scheduled to be published in the Börsen-Zeitung on November 28, 1998.

Investors are expected to be able to ascertain the number of shares allotted to them starting on November 30, 1998 at the financial institution managing their securities accounts.

Purchasers will probably be required to pay the purchase price for the total of up to 517,000 unit shares plus securities commission on December 1, 1998.

DG BANK is empowered to perform surplus allocations or to take other measures as part of the allocation of the up to 517,000 unit shares to be placed to stabilize the market price or to maintain this price at a level which it would not sustain otherwise. Such stabilization measures may be discontinued at any time.

Net Offering Proceeds, Issuing Costs

The net offering proceeds from the placement of the total of up to 517,000 unit shares consist of the placement price to be paid per bearer share multiplied by the number of shares placed, less the issuing and placement costs. The issuing and placement costs are anticipated to amount to between approximately DM 2,1 million and DM 1,6 million, including the total remuneration of the underwriting banks of between approximately DM 1,2 million and DM 1,7 million. The net offering proceeds are expected to amount to between approximately DM 22.1 million and DM 30.1 million.

The net proceeds of the placement of the 300,000 unit shares from the capital increase against cash contributions in 1998 will accrue to the Company and will be used, among other things, to finance the further internal and external growth of the Company. The Company is assuming the costs of this placement.

The net proceeds of the placement of the 217,000 unit shares from the shareholdings of the selling shareholders will accrue to the selling shareholders. The selling shareholders are assuming the costs of this placement.

Securities Code Number

Securities code number: 645 000
ISIN: DE 000 645 000 0

LPKF Aktiengesellschaft

Formation, Registered Office and Duration of the Company

The Company was founded as LPKF Jürgen Seebach Gesellschaft mit beschränkter Haftung on August 4, 1976 and was entered in the Commercial Register of the District Court of Hanover, Germany on March 3, 1977 under No. HRB 8376.

The Company was converted to the status of a joint stock corporation (Aktiengesellschaft) under the provisions of Sections 190 ff. UmwG (German Transformation Act) with effect from January 1, 1998. The change of status was entered in the Commercial Register of the District Court of Neustadt on September 23, 1998.

The registered office of the Company is Garbsen near Hanover. The address of the administrative office of the Company is Osteriede 7, 30827 Garbsen, Germany.

The Company is subject to the laws of the Federal Republic of Germany.

The Company has been formed without limit of duration.

Purpose of the Company

The Company's business objects are the development, manufacture, and sale of laser systems, machines, electronic components and devices plus the requisite software. The Company is empowered to conduct all business and take actions appropriate to the pursuit of its corporate objects. This includes the establishment of branches and the acquisition or establishment of other companies or equity participations in such companies both in Germany and abroad. The Company is also entitled to subcontract or transfer all or part of its operations to such companies.

Capitalization

The ordinary share capital of LPKF Laser & Electronics GmbH, which converted to joint stock corporation status on September 23, 1998 remained unchanged DM 650,000.- during the financial years 1995, 1996 and 1997. On March 11, 1998 the shareholders of LPKF Laser & Electronics GmbH resolved to increase the company's ordinary share capital through the capitalization of reserves of DM 650,000.- from DM 4,350,000.- to DM 5,000,000.-. The capital increase was entered in the Commercial Register on June 2, 1998.

An extraordinary shareholders meeting held on July 30, 1998 resolved to convert the Company to the status of a joint stock corporation (Aktiengesellschaft). The founding shareholders of the Aktiengesellschaft were: BB-Kapitalbeteiligungsgesellschaft mbH, Berlin, Bernd Hildebrandt, Klaus Sütter, Klaus Barke, Dr Michael Hempel, Hannelore Barke, Margit Hildebrandt, Bernd Hackmann, Jörg Kickelhain and Stefan Wenke.

According to the formation audit report presented by SOCIETÄTS TREUHAND GMBH Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft on August 26, 1998, the value of the assets transferred to the new AG under the change of legal basis less the transferred liabilities was equal to the nominal value of the original capital of DM 5,000,000.-. The audit certificate states: "On the basis of the conclusive findings of our examination, which was conducted in accordance with the statutory requirements of Arts. 33 and 34 AktG (Aktiengesetz - German Stock Corporation Act), we affirm that on the basis of the documents and records submitted to

us and the clarifications and proofs provided, the statements of the founding shareholders as to the assumption of title in of the Company's shares, the contributions to its registered capital, and the determinations required by Arts. 26 and 27 AktG are complete and correct. The value of the contributions in kind is equal to the nominal value of the shares to be issued against the capital."

The resolution was recorded in the Commercial Register of the District Court of Neustadt on September 23, 1998.

The general meeting of the Company held on October 13, 1998 resolved inter alia the following points:

- The Managing Board was authorized to increase the original registered capital of the Company once or several times at any time up to October 30, 2003 with the approval of the Supervisory Board by a total of up to DM 2,500,000.-, by issuing new shares against cash or non-cash contributions, to exclude shareholders' subscription rights in respect of fractions and also to the extent necessary to permit the holders of options and convertible loan stock issued by the Company a preferential right to subscribe for new shares. The Managing Board was further empowered to exclude shareholders' subscription rights in respect of the issuance of employee shares up to a total value of DM 500,000.- and up to a total of a further DM 500,000.-, within the scope of Art. 186 Para 3, Sentence 4 AktG. The Managing Board was further empowered to exclude shareholders' subscription rights in respect of a further total of DM 250,000.- provided the new shares are issued against non-cash contributions.
- The meeting authorized the Managing Board to issue convertible loan stock to the Directors and employees of the Company and those of associated companies, and created a conditional capital reserve of DM 500,000.- for this purpose.

The above-mentioned amendments to the Articles of Association were entered in the Commercial Register of the District Court of Neustadt on November 3, 1998.

The shareholders meeting held on October 30, 1998 resolved to increase the Company's registered capital of DM 5,000,000.- by DM 5,500,000.- to DM 10,500,000.- through cash contributions to the value of DM 5,000,000.- through the issue of 1,100,000 bearer unit shares. The new shares will be issued at DM 5.- per share, i.e. at their notional nominal value with no premium. Shareholder subscription rights were excluded in respect of 300,000 unit shares with a total notional nominal value of DM 1,500,000.-.

Of these new shares, the existing shareholders assumed title over 800,000 unit shares, notionally equivalent to DM 4,000,000.- of the Company's registered capital. The remaining 300,000 unit shares, notionally equivalent to DM 1,500,000.- of the registered capital, were taken over by DG BANK Deutsche Genossenschaftsbank AG, subject to the undertaking to place them as part of the process of the Company's Stock Exchange listing and initial public offering, in accordance with the terms of underwriting agreement between the Company and the Bank.

The new shares carry full dividend rights for the 1998 financial year, i.e. as of January 1, 1998.

The capital increase against cash contributions was entered in the Commercial Register of the District Court of Neustadt on November 17, 1998. The share capital of the Company currently amounts to DM

10,500,000.-. It is divided into 2,100,000 unit shares each equivalent to a notional DM 5.- share of the capital.

All of the Company's shares are fully paid up.

The form of the share certificates and the dividend and renewal coupons will be determined by the Managing Board subject to the approval of the Supervisory Board. The shareholders do not have the right to claim individual certification of these shares. Global shares may be issued. The Managing Board is further empowered, subject to the consent of the Supervisory Board, to determine the further content of equity rights and the terms and conditions of share issuance.

The 2,100,000 unit shares are certificated by global certificates with dividend coupons, which are deposited with Deutsche Börse Clearing AG, Frankfurt am Main. It is not planned that individual physical certificates will be printed. The shareholders are entitled to co-ownership shares of the global certificates with dividend coupons.

Major Shareholders

After the increase in share capital and the placement of the shares, the shareholders listed below will have the following proportional holdings in the Company:

	Current Holding	Assuming greenshoe (extra allocation) is not taken up	Assuming greenshoe is taken up in full
BB-Kapitalbeteiligungsgesellschaft mbH, Berlin	20.00%	12.38 %	12.38 %
Bernd Hildebrandt	14.15%	11.27%	9.90%
Klaus Sülter	14.00%	11.14%	9.90%
Klaus Barke	13.00%	10.48%	9.90%
Sabine Gilbert	9.80%	8.40%	8.40%
Hannelore Barke	8.35%	7.15%	7.15%
Daniel Hildebrandt	5.00%	4.29%	4.29%
Mattias Hildebrandt	5.00%	4.29%	4.29%
Dr Michael Hempel	3.90%	3.34%	3.34%
Margit Hildebrandt	2.00%	1.71%	1.71 %
Bernd Hackmann	1.60%	1.37%	1.37%
Jörg Kickelhain	1.60%	1.37%	1.37%
Stefan Wenke	1.60%	1.37%	1.37 %
Unrelated shareholders (free float)	0.00%	21.43%	24.62%

Discrepancy bear out of roundings.

The above-mentioned current shareholders have undertaken to DG BANK not to directly or indirectly offer or sell any shares in the Company within a period of six months starting from the date on which the Company's shares are first traded on the Neuer Markt, nor to announce in advance such a sale or to take any other measures amounting in economic terms to such a disposal.

The existing shareholders with the exception of BB-Kapitalbeteiligungsgesellschaft mbH, Berlin, have concluded a pooling agreement which imposes restrictions on all the members of the pool in the disposal of their shares in the event of the Company's going public, and also requires all the members of the pool to vote their shares the same way. The terms of the pooling agreement permit the members of the pool to each sell up to 15,000 shares per annum from their holding to persons

not belonging to the pool within the three years following the Company's listing. Sales of shares between members of the pool are not subject to any restrictions. The pooling agreement cannot be terminated before December 31, 2001. (On the other relationships between the existing shareholders and LPKF, please refer to point 28 of the notes to the 1997 IAS financial statements for the LPKF Group.)

BB-Beteiligungsgesellschaft has announced that it would like to sell up to a further 50,000 shares after the expiry of the market protection agreement. BB-Beteiligungsgesellschaft has undertaken only to effect this sale in a manner which is supportive of the market. Until the disposal is effected, the voting rights in the shares accrue to DG BANK.

Executive Bodies of the Company

According to the Articles of Association of the Company, the Managing Board shall consist of at least two persons. Alternate members of the Board may be appointed.

The Company is represented in law by two members of the Managing Board or by one member of the Managing Board acting in concert with one authorized signatory ("Prokurist"). Notwithstanding this, the Supervisory Board may also authorize individual members of the Managing Board to represent the Company. The Supervisory Board has made use of this power and has authorized all the members of the Managing Board to represent the Company in their individual capacity.

The current members of the Managing Board are:

Bernd Hildebrandt (51)

After studying business administration, Mr Hildebrandt worked for 5 years in the printing industry. He studied part-time to achieve a qualification from the School of Advertising and Marketing in Hannover and subsequently passed the higher state examinations in business economics. After several years as a systems analyst with a computer manufacturer, he became managing director of LPKF Laser & Electronics GmbH in 1977. Mr Hildebrandt has been chairman of the Managing Board of LPKF Laser & Electronics AG since October 1, 1998.

Bernd Hackmann (39)

Mr Hackmann is a qualified power plant electrician and has an MSc in electrical engineering from Hanover University. After college, Mr Hackmann joined LPKF Laser & Electronics GmbH in 1983 as a development and sales engineer. He became a director of LPKF GmbH in 1992 and has also had the job of managing director of the ELASER subsidiary since 1997. He has been a member of the Managing Board of LPKF Laser & Electronics AG since October 1, 1998.

Jörg Kickelhain (36)

After qualifying as a communications technician, Mr Kickelhain obtained a degree in communications engineering and laser physics after studies at Mittweida and Humboldt University in Berlin. He joined the ELASER subsidiary in 1990 to work on developing laser applications for microelectronics. He was appointed managing director of ELASER in 1994 and of LPKF Laser & Electronics GmbH in 1997. He has been a member of the Managing Board of LPKF Laser & Electronics AG since October 1, 1998.

The Managing Board may be contacted at the Company's registered business address.

Total remuneration for the directors of LPKF Laser & Electronics GmbH (whose composition was the same as the present Managing Board of LPKF AG) during the 1997 financial year amounted to DM 1,447,645.-. However, Mr Kickelhain only joined the directors on December 1, 1997, so that his remuneration only figures in $\frac{1}{2}$ of the period. In determining the directors' remuneration, due consideration was made for their exceptional contribution to the Company's success. However it is possible that the tax authorities, because the directors were simultaneously also shareholders, will take the view that part of their total remuneration should be treated as what is called a concealed profit distribution within the meaning of section 8.3 of the German Corporation Tax Act. Unlike regular salary payments, a concealed profit distribution cannot be set against a company's income to reduce its corporation tax liabilities so the result would be to increase the tax payable on the Company's profits. If the authorities were to demand the resulting back-tax, this would probably apply to a period of several years and have a negative impact on the Company's profits in the year of settlement.

Following the placement, the members of the Managing Board will have the following proportional holdings in the Company:

	Assuming greenshoe is not taken up	Assuming greenshoe is taken up in full
Bernd Hildebrandt	11.27 %	9.90 %
Jörg Kickelhain	1.37 %	1.37 %
Bernd Hackmann	1.37 %	1.37 %

In accordance with the Articles of Association of the Company, the Supervisory Board currently consists of three members. Unless the general meeting of shareholders determines a shorter period of office in respect of the individual members it appoints or for the Supervisory Board as a whole on appointment, its members are elected for the period up to the end of the General Meeting which grants them discharge for the fourth financial year after they have taken office. The financial year in which they are elected is not counted for this purpose.

The Supervisory Board currently comprises the following members:

Mr Klaus Sülter, Hanover
(Chairman)
Businessman

Mr Klaus Barke, Burgwedel
Master machine builder

Mr Udo E. Hartmann, Berlin
CEO of BB-Kapitalbeteiligungsgesellschaft mbH, Berlin

The Supervisory Board can be contacted via the Company's registered office.

According to the Articles of Association of the Company, the remuneration of the members of the Supervisory Board is to be determined by the first ordinary general meeting. It is planned to propose to the meeting that the members be paid a fixed basic remuneration of DM 10,000.- for each full financial year for which they belong to the Supervisory Board. The Chairman should then receive double and the Deputy Chairman one and a half times this amount.

The share placement will leave the member of the Supervisory Board with the following percentage holdings in the Company:

	Assuming greenshoe (extra allocation) is not taken up	Assuming greenshoe is taken up in full
Klaus Süter	11.14%	9.90%
Klaus Barke	10.48%	9.90%

The General Shareholders Meeting must be held at the registered office of the Company or at the location of one of its branches or at the location of a German stock exchange. Each unit share carries the entitlement to one vote.

Employee Share Ownership Scheme

The shareholders' General Meeting held on October 13, 1998 authorized the Managing Board, with the consent of the Supervisory Board, to establish an employee share ownership scheme. This will involve the Managing Board, with the consent of the Supervisory Board, in issuing convertible loan stock in one or more tranches over the next few years up to a total nominal value of DM 500,000.-. The first step will be to issue convertible loan stock, which will only be offered to the Company's employees and Managing Board members for subscription, to accompany the start of trading in the Company's shares. The entitlement of the Company's existing shareholders to subscribe to this convertible stock was excluded.

Each convertible debenture certificate with a nominal value of DM 5.- conveys the right of conversion into an LPKF AG unit share, with the beneficiaries receiving the number of shares arrived at by dividing the total par value of the convertible loan stock submitted for conversion by the notional nominal value of the unit share at the time of exercise. Any resulting part-amounts will be subject to a separate arrangement.

The right of conversion cannot be exercised before the third year from the issue of the convertible loan stock. It can only be exercised providing the owner of the right has not given or received notice to terminate his or her employment with the Company or one of its affiliates.

The conversion price will be the spot price fixed on the FWB Frankfurt Stock Exchange on the first business day following the ordinary general meeting of the Company in the year of the respective exercise period, divided by a performance coefficient.

The performance coefficient will be established by comparing the development of the share price relative to the FWB Frankfurt Stock Exchange DAX index. The basis for calculating the performance coefficient will be two reference periods of ten business days each.

The first reference period will be the first ten business days of the subscription period within which the relevant convertible debenture was subscribed for. The second reference period will be the period from fifteen to six days before the ordinary General Meeting of the Company in the year of the respective exercise period.

The development of the Company's share price is expressed by the ratio of the arithmetic mean of its spot prices during the second reference period to the equivalent average value over the first reference period. The same procedure will be used to determine the evolution

of the DAX index, with each day's closing prices used instead of spot prices.

In the case of the convertible loan stock to be issued during 1998, the price at which the share is placed on introduction to the Stock exchange will serve as the share price for the first reference period.

The conversion price may be adjusted to reflect capital increases and the issuance of warrants or options.

Exercising the conversion right obligates the owner to make an additional payment to the value of the conversion price less the nominal value of the debenture certificates submitted for conversion.

Financial Year, Official Notices, Paying Agents and Depositories

The financial year of the Company is the calendar year.

The Articles of Association of the Company stipulate that the Company's official notices shall be published exclusively in the Bundesanzeiger (Federal Gazette). In addition, the Company will publish its official notices in a supraregional journal for statutory stock market notices issued by the FWB Frankfurt Stock Exchange. However, publication in the Bundesanzeiger shall be sufficient to satisfy the legal requirements for the official notice.

The Company will appoint and announce the appointment of at least one bank within Germany to act as paying agent and depository, at whose counters all transactions concerning the shares may be effected. The paying agents and depositaries are the banks which are currently members of the consortium and which are listed later on in this prospectus.

Appropriation of Profits

It is the function of the General Meeting to decide on the appropriation of the balance sheet profit arising out of the approved annual financial statements. The meeting may resolve to appropriate the distributable profit by transferring sums to the reserves, carrying sums forward as retained earnings or distributing sums to the shareholders. The meeting is also empowered to resolve a further use than the ones listed.

In the context of a decision to increase the Company's capital, the appropriation of the profits for new shares may be determined in a manner different from that laid down in Art. 60 Para. 2 Sentence 3 of the Aktiengesetz (German Stock Corporation Act).

The net earnings per share (relative to the notional nominal value per share of DM 5.-) shown in the commercial balance sheet on the basis of the "pro forma AG" accounts and the consolidated IAS accounts (figures in brackets) have evolved as follows:

	Net profit on year	Earnings per share based on the former GmbH share capital of DM 650,000.-	Earnings per share based on the AG registered capital of DM 10,500,000.-
1995	DM 2,508,155.45*	DM 19.29*	DM 1.19*
1996	DM 3,313,513.05 (TDM 3,814)	DM 25.49 (DM 29.34)	DM 1.58 (DM 1.82)
1997	DM 4,292,458.55 (TDM 4,282)	DM 33.02 (DM 32.94)	DM 2.04 (DM 2.04)

* IAS accounts were not prepared for the LPKF Group's 1995 financial year.

A distribution of DM 2.9 million will be made to shareholders during 1998 in respect of 1997. No distribution was made in 1997 in respect of 1996 because an advance distribution of DM 3.5 million was made to the shareholders during 1996. The advance distribution during 1995 amounted to DM 2 million and a further distribution was made in 1996 in respect of 1995 to the value of DM 500,000.-.

The dividend per share (relative to the notional nominal value per share of DM 5.-) on the basis of the actual distributions made has evolved as follows:

	Distribution	Dividend per share based on the former GmbH share capital of DM 650,000.-	Dividend per share based on the AG registered capital of DM 10,500,000.-
1995	DM 2.5 million	DM 19.23	DM 1.19
1996	DM 3.5 million	DM 26.92	DM 1.67
1997	DM 2.9 million	DM 22.31	DM 1.38

Since the distribution policy pursued in the past is not the dividend policy the Company aims to pursue in future, the figures cited are of only qualified value as an indicator of future distributions.

Future dividend payments will depend on the Company's profitability, its financial position, its need for cash resources, and the general business state of the markets in which LPKF is active. In addition, legal, tax and other factors will influence dividends. The Company does not plan to pay a dividend in 1999 in respect of 1998. Although the Company does expect to distribute an annual dividend in respect of the years subsequent to 1998, it is not possible to predict its size at this stage.

Auditors

The annual financial statements of LPKF Laser & Electronics GmbH for the years 1995, 1996 and 1997 were audited by SOCIETÄTS TREUHAND GmbH of Hanover and were granted an unqualified audit opinion.

The pro forma consolidated financial statements for the same years were certified by the same firm of auditors.

The consolidated financial statements of LPKF Laser & Electronics GmbH prepared in accordance with the International Accounting Standards (IAS) as at December 31, 1997 were also examined by the same firm, and granted an unqualified audit opinion. The interim summary financial statements and report of the LPKF Group to September 30, 1998 (prepared to IAS) have not been audited.

Explanatory notes to the key ratios for financial year 1997 in comparison

The following explanatory notes to the key financial ratios of the LPKF Group for 1997 compared to 1996 relate to the income and cash flow statements of the group's accounts for 1997 drawn up in accordance with IAS. However, the information should be read in conjunction with the "pro forma" financial statements of LPKF AG prepared in accordance with the German Commercial Code (HGB). These follow this explanatory section in the Offering Prospectus.

In comparing the figures presented in the annual accounts of LPKF AG (pro forma basis) and the IAS-basis financial statements for the group, it is important to remember that IAS accounting differs in several important respects from the German generally accepted accounting principles (GoB).

Data from the income statement

Sales revenues

1996	1997	Change
DM 23.0 million	DM 29.6 million	28.6%

The main engine of turnover growth in 1997 was the Lasers divisions, whose revenues increased by 38.9% over the previous year. Virtually all the increase stemmed from additional sales of the StencilLaser line. The Rapid Prototyping division also recorded an expansion, but not in the same order of magnitude as Lasers. Its revenues were 18.4% higher than the prior year. The ELASER subsidiary, which produces stencils under contract for customers, saw its revenues expand less strongly, namely by 5.6% compared to the previous year.

Sales of most accessories and replacement parts, consumables and software expanded in line with the higher sales of the base machines. The Company recorded a decline in turnover of 24.7% on one product group, through-plating systems; however this was of secondary importance as this business only accounts for 1.7% of aggregate group turnover.

The geographical distribution of sales in 1996 and 1997 was as follows:

	1996	1997
Germany	27.9%	23.9%
Rest of Europe	27.4%	22.7%
North America	13.0%	24.7%
South America	0.3%	0.7%
Asia	30.4%	24.0%
Others	1.0%	4.0%

The most notable feature of this distribution is the growing importance of the group's North American sales, which virtually doubled their share of the total. Since LPKF bills in US dollars – in contrast to its practice in other non-domestic markets – the group foresees a growing need for currency hedging during this and next year.

Materials expense

1996	1997	Change
DM 7.4 million	DM 9.5 million	27.9%

The increase in materials costs matches the growth of sales, so that both years' gross margin remained constant at approximately 68%.

Personnel expense

1996	1997	Change
DM 6.4 million	DM 7.5 million	17.5%

The increase in personnel expense was essentially due to higher expenditure on wages and salaries due to the overall growth of the workforce. The headcount increased from 70 at December 31, 1996 to 85 at end-1997, equivalent to a 21% increase. Around 36% of the new blood (5 employees) were appointed to the research and development function, while the expansion of production only required a 21% increase (3 new employees).

Depreciation

1996	1997	Change
DM 1.7 million	DM 1.8 million	5.4%

The slight increase in depreciation and amortization costs was due to a corresponding increase in fixed assets. This heading increased by around 6% between end-1996 and end-1997 due to the increased procurement of technical plant and software and the extension of the Company's building.

Profit on ordinary operations

1996	1997	Change
DM 6.5 million	DM 7.2 million	9.8%

The growth of earnings was not quite able to keep pace with the advance of turnover. The main cause for this lay in a 61.7% increase in Other operating expenses in 1997 compared to the preceding year. This rise was principally due to expenditures in connection with the liquidation of the group's French subsidiary (LPKF S.A.R.L.), which depressed earnings by approximately DM 0.5 million. There were also substantial increases in the group's expenditure on research and development 186.0% higher as well as distribution and advertising (45.2%).

Group net profit

1996	1997	Change
DM 4.1 million	DM 4.4 million	7%

The principal reasons cited for the smaller increase in the group's net profit compared to its profit from ongoing operations were higher charge of LPKF AG in corporation income tax payments, plus the solidarity surcharge in 1997.

Data from the cash flow statement

	1996	1997
Inflow of funds from ongoing operating activities	DM 4.0 million	DM 5.4 million
Inflow of funds from investing activities	DM -4.8 million	DM -2.0 million
Inflow/outflow of funds from financing activities	DM 1.0 million	DM -2.4 million
Funds at January 1	DM -0.04 million	DM 0.1 million
Funds at December 31	DM 0.1 million	DM 1.1 million

Cash flow from ongoing operating activities was the most important source of financing in fiscal years 1996 and 1997. This flow was 35% higher in 1997 than in 1996. Apart from the increase in net profit, the main contributory factors were lower inventories and lower trade debtors, which added up to significantly improved liquidity. The value of current assets reduced by 7.6% between December 31, 1996 and December 31, 1997, from DM 13.2 million to DM 12.2 million. The outflow of funds from investing activities was more than twice as high in 1996 as in 1997. DM 1.3 million of this outflow total was due to spending on expanding the Company's headquarters at Garbsen, while the rest was mainly explained by purchases of equipment to support research and development projects. Increased investment produced a corresponding increase of 5.6% in the value of fixed assets from DM 8.9 million at end-1996 to DM 9.4 million at end-1997. The inflow of funds from financing activities of DM 1.0 million in 1996, which was essentially funded through an increase in long-term bank borrowings intended to support the level of investment, compares with an outflow of funds from financing activities which totaled DM 2.4 million in 1997. The main cause of this net outflow, which came in spite of the taking on of further long-term bank loans to the value of DM 1.0 million, was the burden on cash flow which resulted from the payment of a DM 3.5 million dividend to the shareholders. Thanks to advance distributions, dividends represented only a DM 0.5 million charge on cash flow in 1996 even though the total distribution amounted to DM 2.5 million.

Reconciliation to the "pro forma AG" financial statements

The comparative annual overviews of the "pro forma AG" for 1995 through 1997 were based on the audited financial statements, approved without qualification, of LPKF Laser & Electronics GmbH, Garbsen. The "pro forma AG" financial statements have been compiled according to the provisions of the German Commercial Code and company law governing medium-size stock corporations on the basis of the annual financial statements of LPKF Laser & Electronics GmbH, Garbsen, which were prepared in accordance with German generally accepted accounting principles (GoB).

The annual net profit totals of the "pro forma AG" have been calculated from the starting point of LPKF Laser & Electronics GmbH's annual net profit adjusted for the additional expenses associated with the Aktiengesellschaft legal form, as follows:

	1997 DM	1996 DM	1995 DM
LPKF Laser & Electronics GmbH annual net profit	4,344,358.55	3,368,505.05	2,560,080.45
"Pro forma AG" adjustments:			
- Additional expense arising from change of legal loans form	51,900.00	54,992.00	51,925.00
Total	4,292,458.55	3,313,513.05	2,508,155.45

The effects on the income statement arising from the change in legal form are shown under the heading "pro forma AG" Balancing Item.

This has increased as follows:

	1997 DM	1996 DM	1995 DM
Additional expense arising from change of legal form	100,000.00	100,000.00	100,000.00
Reduction in tax liability	48,100.00	45,008.00	48,075.00
Interim total	51,900.00	54,992.00	51,925.00
Carried forward from previous year	106,917.00	51,925.00	0.00
Total	158,817.00	106,917.00	51,925.00

Balance sheet of LPKF Laser & Electronics GmbH, Garbsen, as at December 31, 1997 and commercial balance sheets of the "pro forma AG" for the years 1995 to 1997 (HGB)

**Balance sheet of LPKF Laser & Electronics GmbH, Garbsen,
as at December 31, 1997 and commercial balance sheets of
the "pro forma AG" for the years 1995 to 1997 (HGB)**

Assets	GmbH "Pro forma AG"		"Pro forma AG"		"Pro forma AG"	
	12.31.1997	12.31.1997	12.31.1996	12.31.1995	DM	DM
A. Fixed Assets						
I. Intangible assets						
1. Software	164,122.00	164,122.00	244,631.00	4,448.00		
2. Payments on account	175,000.00	175,000.00	75,000.00	0.00		
	339,122.00	339,122.00	319,631.00	4,448.00		
II. Tangible assets						
1. Land, equivalent rights and buildings	3,253,698.82	3,253,698.82	3,215,069.82	1,968,670.82		
2. Technical plant and machinery	1,662,085.34	1,662,085.34	1,007,296.00	479,150.00		
3. Other plant, factory and office equipment	715,657.00	715,657.00	785,835.00	603,070.00		
4. Payments on account and plant under construction	136,647.91	136,647.91	491,034.05	111,703.91		
	5,768,089.07	5,768,089.07	5,499,234.87	3,162,594.73		
III. Financial assets						
1. Shares in affiliated companies	401,511.47	401,511.47	284,679.82	281,679.82		
2. Investments	167,010.48	167,010.48	192,010.48	192,010.48		
	568,521.95	568,521.95	476,690.30	473,690.30		
B. Current Assets						
I. Inventories						
1. Raw materials, consumables and supplies	38,495.04	38,495.04	1,062,388.28	889,185.44		
2. Work in process	344,400.00	344,400.00	516,600.00	0.00		
3. Finished goods	6,216,176.19	6,216,176.19	4,906,179.12	2,487,297.22		
4. Prepayments made	280,000.00	280,000.00	197,064.00	333,944.64		
	6,879,071.23	6,879,071.23	6,682,231.40	3,710,427.30		
II. Receivables and other assets						
1. Trade receivables	977,146.94	977,146.94	1,080,334.54	1,465,114.81		
2. Due from affiliated companies	849,203.98	849,203.98	1,621,683.22	2,140,255.65		
3. Due from companies with which a participation relationship exists	770,100.21	770,100.21	505,720.60	774,902.67		
4. Other assets	584,023.31	584,023.31	893,086.66	417,378.63		
	3,180,474.44	3,180,474.44	4,100,825.02	4,797,651.76		
III. Cash in hand, bank and girobank bank balances	843,082.39	843,082.39	807,631.65	222,661.56		
C. Deferred charges to operations						
- Of which: Discounts	96,976.89	96,976.89	109,475.20	82,336.83		
	68,403.50	68,403.50	77,188.10	23,095.46		
	17,675,337.97	17,675,337.97	17,995,719.44	12,453,810.48		

Liabilities	GmbH "Pro forma AG"		"Pro forma AG"		"Pro forma AG"	
	12.31.1997	12.31.1997	12.31.1996	12.31.1995	DM	DM
A. Shareholders' equity						
I. Subscribed capital					650,000.00	650,000.00
II. Capital reserve					2,740,000.00	2,740,000.00
III. Retained profit reserve, other profit reserves					211,550.00	211,550.00
IV. Distributable profit					4,512.40	84,082.35
1. Carried-forward profit/loss					-102,404.60	75,926.90
2. Net income for the year					4,344,358.55	3,313,513.05
3. Advance distribution					0.00	2,508,155.45
						-3,500,000.00
						-2,000,000.00
					7,950,420.95	7,791,603.95
						3,499,145.40
						4,185,632.35
B. "Pro forma AG" balancing item					0.00	158,817.00
C. Accrued liabilities					106,917.00	51,925.00
1. Provisions for Pensions					78,833.00	70,664.00
2. Provisions for taxes					227,949.00	903,365.00
3. Other provisions					1,735,020.00	1,412,271.00
					2,041,802.00	3,120,072.00
D. Liabilities					62,786.00	
1. Liabilities to banks					5,147,665.49	3,604,071.23
2. Payments received on account of orders					1,159,502.05	475,944.13
3. Trade payables					320,135.22	221,684.53
4. Liabilities to affiliated companies					523,584.85	0.00
5. Liabilities to companies with which a participation relationship exists					300,779.23	106,669.65
6. Other liabilities					231,448.18	3,693,881.22
- of which taxes					74,411.37	2,413,923.24
- of which in relation to social security					118,104.36	1,961,757.79
					7,683,115.02	1,126,585.04
						6,715,623.13
					17,675,337.97	17,675,337.97
						17,995,719.44
						12,453,810.48

**Statement of income for LPKF Laser & Electronics GmbH,
Garbsen, as at December 31, 1997 and commercial balance
sheets of the "pro forma AG" for the years 1995 to 1997 (HGB)**

	GmbH "Pro forma AG" 12.31.1997 DM		"Pro forma AG" 12.31.1997 DM		"Pro forma AG" 12.31.1996 DM		"Pro forma AG" 12.31.1995 DM	
1. Sales	27,572,963.11	27,572,963.11	21,579,903.17		18,501,625.61			
2. Increase/decrease (-) in inventories and work in process	-376,919.14	-376,919.14	1,603,239.37		-845,117.23			
3. Other capitalized own work	171,237.51	171,237.51	564,921.59		293,919.77			
4. Other operating income	2,257,284.78	2,257,284.78	1,524,916.09		647,640.78			
5. Cost of materials: Expenditures on raw materials, consumables and supplies and purchased merchandise	13,111,931.85	13,111,931.85	11,995,324.51		8,785,348.71			
6. Personnel expenses a) Wages and salaries	5,135,984.33	5,135,984.33	4,291,779.95		3,055,086.83			
b) Social security, pension and welfare costs - of which: for old-age pensions	785,230.24	785,230.24	618,954.87		477,619.94			
93,271.98	93,271.98		79,816.04		70,459.67			
7. Depreciation on intangible fixed assets and tangible assets	1,109,515.41	1,109,515.41	971,267.30		666,132.23			
8. Other operating expenses	4,387,180.37	4,487,180.37	3,479,323.37		2,661,575.33			
9. Income from participations - of which: from affiliated companies	1,070,655.84	1,070,655.84	0.00		0.00			
10. a) Income from profit transfer agreements b) Municipal trading tax levy charged on to another group company	1,027,798.70	1,027,798.70	0.00		0.00			
10. a) Income from profit transfer agreements b) Municipal trading tax levy charged on to another group company	1,410,609.64	1,410,609.64	1,947,472.18		1,505,671.19			
11. Other interest and similar income - of which: from affiliated companies	339,963.00	339,963.00	375,250.00		280,238.00			
12. Interest and similar expenses - of which: to affiliated companies	72,841.65	72,841.65	87,361.41		63,764.39			
13. Extraordinary income	43,423.25	43,423.25	31,184.86		0.00			
14. Extraordinary expenses	530,402.71	530,402.71	443,609.29		399,140.66			
15. Balance of extraordinary income and expense	32,947.84	32,947.84	0.00		0.00			
16. Results from ordinary activities	275,000.00	275,000.00	0.00		0.00			
17. Tax on income	525,951.34	525,951.34	0.00		0.00			
18. Other taxes	2,853,694.67	2,805,594.67	2,530,600.54		1,860,363.37			
19. Net income for the year	9,386.92	9,386.92	38,690.93		34,319.99			
	4,344,358.55	4,292,458.55	3,313,513.05		2,508,155.45			

**Funds flow statements for LPKF Laser & Electronics GmbH,
Garbsen, as at December 31, 1997 and Funds flow State-
ments of the "pro forma AG" for the years 1995 to 1997 (HGB)**

	GmbH 1997 DM '000	"Pro forma AG" 1997 DM '000	"Pro forma AG" 1996 DM '000
Ongoing operations			
Net income for the year	4,344	4,292	3,313
+ Depreciation on fixed assets	1,109	1,109	971
- Gains on the disposal of fixed assets	-280	-280	-1
+ Losses on the disposal of fixed assets	15	15	8
+ Other non-cash expenses	0	52	55
-/+Increase (-)/decrease in trade receivables and other assets	227	227	-3,091
-/+Increase (-)/decrease in accounts receivable from affiliated companies	773	773	519
-/+Increase (-)/decrease in accounts receivable from participation companies	-264	-264	269
+ Increase in long-term provisions	8	8	8
+ Increase in liabilities to affiliated and participation companies	632	632	541
+/-Increase (-)/decrease in other liabilities	-4,247	-4,247	3,025
Cash flow from current operating activities	2,317	2,317	5,617
Investing activities			
- Outflows of funds for fixed-asset investment	-1,558	-1,558	-3,759
+ Inflows of funds from fixed-asset disposals	333	333	127
Cash flow from investing activities	-1,225	-1,225	-3,632
Financing activities			
- Distribution of profits to shareholders	0	0	-4,000
+/-Increase/decrease (-) in liabilities to banks	-1,057	-1,057	2,600
Cash flow from financing activities	-1,057	-1,057	-1,400
Net cash increase/decrease in funds	35	35	585
Funds at the start of the reporting period	808	808	223
Funds at the close of the reporting period	843	843	808

Notes to the financial statements of LPKF Laser & Electronics GmbH, Garbsen, for the year ending December 31, 1997

1. General information on accounting and valuation principles

The balance sheet and income statement have been structured in accordance with the provisions of the German Commercial Code (HGB). Partly in order to assist comparability, no changes have been made from the previous year's practice. Where it assists clarity, the notes identify where the Company has made use of optional rights in respect of presentation.

The accounting and valuation principles applied are in accordance with the provisions of the Commercial Code (HGB) and the special rules for corporations.

Fixed assets have been valued throughout at their cost of acquisition or manufacture. In the case of fixed assets with a limited useful life, their cost of acquisition or manufacture has been reduced by regular depreciation.

The Company has taken advantage of the simplification rule permitted by administrative regulation 44 para. 2 of the German Income Tax Directive to the extent that non-real-estate business assets acquired in the first half of the year have been depreciated by the appropriate full-year amount, while non-real-estate business assets acquired in the second half of the year have been depreciated by half of the appropriate full-year amount.

List and proportion of participations

	Nominal capital	Shareholders equity	Proportion held at 31.12.1997 in %	Profit/loss in most recent year
ELASER Gesellschaft für Elektronik, Laser und Automation mbH, Suhl, Thuringia	DM 50,000	50,000	100.00	1,410,609
LPKF d.o.o., Kranj, Slovenia	SIT 1,500,000	217,743,000 (1996)	75.00	104,884,000 (1996)
Franklin Industries N.V., Mechelen, Belgium	BEF 9,980,000	3,658,336 (1996)	67.22	305,818 (1996)
LPKF CAD/CAM Systeme in Thüringen GmbH, Suhl, Thuringia	DM 192,000	279,977 (1996)	50.00	149,762 (1996)
LPKF CAD/CAM Systems Inc., Portland, Oregon, USA	US\$ 100	464,484	40.00	206,005 (provisional)
A-Laser Inc., Beaverton, Oregon, USA	US\$ 250,000	121,320 (1996)	20.00	-77,694 (1996)

Applying the tax valuation procedure permitted by Art. 6 para. 2 of the German Income Tax Act, the acquisition costs of non-real-estate business assets capable of independent use and with a purchase price of up to DM 800.00 have been written off in full in the year of accrual as operating expenses.

Disposals have been accounted for at the residual book value adjusted to the date of their sale or scrapping.

Current assets are carried either at the lower of cost of acquisition or manufacture, or market.

The deferred charges and debt discounts include expenditure ahead of the closing date which represents operating expense for a specified time after that date.

Pension provisions have been valued at their discounted value under the terms of Section 6 letter a EStG. The applicable rate is 6%. Other provisions have been valued on the basis of need according to prudent business judgment.

Liabilities are carried at their repayment amount.

Items denominated in foreign currency have been valued at the lower of cost or market in the case of assets, and the higher of cost or market in the case of liabilities. Their values have been translated at either the exchange rate which applied on the date they were incurred or the exchange rate on the closing date, as appropriate.

There are no changes in presentation or valuation to report.

2. Notes to individual headings of the balance sheet

Fixed assets

The composition and movements during 1997 of fixed assets are shown in a separate summary:

Other assets

The Company has accounts receivable repayable in more than twelve months to a total of DM 77,741.20 (1996: DM 64,359.70). There are no accounts receivable from shareholders (1996: DM 12,336.00).

Pension provisions

In addition to the pension liabilities reported in the balance sheet, there exist other obligations to the value of DM 36,829.00 in respect of pre-existing commitments.

Other provisions

The Other provisions heading essentially involve the following anticipated liabilities:

	DM '000
Residual holiday entitlement	134
Management bonuses	1,266
Guarantees	265
Accountancy fees	23
Mutual indemnity association contribution	27
Unsettled invoices	20
	1,735

Liabilities

The following table has been prepared to show the breakdown of the Company's liabilities by maturity term and type of security:

Table of liabilities (in DM '000)

Liability class	Total value	Up to 12 months	More than 1-5 years	Total value secured	Type of Security
Liabilities to banks	5,147	745	1,923	2,479	4,330 *
	(6,204)	(1,741)	(1,647)	(2,816)	(5,850) (*)
Pre-payments received	1,160	1,160	-	-	238 Bank guarantee
	(724)	(724)	(-)	(-)	(-) (-)
Trade liabilities	320	320	-	-	-
	(455)	(455)	(-)	(-)	(-) (-)
Liabilities to affiliated companies	524	524	-	-	-
	(86)	(86)	(-)	(-)	(-) (-)
Liabilities to associated companies	301	301	-	-	-
	(107)	(107)	(-)	(-)	(-) (-)
Other liabilities	231	231	-	-	-
	(3,694)	(3,694)	(-)	(-)	(-) (-)
	7,683	3,281	1,923	2,479	4,568
	(11,270)	(6,807)	(1,647)	(2,816)	(5,850)

* Mortgage, land charge certificate, transfer of ownership of machinery and equipment by way of security.

The Company has liabilities to shareholders to the value of DM 2,971.20 (1996: DM 1,345.65).

3. Other information

Other financial liabilities

The Company has an Other financial liability to the value of DM 455,839.82 arising from the purchase of real estate. The transfer of economic ownership (the passing of benefit and liability for public charges) will be effected only on payment of the full purchase price.

Guarantees

The Company has provided the following guarantees on its own liability on behalf of the following affiliated or associated companies:

ELASER Gesellschaft für Elektronik, Laser und Automation mbH DM 2,300,000.00

Franklin Industries N.V. BEF 750,000.00

- Dipl.-Ing. Jörg Kickelhain (appointed with effect from December 1, 1997, recorded in the commercial register on January 18, 1998).

Average number of employees

The average number of employees in the year under review was 48 (1996: 45).

Garbsen, January 23, 1998

LPKF Laser & Electronics GmbH

Bernd Hildebrandt

Bernd Hackmann

Jörg Kickelhain

**Statement of fixed asset movements
for LPKF Laser & Electronics GmbH, Garbsen, over the year
to December 31, 1997 (HGB)**

	Cost of acquisition or manufacture				Cumulative depreciation			Residual book value	
	Position at 1.1.1997 DM	Addition/ Transfer (T) DM	Disposals/ Transfer (T) DM	Position at 12.31.1997 DM	Position at 1.1.1997 DM	Additions DM	Liquidations DM	Position at 12.31.1997 DM	Prior year 12.31.1997 DM
Assets									
I. Intangible assets									
1. Software	522,347.14	0.00	0.00	522,347.14	277,716.14	80,509.00	0.00	358,225.14	164,122.00
2. Prepayments made	75,000.00	100,000.00	0.00	175,000.00	0.00	0.00	0.00	0.00	175,000.00
	597,347.14	100,000.00	0.00	697,347.14	277,716.14	80,509.00	0.00	358,225.14	339,122.00
II. Tangible assets									
1. Land, equivalent rights and buildings	3,657,887.49	188,255.35	0.00	3,846,142.84	442,817.67	149,626.35	0.00	592,444.02	3,253,698.82
2. Technical plant and equipment	1,483,782.37	747,723.01	27,839.00	2,621,552.52	476,486.37	487,696.81	4,716.00	959,467.18	1,662,085.34
	417,886.14 (T)								
3. Factory and office equipment	2,719,723.33	327,849.75	60,735.02	2,986,838.06	1,933,888.33	391,683.25	54,390.52	2,271,181.06	715,657.00
4. Prepayments made and plant under construction	491,034.05	63,500.00	417,886.14 (T)	136,647.91	0.00	0.00	0.00	0.00	136,647.91
	8,352,427.24	1,327,328.11	88,574.02	9,591,181.33	2,853,192.37	1,029,006.41	59,106.52	3,823,092.26	5,768,089.07
	417,886.14 (T)	417,886.14 (T)							
III. Financial assets									
1. Shares in affiliated	284,679.82	130,766.59	13,934.94	401,511.47	0.00	0.00	0.00	0.00	401,511.47
2. Other lending	192,010.48	0.00	25,000.00	167,010.48	0.00	0.00	0.00	0.00	167,010.48
	476,690.30	130,766.59	38,934.94	568,521.95	0.00	0.00	0.00	0.00	568,521.95
									476,690.30
	9,426,464.68	1,558,094.70	127,508.96	10,857,050.42	3,130,908.51	1,109,515.41	59,106.52	4,181,317.40	6,675,733.02
	417,886.14 (T)	417,886.14 (T)							6,295,556.17

LPKF Laser & Electronics GmbH, Garbsen

Management report on the 1997 financial year

Turnover expanded by a total of 30% during the year, with both laser systems and circuit board plotters contributing to the growth.

	1996		1997			
	Foreign sales	Domestic sales	Total	Foreign sales	Domestic sales	Total
Laser systems and accessories	8,015,694.75	943,184.39	8,958,879.14	10,151,384.35	2,688,776.20	12,840,162.55
Circuit board plotters	4,357,141.09	1,691,905.06	6,049,046.15	6,370,801.15	1,677,559.84	8,048,360.99
Other	5,417,938.56	1,154,039.32	6,571,977.88	4,830,333.66	1,854,105.91	6,684,439.57
Total	17,790,774.40	3,789,128.77	21,579,903.17	21,352,519.16	6,220,443.95	27,572,963.11

The newly developed 800 SL StencilLaser system was well received by the market and has replaced the previous model in some applications.

The MicrolineLaser system for manufacturing ultrafine conductor circuits was first presented to the public at the PRODUCTRONICA 97 show and received a warm response. The first sales are expected at the end of 1998 and in the subsequent years.

R&D expenditure increased disproportionately to sales, and the increase in personnel expenses was similarly largely due to the expansion of the development function.

For strategic reasons, the Company sold its stake in ATL Lasertechnik und Accessoires GmbH.

LPKF S.A.R.L., France, was liquidated and marketing and distribution responsibility for France transferred to Franklin Industries N.V., Mechelen, Belgium. This resulted in the need to write off a loan made to the French company to fund its market launch as well as outstanding accounts receivable.

The registered capital of Franklin Industries N.V. was increased by BEF 4,000,000.00. LPKF's share of the increase was BEF 2,689,000.00, equivalent to DM 130,599.35. The company's registered capital now amounts to BEF 9,980,000.00. Our share of this capital is unchanged at 67.22%.

Our affiliated companies LPKF d.o.o., Slovenia, and LPKF in Thüringen GmbH contributed their first-ever profits to the Group (reported under "Share of affiliates").

An increase in the Company's registered capital to DM 5,000,000.00 is planned for 1998.

The Group net profit on the 1997 financial year can be regarded as satisfactory.

Our outstanding product groups and the exceptional performance of our people create the prospect of turnover finishing even higher in 1998. Nevertheless, there are also considerable risks in Asia as a result of the economic crisis in the region. These relate particularly to the sale of StencilLasers.

Audit opinion and certificate

Audit opinion

"The accounting and the annual financial statements which we have audited in accordance with professional standards comply with the legal regulations.

In accordance with German generally accepted accounting principles (GoB), the annual financial statements present a true and fair view of the net worth, financial position and results of LPKF Laser & Electronics GmbH.

The management report is in agreement with the annual financial statements."

Hanover, February 13, 1998

SOCIETÄTS TREUHAND GMBH
Wirtschaftsprüfungsgesellschaft
Steuerberatungsgesellschaft

Dr W. Gebler
Wirtschaftsprüfer

A. Jürgensen
Wirtschaftsprüferin

Audit certificate

We hereby attest the "pro forma AG" balance sheets, income statements and cash flow statements for the years 1995, 1996 and 1997, as follows:

"The "pro forma AG" financial statements of LPKF Laser & Electronics GmbH as at December 31, 1995, December 31, 1996 and December 31, 1997 and the "pro forma AG" cash flow statements for the years 1996 and 1997 have been compiled from the said company's audited financial statements, approved without qualification.

We certify that the balance sheet and income statement figures quoted for the 1997 financial year for the purposes of comparison are in accordance with the separate audited financial statements, approved without qualification, of LPKF Laser & Electronics GmbH for the year to December 31, 1997. The cash flow statement for 1997 was compiled from the company's separate audited financial statements, approved without qualification, for the years to December 31, 1997 and December 31, 1996.

The balance sheets, income statements and cash flow statements of the "pro forma AG" incorporate estimates of the additional expense flowing from the change in legal status, the scale of which is plausible."

Hanover, October 13, 1998

SOCIETÄTS TREUHAND GMBH
Wirtschaftsprüfungsgesellschaft
Steuerberatungsgesellschaft

Dr W. Gebler
Wirtschaftsprüfer

T. Stieve
Wirtschaftsprüfer

Garbsen, January 23, 1998

LPKF Laser & Electronics GmbH

Bernd Hildebrandt

Bernd Hackmann

Jörg Kickelhain

**IAS consolidated financial statements of LPKF Group,
as at December 31, 1996 and 1997**

Profit and loss account

	Note	1997 DM 000	1996 DM 000
Sales revenue	(1)	29,558	22,978
Decrease/increase in finished goods inventories and work in progress		404	785
Capitalised cost of self-constructed assets		639	693
Other operating income	(2)	2,871	1,888
		32,663	26,344
Cost of materials	(3)	9,477	7,410
Personnel expenses	(4)	7,467	6,356
Depreciation	(5)	1,843	1,749
Other operating expenses	(6)	6,593	25,380
		7,283	6,752
Financial result	(7)	-117	-225
Results from ordinary activities		7,166	6,527
Taxes on income	(8)	2,769	2,417
Consolidated net income		4,398	4,110
Minority interests		116	296
Consolidated result		4,282	3,814

Balance sheet

Assets

	Note	DM 000	31.12.1997 DM 000	Previous year DM 000
Start-up and business expansion expenses	(9)		1	1
Fixed assets	(9)			
Intangible assets	(9)			
Software		164	249	
Goodwill		52	69	
Payments on account		881	555	
		<u>1,097</u>		
Tangible assets	(9)			
Land and leasehold rights and buildings		3,254	3,215	
Technical equipment, plant and machinery		2,523	1,728	
Other fixtures and fittings, tools and equipment		1,565	2,187	
Payments on account and construction in progress		137	491	
		<u>7,479</u>		
Financial assets	(9)			
Shares in affiliated companies		36	50	
Investments		0	25	
Investments in associated companies		811	349	
Other loans		11	11	
		<u>858</u>	<u>9,434</u>	
Current assets	(10)			
Inventories				
Raw materials and supplies		864	1,705	
Work in process		609	517	
Finished goods and goods for resale		5,925	4,826	
Payments on account		280	197	
		<u>7,677</u>		
Accounts receivable and other assets				
Trade accounts receivable	(11)	1,533	1,924	
Due from affiliated companies	(12)	90	486	
Due from other group companies		770	506	
Other assets	(13)	816	1,035	
		<u>3,209</u>		
Other marketable securities		61	192	
Cash-in-hand, postal giro balances, cash in other banking accounts	(14)	1,316	12,263	1,791
Prepaid expenses	(15)		153	110
Deferred tax asset	(16)		305	159
Total assets		<u>22,156</u>	<u>22,378</u>	

Balance sheet

Liabilities

	Note	DM 000	31.12.1997 DM 000	Previous year DM 000
Shareholders' equity				
Subscribed capital			650	650
Capital reserve	(17)		2,740	2,740
Revenue reserves, other revenue reserves	(18)		212	212
Net profit for the year	(19)		5,679	1,397
Foreign currency translation adjustment	(20)		119	21
Minority interest	(21)		864	651
Accrued liabilities				
Provisions for pensions	(22)		192	121
Provisions for taxation	(23)		228	1,637
Other provisions	(24)		1,813	2,232
Liabilities	(25)			
Due to banks			6,912	7,378
Advances from customers			1,159	724
Trade accounts payable			960	1,294
Due to affiliated companies			0	4
Due to other group companies			301	107
Other liabilities			320	3,878
Deferred income			8	66
Total liabilities		<u>22,156</u>	<u>22,378</u>	

Cash flow statement in accordance with IAS 7

	Note	1997 DM 000	1996 DM 000
Operating activities			
Net profit for the year		4,398	4,110
Depreciation of fixed assets		1,843	1,749
Other expenses and income not relating to payments		177	-98
Changes in inventories and accounts receivable		-260	-2,401
Changes in other liabilities		-749	608
Cash flow from operating activities	(27)	5,409	3,968
Investment activities			
Fixed asset investments		-3,536	-5,071
Payments received on the disposal of fixed assets		1,507	258
Cash flow from investment activities		-2,029	-4,813
Financing activities			
Dividend paid		-3,500	-500
Minority shares		96	7
Change in long-term bank borrowings		969	1,506
Cash flow from financing activities		-2,435	1,013
Changes in cash and cash equivalents			
Exchange rate-related changes in financial resources		15	19
Changes in cash and cash equivalents		945	168
Cash and cash equivalents as at 1 st January		149	-38
Cash and cash equivalents as at 31 st December		1,109	149
Composition of cash and cash equivalents			
Liquid assets		1,316	1,791
Liabilities on current bank accounts		-207	-1,642
Cash and cash equivalents		1,109	149

Scope of consolidation

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

Name	Domicile	Holding %	Acquired
Full consolidation			
ELASER Gesellschaft für Elektronik, Laser und Automation GmbH	Suhl/Thuringia	100.00	1989
LPKF d.o.o.	Kranj/Slovenia	75.00	1995
Franklin Industries N.V.	Mechelen/Belgium	67.22	1995
Equity consolidation			
LPKF CAD/CAM Systeme in Thüringen GmbH	Suhl/Thuringia	50.00	1991
LPKF CAD/CAM Systems Inc.	Portland/USA	40.00	1992
A-Laser Inc.	Beaverton/USA	20.00	1995

There were no changes to the consolidated group in 1996 and 1997.

The companies included according to the equity method operate in the same business as the parent company, carrying out research and development work as well as production operations (as component suppliers) and marketing.

The turnover for these companies in the 1997 business year was as follows:

	DM 000
LPKF CAD/CAM Systeme in Thüringen GmbH	3,178
LPKF CAD/CAM Systems Inc.	6,478
A-Laser Inc.	807

Principles of consolidation

The basis for the consolidated financial statement is provided by the annual financial statements of the companies included in the consolidated financial statement as drawn up according to standard rules for the year ending 31st December 1997.

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.

Any debit difference resulting from application of the equity method, which is included in the valuation of the investment in associated companies, is treated according to the same principles.

Intercompany results, expenses and income, accounts receivable and accounts payable between the fully consolidated companies have been eliminated. The intercompany results have also been eliminated in the course of application of the equity method.

Foreign currency translation

Translation of the foreign companies' annual financial statements is effected according to the functional currency method. In effecting this translation into German marks, the assets and debts were translated at the 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 adjustment without any effect on net income.

Notes to the consolidated financial statements

Principles governing the preparation of the consolidated financial statements

The consolidated financial statements of LPKF Laser & Electronics GmbH, Garbsen, for the year ending 31st December 1997 has been drawn up in accordance with uniform accounting and valuation 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 was 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 balances brought forward as per 1st January 1996.

The consolidated financial statements were based on the consolidated financial statements drawn up in accordance with the German Commercial Code (HGB). Adoptions to IAS were effected where necessary.

The business year corresponds to the calendar year. The consolidated financial statement has been drawn up in German marks.

Profit and loss account

1. Sales revenue and segment reporting

The breakdown of sales revenue according to product groups and regional markets is presented in the following segment reporting.

The following table shows the breakdown of sales:

a) Product groups:

	1997 DM 000	1996 DM 000
Laser systems	12,785	9,145
Rapid Prototyping	14,073	11,882
Stencils	1,889	1,789
Other	811	162
	29,558	22,978

b) Regions:

	1997 DM 000	1996 DM 000
Germany	7,070	6,409
Rest of Europe	6,697	6,293
North America	7,313	2,988
South America	188	77
Asia	7,100	6,980
Other	1,190	231
	29,558	22,978

2. Other operating income

	1997 DM 000	1996 DM 000
Grants for research and development	1,773	1,241
Exchange gains	269	168
Leasing and rental income	129	0
Gains from investment disposal	275	0
Other	425	479
	2,871	1,888

The grants for research and development are awarded for costs incurred in the business year and are thus shown in full amount as income for the year. Because of the uncertainty of future income from research and development projects, no capitalisation has been carried out.

3. Cost of materials

	1997 DM 000	1996 DM 000
Cost of raw materials, consumables and supplies and of purchased goods for resale	8,704	6,845
Cost of purchased services	773	565
	9,477	7,410

4. Personnel expenses and employees

	1997 DM 000	1996 DM 000
Wages and salaries		
Wages	5,835	5,006
Salaries	425	398
Other	133	123
	6,393	5,527

Social security and pension costs

	1997 DM 000	1996 DM 000
Employer's contributions to statutory social security	887	673
Workman's compensation board	30	26
Pension costs	157	130
	1,074	829
	7,467	6,356

The breakdown of the employees was as follows as of 31st December:

	1997 DM 000	1996 DM 000
Production	18	15
Marketing	14	12
Research and development	18	13
Engineering and administration	29	25
	79	65

The employees also includes 6 (previous year: 5) part-time employees.

5. Depreciation

The depreciation effected for the different groups of fixed assets is shown in the fixed-asset movement schedule (9).

6. Other operating expenses

The other operating expenses are structured as follows:

	1997 DM 000	1996 DM 000
Advertising and marketing expenditure	2,420	1,667
Research and development	645	226
Services	383	140
Postage, telephone, telefax	350	276
Legal and consultancy costs	234	236
Expenditure on liquidation of a subsidiary	526	-
Exchange losses	187	99
Other	1,848	1,433
	6,593	4,077

7. Financial result

Income from associated companies

	1997 DM 000	1996 DM 000
Income from associated companies	452	98
Other interest and similar income	115	214
Interest and similar expenses	-684	-537
	-117	-225

8. Taxes on income

Corporation tax and solidarity surcharge

	1997 DM 000	1996 DM 000
Corporation tax and solidarity surcharge	1,884	1,613
Trade earnings tax	1,031	963
Deferred taxes	-146	-159
	2,769	2,417

The corporation tax for 1997 was calculated on the assumption of a dividend payout of DM 2,900 000. The remaining distributable earnings for the year are to be retained.

Balance sheet

Assets

9. Fixed assets

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

Consolidated fixed asset movement schedule of
LPKF Laser & Electronics GmbH, Garbsen
for the period from 1st January to 31st December 1997
in accordance with IAS standards

	Acquisition and production costs					Cumulative depreciation					Net book value	
	Balance 1.1.1997 DM 000	Currency differences DM 000	Additions Transfer(T) DM 000	Disposals Transfer(T) DM 000	Balance 31.12.1997 DM 000	Balance 1.1.1997 DM 000	Currency differences DM 000	Allocations Transfer(T) DM 000	Releases Transfer(T) DM 000	Balance 31.12.1997 DM 000	31.12.1997 DM 000	Previous year DM 000
Expenditure on the start-up and expansion of business activities	2	0	0	0	2	1	0	0	0	1	1	1
Fixed assets												
Intangible assets												
Software	546	0	0	0	546	297	0	85	0	382	164	249
Goodwill	86	0	0	0	86	17	0	17	0	34	52	69
Payments on account	555	-14	340	0	881	0	0	0	0	0	881	555
	1,187	-14	340	0	1,513	314	0	102	0	416	1,097	873
Tangible assets												
Land and leasehold rights and buildings	3,658	0	188	0	3,846	443	0	149	0	592	3,254	3,215
Techn. equipment, plant and machinery	2,627	0	1,685	1,504	4,165	899	0	874	434	1,642	2,523	1,728
			1,357(T)					303(T)				
Other fixtures and fittings, tools and equipment	5,598	-7	796	169	5,279	3,411	-2	717	109	3,714	1,565	2,187
				939(T)				303(T)				
Payments on account and construction in progress	491	0	64	418(T)	137	0	0	0	0	0	137	491
	12,374	-7	2,733	1,673	13,427	4,753	-2	1,740	543	5,948	7,479	7,621
			1,357(T)	1,357(T)				303(T)	303(T)			
Financial assets												
Shares in affiliated companies	50	0	0	14	36	0	0	0	0	0	36	50
Investments	25	0	0	25	0	0	0	0	0	0	0	25
Investments in associated companies	349	38	427	3	811	0	0	0	0	0	811	349
Other loans	11	0	0	0	11	0	0	0	0	0	11	11
	435	38	427	42	858	0	0	0	0	0	858	435
	13,998	17	3,500	1,715	15,800	5,068	-2	1,842	543	6,365	9,435	8,930
			1,357(T)	1,357(T)				303(T)	303(T)			

Software is valued as an intangible asset at the acquisition costs reduced by scheduled depreciation. The goodwill was established in the course of consolidation and capitalised in accordance with IAS 22.

The tangible assets are valued at acquisition or production costs reduced by scheduled straight-line depreciation.

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 are written off in full in the year of acquisition.

The following expected lives are assumed:

	Years
Software	3
Goodwill	5
Buildings	25
Outside facilities	10
Technical equipment, plant and machinery	3-10
Other fixtures and fittings, tools 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).

The additions under the item Investments in associated companies result from entry of the prorated year-end results of the respective companies in the balance sheet.

10. Inventories

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

11. Trade accounts receivable

Nominal amount of accounts receivable

Provision for doubtful accounts

General bad-debt provision

Accounts receivable after provisions

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.

	1997 DM 000	1996 DM 000
	1,601	1,982
/. 36	/. 26	
/. 32	/. 32	
	1,533	1,924

12. Accounts receivable from affiliated companies

Receivables to the amount of DM 390 000 due from LPKF S.A.R.L., Lille, France, has been adjusted by DM 300 000.

13. Other assets

Grants

Short-term loans

Value added tax

Reinsurance

Other

Other assets falling due after one year totaled DM 78 000 (previous year: DM 65 000).

	1997 DM 000	1996 DM 000
	409	314
124	0	
64	389	
78	64	
141	268	
	816	1,035

14. Cash-in-hand, bank balances

The liquid assets are comprised of cash in hand (DM 17 000), postal giro balances (DM 62 000) and cash in other banking accounts (DM 1,237 000).

15. Deferred income

The deferred income consist primarily of discount amounts to the sum of DM 68 000 (previous year: DM 77 000) and rent paid in advance to the sum of DM 56 000 (previous year: DM 0).

16. Deferred tax asset

The deferred tax assets consists primarily of deferred taxes resulting from the elimination of intercompany profits. The deferred taxes for 1996 and 1997 have been calculated at the corporate tax rate for distributions.

Liabilities**17. Capital reserve**

The capital reserve results from the premium paid in acquiring shares in the parent company.

18. Revenue reserve

Amounts were allocated to the revenue reserve on a voluntary basis in previous years.

19. Net profit for the year

The net profit has developed as follows:

	1997 DM 000	1996 DM 000
Net profit on 1 st January	1,397	1,583
Consolidated result	4,282	3,814
Dividend payout	0	-4,000
Net profit on 31 st December	5,679	1,397

20. Foreign currency translation adjustment

The foreign currency translation adjustment has developed as follows:

	1997 DM 000
Initial level on 1 st January	21
+ sum of conversion differences dealt with in the business year without any effect on net income	98
Final level on 31 st December	119

21. Minority interest

The minority interest has developed as follows:

	1997 DM 000	1996 DM 000
Level on 1 st January	651	349
Additions	213	302
Level on 31 st December	864	651

22. Provisions for pensions

The provisions for pensions have been established exclusively for the pension commitments relating to the managing partners of the parent company.

Calculation has been effected in accordance with the standard international present-value method (IAS 19). Calculation of the pension obligation has been effected on the basis of the "guidelines" issued by Dr. Klaus Heubeck, allowing for future pension adjustments at a rate of 2%. The discount factor stands at 7%.

23. Tax provisions

	1997 DM 000	1996 DM 000
Corporation tax	177	238
Trade tax	38	1,381
Solidarity surcharge	13	18
	228	1,637

24. Other provisions

	1997 DM 000	1996 DM 000
Bonuses	1,266	1,024
Guarantees	320	268
Holidays	142	150
Other	85	56
	1,813	1,498

25. Liabilities

The table below shows a summary of the liabilities broken down according to remaining terms:

Type of liability	Summary of liabilities (in DM 000) with a remaining term of					
	Total amount	Up to 1 year	1 to 5 years	More than 5 years	Secured amount	Type of security
Due to banks	6,912 (7,378)	1,028 (2,236)	2,834 (2,254)	3,050 (2,888)	6,095 (1,174)	*
Advances from customers	1,159 (724)	1,159 (724)	— (—)	— (—)	238 (—)	Bank guarantee (—)
Trade accounts payable	960 (1,294)	960 (1,294)	— (—)	— (—)	— (—)	— (—)
Due to affiliated companies	0 (4)	0 (4)	— (—)	— (—)	— (—)	— (—)
Due to group companies	301 (107)	301 (107)	— (—)	— (—)	— (—)	— (—)
Other liabilities	320 (3,878)	320 (3,878)	— (—)	— (—)	— (—)	— (—)
	9,652 (13,385)	3,768 (8,243)	2,834 (2,254)	3,050 (2,888)	6,333 (1,174)	

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

Further notes on liabilities:

The amounts due to banks include long-term borrowings to the amount of DM 6,705 000, which are subject to interest at a rate of 4.5% p.a. to 6.6% p.a. The average interest on current accounts stands at approx. 7%.

Other information

26. Other financial obligations

Another financial obligation of DM 456 000 results from a payment obligation relating to the acquisition of real estate.

27. Cash flow statement

The cash flow from operating activities includes tax payments to the amount of DM 4,327 000 (previous year: DM 3,043 000), interest paid totalling DM 541 000 (previous year: DM 477 000) and interest received of DM 70 000 (previous year: DM 211 000).

28. Transactions of related parties

Related parties	DM 000
Zeltra Naklo d.o.o., Slovenia purchased deliveries and services	646
PMV d.o.o., Slovenia purchased deliveries	279
Cura Consult, Germany	48

A managing director and shareholder of a subsidiary owns 80% of Zeltra Naklo d.o.o. shares. The remaining 20% shares are owned by an executive of the subsidiary. Materials and equipment, goods for resale and services to the sum of DM 646 000 were purchased from this related party in 1997.

A managing director and shareholder of a subsidiary has a 50% shareholding in PMV d.o.o., with a close relative of a shareholder of the parent company holding the remaining 50%. In 1997 business relations with this company covered development and production services and leasing to the amount of DM 279 000.

Cura Consult, which rendered consultancy services totalling DM 48 000 in 1997, is owned by a close relative of a shareholder of the parent company. The contract for consultancy services has been terminated with effect from 31st October 1998.

Two close relatives of shareholders of the parent company were also employed as salaried employees.

29. Events after the balance sheet date

Shareholders' meeting on 11th March 1998

- Dividend payout of DM 2,900 000 from the parent company.
- Capital increase of DM 4,350 000 to DM 5,000 000, via transfer of reserves (entry in the commercial register was effected on 2nd June 1998).

Shareholders' meeting of 30th July 1998

Change of legal form into a stock corporation ("Aktiengesellschaft") (entry in the commercial register was effected on 23rd September 1998).

On the basis of the agreement of 29th September 1998, a further 20% of the shares of LPKF CAD/CAM Systems Inc., Portland, USA, has been acquired with effect from 1st January 1999.

LPKF Laser & Electronics GmbH

Bernd Hildebrandt

Bernd Hackmann

Jörg Kickelhain

Report of the independent auditors

We hereby submit the following audit report regarding compliance of the accounts of LPKF Laser & Electronics GmbH for the year ending 31st December 1997 with the International Accounting Standards (IAS):

"We have audited the accompanying consolidated balance sheet of the LPKF Laser & Electronics GmbH, Garbsen, as of December 31, 1997, and the related consolidated profit and loss account and cash flow statement for the year ended. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on the audit. We conducted our audit in accordance with International Standards on Auditing from the International Federation of Accountants (IFAC). Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall consolidated financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements give a true and fair view of the financial position of the Company as of December, 31, 1997, and of the results of its operations and its cash flows for the year ended in accordance with International Accounting Standards."

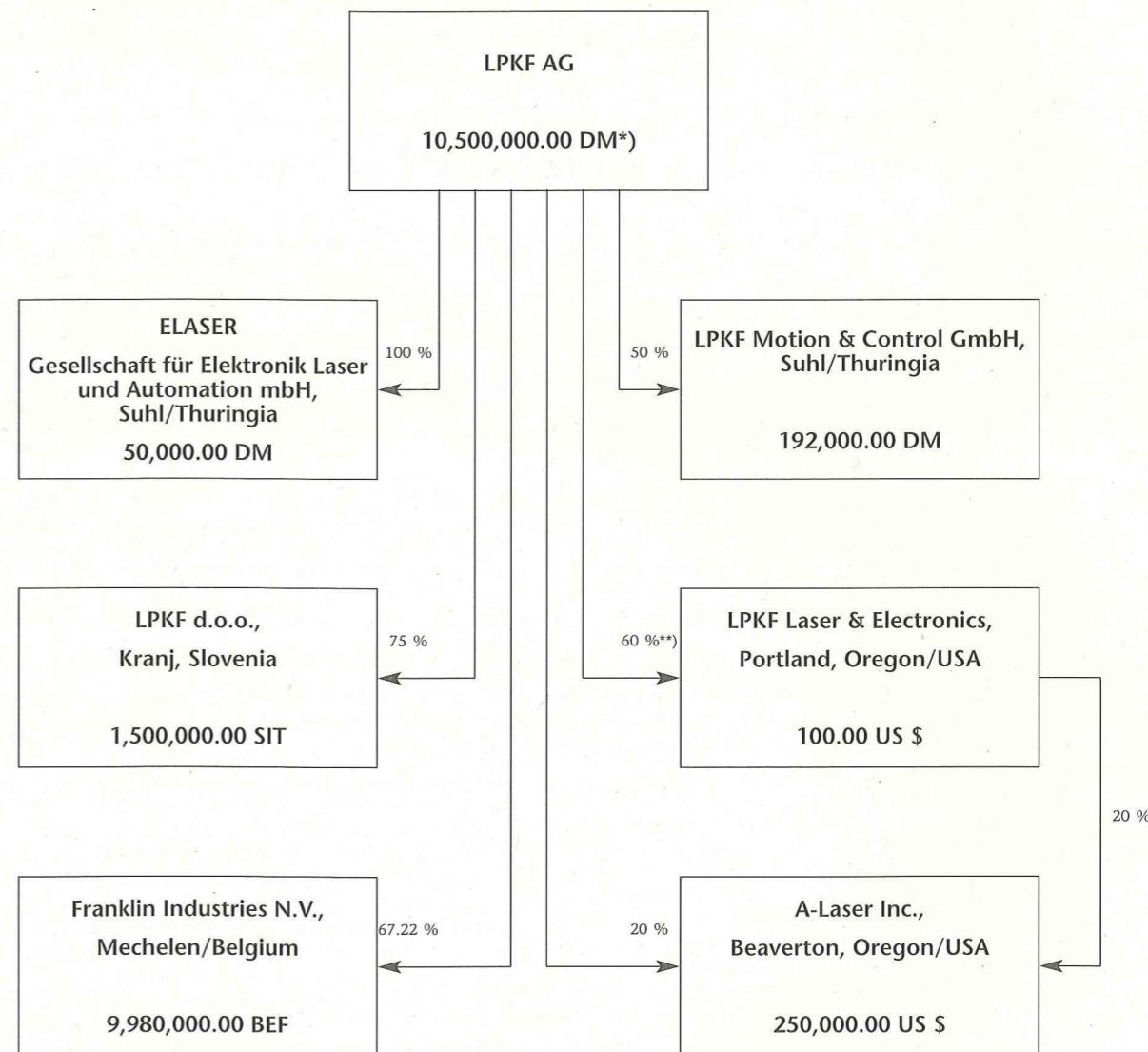
Hannover, 7th October 1998
SOCIETÄTS TREUHAND GMBH
Wirtschaftsprüfungsgesellschaft
Steuerberatungsgesellschaft

Dr. W. Gebler
Wirtschaftsprüfer
(Auditor)

T. Stieve
Wirtschaftsprüfer
(Auditor)

Investments in affiliated companies

The following table presents a summary of the Company's equity participations as at October 31, 1998:



*) After entry of the capital increase

**) The current interest is 40%. Further 20% of shares has been acquired with effect from January 1, 1999.

The following overviews provide the key data on the Company's subsidiaries and affiliates as at December 31, 1997 (prior-year values in brackets):

	Subsidiary companies*		
	ELASER Gesellschaft für Elektronik, Laser und Automation mbH, Suhl, Thuringia	LPKF d.o.o., Kranj, Slovenia	Franklin Industries N.V., Mechelen, Belgium
Share capital	DM 50,000,-	SIT 1,500,000,-	BEF 9,980,000,-
Proportional holding	100%	75%	67,22%
Net income/loss for the year	DM 1,410,609.64 (DM 1,947,472.18)	DM 815,269.95 (DM 1,164,212.40)	DM 495.35 (DM 14,832.17)
Book value of holding	DM 50,000,-	DM 25,000,-	DM 326,511.47
Liabilities to LPKF AG	— (DM 789,559.30)	DM 638,880.86 (DM 22,549.96)	DM 120,323.12 (DM 323,087.44)
Receivables from LPKF AG	DM 523,584.85 (-)	(DM 80,614.45)	(DM 1,450,-)
Sales	DM 6,150,928.64 (DM 5,825,037.84)	DM 3,783,178.61 (DM 4,207,410.60)	DM 1,775,513.44 (DM 1,657,770.35)
Employees	9 (10)	12 (7)	5 (5)

* During fiscal 1997 the Company held an equity stake in LPKF S.A.R.L., Lille, France, which it increased from 95% to 100% in the course of the year. A resolution of October 31, 1997 committed the Company to liquidating LPKF S.A.R.L.. Its account for the year to October 31, 1997 showed a net loss on the period of FF 581,249.57. The loss to the parent from this company's closure was reported as an extraordinary expense of DM 13,934.94 in the Company's income statement. The Company was also obliged to write off a proprietor's loan to the value of FF 754,382.01. Since LPKF S.A.R.L. has meanwhile been liquidated and is irrelevant to the future operations of the Company, no figures have been included for it.

ELASER Gesellschaft für Elektronik, Laser und Automation mbH, Suhl, Thuringia (ELASER GmbH)

ELASER GmbH is the LPKF Group's service subsidiary. It is responsible for the provision of services in connection with lasers, SMD metal stencils, microcutting and applications development. It mainly deploys the cutting lasers manufactured by LPKF for these tasks and manufactures SMD stencils and flexible circuits to customer orders. ELASER GmbH also performs two strategic functions within the LPKF Group. Firstly it provides a link to customers in the electronics industry who do not own their own LPKF systems and therefore contract out necessary services. These are potential buyers of LPKF's products. Secondly, ELASER GmbH's business activity provides LPKF with a facility for testing and optimizing its systems in response to genuine customer needs. ELASER GmbH maintains offices both at its own base in Suhl, Thuringia, and at LPKF AG's headquarters in Garbsen. A controlling and profit-and-loss transfer agreement is in place between LPKF AG and ELASER GmbH. Three members of LPKF AG's Managing Board act as the directors of ELASER GmbH.

LPKF d.o.o., Kranj, Slovenia (LPKF d.o.o.)

LPKF d.o.o. is responsible for the following functions within the LPKF Group. Firstly, the Group has transferred virtually the entire production of circuit board plotters to LPKF d.o.o. in Slovenia. Garbsen now handles only the final inspection of the machines. Secondly, LPKF d.o.o. contributes laser technology know-how to the Group, not least through the development of its own laser source for LPKF's cutting lasers. Finally, LPKF

d.o.o. is also responsible for distributing LPKF's products in Italy and former Yugoslavia.

In addition to LPKF AG's 75% holding in the company, the qualified engineer Janez Zepic and his son Thomas Zepic each own 8.333% of the company's shares. Janez Zepic is also responsible for the business management of LPKF d.o.o.. A further stake of 8.333% is held by ZELTRA NAKLO d.o.o., a cooperation partner of LPKF d.o.o.'s on the ZELTRA 2000 project. The object of this cooperation is the production and sale of a complete system for PCB assembly for prototypes and short production runs, which LPKF will sell. The directors of LPKF d.o.o. are Janez Zepic and Bernd Hildebrandt. The relations between LPKF AG and LPKF d.o.o. are regulated by a cooperation agreement dating back to October 2, 1996.

Franklin Industries N.V., Mechelen, Belgium

Franklin Industries N.V. essentially provides distribution and service functions for the Benelux countries and the French market. To a limited extent, Franklin Industries also develops its own products for niche markets such as through-plating devises, which it is permitted to distribute under the LPKF brand subject to inspection by the LPKF AG. In addition, Franklin Industries installs LPKF systems for customers and maintains and services machines, systems and accessories. Alongside LPKF AG (67.22%), the company's managing director and other shareholders own equity in Franklin Industries. The managing director is Frank Jacobs.

	Affiliated companies*		
	LPKF Motion & Control GmbH Suhl, Thuringia	LPKF CAD/CAM Systems Inc. Portland, Oregon/USA	A-Laser Inc. Beaverton, Oregon/USA
Share capital	DM 192,000.-	USD 100.-	USD 250,000.-
Proportional holding	50%	40%	20%
Net income/loss for the year	DM 344,452.29 (DM 148,559.17)	DM 441,822.17 (DM 34,632.23)	DM 239,523.02 (DM -49,964.99)
Book value	DM 96,000.-	DM 60.48	DM 70,950.-
Liabilities to LPKF AG	— (-)	DM 770,100.21 (DM 505,698.92)	— (-)
Receivables from LPKF AG	DM 300,779.23 (DM 82,145.88)	— (DM 428.86)	— (DM 12,938.48)
Sales	DM 3,177,960.54 (DM 2,348,667.89)	DM 6,478,279.01 (DM 4,427,537.50)	DM 806,043.18 (DM 245,452.35)
Employees	12 (10)	8 (8)	5 (3)

* During 1997 LPKF AG sold its 49% stake in ATL Lasertechnik & Accessoires GmbH, Friedrichsthal, which it had acquired in 1994, with a profit on the disposal of DM 275,000.00. Since ATL GmbH is irrelevant to the future operations of the Company, no figures have been included for it.

LPKF Motion & Control GmbH, Suhl, Thuringia (until June 1998: LPKF CAD/CAM Systeme in Thüringen GmbH)

LPKF Motion & Control GmbH develops and builds all the drive and measurement/control systems for the LPKF Group's circuit board plotters and cutting lasers. LPKF Motion & Control GmbH is a joint venture between LPKF AG and six former academic staff at Ilmenau Technical University who each own 8.33% of the company and are at the same time its leading personnel. LPKF AG injected its own in-house expertise in this field into the joint venture. LPKF AG accounted for 80% of LPKF Motion's sales revenues in 1997 and is therefore the company's biggest customer. Its managing director is Dr Gunter Blank.

LPKF Laser & Electronics Inc. (formerly LPKF CAD/CAM Systems Inc), Portland, Oregon, USA and A-Laser Inc., Beaverton, Oregon, USA

The two companies are both marketing subsidiaries, responsible for the distribution and servicing of LPKF products in the USA, Canada and Mexico. Similarly to ELASER GmbH, A-Laser Inc. also produces SMD metal stencils for the electronics industry on a contract basis. Key personnel of the two companies had previously held approximately 60% of the share capital of LPKF CAD/CAM Systems Inc. and A-Laser Inc. in recent years. In 1998 LPKF AG acquired a further 20% of the equity. Title in these shares will pass to LPKF AG on January 1, 1999.

Historic Overview

1976	Foundation of Company
1979	First CNC-controlled systems built
1980	Branch established in USA
1984	PC-based CAD/CAM, creation of a total-solution integrated prototyping system
1988	BB Beteiligungsgesellschaft Berlin becomes a shareholder with a 20% stake
1989	Company moves into laser technology; ELASER GmbH founded to manufacture fine conductor printed boards
1991	Relocation to new headquarters premises at Garbsen near Hanover, establishment of LPKF Thüringen, move into drive technology
1993	Development of the StencilLaser
1994	Establishment of LPKF d.o.o., Slovenia for production and development
1995	Participation in LPKF Franklin in Belgium (Benelux and French distribution), Smart Card R&D project launched
1996	Launch of 3D-MID and Chip Size Packaging R&D projects
1997	Development starts of new base materials (Flex/3D) and physical vaporization coating of current-generation flexi-materials
1998	Conversion to Aktiengesellschaft form (joint stock corporation)

Business activity

Overview

LPKF is a high tech company which develops, constructs and distributes laser-based and conventional machines and systems for manufacturing printed boards and SMD metal stencils, and for surface treatment and microcutting, to customers in the electronics industry. LPKF supplies integrated systems including hardware, software and accessories. The most important of the products the Company sells belong to the fields of rapid prototyping and lasers.

The Company's Rapid Prototyping division offers a wide range of computer controlled circuit board plotters, which permit an electronics developer to rapidly produce a printed board to its own specifications which can then be populated with electronic components. LPKF has developed an extensive range of add-on products for this application which enable their users to perform every step of the process within their own laboratory, from design through to the ready-assembled prototype of a circuit. The Rapid Prototyping division achieved sales of DM 14.1 million in 1997 and in the process contributed 47.6% of Group turnover.

The Company's Lasers division offers laser systems which are suitable for machining sheet metal, coated films and other materials. These machines are used primarily by the electronics industry, but also in other sectors. LPKF's cutting lasers have the capability to drill, cut and surface-structure metals but also certain other materials with a high degree of precision. LPKF lasers can plot accuracies up to 15 µm (0.015 mm). The Lasers division achieved sales of DM 12.8 million in 1997 and contributed 43.3% of Group turnover.

LPKF's ELASER subsidiary uses the group's laser systems to produce metal stencils to customer order. In 1997 ELASER contributed DM 1.9 million, equivalent to 6.4%, to the Group's turnover.

Its precision tools and plants give LPKF a presence at various points of the process of developing and producing electronic circuits and components. Building on its base technologies in lasers, drives and measurement/control systems, the Company continuously develops product innovations, opens up new fields of application, and integrates new components into its systems. Although all the important products the Company has developed in the past directly or indirectly service the microelectronics industry, the Company does not rule out the possibility that it will one day also produce technologically comparable systems for other applications as well.

Rapid Prototyping division

The Rapid Prototyping division and its core product line of circuit board plotters were the launch pad for the Company's business expansion and continue to be a significant driver of sales.

Technical background

The circuits used in electronic devices and systems consist of a large number of electronic components including microchips. These components are not connected via cables but are attached to boards with printed-on electrical strip conductors or tracks, known as printed boards. These boards permit current to flow between the different electronic components.

As a rule, the conventional approach to developing a new electronic circuit begins with an electronics devel-

oper producing a plan of the relevant circuit on the drawing board or at the computer screen using a specialist CAD/CAM program. To build up the actual circuit, the plan has to be transferred to a board blank consisting of a backing material and a conductive coating (generally copper). Conventionally this is done by photo-exposing the circuit-plan onto a light-sensitive coating on the board and applying a screen lacquer to the unexposed parts of the board. Acid is then applied to etch out the metal coating where it is not protected by the lacquer, leaving conductive copper tracks at the required locations. The use of acids and a subtractive chemical process means that a range of wastes are left at the end which are expensive to dispose of and classed as environmentally damaging. Since many of the electronics laboratories do not have the necessary specialist facilities, they have to resort to external service providers. This means that several days or even weeks can pass between the first design of a circuit and the actual availability of a usable printed board. If the board has been etched, it needs to be drilled at the places where it is planned to solder on electronic components, an additional process stage. The normal practice for these components is to plug them through the board and solder them fast on the back. Once all the requisite electronic components have been inserted onto the printed board (the "assembly" stage), the developer has the first functional prototype of the circuit he has designed. If a function test then identifies defects in the circuit "which happens particularly frequently in the case of high frequency and microwave circuits" an equally lengthy period of time can be spent reworking the circuit, since it is necessary once again to design, produce and assemble improved boards. Since electronics developers are always under extreme time pressure, there is a market for systems which reduce the waiting times between the individual steps of the process.

"Rapid prototyping" is the name given to a process by means of which a computer-generated design is developed into a functional prototype in the shortest possible time. The product line of LPKF's Rapid Prototyping division provides developers with efficient tools which make it possible to produce a test-ready prototype of a circuit in just a few hours from the completion of its design.

Circuit board plotters

At the heart of the system is what is known as a circuit board plotter. Circuit board plotters operate similarly to standard graphic plotters, in other words machines which under computer control move a pen relative to two axes and can therefore produce drawings. Instead of a pen however, a circuit board plotter moves a combined drilling/milling tool over a working platform. Attached to the plotter's working platform is a base material which as a rule consists of a thin copper coating over a thicker backing material.

The circuit board plotter is now in a position to remove the conductive copper coating at defined points ("ablation") and drill holes for the attachment of electronic components. The control software running on the user's personal computer and controlling the plotter, tells the plotter exactly where to drill or mill. The starting point for this is the circuit design which the electronics developer has generated on his computer with the aid of his CAD/CAM system. The Circuit CAM software interface developed by LPKF processes and optimizes the read-in design and layout data. Circuit CAM is capable of processing all the standard data formats generated by computer-aided design (CAD) systems. The optimized data is then transmitted to the BoardMaster control software (also an LPKF in-house development), which

converts it into signals which the plotter can understand and steers the plotter with pin-point accuracy. The control signals derived from the electronics developer's design replicate on the base material a copy of the design structure consisting of conductive strips and non-conductive isolations, the so-called printed circuit board. The finest structures which can be machined onto the board in this way have a width of 100 µm (0.1 mm).

At the present time, the Company offers five model types of its circuit board plotter, all distributed under the brand name ProtoMat. The five current models, whose prices lie between DM 17,000.00 and DM 58,000.00, essentially differ in the size of their transverse range, which determines the maximum size of machinable board, and the speed in rpm of their drilling/milling motor. The higher the speed, the finer the structuring of the tracks which can be achieved. The top of the range model, the LPKF ProtoMat 95s, also offers fully-automated tool-changing which makes it possible to perform all the operation steps – graving, high frequency milling, drilling and micromilling – fully automatically and without the need for a manual tool change. All the machines are compact in size, and can be accommodated even in smaller laboratories.

The Company believes its circuit board plotters are exceptional for the robustness of their design. Even with intensive use, they can remain in service for 10 to 15 years.

Along with the actual plotter, the software package of optimizing and control programs represents a crucial part of the system know-how. The source code which would permit users to reverse engineer the software is not made available to operating staff or customers.

The Company backs up its circuit board plotters with both the necessary software and a comprehensive offering of accessories such as noise insulation hoods, measuring microscopes, dust extraction systems, filters and tools.

Multilayer technique

With complex circuits, it is necessary to overlay several layers of a circuit board on top of each other. The individual layers of the prototype are produced using a circuit board plotter and then pressed together. In order for the different layers to be electrically connected with each other and with the electronic components inserted into the top and bottom side of the board, it is necessary for the board to be through-plated. The Company offers a manual system and an automatic system for doing this. The automatic system makes it possible to use the circuit board plotter to inject a conductive solderable paste into the drilled feedthrough holes. However the Company also manufactures two systems based on the conventional galvanic principle, i.e. immersion baths. A press which LPKF also makes itself allows users to produce four and six-layer printed boards without having to depend on outside suppliers.

Assembly

The prototype single or multilayer printed board now needs to be populated with electronic components to arrive at the finished prototype circuit. The Company offers a range of tools from its Assembly product group to help with this:

- Multipurpose dispenser with built-in pick and place. This machine makes it possible to apply solder pastes, oils and lacquers and insert small parts such as electronic components cleanly onto printed boards by means of compressed air. It can also be deployed in conjunction with circuit board plotters for automatic through-plating.

- Stencil screen print machines for applying solder pastes
- Tenter frames for metal stencils to go with the corresponding printing machines
- Manual pick and place devices
- Hot-air/quartz reflow ovens for hardening conductive pastes, soldering components and other thermal treatments
- Optical inspection systems for circuits

The relevant machines are offered under the brand names ZelDisp, ZelPrint, ZelPlace, ZelFlow and ZelOpt. They are manufactured by LPKF d.o.o., Slovenia, under a cooperation agreement with Zeltra Naklo d.o.o. of Slovenia (see the chapters on "Investments in affiliated companies" and "Activities – Production").

Lasers division

The Company set up its Lasers division in 1989 in order to respond to new developments in the electronics industry and remain at the leading edge of technology. The Company's laser-technology-based products are targeted primarily on the electronics and semiconductor industries and related service providers.

Technical background

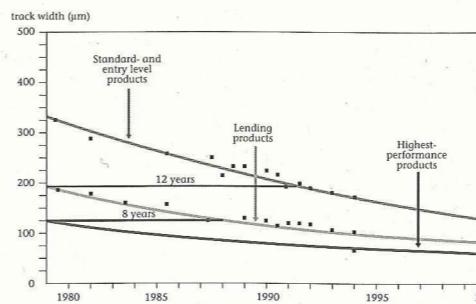
The term laser stands for "Light Amplification by Stimulated Emission of Radiation." It is a physical process for directing and amplifying light of a particular wavelength. The laser concept is based on the phenomenon that certain atoms are capable of storing energy and, when excited to do so by the application of light, giving off this energy again in the form of light which has special properties (coherence). Lasers consist of three essential components: (1) an external energy source, required to charge the atoms in the laser, (2) an active laser medium, a liquid, semiconductor or solid whose atoms possess the requisite storage properties, and (3) a resonator with parallel mirrors, one of which is partially light transmitting.

To create laser light, the electrons in the laser medium are first charged ("pumped"). Then photons, i.e. light, are introduced into the laser medium from outside, which excite the pumped-up electrons to discharge and in the process emit photons of their own. Since some of the photons are reflected backwards and forwards between the parallel mirrors, they excite still more electrons to discharge. The progressive discharging of the laser medium produces a strong, directional, monochrome laser beam transmitted through a partially translucent mirror. Lenses and mirrors can be used to change the direction of the beam and direct it onto specific points of a material to be worked. When the laser beam strikes certain materials, it changes their structure or even, depending on the intensity of the beam, vaporizes them completely. Different applications require lasers of different strengths, frequencies and discharge durations. The required laser characteristics are achieved by varying the laser medium and pumping method used. So-called neodymium-yag lasers, which incorporate a crystal as the laser medium, are frequently used for cutting applications but so are what are known as excimer lasers, which are based on a gaseous active medium and include some of the most powerful lasers in industrial use.

Because of certain technological changes which are spreading through the electronics industry, lasers are increasingly playing a central role in the production of electronic circuits as well. The progressive integration of electronic components and the ever greater complexity of cir-

cuits has significantly changed certain aspects of the conventional technique for producing electronic components. The space available on the circuit board in the case of modern electronic components is generally extremely limited. The result is that the density of the conductor strips or tracks on the boards has continually increased.

Minimizing track widths



Since circuits require a large number of connections between their electronic components, the practice has also been adopted of printing tracks onto both sides of the board and inserting components on both sides as well. Even more complex structures can be realized by producing boards in several layers. The drastically smaller dimensions of modern electronic components mean it is no longer possible to plug the connectors through the board and solder them on the reverse, as was the traditional solution. It was therefore necessary to develop methods which make it possible to mount components on the surface of the board ("onserting" rather than "inserting"). The solution is known as the SMD technology (from Surface Mounted Device). In this process, the electrical connection and assembly of the components on the board are achieved in a single step by bonding the component directly to the backing material using either solder or an electrically conductive adhesive. To do this, the solder or adhesive has to be applied to precisely defined points and in exact quantities. This is made possible with the aid of stencils cut specially for each circuit board, which contain exact and sharply defined apertures at the positions where the application of solder or adhesive is required. Once the materials have been pressed through the stencil onto the board using a Squeegee blade, the stencil can be removed and the components onserted. The connections between the components and the board are made permanent through thermal treatment in a special purpose oven, a hot-air/quartz reflow oven. Laser technology makes it possible to produce the stencils essential to this process with exceptional precision.

One result of the unceasing demands for ever-more compact electronic components is that circuit boards now also have to be located in curved or angular casings. To make this possible, the industry has developed new materials for manufacturing circuit boards. Boards made from flexible film can be populated with components and then fitted into the space available in for instance mobile phones and video cameras. These technological advances have continuously increased the precision demanded of materials processing. In certain forms and at certain thicknesses of the work material, the conventional chemical processes are reaching their performance limits. Laser technology has proved to be one of the key technologies for the precise machining of ultrafine structures in a range of work materials. Laser technology makes surface structures of less than 15 µm (0.015 mm) realizable.

The StencilLaser range

The Company's most important laser-technology product is its so-called StencilLaser, a cutting laser for making metal stencils. Metal stencils are used for squeezing spots of solder paste onto printed boards used as part of the industrial manufacture of circuits with surface-mounted components (SMD technology) (see Technical Background above for more detail). However, StencilLasers can also perform cutting, drilling and marking tasks.

In addition to laser cutting, two other methods of stencil production are currently in use:

- conventional chemical etching, in which the material on both sides of a thin metallic sheet (non-ferrous metals can also be used) is completely removed at the points not covered by photosensitive resist. This creates apertures used for the subsequent printing of the circuit board;
- electroplating, which is based on an electrochemical process and causes a nickel coating to build up at the unmasked points of one side of a backing material.

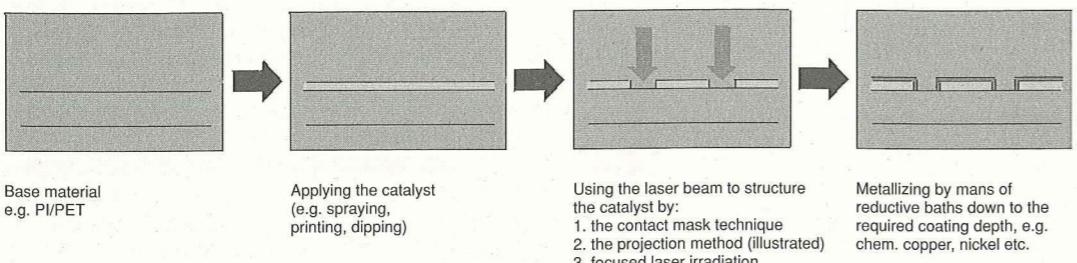
Both of these methods have advantages and disadvantages which can weigh differently with different users. Both the chemical and the electrochemical process create all the apertures in the stencil simultaneously. Performing the process in a special way also permits the creation of partial sections of graduated depth, and specifically in the case of conventional etching it is also possible to make stencils from a range of materials. It can happen however, especially with complicated forms, that the structures created have rough edges or are undermined. Nor is the front-and-back overlap accuracy achievable from wet chemical processing always adequate. Especially as the boards' electrical connections are getting ever finer, these drawbacks are resulting in a deterioration of the quality of print outcomes. By contrast, laser cutting permits the precise transmission and replication of the CAD data, exceptional positional and structural accuracy of the individual apertures, steep cut edges, and finally the elimination of chemical and therefore in some cases ecologically unwelcome processing steps.

Every StencilLaser consists of a laser source, a lamp-pumped solid laser (neodymium-yag) whose beam is directed onto a working platform via a variable optic system. The Company's product range currently includes three different StencilLasers which differ essentially in the size of their working platform. The laser-machinable area of the basic model, the SL 200 x 200, is 20 cm x 20 cm and that of the top-of-the-range model SL 800 x 800 is 80 cm x 80 cm. During processing, the laser source fires short laser pulses onto the workpiece, the stencil blank, and melts/vaporizes the metal at the point of impact. Then, controlled by a precision drive, the working platform moves to the next point where a hole is required. The basic version of the LPKF StencilLaser is said to have a cutting speed of up to 8,000 holes an hour, while the TurboCutter LF increases this capacity to up to 15,000 holes an hour. The selling prices of the StencilLasers range from DM 525,000 to DM 650,000.

The MicrolineLaser range

The Company has developed a laser capable of structuring conductive strips down to 15 µm (0.015 mm) on flexible base materials. For this purpose, base materials made of polyimide/polyester plastics are coated with a catalyst which can be removed by a laser beam. The functional principle is different from that of the StencilLaser to the extent that the structure on the base

Additive ultrafine track structuring



material is not the product solely of moving the workpiece beneath the pulses of the laser beam, but that the beam itself is directed through a mask and structured in the process. In the positions where the laser beam strikes the base material, the structure defined by the mask is reproduced in an optically reduced form. The workpiece and the mask can then be moved so that a further replication of the mask is burned in immediately adjacent to the first. This approach permits the gradual high-resolution processing of 10 cm x 10 cm footprints. A metallizing process can then apply the required thickness of a copper or nickel coating in the places where the laser has not ablated the catalyst material.

The high-density circuit carriers produced by this technique are essential to numerous microelectronics applications:

- Chip Size Packaging (CSP): In the past chip manufacturers have packaged their chips in comparatively large housings, with most of the room needed for the chip's connectors which connect it to the printed circuit board. In CSP solutions, the space beneath the actual chip is used for this wiring. This requires a flexible circuit (interposer) to guide the extremely fine conductors beneath the chip, with the result that the chip and the interposer can have roughly the same size.
- Flexible backing materials: These are increasingly being used in microelectronics wherever large numbers of components need to be integrated in the minimum possible space. The relevant applications include for instance audio and video technology, portable computers, sensors, medical engineering, and measurement and control functions.
- Smart cards: These are chipcards which have an internal circuit consisting of one or more chips. The MicrolineLaser can be used both to structure the requisite circuits on appropriately thin backing materials and to attach microcoils to the backing material which can serve for instance as antenna coils on chipcards designed for contact-free readers.
- Precision drilling: The MicrolineLaser can be used to create precision bores on flexible printed boards as well as through-plating and metallizing apertures for internal layers (e.g. for smart cards).

The MicrolineLaser reached serial production maturity in the Summer of 1998. A prototype has been produced, and a further system is under construction. The MicrolineLaser will sell for around DM 1.3 million. In addition, the Company's ELASER subsidiary has already taken orders to produce samples of ultrafine conductor circuits for customers using the MicrolineLaser.

Multifunction laser

LPKF's Multifunction laser is the cheapest of the lasers it markets. The Multifunction laser is an alternative to conventional circuit board plotters. It is capable of realizing circuit boards with structures down to below 40 µm (0.040 mm). However, it can also be used for micro-machining ceramic materials. The LPKF Multifunction laser comes in two versions which essentially differ only in the size of their machining range (100 x 100 mm, 470 x 420 mm). LPKF has used the Multifunction laser as the base for developing a Hybrid Laser System 470/420 which incorporates a milling/drilling head in addition to a laser machining head. The Company also markets the high-speed twin-coordinates drive it builds into the Multifunction laser as a stand-alone product. The prices of the systems are around DM 220,000.

Accessories

LPKF offers a wide range of accessories to accompany its laser systems, such as extractor, compressor and climate control systems, but also material pull-in systems (AutoLoader) which help feed base materials from the front, and optical and camera-managed systems for monitoring materials positioning.

Strategy

The Company's business objective is to expand its sales and earnings substantially in the next few years. It aims to achieve this primarily through expanding the Company's market share in rapid-prototyping-related products and secondly through bringing new leading-edge systems to market in the core technology areas of its business. The Company's long-term goal is to establish its laser systems as the industry standard across the full range of fine and ultrafine structure materials processing. The Company's strategy encompasses the following key elements:

Continuous technological improvement

The Company sees itself as a high-tech enterprise whose key business performance is the design and manufacture of technologically high-quality and high-value solutions. The Company accordingly places great store on the high quality of its research and development function and plans to continue to expand this activity in the coming years. In addition to developing new technologies, LPKF's research and development function is tasked with improving its existing products in order to prevent their obsolescence, and thereby helping to preserve the Company's technological advantage over its competitors. An example of this kind of product refinement is the new transmission on the plotters' drill/mill unit motor, which makes it easier to operate and also permits a 50% increase in speed. To enhance its StencilLasers, the Company has developed the Turbo-Cutter technology and a new AutoLoader accessory to assist feeding of the base material. The Company is also working on new innovative improvements in laser tech-

nology, which it aims to bring to market as quickly as possible in order to make it harder for technologically more backward rivals to either break into the market or expand their existing market share.

Accessing new customer potential

The Company starts from the premise that the circuit board plotter market still offers considerable potential, especially in the low-price segment. At around DM 17,000, the price for the entry-level model ProtoMat is still comparatively high. This has proved to be an obstacle in the Company's efforts to build market share in the emerging economies to which the bulk of electronics development and production has migrated. The Company intends to offer even better terms on entry-level products and thereby increase its market penetration amongst CAD users in the industrializing countries as well. The Company believes this approach is strategically promising since customers who opt for an entry-level circuit board plotter will subsequently become customers for optional attachments, higher-value plotters, through-plating plants, multilayer presses and ultimately also laser systems. The Company expects to be able to recover its lower prices from the improved efficiency of longer production runs.

Patent protection

Its innovative power has enabled the Company to achieve patent protection for important technological developments. This makes it harder for its competitors to market products of the same quality.

The Company holds a string of patents relating to laser technology and has applied for patents on further inventions. Its approach is to obtain comprehensive protection for its technologies in the most important markets it operates in. These include the EU, the USA, Canada, and Japan. The Company has already also achieved the first commercially exploitable results in its new areas of research (3D-MID and the development of coated flexi-materials), and has applied for and in some cases already achieved patent protection on them. The Company plans to continue to derive most of its future growth from technical innovations, with the emphasis on exploiting its own protected technologies, in order not to become dependent on licenses or third-party developments.

Restricted manufacturing depth

Outside the core areas of its technological development, the Company strives to base its products on standard components and to outsource as much production as possible to its suppliers. The Company views the flexibility and lower costs which stem from minimizing its manufacturing depth as a crucial competitive advantage. When the Company takes on the production of certain components such as laser sources itself or through a subsidiary, it does so because this offers cost benefits or because it is then in a position to provide superior technological solutions. In addition, developing its own production capability is a means of safeguarding the know-how the Company has acquired.

Combination of service providing and equipment manufacturing

Part of the Company's strategy is to deploy the machines it sells to perform contract work for customers through its ELASER GmbH subsidiary. This produces two benefits. Firstly the machines can be extensively trialled in a working environment before being generally marketed. Secondly it allows the Company to ensure that its machines and systems genuinely satisfy the requirements placed on them by customers for everyday use. In addition, the outputs produced for cus-

tomers serve as free advertising and as proof of the quality of LPKF's machines. Finally, StencilLasers in particular need extensive testing, and trial operation at ELASER is a good way of achieving this while at the same time producing stencils for customers. The Company also plans to continue this practice as part of its strategy for introducing new product types.

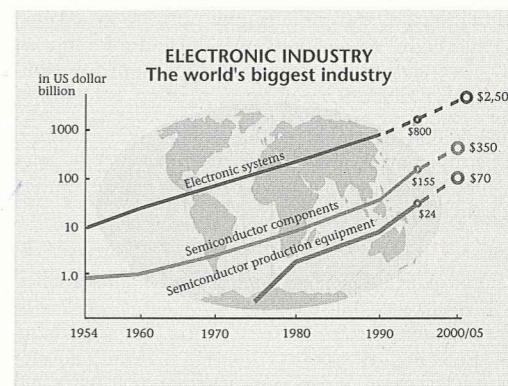
Service

It is the Company's objective to design and construct its products for maximum robustness and durability in order to minimize the need for service interventions. Nevertheless the Company has established a comprehensive service network, especially to back up its laser systems, since these machines are always incorporated into production facilities where lost production and downtime cannot be tolerated. The Company accordingly sees it as a central part of its strategy to continue to improve its global sales and servicing network and to continue to shorten its service response times.

Market and competition structure

The Company's products are used in the electronics equipment industry and related sectors at various stages of the development and production process. The Company is therefore part of the industry in the wider sense and also profits from its growth. The electronics industry's global turnover is forecast to grow to US\$ 2.5 trillion by the year 2000, of which semiconductor manufacturing equipment will account for approximately US\$ 70 billion.

Electronics industry



Source: SIA, SEWI

The Company is confident its existing and future product developments will allow it to share in this growth.

Rapid Prototyping

The demand for the Rapid Prototyping division's products, i.e. circuit board plotters, through-plating plants, multilayer presses and its accessories product family, comes especially from electronics developers in the electronics, automotive, aerospace and telecommunications industries, from engineering, medical and high frequency engineering and printed board service companies, from educational institutions and research organizations. Although circuit board plotters have been on the market for around fifteen years now, there is still no sign of market saturation. However, the result of the wholesale transfer of electronics development and production abroad has resulted in a stagnant market for prototyping products in Germany. The reverse of the coin is that foreign markets, in the emerging countries especially, are expanding. The Company estimates that several hundred thousand of the CAD packages which electronics developers use to disentangle the tracks of printed boards have been installed around the

world. By contrast, the installed base of circuit board plotters is just 15,000. Although the Company regards this as indicating a clear market potential, it sees the low-end, entry-level segment as the main beneficiary. This is also the segment which is subject to the fiercest competition. The Company's assessment is that the player which succeeds in bringing even cheaper entry-level models offering undiminished performance and quality, will conquer substantial market share.

The Company's key competitors in the field of circuit board plotters are:

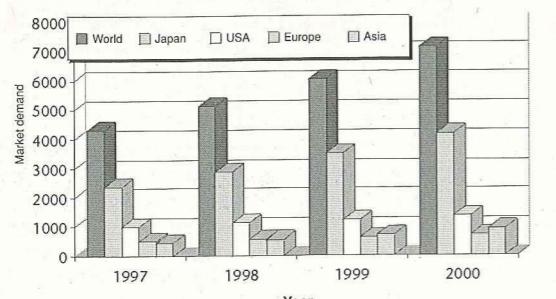
- T-Tech, USA, which manufactures comparable products to LPKF in the lower and mid-price segments. T-Tech also competes with the Company on through-plating systems and systems for manufacturing multilayer boards. T-Tech's main sales markets are the USA and Canada plus to a lesser extent Italy, Korea and Southeast Asia.
- MITS, Japan, is a manufacturer of circuit board plotters whose range covers every important product in the Company's range. Its key sales markets are Japan and Korea plus Southeast Asia. MITS has only a small presence in the USA and none at all in Europe and other countries.
- Bungard, Germany, is a manufacturer of machinery for producing prototype boards by conventional methods (base materials, luminance sources, developers, etching plants, laminators etc). Bungard also makes drilling machines which can also be used for milling. However, these products are not truly comparable with LPKF's systems. Most importantly, Bungard does not produce any software for printed circuit board applications. Its principal sales market is Germany, plus a few European countries. Non-European markets are not supported.
- In addition, a handful of other smaller manufacturers, operating on a small scale, also offer technologies which could be used to produce simple types of printed board prototypes.

Lasers

The principal customers for laser systems and accessories, i.e. StencilLasers, MicrolineLasers, Multifunction lasers, printing frames and presses, are electrical equipment manufacturers and their specialist suppliers, the semiconductor industry, the electronics industry, telecommunications and microcircuitry equipment manufacturers, PCB assembly service providers, stencil and PCB manufacturers, and the high frequency engineering industry.

The Company expects laser technology to provide most of its growth in the next few years. In particular the Company expects demand to strengthen for the flexible circuits used in the fields of Chip Size Packaging (CSP), smart cards and compact appliances.

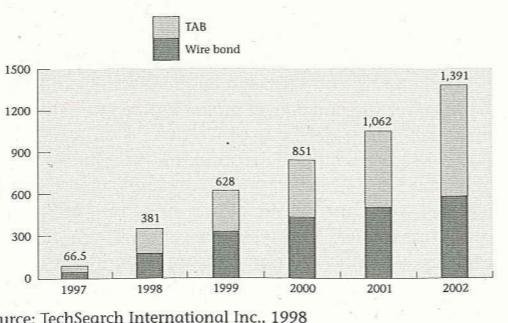
Market demand for flexible circuits



Source: BPA, TMM, TechSearch International Inc.

The Company sees the rising demand flowing from the advancing miniaturization of flexible circuits in CSP applications and smart cards.

Demand for flexi-CSPs

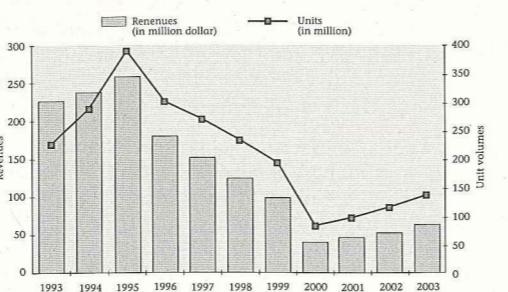


Source: TechSearch International Inc., 1998

The Company expects smart cards to replace magnetic strip cards in the medium term, which will dramatically increase the demand for flexible ultrafine conductors.

Total market for magnetic strip cards

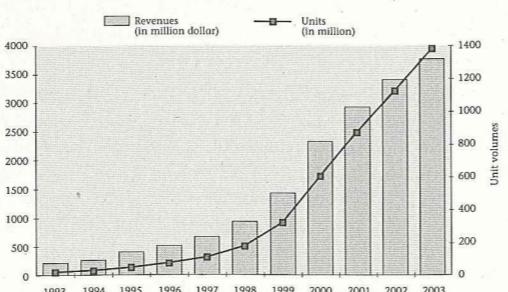
Units- and revenue fore-cast, worldwide, 1993-2003



Figures are rounded and date from 1996 Source: Frost & Sullivan

Total market for intelligent smart cards

Units- and revenue fore-cast, worldwide, 1993-2003



Figures are rounded and date from 1996 Source: Frost & Sullivan

The global market for three-dimensional circuits (3D-MID) is still small. Nevertheless, the Company expects substantial growth rates in this segment provided that potential users can be offered innovative technologies. The Company regards itself as well positioned in this market, thanks especially to the research work it has done into laser-supported processes for structuring 3D-MID as part of a publicly funded research project. The most important applications for 3D-MID technology will be in the fields of automotive manufacturing, telecommunications, sensorics, and large household appliances. Since the industries concerned are domiciled in Asia, especially Japan, the USA and in some cases Europe, these are the markets on which the Company's specialist products will be targeted.

As far as StencilLasers are concerned, the Company has to compete both against other manufacturers' laser-based products and also with the conventional chemical technologies which still offer certain advantages in the context of mass production. In respect of innovative products such as the MicrolineLaser or 3D-MID technology, the Company's only competition comes from the suppliers of chemical processes.

The Company estimates its share of the stencil-cutting lasers market at around 64 %. At present its major competitors in this sector are as follows:

- Lumenics Inc, Canada, is a subsidiary of Sumitomo Heavy Industries of Japan. LPKF estimates Lumenics' share of the global market at around 22 %. Lumenics' product range takes in nearly every conceivable type of laser. Lumenics is generally accepted to be the current market leader in laser applications. Lumenics' stencil-cutting lasers compete directly against the Company.
- Sumitomo Heavy Industries, Japan, manufactures lasers for the Japanese market separately from Lumenics. In addition to lasers for industrial applications, Sumitomo also produces stencil-cutting lasers. These have an approximately 5 % share of the world market.
- Toshiba, Japan, also manufactures lasers for all industrial applications. Its share of the global stencil-cutting lasers market is around 2 %.
- Eduard Huber Engineering, Switzerland, manufactures lasers for industrial applications and also produces stencil-cutting lasers in a joint venture with Lasag. Its share of the global stencil-cutting lasers market is around 4 %.
- 3 % are self made by end users.

Production

LPKF assembles its products primarily from standard components, which it outsources. The machines are put together at its locations in Garbsen, Germany, and Kranj, Slovenia, and also at LPKF Motion & Control GmbH in Suhl, Germany.

The Company believes that alternative sources of supply are available for all its components so there is no risk of it becoming strategically dependent on a single supplier. LPKF's single biggest supplier accounted for 21.4 % of the Company's purchasing volume in 1997 (not counting LPKF Motion & Control GmbH as an external supplier).

Circuit board plotters

The control and drive systems for the Company's circuit board plotters come from LPKF Motion & Control GmbH, Suhl. The parts are transported by truck to Slovenia and assembled there by the technicians of LPKF d.o.o. The finished machines are trucked back to Garbsen, where they undergo individual final adjustment and inspection on the pallet before delivery to the end customer. The current annual production of circuit board plotters is approximately 600 machines. The Group employs a total of approximately 10 people on manufacturing circuit board plotters.

The Company plans to expand this output to between 1,400 and 1,500 machines in 1999.

Stencil/Multifunction/Microline lasers

The subframes of the Company's laser systems including the drive and control systems for the working platforms are manufactured in Suhl by LPKF Motion & Control GmbH. The strict requirement for the working

platform to move freely without vibration makes it necessary for the systems to be extremely heavily built. Their subframe is constructed entirely from granite blocks which are a major factor in the lasers' final weight of up to 4 tonnes. The chassis is supplied to Garbsen fully assembled. The laser source is supplied either by external manufacturers or by LPKF d.o.o., Slovenia, and mounted in Garbsen together with the also externally sourced optics. Following assembly and final inspection, the machines are dispatched by special truck or plain from Garbsen to the customer. Current annual production is approximately 30 Stencil and Multifunction lasers a year.

Assembly products/Accessories

The assembly products line is manufactured exclusively by LPKF d.o.o., Slovenia, the multilayer technology products line exclusively by LPKF Motion & Control GmbH, Suhl. One-off orders and accessories which require extensive engineering such as the AutoLoader base-material feeder for the StencilLaser line are manufactured at LPKF's Garbsen facility. The remaining accessories are mostly bought in externally.

Laser sources

In order to reduce its dependency on the laser source manufacturers' standard products and promote the development of laser sources optimized for cutting applications, the Company has decided to develop its own laser sources in-house. The development work was carried out by LPKF d.o.o., Slovenia, where considerable know-how in the field of laser engineering is concentrated. The development work was completed in the Spring of 1998 and LPKF has now used the first of its own laser sources in its production of StencilLasers.

Software

Mature and powerful inversion, control and CAM software is an absolutely indispensable component of both circuit board plotters and StencilLasers. The Company has much of its software produced to its own specification by an external service provider in Fulda, with whom the Company has worked closely for fifteen years now. The Company holds the rights to the inversion and control software which has been developed, and which is essential to the machines it sells, but the service provider is paid a royalty on every package of the software sold and every upgrade installed. This is seen as incentivizing the service provider to optimize the software. However, neither the service provider nor the Company is bound by any sort of long-term contract as far as new program development is concerned. The rights to the CAM software packaged with LPKF's machines reside with the software service provider. However, this does not create a dependency since the machines also accept data from every other standard CAM software. The BoardMaster control software is produced by a different service provider in Slovenia who is similarly paid bonuses for improvements. The Company owns the BoardMaster program.

Marketing and distribution

Marketing

A central focus of LPKF's marketing activity is on exhibiting at the relevant specialist trade fairs in Germany and abroad. The most important of these in Germany are the Electronica, Laser Messe and Productronica fairs, all held in Munich, SMT in Nuremberg, CeBIT and the Hanover Trade Fair plus approximately 15 others held around Europe. In addition there are twelve relevant fairs every year in the USA and six in Japan which the Company or its agents attend. The Company either had its own stand or

shared a stand with distribution partners at a total of 40 fairs during 1997. In addition, the Company switches its advertising around the international trade press and commissions editorial articles showcasing its products. Direct mail and roadshows are also used to address customers. The Company has a further marketing tool at its disposal in the form of the services of its ELASER GmbH subsidiary, which exclusively uses LPKF's machines to produce stencils to customer order. Firstly this provides LPKF with an address list of potential customers who do not yet have a cutting laser system of their own. Secondly ELASER makes it quite clear whose products it uses, so that its satisfied customers are already part-sold on LPKF's machines. LPKF has an internet presence (<http://www.LPKF.de>). This provides customers and inquirers with product information and also details forthcoming trade fair appearances.

Distribution

The Company mainly distributes its products itself in Germany, while abroad its distributes through subsidiaries, affiliated companies and independent sales partners. The Company achieved around 76% of its sales revenues outside Germany in 1997, and approximately 26% in Asia. The Company has subsidiaries in Slovenia, Belgium and the USA. As far as its US distribution is concerned, the Company is considering setting up its own nationwide sales structure to replace its existing network of representatives. It also plans to establish a plotters and laser systems sales and service base to cover Hong Kong and Shen Zhen in China. The Company has independent distribution partners in Egypt, Australia, Brazil, Chile, China, Denmark, Finland, Greece, the UK, Hong Kong, India, Iran, Israel, Italy, Japan, Korea, Austria, Poland, Portugal, the Russian Republic, Saudi Arabia, Sweden, Switzerland, Singapore, Slovakia, Spain, South Africa, Syria, Taiwan, the Czech Republic, Turkey, Ukraine, Venezuela and Vietnam.

The Company has tied the vast majority of its distribution partners to exclusive contracts, so that they do not offer any rival systems which compete with those of LPKF. The Company assists the marketing effort of its distribution partners through regular training sessions and the provision of appropriate brochures and sales materials.

Sales agreements for circuit board plotters are concluded between the relevant end customer and foreign representative; customers are billed in D-Marks, and also in US dollars by LPKF's US subsidiaries. In the case of laser systems, the local distribution partner generally acts as an intermediary and the sale is transacted directly between LPKF AG and the end customer. Billing is mainly in D-marks but also occasionally in dollars.

Research and development

As a high tech business, LPKF makes research and development (R&D) an important focus of its activity, and around 20% of its staff are attached to this function. The overwhelming majority of its technical personnel are graduates.

The Company's R & D function is organized around the following key areas/teams:

- further improving circuit board plotters and accessories (Garbsen and Slovenia)
- new laser applications (Garbsen)
- coating technology (Garbsen)
- control systems and drive technology (Suhl)
- laser sources (Garbsen and Slovenia)

The Company has also initiated cooperative R & D with academic institutions. It is currently working with Professors Nauendorf and Wissbrock of Lemgo Technical University on laser-supported additive technologies for generating ultrafine conductor prints, and with the University of Erlangen on 3D-MID technologies.

The following are the Company's main current R & D projects:

- The Company has been actively developing the 3D-MID technology since 1996. The objective of this R & D project is to develop a laser which can imprint ultrafine-track circuits directly onto the inside surface of cast housing preforms. This would make the conventional printed circuit boards redundant and allow the appliance housing itself to be used for mounting the requisite electronic components. This technique imposes much tougher demands on the laser head, which needs to be positionable in relation to eight axes in order to be able to reach every point on a three-dimensional housing structure. The Company reckons to have solved the most important technical problems and foresees a market launch in Spring 2000. The 3D-MID laser will make it possible to realize ultrafine-track circuits with structures down to 50 µm.
- While LPKF has long offered a Multifunction laser with a drilling/milling head, the Company has now modified one of its conventional circuit board plotters, the ProtoMat 95s, to enable a Nd:YAG laser to be used alongside the drilling/milling head. The applications for this Hybrid product are the prototyping of ultrafine tracks (conductor strip structures down to 50 µm) plus standard laser cutting and inscription tasks. There is also potential for specialist applications in the field of high frequency circuits. A market launch is similarly predicted for Spring 1999. LPKF says it will then be the only supplier of a circuit board plotter with built-in laser technology. The microstructuring method is patented.

- The use of a laser-supported technology has enabled LPKF to succeed in developing a novel method of contacting chips for e.g. smart cards. The technique is characterized by the use of an excimer laser to both drill the holes and structure the tracks. The connection of the chip contacts with the interposer and the metallizing of the tracks are handled additively by means of chemical baths. The main application will be the low-cost production of highly-integrated chipcard modules for intelligent chipcards.

- The Company has been working since 1994 on innovative laser-supported strategies for the additive ultrafine-track structuring of flexible circuits. The Company's assessment is that this market offers considerable potential, especially for ecologically-responsive and economical technologies. LPKF has succeeded in using excimer lasers to develop custom solutions to this problem and in building a total system technology in the form of the MicrolineLaser. The technique has achieved 15 µm track widths on flexible (polyimide) circuits. The process is currently undergoing certification under the IPC standards and will be marketed globally on a services basis in the next few months.

- The laser-based production of printed boards for flexible or three-dimensional circuits requires the boards' backing materials to be given an adhesive and metallizable coating. Since this is a vital technical precondition for the successful launch of the Company's MicrolineLaser and 3D-MID (8-axis) lasers, LPKF is currently developing the coating for the backing

materials on its own account. The Company has installed a vacuum vaporization plant and recruited people with the relevant expertise to its R&D team. The results are currently being certified by an independent testing institute. Production of coated flexi-materials is expected to start late in 1998 or early in 1999.

- In collaboration with Lemgo Technical University, the Company has developed a method which allows plate glass to be coated with adhesive and structured using a UV laser. The main applications will relate to vehicle windscreens, for instance sensors to activate the wipers. The first windscreens have already been successfully coated and laser-structured and are now being tested for durability, strength of bond, and wiper-glide resistance. Patent protection of the technology has been applied for.

In addition to the above, LPKF's research and development effort regularly generates technologies and product ideas which fall outside the scope of the Company's core technologies. For instance, the Company has discovered that lasers can also be used to internally mark plate glass sheets (i.e. below the surface) and are also suitable for reliably measuring the moisture levels below the surface of organic materials such as compost heaps. LPKF's policy on these by-products of its research activity is to sell or license them at a profit to specialist firms in the industries concerned.

In the past the Company has received grant aid from public funds towards its research and development costs. This aid amounted to DM 1.35 million in 1996 and DM 1.77 million in 1997. Three of LPKF AG's current projects benefit from public subsidy:

Part-funded project	Duration	Total volume	Percentage subsidy	Funding institution
Laser-beam-assisted structured metallizing of 3D-MID's	to 31.12.1998 + 6 months extension	DM 6.8 million	50%	Federal Ministry for Education and Research
Chip Size Packaging (CSP)	to 31.12.1998	DM 2.2 million	45%	Federal Ministry for Education and Research
Laser measurement of relative and absolute moisture in compost heaps	to 17.09.1999	DM 1.1 million	50%	German Federal Environmental Foundation

The Group's expenditure on research and development increased from DM 2.05 million in 1996 to DM 3.15 million in 1997. Most of the increase is accounted for by the expansion of the R&D function's staffing.

Real estate and operating premises

The Company owns the land its operating headquarters are situated on (4,314 m²) in Garbsen, registered in the Land Register of Neustadt District Court, lot identification 111/22, cadastral district 3, subdistrict Berenbostel. This is also the Company's registered office. The lot is subject to a mortgage to the value of DM 4.25 million. The ELASER GmbH subsidiary does not own any real estate but has rented premises in 98527 Suhl/Thüringen, Neuer Friedberg, and also maintains an office in the headquarters of LPKF AG in Garbsen. LPKF d.o.o., Slovenia, also operates only from rented accommodation in Kranj, Slovenia.

LPKF AG has acquired adjacent land from Garbsen parish council for the purpose of extending its premises. Most of the purchase price has already been paid. The outstanding remainder amounts to approximately DM 130,000.00. However, the parish council has not yet completed the conveyance and transfer of title, since it has not yet regained possession of the property from its previous occupier and the purchase agreement is therefore still subject to delay. The lot is subject to a planning requirement which obliges the Company to build on it within five years.

To the best of the Company's knowledge, both the land it already owns and its new land have previously been used for agriculture and are uncontaminated. However, the Company has not commissioned any soil analysis.

Investments

The Group's additions to fixed assets totaled DM 5.19 million in 1996 and DM 3.5 million in 1997. LPKF AG (GmbH) was responsible for the greater part of the 1996

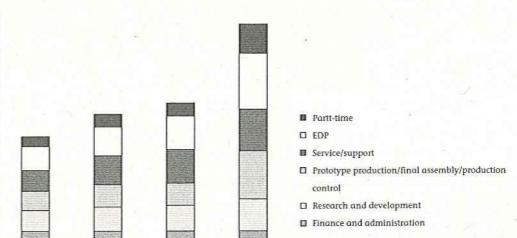
investment total, namely DM 3.76 million; it committed DM 1.3 million to extending its head office building and also made major purchases in connection with R&D projects. At the subsidiaries level, there was capital expenditure on a new StencilLaser system for ELASER GmbH and on an advance payment for the exclusive rights to commercially exploit the laser source developed by Zeltra Naklo d.o.o. on behalf of LPKF d.o.o. LPKF AG (GmbH) accounted for a much lower share of the investment total in 1997, namely DM 1.56 million. Once again, the biggest items at the parent company involved purchases in connection with R&D projects. ELASER's capital expenditure of DM 1 million related to the purchase of two StencilLaser systems.

Employees

LPKF owes its outstanding progress in recent years not least to its employees. Their commitment and willingness to master new challenges have helped to secure the Company's growth.

The number of people employed by LPKF at December 31, 1997 was 85, an increase of 21% over the previous year's total. The following graph shows the expansion of the workforce between end-1996 and mid-1997, and the breakdown of new employment by organizational units:

Employees



The Company regards its flat hierarchy and informal structures as valuable assets which permit creativity and new ideas to flourish and gain acceptance. However, the Company is also aware that it will need to introduce new organization structures as its growth continues.

Patents, licenses etc.

Ever since it started in business, the Company has been determined to obtain patent protection for its product innovations in order to prevent their imitation and unauthorized use. The Company restricts itself to patenting the principles of key innovations and in this way locking out rivals from entire technology fields, rather than devoting extensive time to investigating the patentability of every trivial advance – as some competitors do, especially in Southeast Asia. The Company also supplements its own inventions by buying strategic patent rights.

The Company applied for patents in the early days of the laser technology. Since this is a relatively new technology which is the object of research by numerous

Technology	Geographical protection afforded
Method for the structured metallizing of substances' surfaces	USA; applications submitted for Germany, certain other EU countries and Japan
Method for through-plating bores in multilayer printed circuit boards	Germany, USA; applications submitted for certain other EU countries and Japan
MicrolineLaser-based additive technique for flexible circuits	USA; applications submitted for Germany and Japan
Coating permitting the structuring of conductor strips/ coating plate glass	Germany, certain other EU countries; applications submitted for USA, Japan, China, and Korea
Combination method for manufacturing circuit boards and contacting chips for use inter alia in smart cards	Germany, certain other EU countries and USA
Combination of Multifunction laser technology and laser-induced microstructuring	Germany; applications submitted for certain other EU countries and USA

The Company has additionally applied for patents on twelve other technologies; the award of these is still pending.

In all instances, LPKF AG applies for patents on innovations developed by any company within the Group. This is a condition of a research and cooperation agreement with LPKF Suhl which transfers the rights in innovations developed by that company to the parent LPKF AG. In 1995, 1997 and 1998, LPKF Slovenia applied for patents on certain inventions which only have significance for its production activities in that country.

As far as its current R&D projects are concerned, the Company currently sees no risk that the commercial exploitation of their development outcomes could cause it to infringe third-party patent rights. Should this eventuality transpire however, the possibility cannot be excluded that the Company will have to forego the anticipated positive benefits of the relevant products it has developed to full or approaching market readiness.

Litigation

No legal or arbitration proceedings which could have a significant influence on the economic situation of the Company or its subsidiaries, or which have had such an influence in the past three financial years, are currently pending, nor to the best of the Company's and its subsidiaries' knowledge are any such proceedings pending, threatened, or foreseeable.

companies and academic institutions and universities, large numbers of patents have already been awarded in this field, some of them making very broad claims.

This creates the risk for LPKF that individual of its patent applications may be rejected or that elements of the Company's technology infringe patents already awarded to third parties. To date the Company is unaware of any patents which it could have infringed through its technologies or the marketing of its products, nor have any third parties made or threatened any such claims. Even if this eventuality were to arise, the Company estimates that the impact on its market position in rapid prototyping and stencil-cutting lasers would be relatively slight. This is because the crucial technological know-how resides not so much in the laser sources and optics systems utilized as in the drives and precision controlling of their work platforms.

The Company holds or has applied for numerous patents in the field of laser technology. The following key patents have already been awarded:

Unaudited IAS summary interim financial statements of the LPKF Group for the period to September 30, 1998

Statement of income

	Notes	DM '000
1. Sales revenues	(1)	23,539
2. Increase/decrease in inventories and work in process		333
3. Other capitalized own work		0
4. Other operating income	(3)	2,110
		<hr/>
5. Cost of materials	(4)	6,766
6. Personnel expenses	(5)	6,102
7. Depreciation on intangible fixed assets and tangible assets		1,306
8. Other operating expenses		4,586
		<hr/>
9. Net financial income/expense		6,556
10. Results from ordinary activities		-425
11. Taxes on income	(6)	6,131
12. Consolidated net income for the period		3,316
13. Minority interest		2,815
14. Consolidated result		4
		<hr/>
		2,811

**Unaudited IAS summary interim financial statements
of the LPKF Group for the period to September 30, 1998**

Balance sheet

Assets	Note	DM '000	9.30.1998 DM '000
A. Expenditures on starting and expanding operations			1
B. Fixed assets	(7)		
I. Intangible assets		1,233	
II. Tangible assets		7,294	
III. Financial assets		977	9,504
C. Current assets			
I. Inventories	(8)	9,027	
II. Receivables and other assets	(9)	4,830	
III. Securities		63	
IV. Cash, girobank and other bank balances		1,468	15,388
D. Prepaid expenses			149
E. Deferred tax asset	(10)		144
			25,186

Liabilities	Anhang	TDM	30.09.1998 TDM
A. Shareholders' equity			
I. Subscribed capital	(11)	5,000	
II. Capital reserve		0	
III. Retained profit reserve, other profit reserves		0	
IV. Distributable profit	(12)	4,191	
V. Foreign currency translation adjustment		34	9,225
B. Minority interest			809
C. Accrued liabilities	(13)		3,431
D. Liabilities	(14)		11,721
E. Deferred income			0
			25,186

Consolidated cash flow statement (IAS)

	Note	1998 DM '000
Current operations		
Net income for the period		2,815
Depreciation on fixed assets		1,305
Other non-cash expenses and income		14
Changes in inventories and receivables		-2,807
Changes in other borrowings		127
Net inflow of funds from current operating activities	(16)	1,454
Investing activities		
Fixed-asset investment		-1,440
Proceeds of disposals		52
Net outflow of funds from investing activities		-1,388
Financing activities		
Payment of dividend		-2,900
Minority shareholders		-59
Change in long-term bank borrowing		-605
Net inflow/outflow of funds from financing activities		-3,564
Change in cash and cash equivalents		
Exchange-rate-induced movement in funds		-1
Changes in cash and cash equivalents		-3,498
Cash and cash equivalents as at January 1		1,109
Cash and cash equivalents as at September 30		-2,390
Cash and cash equivalents		
Liquid funds		1,468
Overdraft liabilities		-3,858
Cash and cash equivalents		-2,390

Notes

I. Closing date for interim summary report

The rules for admission to the Neuer Markt stipulate that the Offering Prospectus must include a set of interim summary financial statements for a period ending not less than two month before the date of the Prospectus. The closing date has accordingly been fixed at September 30, 1998.

The Company's trading pattern is not fundamentally influenced by seasonal effects.

Comparative figures have not been provided for the same period of the previous year.

II. Use of International Accounting Standards

The interim financial statements of the LPKF Group for the period ending September 30, 1998 have been prepared using the same uniform accounting and valuation principles applied for the consolidated financial statements for the years ending December 31, 1996 and 1997.

III. General disclosures

The interim financial statements have been prepared in deutschmarks (DM). To simplify the presentation and improve the clarity of the accounts, the figures in tables are presented in thousands of deutschmarks (DM '000).

The interim financial statements have not been audited.

IV. Sphere of consolidation

In accordance with the principles of full consolidation, the interim financial statements of the LPKF GROUP (with LPKF Laser & Electronics AG (formerly LPKF Laser & Electronics GmbH), Garbsen, as parent company) for the period ending September 30, 1998 include the following companies:

- ELASER Gesellschaft für Elektronik, Laser und Automation GmbH, Suhl
 - LPKF d.o.o., Kranj, Slovenia
 - Franklin Industries N.V., Mechelen, Belgium
- The following companies were consolidated according to equity:
- LPKF Motion & Control GmbH (formerly LPKF CAD/CAM Systeme in Thüringen GmbH), Suhl
 - LPKF CAD/CAM Systems Inc., Portland, Oregon, USA
 - A-Laser Inc., Beaverton, Oregon, USA

The group acquired a further 20% of the shares in LPKF CAD/CAM Systems Inc., Portland, Oregon, USA, by virtue of an agreement dated September 29, 1998, the purchase to take effect from January 1, 1999. The group's holding will then be 60%.

Notes on selected income statement headings

1. Sales

For details of the composition of sales revenues, please refer to the Sales breakdown by business area and region (point 19).

2. Order book

Orders in hand were worth approximately DM 4,500,000 on October 26, 1998. This coverage is in line with the prior year.

3. Other operating income

This heading essentially includes public research and development grants to the value of DM 1,577,000.

4. Materials expense

Materials requirements depend on the structure of the products sold. Purchasing prices have essentially remained constant.

5. Personnel expenses

89 persons (including part-timers) were employed at the closing date.

6. Taxes on income

The tax liability was calculated on the assumption that the Company's earnings would be retained.

Notes to selected balance sheet headings

7. Fixed assets

The additions to fixed assets totaling DM 1,440,000 during the period under report primarily concern investments by the parent company, with DM 326,000 resulting from the down-payment on a land purchase.

The changes in financial assets reflect the pro-rata inclusion of the earnings of the Group's equity-consolidated affiliates.

8. Inventories

The Inventories heading includes finished products and goods to the value of DM 6,958,000.

9. Receivables and other assets

The Trade receivables shown (to the value of DM 2,740,000) essentially result from work performed in the third quarter of 1998. Receivables of DM 832,000 are also shown which are due from companies consolidated in proportion to equity. The Other assets total of DM 1,258,000 primarily consist of outstanding research and development grants (DM 734,000).

10. Deferred taxation

The deferred tax total was calculated by reference to the distribution liability identified by the Group's medium-term planning and results essentially from the elimination of inter-Group profits.

11. Subscribed capital

By virtue of the resolution of the shareholders meeting held on March 11, 1998, the subscribed capital was increased to DM 5,000,000 through the capitalization of reserves and retained profits of DM 650,000.

12. Distributable profit

The unappropriated profit was arrived at as follows:

	In DM '000
Brought-forward profit at January 1, 1998	5,679
Appropriated for capital increase	-1,399
Distribution	-2,900
Consolidated net profit	2,811
Distributable profit at September 30, 1998	<u>4,191</u>

13. Provisions

The provision for taxation was calculated at a corporation tax rate of 45% on the assumption that the earnings would be retained.

The Other provisions heading essentially includes provisions for management bonuses (DM 942,000) and provisions for warranty liabilities (DM 350,000).

14. Liabilities

The Liabilities total includes liabilities to banks to the value of DM 9,958,000, including overdraft liabilities of DM 3,858,000.

Other information

15. Earnings per share

On the basis of the new total of shares outstanding after the capital increase from company resources, namely 1,000,000 shares, the earnings per share at the closing date were DM 2.81.

16. Cash flow statement

The inflow of funds from ongoing operations includes tax payments of DM 1,802,000. The relevant interest income and expense totals essentially correspond to the interest received and paid.

17. Related party transactions

Related companies	DM '000
Zeltra Naklo d.o.o., Slovenia	
Goods and services procured	550
PMV d.o.o., Slovenia	
Services procured	124
Cura Consult, Germany	
Services procured	90

The shares in PMV d.o.o. held by a close relative of a shareholder in the parent company were sold under an agreement dated October 12, 1998.

18. Developments of exceptional significance

The general meeting held on October 13, 1998 authorized the Managing Board to increase the registered capital by up to DM 2,500,000, the authority to expire on October 13, 2003 (authorized capital).

The meeting also resolved a conditional capital increase to the value of DM 500,000 as part of an employee share participation scheme in the form of convertible loan stock.

19. Segment reporting

Composition of sales revenues:

a) Product groups	Period to September 30, 1998 DM '000
Laser systems	12,595
Rapid prototyping	9,008
Stencils	1,539
Other	397
Total	23,539

b) Regions	Period to September 30, 1998 DM '000
Germany	6,241
Rest of Europe	6,427
North America	4,430
South America	206
Asia	6,199
Others	36
Total	23,539

20. Outlook for the current financial year

As far as the budgeted figures for 1998 are concerned, we can be confident that the LPKF Group will reach all the targets it has set itself.

The Laser Systems division, which largely reflects the sales of StencilLaser systems, has continued to expand. We expect the division's order intake to continue strong through to the end of the year since we know that many of our customers are running their systems at the limit of their capacity.

Hanover, October 26, 1998

LPKF Laser & Electronics AG

Bernd Hildebrandt

Bernd Hackmann

Jörg Kickelhain

Current trading and prospects

The 1998 financial year has seen business satisfactory so far. The LPKF Group has achieved sales of DM 23.54 million in just the nine months to September 30, 1998. This pattern means that, provided the fourth quarter turns out as expected, 1998 turnover will finish [significantly] higher than in 1997.

More precise numeric information on the period to September 30, 1998 is provided in the afore-going interim financial statements.

The turnover of the Lasers division, which derives basically from the sale of StencilLasers, has continued to expand during the period. In spite of the financial crisis, the Company has succeeded in winning new orders in Asia, especially in Japan and China. The upsurge of business in the USA has also been a particularly welcome development. In this market LPKF has incidentally even managed to acquire customers who were already operating rival systems. In line with the Company's predictions, its European turnover is matching last year's level. Looking to the rest of the year, the Company expects its order intake to remain strong since it is confident that many of its customers are currently running their LPKF systems absolutely flat out and will therefore find themselves obliged in the near future to make new investments in order to expand their capacity. The Company also expects a further boost to its sales in the first half of 1999 from the market introduction of a new laser system which will have the capability to cut stencils from plastic materials. Customers have already requested systems offering this functionality. Additionally, the Company is already enjoying strengthening demand for upgrade options such as its TurboCutter and AutoLoader products.

The Rapid Prototyping division (ProtoMat) was able to increase its turnover substantially in the third quarter of the current year, on a scale which effectively balanced out the drop in sales in the first quarter. The stability of the business the division does with Japan has been an especially gratifying feature of the year to date. The demand for circuit board plotters declined in other Asian countries however, especially South Korea, although the third quarter has seen a definite pickup. If this trend is maintained, as the Company believes, it will enable the Rapid Prototyping division's turnover to also end the year higher than 1997 and ensure higher sales in the first half of 1999 as well.

The subsidiary ELASER GmbH was able to expand its turnover in contract production of solder past stencils as to 10%.

In the fourth quarter the ELASER GmbH aims to install a stencil laser for the production of plastic stencils. The Company is confident to start production with in the current business year.

The Company has enjoyed continued success in winning new work during the current financial year. Orders in hand amounted to DM 4.5 million on October 26, 1998. The order intake for the year to date (LPKF AG only) was DM 20.5 million. This includes orders worth DM 11.5 million for laser systems. The Company is confident of receiving further orders before the year ends since a year-end peak in orders has proved to be the pattern in recent years, as the two important Munich trade fairs ELECTRONICA and PRODUCTRONICA fall in this period. The Company expects the targets set for the Group as a whole to be achieved.

The Company's research and development projects are progressing according to schedule. Its method for structuring flexible printed boards by means of the MicrolineLaser® is at the certification stage. Samples are already being produced for a range of potential customers – including the smart cards sector. Construction of the laser system for the 3D-MID technology is already complete, and the software is nearing readiness. The 3D-MID team are also testing materials which promise to be particularly suitable for this application.

The Company is confident the positive trend of its business will continue through the rest of the current year and next year as well. The Company intends to supplement selected product areas through a corporate acquisition should the opportunity arise. At the moment however, the Company has no concrete partnership or take-over plans.

Garbsen, November 1998

LPKF Laser & Electronics AG

On the basis of the afore-going Offering Prospectus/Company Report, the said

**2,100,000 bearer shares
in the form of no-par-value unit shares
(notional nominal value per unit share: DM 5.-)
DM 10,500,000.-,**

each carrying full dividend rights for the financial year 1998, i.e. as of January 1, 1998

– Securities Code Number 645 000 –

plus up to

**100,000 bearer shares
in the form of no-par-value unit shares
(notional nominal value per unit share: DM 5.-)
DM 500,000.-**

in respect of the conversion rights extending to October 13, 2003, into no-par-value ordinary bearer shares created from a conditional capital reserve and carrying full dividend rights for the financial year in which the application to convert becomes effective,

of

LPKF Laser & Electronics Aktiengesellschaft, Garbsen,

have been admitted to the Geregelter Markt (Second Trading Segment) and to trading on the Neuer Markt of the Frankfurter Wertpapierbörsse (FWB Frankfurt Stock Exchange)

Frankfurt am Main, Berlin and Hamburg, November 1998

**DG BANK
Deutsche Genossenschaftsbank AG**

**Bankgesellschaft Berlin
Aktiengesellschaft**

**Commerzbank
Aktiengesellschaft**

**M.M.Warburg & CO
Kommanditgesellschaft auf Aktien**