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# JENOPTIK AT A GLANCE.

Figures in million euros	IFRS		HGB			
	2004	2003	2003	2002	2001	2000
<b>Sales</b>	<b>2,523.0</b>	1,922.0	1,982.2	1,584.5	2,001.5	1,572.3
<b>of which domestic in %</b>	<b>59.2 %</b>	62.2 %	61.9 %	57.1 %	48.2 %	42.2 %
<b>of which foreign in %</b>	<b>40.8 %</b>	37.8 %	38.1 %	42.9 %	51.8 %	57.8 %
of which Clean Systems	2,151.5	1,630.5	1,693.5	1,308.6	1,670.6	1,172.5
Photonics	359.8	282.6	282.1	268.2	264.2	235.7
<b>Value added</b>	<b>618.4</b>	494.4	481.0	476.1	460.7	398.6
of which Clean Systems	443.6	364.1	362.7	328.7	289.1	235.2
Photonics	166.5	148.4	142.3	135.9	125.2	112.6
<b>Return on value added</b>	<b>13.1 %</b>	1.8 %	1.6 %	13.6 %	23.7 %	20.7 %
of which Clean Systems	10.4 %	– 1.9 %	0.3 %	6.2 %	16.2 %	15.0 %
Photonics	20.7 %	17.6 %	18.7 %	20.3 %	20.1 %	18.8 %
<b>EBITDA</b>	<b>128.8</b>	50.9	45.1	95.3	132.6	102.5
of which Clean Systems	68.0	12.5	22.8	37.2	60.3	48.3
Photonics	53.4	41.5	42.3	41.3	35.0	28.1
<b>EBIT</b>	<b>81.1</b>	9.0	7.9	64.8	109.1	82.5
of which Clean Systems	46.0	– 6.9	1.2	20.3	46.7	35.2
Photonics	34.5	26.1	26.6	27.6	25.1	21.2
<b>EBIT margin (EBIT as % of sales)</b>	<b>3.2 %</b>	0.5 %	0.4 %	4.1 %	5.5 %	5.2 %
of which Clean Systems	2.1 %	– 0.4 %	0.1 %	1.6 %	2.8 %	3.0 %
Photonics	9.6 %	9.2 %	9.4 %	10.3 %	9.5 %	9.0 %
<b>Earnings before tax</b>	<b>37.4</b>	– 43.3	– 19.6	46.2	107.5	96.5
<b>Earnings after tax</b>	<b>19.0</b>	– 45.9	– 25.8	40.3	88.3	86.6
<b>Return on sales before interest and taxes</b>	<b>3.2 %</b>	0.5 %	0.4 %	4.1 %	5.5 %	5.2 %
<b>Order intake</b>	<b>2,368.0</b>	2,205.0	2,205.0	2,137.9	1,890.5	1,929.0
of which Clean Systems	1,939.0	1,870.3	1,870.3	1,879.5	1,564.6	1,615.9
Photonics	418.6	328.1	328.1	250.9	291.8	270.0
<b>Order backlog</b>	<b>1,866.6</b>	2,290.4	2,509.2	2,394.5	1,746.0	1,719.8
of which Clean Systems	1,445.6	1,920.0	2,140.3	2,073.3	1,432.5	1,433.1
Photonics	421.0	370.4	368.9	321.2	312.7	284.0
<b>Employees as of Dec. 31 (incl. trainees)</b>	<b>9,267</b>	10,486	10,363	9,824	6,943	6,146
of which Clean Systems	6,607	7,928	7,943	7,543	4,817	4,206
Photonics	2,593	2,498	2,360	2,209	1,987	1,793

A handwritten signature in blue ink, reading "Dear ladies and gentlemen," is displayed on a light blue background. The signature is written in a cursive, flowing style.

Looking back upon a truly strong fiscal year 2004, we can be content in our achievement of a number of important goals. Our operative income is higher than had been expected, while we have been able to reduce our net debt considerably. And according to the strict IFRS rules that we have recently introduced, our equity ratio has now surged ahead to 23.7 percent, well beyond the 20-percent benchmark. Our order intake in 2004 improved slightly on the record that we set in 2003, while orders have continued to come in at a lively pace over the first few months of 2005.

With all this good news, we have begun the new fiscal year with great optimism, while starting the year by laying the groundwork for further group development in 2005. We began this work in 2003 and 2004 by significantly strengthening our capital structure during a period of low interest rates around the world. These measures included a long-term bond issue, a capital increase, and a convertible bond issue. Our improved capital situation has allowed us to invest strongly in the Photonics business division. This strategy has already met with success as the 2004 Photonics figures – the best ever – clearly demonstrate. And these moves have afforded us the leeway necessary to reorganize the Clean Systems business division. Clean Systems has also seen excellent sales, income, and order intake figures, a clear confirmation of our strategy.

Most importantly, we have returned to profitability in 2004 and, at an operating result of 81 million euros, convincingly so. I would especially like to emphasize the fact that our income has grown solely as a result of our operational activities. Group sales rose strongly to 2.5 billion euros, while we were able to improve our profitability further by reducing costs, particularly administrative costs. Our earnings after tax group income came to 19 million euros, a significant difference to operating income that may cause some bafflement on the part of the reader. By means of explanation: this difference reflected in part the balance sheet position “deferred taxes without effect on the cash flow” that we posted for the first time in line with our transition to IFRS accounting regulations.

Our financial standing, however, is nearly as important as our profitability. In addition to the aforementioned capital measures, we paid off the outstanding purchase price of Wahl optoparts with our own shares, thus boosting our equity. And of particular note: we have reduced our net debt by more than 130 million euros in the course of fiscal year 2004.

Ladies and gentlemen, not only have our key group figures improved in 2004, we have also worked on the group structure throughout the course of the year. Our globally active electronics facility engineering business has been headquartered in Singapore since autumn 2004. This move will do well to serve customers who are intensifying their investments in Asian chip factories. By combining our activities in this capital-intensive business, we will also become more attractive to new investors and

shareholders. At the same time, we have extracted the company from much of its involvement in a difficult market by selling the majority of our Technical Facility Systems unit.

With these two fundamental moves, the M+W Zander Group has, over the past year, developed into an international facility engineering group characterized by strong individual companies – without however being forced to forego the advantages of a united company working together. Our Photonics business division has in fact been following this very business model for years.

We will also continue to put great effort into furthering Photonics expansion in 2005, focusing on the mass production of new high-tech products, new global markets, and linking our numerous areas of activity to strengthen our corporate network. Optical technologies are a driving force behind growth and innovation in Germany and throughout the world. And we are one of a few companies in the world to enjoy near comprehensive command of light applications, spanning the generation and detection, manipulation and use of light. This is our potential, and are determined to expand on this potential in 2005 and the years to come.

Ladies and gentlemen, I would like to thank all our customers and partners, and to thank you for placing your trust in Jenoptik. I would particularly like to express my appreciation to our employees – for their efforts, their ideas, their tenacity and enthusiasm.

Sincerely yours,



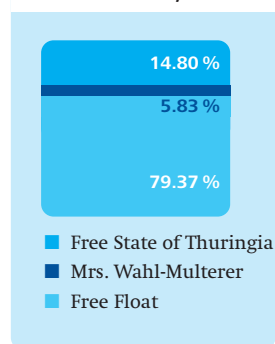
Alexander von Witzleben

Chairman of the executive board

Jena, April 2005

## THE JENOPTIK SHARE.

Shareholder structure as of December 31, 2004



Jenoptik's sales and income increased over fiscal year 2004, and the further realignment of the Clean Systems business division both received a positive reaction from the capital market. Since the beginning of 2005, Jenoptik's share price has risen strongly to 9.73 euros as of February 28, 2005.

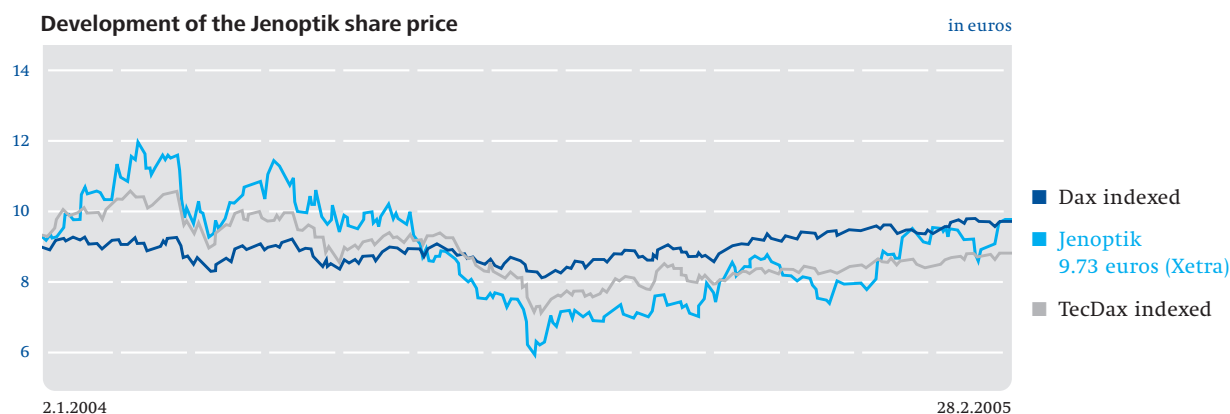
Solid arguments speak in favor of investment in Jenoptik: ■ Photonics and Clean Systems have leading positions in major growth markets. ■ Solid capital base enables future growth – mostly free of bank financing. ■ Jenoptik consistently continues expansion of the Photonics business division.

**Stock indexes more stable in 2004.** In contrast to 2003, Germany's Dax and TecDax both showed considerable stability in 2004, despite rising oil prices and somewhat slower U.S. economic growth. The German share index Dax recovered from its annual low of 3,646.99 in mid-August, ending the year at 4,256.08, a rise of over 7 percent for the year. The TecDax, by contrast, was not able to fully recover its losses for the year. The index of Germany's 30 top technology shares lost more than 4 percent to finish the year at 519.99.

**Jenoptik share recovered strongly at year's end.** The Jenoptik share began 2004 at 8.85 euros, to be followed by a clear upward trend, peaking at what would prove to remain the year high of 11.90 in February. The price of the Jenoptik share developed almost in parallel to the Dax and TecDax through June. By the middle of the year, however, Jenoptik fell faster than both indexes, hitting a year low of 5.93 euros in early August. Through the end of 2004, Jenoptik was nevertheless able to rebound noticeably, completing the year on December 30, 2004 at 7.76 euros. Despite a positive development in particular in the fourth quarter, Jenoptik lost about 12 percent in the course of 2004.

In 2005, the Jenoptik share has continued to move upwards. Jenoptik has announced important moves towards the realignment of its Clean Systems business division over the first few months of the current fiscal year. The Jenoptik share was valued at 9.73 euros on February 28, 2005 – a rise of approximately 20 percent from the beginning of the year.

Jenoptik market capitalization came to 403.79 million euros as of December 30, 2004, down just under 5 percent from the beginning of the year. Calculated from the share price of February 28, market capitalization has resurged substantially to 506.3 million euros.



#### Jenoptik share master data

ISIN DE0006229107  
WKN (Germany) 622 910  
Stock symbol JEN  
Reuters Frankfurt JENG.F  
Xetra JENG.DE

Included in the TecDax since the first quarter 2003.

#### In addition, included in the following indexes:

HDax  
Prime All Share  
Tec All Share  
Mid Cap Market Index  
CDax

Jenoptik trading volume came to an average 179,754 shares a day on all German Stock Exchanges for 2004, a considerable rise from 2003 (104,223 shares). Jenoptik has thus joined the ranks of high-liquidity TecDax shares. At the end of 2004, Jenoptik ranked 13th among TecDax technology companies for market capitalization and trade volume.

**Capital measures completed with convertible bond.** The June 2004 issue of a convertible bond totaling 62.1 million euros, concluded Jenoptik's capital measures, which had included the issue of a bond and a capital increase in autumn 2003, allowing Jenoptik to improve its financing structure in the long run. The convertible bond, which excluded shareholders' subscription rights, was successfully issued under the auspices of HVB Corporates & Markets. The convertible bond has a term of 5 years with a conversion premium of 45 percent and a coupon of 2.5 percent.

**Acquisition paid for in shares.** In autumn 2004, JENOPTIK AG used part of its authorized capital to pay for the rest of its acquisition of Wahl optoparts GmbH, purchased in December 2003, with new shares. 3,194,651 new shares were issued in September 2004 against a contribution in kind – the balance of the purchase price. The JENOPTIK AG share capital thus rose by 8,306,092.60 euros, with the number of no-par value bearer shares increasing from 48.84 million to 52,034,651. The shares were issued with respect to the current share price at the time of the transaction. The new shares excluded shareholders' subscription rights, and are entitled to full dividends for fiscal year 2004. Jenoptik plans to use its shares as an acquisition instrument with little effect on liquidity.

<sup>1)</sup> Source: Deutsche Börse

<sup>2)</sup> The number of shares used as a basis is adjusted for the number of treasury shares amounting to 9,000 (2003:393,000) and for 884,00 new shares (capital increase against contribution in kind) on annual average.

<sup>3)</sup> Taking into account the maximum possible number of shares converted (convertible bond) pro rata temporis.

### Key Jenoptik share figures in comparison with the previous year

in euros

	2004	2003
Group earnings per share	0.26	- 1.07
DVFA/SG earnings per share <sup>2)</sup>	0.30	- 0.58
Diluted DVFA/SG earnings per share <sup>3)</sup>	0.31	- 0.58
Highest share price / Lowest share price (Xetra)	11.90 / 5.93	13.08 / 7.30
Closing share price (Xetra, year-end)	7.76	8.70
Average daily trading volume <sup>1)</sup>	179,754 shares	104,223 shares
Market capitalization (Xetra, year-end)	403.8 million	424.9 million
PER (based on highest share price) / PER (based on lowest share price)	45.77 / 22.81	n.a.
Non-par value bearer shares issued	52.03 million	48.84 million
Bond (closing price, Frankfurt, year-end)	109.90	107.80
Convertible bond (closing price, Luxembourg, year-end)	93.70	-

**DVFA/SG earnings.** In determining earnings figures according to the DVFA, erratic items are deducted from the net profit. Jenoptik's net profit was mainly adjusted for the sale of the shares in Infineon Technologies sc300 GmbH & Co. KG, the sales of the project building in Singapore as well as costs resulting from the deconsolidation and restructuring of the Technical Facility Systems unit. Taking into account the maximum possible number of shares converted resulting from the convertible bond pro rata temporis diluted earnings per share were calculated for the first time.

**Comprehensive and up-to-date business information.** In 2004, Jenoptik management presented the group at two analyst conferences, technology conferences run by Deutsche Bank and Deutsche Börse/equinet, and at the SEMINVEST conference. Jenoptik was also present for the first time at Deutsche Bank's High Yield Conference in London. Analysts and institutional investors from around the world were able to request company information in numerous conversations. Investors and analysts also came to visit Jenoptik in Jena in their quest for information. As in 2003, some 20 analysts filed research reports on Jenoptik over the past year.

**Annual report again receives honors.** In addition to direct contacts and the Internet, financial reports are an important means of communication. The JENOPTIK AG annual report again received special recognition this past year. For the second time, the Jenoptik report came in first in the TecDax division of "manager magazin's" annual rankings.

**DVFA/SG earnings calculation**

in TEUR

	I F R S	
	2004	2003
<b>Earnings after tax</b>	<b>19,049</b>	<b>-45,877</b>
- Adjustment for deferred taxes	0	0
= Adjusted group income	19,049	-45,877
- Erratic items (asset) after taxes <sup>1)</sup>	-24,312	15,211
- Erratic items (liabilities) after taxes	0	0
- Other erratic items after taxes <sup>2)</sup>	26,503	8,554
<b>= DVFA/SG earnings for entire group</b>	<b>21,240</b>	<b>-22,112</b>
- Third party shares in profits(+)-/losses(-)	6,227	6,048
<b>= DVFA/SG earnings for shareholders of the parent company</b>	<b>15,013</b>	<b>-28,160</b>
/ Number of shares used as basis, in thousands <sup>3)</sup>	49,715	48,448
<b>= DVFA/SG earnings per share (euros)</b>	<b>0.30</b>	<b>-0.58</b>
Adjusted DVFA/SG earnings	15,898	-28,160
Number of potential shares (diluted) in thousands	51,869	48,448
Fully diluted DVFA/SG earnings per share in euros	0.31	-0.58

<sup>1)</sup>In 2004: Sale of sc300, sale of project building Singapore.

In 2003: Mainly loan to DEWB.  
<sup>2)</sup>In 2004: Deconsolidation and restructuring of Technical Facility Systems unit.

In 2003: Restructuring and merger loss

<sup>3)</sup>See point 2) table page 8.

**The sixth JENOPTIK AG annual general meeting** in Weimar was attended by some 600 shareholders on June 9, 2004, corresponding to 41.7% of voting capital. With a great degree of consent, the full agenda was passed unchanged.

**The three leading rating agencies**, Fitch, Moody's und Standard & Poor's (S&P), all rate JENOPTIK AG and its bonds issued. The three agencies issued their first Jenoptik corporate and bond ratings in accordance with standardized credit criteria on the occasion of Jenoptik's bond issue in autumn 2003. All three agencies lowered Jenoptik's corporate and bond ratings subsequent to the company's posted loss in fiscal year 2003. Due to largely fixed interest rates, however, this will not have a direct effect on Jenoptik financing costs. Jenoptik reorganized its financing structure considerably with its capital measures in 2003 and 2004.

**Rating of JENOPTIK AG**

	Corporate Rating	Bond Rating
1.1.2004		
S&P	BB -	BB -
Moody's	Ba3	Ba3
Fitch	BB -	BB -
31.12.2004		
S&P*	B+	B+
Moody's	B1	B1
Fitch	B+	B+

\* Rating Convertibles: B-

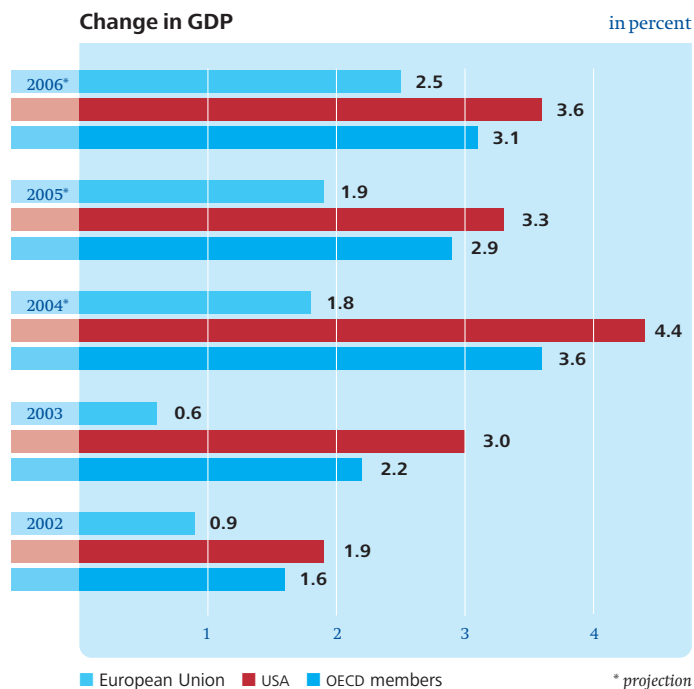


## JENOPTIK AG GROUP MANAGEMENT REPORT FOR FISCAL YEAR 2004.

### GENERAL ECONOMIC DEVELOPMENT.

Growth in the global economy slowed slightly during the course of 2004. The main reason for this was the sharp rise in oil prices, the effects of which were increasingly felt. It was not just the high energy prices themselves but the psychological effects as well which knocked confidence which was already low in some countries, particularly in Europe. Despite this the economy throughout the OECD region grew at a stronger rate than in the previous years. For 2004 the OECD forecasts a 3.6 percent rise by comparison with the previous year. The front runners once again included the USA with a forecast 4.4 percent growth.

2004 was a successful year for the Asian economic region. With growth of 7.6 percent the region achieved its best result since the financial crisis of 1997/98 according to the Asiatic Development Bank.



The measures taken by the Chinese government aimed at throttling back slightly on the pace of growth have not yet taken effect. Although the global economy slowed slightly in mid 2004 this did not last. For the 2004 year as a whole the OECD expects the Chinese economy to report record growth of 9.5 percent, consequently surpassing even the level achieved in the previous year.

Economic growth in Europe met with strong resistance. This was caused not only by the level of oil prices but also the continuing rise in the value of the euro. At 1.8 percent according to the OECD the rise in economic output in 2004 in Europe was only moderate. Whilst the strong pick-up in global trade had a positive effect domestic demand remained sluggish. Following a strong start during the course of 2004 it subsequently lost impetus. Investment activity within the euro zone remained flat throughout the entire year.

In 2004 Germany recovered from the previous three years of stagnation. With the economy forecast by the OECD to grow by 1.2 percent in 2004 however it remains one of the backmarkers of the OECD states. As elsewhere throughout the euro region growth was driven by strong exports.

### THE INDIVIDUAL JENOPTIK MARKETS.

**Photonic technologies a driver for growth and innovation.** In 2004 optical technologies reported marked increases in sales worldwide. The global market for optical technologies is estimated to be around 80bn euros. Following two years of rather moderate growth, in 2004 the sector rediscovered its important role as an engine that drives growth.

German companies are amongst the worldwide leaders in this sector. In 2004 they generated high levels of growth, primarily abroad, with the share of exports increasing to above 66 percent. According to experts photonic technologies have now been incorporated as a standard technology in many areas of life.

**The worldwide laser market**, according to the specialist magazine Laser Focus World, generated a sales volume of 5.4bn us dollars in 2004, equating to growth of around 10 percent. Within the last ten years growth worldwide has been on average 18 percent per annum – an impressive result. The market for industrial lasers is driven in particular by strong demand from the area of medical technology and laser materials processing. Jenoptik has been well established in both of these areas of application for many years through its special laser modules and systems.

**The sensor market**, which saw sales rise nearly 10 percent in 2004, is similarly on a growth path, with the impetus coming from the increasing level of miniaturization.

**The international automotive industry** is one of Jenoptik's key markets, accounting for around 30 percent of sales in the Photonics business division (of which approx. 17 percent automotive, approx. 4 percent coach/rail, approx. 9 percent aerospace).

German automobile manufacturers succeeded in expanding their international market positions. Sales in 2004 rose by 8 percent overall compared with the previous year and were achieved primarily during the second half of 2004.

In 2004 the European aviation industry demonstrated its position as a global leader with the completion of the A380. In 2004 the German aviation industry recovered further from the collapse in 2001 and 2002.

**The market for safety systems** – alongside the automotive industry – is one of the key markets in the Photonics business division, accounting for around 24 percent of sales. The transition between the two markets is fluid as the Electromechanical Systems business area develops and produces technology for military vehicles and aircraft. Although the defense budget of the Federal Republic of Germany continued to fall in past years, the share for military procurement however has increased since 1999. Over the last four years the procurement budget has remained almost constant at around 3.8bn euros.

**2004 was a boom year for the semiconductor industry.** According to statistics from VLSI, the market research institute, worldwide sales of the sought-after chips rose to 215.3bn us dollars, surpassing by 5 percent even the record sales posted by the sector in the year 2000. By comparison with the previous year, the level of growth therefore almost reached the 30 percent mark. The chip sector benefited from the increased demand for electronic devices such as digital cameras and notebooks.

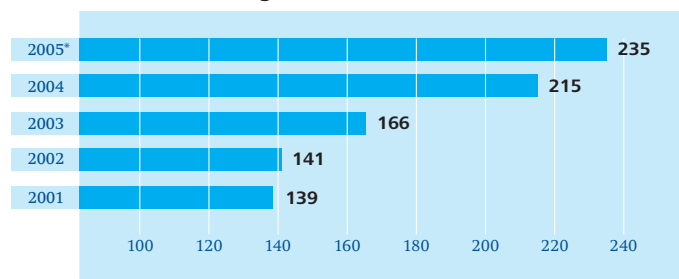
**The market for flat screen monitors remained on a growth path.**

2004 was characterized by a fall in prices for flat screen monitors, particularly during the second half of the year. However, this created a further rise in demand for the so-called flat panels. For the very first time, in the third quarter 2004 deliveries of flat panels exceeded those of cathode-tube monitors. The worldwide sales volume in 2004 reached a record of 37.1bn us dollars, against 23.7bn us dollars in the previous year.

**The solar panel industry has a brilliant future ahead of it.** The German industry in particular is experiencing a boom and in 2004 became the world's leading photovoltaic nation. For the very first time more photovoltaic systems were installed here than in Japan. The sector has already been growing by between 25 and 30 percent annually for a number of years and in 2004 alone reported sales of around seven billion us dollars. Manufacturers are massively increasing their capacities for production of the base material – silicon wafers. In Germany, the increase in sales, according to details from the Solar Industry Association, totaled approx. 60 percent.

**Semiconductors: global sales**

in billion us dollar



\* projection

Source: VLSI

**The market for facility technology** in Germany stagnated in 2004. The sector has therefore experienced its fourth year in succession without an increase in sales. There was also a further fall in the number of employees. Overall, in 2004 the construction sector experienced its ninth successive year of falling sales.

**For Facility Management providers** 2004 offered up new market opportunities, particularly as a result of the EU's expansion towards the East. According to a study by the market research company Lünendonk, total sales in the Facility Management sector in 2003 totaled around 50 billion euros – with an annual growth rate of approx. 8 percent. We are seeing a continuation of the process of concentration within the sector which began in 2003 and is primarily also attributable to the increasing internationalization.

## SALES DEVELOPMENT.

**With sales of 2,523.0m euros** the Jenoptik Group clearly passed the two billion euro mark (prev. year 1,922.0m euros). The 31.3 percent increase in sales came from contributions by both business divisions. Both Clean Systems and Photonics reported double figure rises in sales.

The Jenoptik Group recorded around 41 percent of its sales through exports (prev. year 38 percent). However, in view of the major projects in facility engineering at Clean Systems plus a high proportion of component business transactions at Photonics this figure is only of limited relevance.

**The Photonics business division posted sales of 359.8m euros** (prev. year 282.6m euros) and therefore exceeded expectations for fiscal year 2004 by nearly 10m euros. The 27.3 percent rise in sales was the result of broadly-based growth across the entire Photonics Group as well as acquisitions. Two companies, LECHMOTOREN GmbH (Lechmotoren) and WAHL optoparts GmbH (Wahl optoparts), whose sales in 2003 had not been included in the figure, accounted for around 40m euros of the Photonics sales. Purely organic growth

## Group sales

in million euros

	2004	2003	Change from previous year in percent
Sales	2,523.0	1,922.0	31.3
Domestic	1,493.6	1,195.6	24.9
Foreign	1,029.4	726.4	41.7

## Sales by business division

in million euros

	2004	2003	Change from previous year in percent
Clean Systems	2,151.5	1,630.5	32.0
of which Facility Engineering	1,759.1	1,260.3	39.6
of which Facility Management	408.0	397.1	2.7
Photonics	359.8	282.6	27.3

therefore was approx. 13.2 percent. Exports increased their share of Photonics sales compared with the previous year from 48.3 percent to 56.0 percent.

The Electro-Optics business area reported a double figure rise in sales in percentage terms, primarily in the areas of laser materials processing, high-performance optics and sensors for aerospace applications as well as with laser positioning and distance measurement equipment marketed by Jenoptik in a joint venture company with HILTI AG. With consolidated sales of 108.9m euros, the Electromechanical Systems business area exceeded the figure for the prev. year by 14.1 percent (prev. year 95.4m euros). This rise is primarily attributable to Lechmotoren GmbH whose sales figures were included for the first time.

**2004 was a new record year for the Clean Systems business division.** The m+w Zander Group reported a jump in sales to 2,151.5m euros (prev. year 1,630.5m euros). This represents 32.0 percent growth which came primarily from the Facility Engineering business area where sales rose by 39.6 percent to 1,759.1m euros

(previous year 1,260.3m euros). It is clear to see that 2004 was a very good year for the electronics industry.

In 2004 42.7 percent of total sales in the Facility Engineering business area were generated abroad, the majority in Asia.

In addition, up to the deconsolidation as at December 31, 2004 sales of the Technical Facility Systems unit were included in the sales of the Facility Engineering business area. Since July 2004 this unit has been combined within M+W Zander Gebäudetechnik GmbH. Despite the selection of orders being increasingly made in accordance with strict profitability criteria, this unit posted a small rise in sales in 2004. A contribution to this came from partial orders for the AMD chip factory in Dresden which is built by the Electronics unit as the general contractor that awarded orders to the Technical Facility Systems unit as subcontractor.

With sales of 408.0m euros (prev. year 397.1m euros) in 2004 Facility Management maintained the level of growth achieved in the previous years. The 2.7 percent increase in sales was achieved despite the fact that the UK Facility Management company relinquished part of its business involving a sales volume of 24.8m euros as part of combining all electronics activities in Singapore in summer 2004. The growth in internal sales is essentially attributable to a series of large and long-term orders received by Facility Management during the course of fiscal year 2003. Despite having to forego contributions to sales from abroad as mentioned above, exports further increased their share of total sales in Facility Management to 20.5 percent (prev. year 19.2 percent).

## EARNINGS DEVELOPMENT.

**Leap in profits in 2004.** Earnings before interest, taxes, depreciation and amortization (EBITDA) reached 128.8m euros (prev. year 50.9m euros). Earnings before interest and taxes (EBIT) in the sum of 81.1m euros improved nine-fold in comparison with the previous year, by 72.1m euros (prev. year 9.0m euros) in total terms. A series of factors contributed towards this enormous increase in the result: increased sales as a result of the recovery in the market in 2004, a strong rise in earnings from the electronics area, a positive contribution to the result by two new companies, Wahl optoparts and Lechmotoren, as well as cost savings. Special effects which

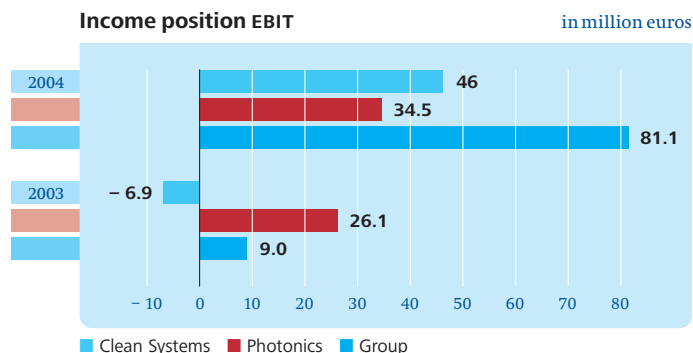
influenced the result in the Clean Systems business division subsequently balanced each other out on the EBIT and EBITDA level (see page 16). The increase in earnings posted by the Jenoptik Group is therefore attributable to the rise in sales, cost savings and an improvement in the operating profitability.

### Photonics business division achieved the targets set for 2004 in full.

The EBIT rose to 34.5m euros (prev. year 26.1m euros). The 32.2 percent increase in earnings therefore even surpassed the rise in sales. Photonics accordingly improved the existing high EBIT margin from 9.2 percent to 9.6 percent and is therefore within the target range of 9 to 10 percent.

The acquisitions Wahl optoparts and Lechmotoren that affected the result contributed towards the increased earnings the first time in 2004. The 2004 EBIT for the Photonics business division includes for the first time depreciation on intangible assets which were capitalized within the framework of the acquisitions in 2003 and 2004 and correspondingly reduced the goodwill for the acquisitions.

In the Electro-Optics business area pure organic growth was achieved in 2004 primarily by high-performance optics which benefited from a good year in the semiconductor industry as well as from product launches in the area of infra-red optics. The areas of laser materials processing, high-performance diode lasers as well as laser measurement systems also posted sharp increases.



The Electromechanical Systems business area improved its earnings to 8.4m euros (prev. year 5.2m euros) thanks to Lechmotoren whose sales were included in the figures for the first time in 2004. This was boosted by an improvement in the result of ESW-EXTEL Systems Gesellschaft für Ausrüstung mbH (ESW) – despite high lead costs for major projects, particularly in the aviation industry. These will only make a positive contribution to earnings in the years ahead.

**Clean Systems benefited from a strong year for the electronics industry** and reported a marked increase in the EBIT in the fiscal year just past. It rose in total terms by 52.9m euros to 46.0m euros (prev. year minus 6.9m euros). The EBIT margin was therefore 2.1 percent (prev. year minus 0.4 percent). Related to the own value added (see p. 30) the EBIT margin thus improved from minus 1.9 percent to 10.4 percent. The earnings increase posted by the M+W Zander Group came primarily from the Facility Engineering business area. However, Facility Management also reported a sharp rise.

The result in the Facility Engineering business area was influenced by special effects, although on balance these were cancelled out to a significant extent within the EBIT: earnings from the construction of the Infineon chip factory in Dresden had a positive impact. The project, dating from 2000, provided for M+W Zander to subsequently sell its shares in Infineon Technologies sc300 GmbH & Co KG (sc300). The sale of these shares in the 1<sup>st</sup> quarter 2004 produced earnings before interest and taxes of around 30.7m euros. About 5m euros came from the sales of a project building in Singapore. These positive special effects were offset by one-off expenses in the sum of around 32m euros in the Technical Facility Systems unit in which the Jenoptik Group now no longer has a majority holding. 17.9m euros of this figure resulted from the deconsolidation of M+W Zander Gebäudetechnik GmbH. During the course of the prior restructuring of the Technical Facility Systems unit staff downsizing was inevitable. This gave rise to restructuring costs of around 14.1m euros, of which 10m euros are social compensation plan expenditures.

The EBIT in the Facility Engineering business area reached 32.5m euros (prev. year minus 14.1m euros). The increase in the

result was primarily attributable to the facility engineering for the worldwide electronics industry which has been combined within a separate company with registered offices in Singapore since autumn 2004.

The Technical Facility Systems unit, which made a major contribution towards the operating losses in the Facility Engineering business area in the previous year, achieved a marked reduction in pure operating losses as a result of improved project controlling and greater focus on the selection of orders in accordance with strict criteria on profitability. However, the social compensation plan expenses mentioned above, as well as the loss arising from the deconsolidation, have to be apportioned to the Technical Facility Systems unit in 2004.

The EBIT in the Facility Management business area rose by 51.5 percent to 15.3m euros (prev. year 10.1m euros). The increase in earnings is only partially attributable to the expansion of the operating business. Deferrals of pension expenses gave rise to a charge of approx. 1m euros in the previous year and reduced the burden on fiscal year 2004. The EBIT margin in Facility Management was increased from 2.5 percent to 3.8 percent and is therefore above the forecast target range of 3.0 to 3.5 percent.

**In Jenoptik Holding** (JENOPTIK AG) administrative expenses in the sum of 11.3m euros (prev. year 12.7m euros) were incurred. The 11.0 percent fall is due primarily to the cost savings introduced at the end of 2003. An additional 0.4m euros were saved in other function costs.

**Net investments result improved** to minus 10.4m euros (prev. year minus 24.2m euros), due in particular to the lower depreciation on financial assets in the sum of 3.6m euros (prev. year 21.7m euros). This was offset by higher costs arising from investments in associated companies which totaled 6.1m euros (prev. year 2.0m euros). The main cause of these is the share in the result produced by DEWB AG in which JENOPTIK AG has a 34.88 percent stake. Expenses from investments totaled 0.7m euros (prev. year 0.5m euros).

**Net interest result in the Jenoptik Group** came in at minus 33.3m euros (prev. year minus 28.1m euros), representing a fall of 5.2m euros or 18.5 percent. Interest expense of 44.2m euros (prev. year 37.7m euros) were offset by interest income in the sum of 10.9m euros (prev. year 9.6m euros). The increase in interest expense is primarily attributable to the interest paid on the seven-year bond. It replaced debts with lower interest rates but with shorter terms at the end of 2003. Interest expense also include the addition of accrued interest to provisions in the sum of 3.9 m euros as well as calculatory and therefore non-cash interest expense in the sum of 1.6m euros (prev. year 0.1 m euros) as the effective interest method was applied to the convertible bond and corporate bond.

**Earnings before tax** improved overall by 80.7m euros to 37.4m euros (prev. year minus 43.3m euros). This is attributable in particular to the marked increase in the operating result as well as to lower depreciation on financial assets. Accordingly however there was a rise in Jenoptik Group taxes on income and earnings which increased to 11.2m euros (prev. year 5.0m euros). Taxes are paid predominantly by the companies abroad as well as domestic companies with no profit transfer agreement. The loss carry forward by Jenoptik from the early 90s was taken into account for those group companies which do have a profit transfer agreement. One-off tax expenses were also incurred from the sale of the investment in sc300 as well as from the restructuring of the Technical Facility Systems unit.

The increase in earnings before tax in fiscal year 2004 gives rise to the deferred and therefore non-cash taxes to be calculated that amount to 7.2m euros (prev. year minus 2.4m euros). Deferred taxes for fiscal year 2004 were particularly high in percentage terms as the costs arising from the deconsolidation of the Technical Facility Systems unit are not included for the purpose of reducing taxes.

**The result after tax of the Jenoptik Group** amounted to 19.0m euros taking into account the result from investments, the interest result and the tax expenditures. It thus surpassed the previous

year's figure by 64.9m euros (prev. year minus 45.9m euros). The special effects mentioned for the EBIT of the Clean Systems business division (see page 16) had a slightly negative effect on the group's earnings after taxes taking into account taxes and interests.

The share of the group earnings after tax held by third parties totaled 6.2m euros (prev. year 6.0m euros). As a result of the high share of warranty dividends this rise was under-proportionate.

## ORDER SITUATION .

**Well equipped for 2004 with a record order intake.** The high level achieved in the previous year was again slightly exceeded. The order intake in the Group for 2004 came to a total of 2,368m euros (prev. year 2,205m euros). Of this figure 44.8m euros came from those companies acquired by Jenoptik in December 2003. With a book-to-bill-rate of 0.94 the order intake for 2004 remained slightly below the sales volume, which was exceptionally high in 2004.

This high volume of sales, together with the deconsolidation of the Technical Facility Systems unit, was also reflected in the order backlog which, in 2004, was down on the level for the previous year. As at December 31, 2004 the Jenoptik Group posted an order backlog of 1,867m euros – a reduction of 423m euros or 18.5 percent (prev. year 2,290m euros). 218m euros of the order backlog were lost during the course of the deconsolidation of the Technical Facility Systems unit whose order backlog is no longer included in the figures. Currency conversions of the weak us dollar in particular also produced a further reduction in the order backlog of approx. 40 to 50m euros due to conversions.

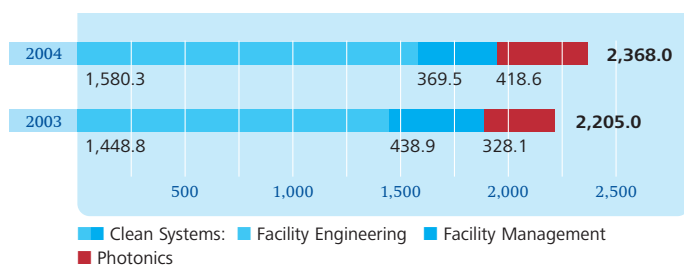
**Photonics business division posted record new orders.** In 2004 Photonics recorded a total order intake of 418.6m euros (prev. year 328.1m euros) – a rise of 27.6 percent. Virtually all companies in the Electro-Optics business area contributed to the increase in the order intake of more than 90m euros; some companies actually succeeded in more than doubling their order intake. The book-to-bill-rate for the entire Photonics business division was 1.16.



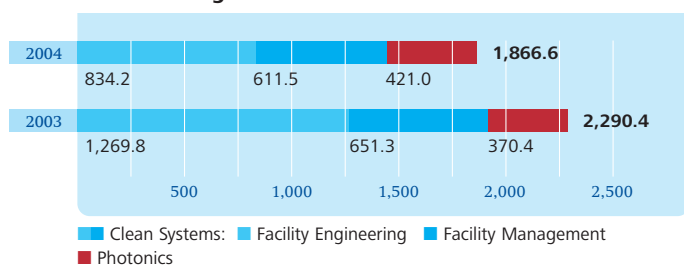
With around 44.8m euros nearly half of the growth in the order intake came from the firms Wahl optoparts and Lechmotoren which were included in the figures for the first time. Excluding these the growth in orders for Photonics totaled 13.9 percent. There was a particularly strong increase for example in the order intake by HILLOS GmbH and by Jena-Optronik GmbH which was awarded a long-term major order for the “RapidEye” earth observation system.

This “RapidEye” order is also one of the heavyweights in the order backlog at Photonics which increased to 421.0m euros (prev. year 370.4m euros including Lechmotoren and Wahl optoparts). Contributions to this 13.7 percent rise came not only from long-term orders in the Electromechanical Systems business area but also in particular from medium-term orders in the Electro-Optics business area. A particularly strong order intake at JENOPTIK Laser, Optik, Systeme GmbH in the December of the fiscal year just past also helped the growth in the business division’s order intake as at December 31, 2004.

**Order intake** in million euros



**Order backlog** in million euros



**The order intake of the Clean Systems business division also achieved a record level.** It almost reached the two billion euros mark. The M+W Zander Group posted a total order intake of 1,939m euros (in the previous year 1,870m euros). The order intake was therefore up by 3.7 percent - despite the major AMD order of 380m euros included in 2003, which had an extraordinarily strong effect on the order intake in 2003. With a book-to-bill-rate of 0.90, in 2004 Clean Systems posted sales slightly in excess of the order intake, although this is primarily attributable to high part sales from the AMD project in Dresden.

The order backlog in the Clean Systems business division totaled 1,446m euros and so was sharply down on the figure for the previous year (prev. year 1,920m euros). The reasons for this were the loss of the Technical Facility Systems order backlog of 218m million euro as well as the weak dollar. The order backlog was also reduced by the high level of sales in 2004, for example those from the AMD project which was still included in the order backlog of the previous year with significantly more than 300m euros.

The growth in the order intake for Clean Systems came purely from the Facility Engineering business area which reported an order intake of 1,580m euros (prev. year 1,449m euros). The 9.0 percent growth reflects the strong year for the electronics industry. In addition to a follow-up AMD order, the investment boom in the semiconductor and flat panel industry, particularly in Asia, contributed towards this result. With the order backlog of the deconsolidated Technical Facility Systems no longer included, through currency conversions and accountings of the AMD major order, the order backlog for the Facility Engineering business area in 2004 was reduced accordingly to 834m euros (prev. year 1,270m euros) despite the increase in the order intake.

Although the order intake in the Facility Management business area, at 369.5m euros, was down on the level for the previous year (prev. year 438.9m euros) it was markedly ahead of expectations for 2004. The book-to-bill-rate in 2004, at 0.91, was near to 1 as Facility Management won a number of important and major orders primarily from industry. Outside Germany it is the countries of Eastern Europe in particular in which building services contracts are awarded to external providers. This is an area in which M+W Zander has carved out a strong market position for itself over recent years.

Since it is standard for contracts in Facility Management to be concluded for three years and more, it is only in the first year that these increase the order intake and backlog.

The order intake for 2003 included several long-term major orders, particularly from German financial service providers which are now being processed on an on-going basis. The order intake in the Facility Management business area as at December 31, 2004 was accordingly down slightly by 6.1 percent to 611.5m euros (prev. year 651.3m euros).

## RESEARCH AND DEVELOPMENT.

**Expenditure by the Jenoptik Group on R+D was further increased in 2004.** Expenditure on R+D was 31.8m euros and therefore 12.0 percent higher than a year ago (prev. year 28.4m euros). The proportion invested in R+D by the Jenoptik Group, at 1.3 percent, was below the previous year's level of 1.5 percent as a result of the sharp rise in sales in the Clean Systems business division. However, the proportion invested by the Group as a whole is of no great relevance as the Photonics business division – generating a 14 percent share of the 2004 group sales – accounts for around three quarters of the expenditure on R+D.

The Clean Systems business division accounts for 8.1m euros, around 25 percent of the total expenditure on R+D (prev. year 6.5m euros). The research work in the M+W Zander Group is focused on, amongst other things, developments for the efficient control of chip manufacturing plants as well as on the technology and know-how transfer to other high-tech sectors such as the photovoltaics industry and medical technology.

**Expenditure on R+D at Photonics maintained at a high level.** In 2004 a total of 25.1m euros was invested in R+D projects in this business division, around 8.2 percent more than in the previous

### R+D-expenses of the business divisions

in million euros

	2004	2003	Change from previous year in percent
R+D-expenses in the group	31.8	28.4	12.0
of which Clean Systems	8.1	6.5	24.6
of which Photonics	25.1	23.2	8.2
other/consolidation	- 1.4	- 1.3	7.7

year (prev. year 23.2m euros). R+D corresponded to 7.0 percent of sales (prev. year 8.2 percent). This reduction in percentage terms by comparison with the previous year was primarily the result of the sales volume generated by the two new companies Wahl optoparts and Lechmotoren. Both these companies have a large proportion of customer order-related R+D which is reflected in cost of sales and not the R+D expenses.

The R+D expenses essentially comprised personnel costs for the R+D employees as well as costs for outsourced services and materials. Investment in materials was comparably low as this is mainly restricted to laboratories and workstation equipment. As in the previous year the R+D expenses were relieved as developments close to the market were capitalized in the sum of 0.5m euros. This was offset by depreciation arising from the capitalization of developments close to the market in the previous years in the sum of 1.3m euros. The long-term research project Extreme Ultra Violet (EUV) is not included in the R+D expenses of the Photonics business division. The joint venture XTREME Technologies GmbH is consolidated at equity.

In addition to the EUV long-term project, in 2004 the main topics of research in Photonics included in particular new developments in the area of digital photography technology, both for road traffic safety and professional digital photography as well as for example for earth observation by satellite.

The customer order driven developments, extensively carried out by Jenoptik, are included in cost of sales. Together with these R+D services the R+D share of sales in the Photonics business division would increase to at least 11.5 percent.



## PROCUREMENT.

**Cost of materials increased, driven by sales.** The cost of materials and purchased services of the Jenoptik Group in 2004 totaled 1,468.7m euros (prev. year 1,217.3m euros). Raw materials, consumables and supplies as well as purchased goods accounted for 685.7m euros (prev. year 925.5m euros). That represents a figure of 46.7 percent (prev. year 76.0 percent). The remaining 783.0m euros (prev. year 291.7m euros) reflected the share of purchased services. The materials ratio of the company output, including purchased services and prepayments (total from sales, other income and investment result), rose slightly to 74.6 percent (prev. year 72.9 percent). In this context, as a result of the proportionally lower percentage of own added value for major projects, the Clean Systems business division has a higher materials and prepayments quota than the Photonics business division. In 2004 the figure for Clean Systems was 79.1 percent (prev. year 77.1 percent) and for Photonics 49.8 percent (prev. year 44.8 percent).

The Photonics business division was only indirectly affected by the sharp rises in oil and steel prices in 2004. As with all companies these price increases are primarily translated into overheads such as energy and fuel costs. The main base material for Photonics, glass, was hardly affected at all by the rise in raw material prices in 2004. In addition, Jenoptik had already secured access to this raw material in the previous years through strategic alliances.

**Photonics companies draw up new criteria for selecting suppliers.** As previously announced, Jenoptik placed greater emphasis on the strategic orientation of procurement within the Photonics business division. As a first step, in 2004 it conducted a review of

the supplier assessment process, the auditing system. Greater importance than in the past will now be attached to e.g. environmental protection criteria. Furthermore, relationships with East European and Asian countries were intensified. As a result of greater emphasis being placed on servicing the security systems market in 2004, in the Photonics business division Jenoptik geared itself to meeting the stringent demands placed on quality by customers, extending right through to procurement management.

## DISTRIBUTION.

**Less than proportional rise in selling expenses.** These increased by 8.8 percent to 73.8m euros (prev. year 67.8m euros). This was essentially attributable to the companies newly acquired at the end of 2003 and to the rise in sales which led for example to an increase in sales commissions to dealers. Since the growth in sales outstripped the rise in selling expenses the selling expenses quota (selling expenses as a percentage of sales) fell from 3.5 percent in the previous year to 2.9 percent. This reduction is attributable both to fixed costs within the selling expenses as well as to cost savings.

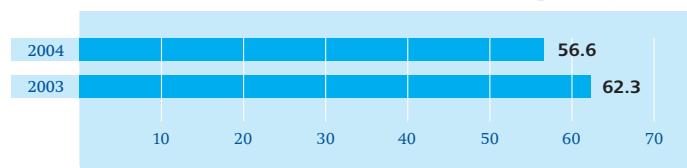
Clean Systems accounted for around 54 percent of the selling expenses which increased by 9.6 percent, a less than proportional rate against sales, to 40.0m euros (prev. year 36.5m euros). The selling expenses quota therefore fell from 2.2 percent to 1.9 percent.

**Further improvement in Photonics distribution structures in 2004.** Despite the inclusion for the first time of Wahl optoparts and Lechmotoren and high organic sales growth, the 7.8 percent increase in selling expenses to 33.2m euros was moderate (prev. year 30.8m euros). The selling expenses quota was reduced accordingly to 9.2 percent (prev. year 10.9 percent). This reduction is attributable on the one hand to two new companies which have a relatively low selling expenses quota and secondly to the fact that a further improvement was achieved in the efficiency of distribution within the Photonics business division.

Since autumn 2004 a close partnership with the Swiss camera manufacturer SINAR AG has been strengthening Jenoptik's distribu-

Materials ratio

as a percentage of sales



tion of digital camera backs which are targeted at professional photographers. New distribution partnerships for the European, North American and Japanese regions were concluded for the VarioCam thermographic cameras.

In September 2004 Photonics expanded its market presence in the area of industrial measurement technology in Asia by taking a 33.33 percent stake in the South Korean firm of Telstar Engineering Co., Ltd.

ORGANIZATION.

In the past business year Jenoptik has made several corporate realignments which, however, did not directly affect the operative business. With these steps Jenoptik continued its strategy of focusing on the Photonics business division and simultaneously has prepared the comprehensive corporate realignment of Clean Systems. The group's structure is now more efficient and oriented towards the core competencies of both business divisions. In addition, essential prerequisites for the further development of the group have been created.

In order to further exploit the development potential of Photonics and at the same time to reduce the Group's multi-layer structure JENOPTIK PHOTONICS AG was merged into JENOPTIK AG at the beginning of 2004. Since then key Photonics companies have been directly assigned to JENOPTIK AG. In addition, Jenoptik continued its strategy of relinquishing non-strategic investments. So for example the stake in Kempfer & Kolakovic Personalmanagement GmbH was sold to its management. In the Photonics business division Jenoptik sold its majority holding to sis Surface Inspection Systems GmbH (sis). In addition to Innovavent GmbH, Photonics also acquired other small companies within which Jenoptik conducts R+D projects in its core areas of expertise.

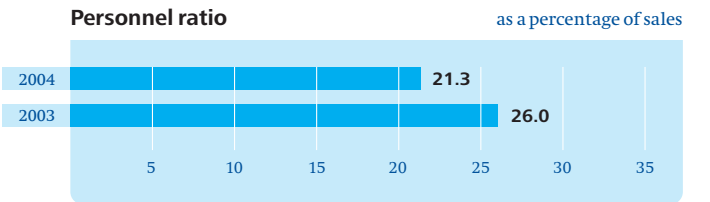
The comprehensive realignment of Clean Systems reflected the reorientation of the M+w Zander Group towards the provision of integrated support for globally active customers. The activities of the worldwide facility engineering for the electronics industry were pooled in autumn 2004 and united under the umbrella of

M+w Zander Facility Engineering Pte. Ltd with headquarters in Singapore. The main subsidiaries which are now managed from Singapore include not only all the subsidiaries and branches in Asia but also M+w Zander U.S. Inc., M+w Zander FE GmbH in Germany as well as its strong subsidiaries in France and Italy.

In preparation for an expanded shareholder base and consequently for relinquishing the majority holding, the Technical Facility Systems unit (TGS) was transferred to a separate company, M+w Zander Gebäudetechnik GmbH, on July 1, 2004. At the end of 2004 the Jenoptik Group relinquished its majority stake in the company. 41 percent was acquired by the management, with TEMCO Holding GmbH, an investment company, being one of the other new shareholders with a ten percent stake. The remaining 49 percent were kept by M+W ZANDER Holding AG. M+w Zander Gebäudetechnik GmbH was deconsolidated as at December 31, 2004 and will now be shown in the balance sheet at equity, i.e. reflecting the corresponding proportion of the shareholders' equity.

PERSONNEL.

Reduction in number of employees as the result of the deconsolidation of the Technical Facility Systems unit. At the end of 2004 the Jenoptik Group employed a total of 9,267 personnel. The number of employees was therefore reduced by 1,219 (December 31, 2003: 10,486 employees, including Wahl optoparts and Lechmotoren).



## Employees as of December 31 (including trainees)

	Total		Domestic		Foreign	
	2004	2003	2004	2003	2004	2003
Clean Systems	6,607	7,928	3,986	5,806	2,621	2,122
Photonics	2,593	2,498	2,495	2,416	98	82
Other	67	60	62	55	5	5
<b>Group</b>	<b>9,267</b>	<b>10,486</b>	<b>6,543</b>	<b>8,277</b>	<b>2,724</b>	<b>2,209</b>

Since the increase in the number of employees in 2003 was primarily the result of new companies being added to the Jenoptik Group, the increase of 508 employees in the year 2004, after adjustment for the reduction in the Technical Facility Systems unit, is attributable for the most part to new staff being taken on as the result of the good business situation. Jobs were created virtually throughout the Group – at Clean Systems primarily in Asia and at Photonics mainly in Thuringia. The proportion of personnel employed abroad was 29.4 percent at the end of 2004 (prev. year 21.1 percent). With the deconsolidation of the Technical Facility Systems unit jobs were shed primarily in Germany, significantly affecting the ratio between employees at home and abroad.

**In the Photonics business division** a total of 2,593 personnel were employed as at December 31, 2004 (December 31, 2003: 2,498 employees). The 3.8 percent increase, or a total of 95 employees, was essentially the result of new staff at JENOPTIK Laser, Optik, Systeme GmbH, Wahl optoparts GmbH, JENOPTIK Automatisierungstechnik GmbH and Jena-Optronik GmbH, amongst others. The acquisition of LINOS AG's plant in Gießen added a further 44 employees to the optics area. There was a slight reduction in employee numbers in the Electromechanical Systems business area and at JENOPTIK LDT GmbH.

**In the Clean Systems business division** the staff development shows a differentiated pattern. During the course of the realignment, on the one side, there were inevitable redundancies in the Technical Facility Systems unit whilst, on the other, new staff were taken on in Facility Engineering and in the Facility Management business area. As a result of the deconsolidation of the Technical Facility Systems unit 1,727 jobs were shed as at the 2004 year end. The staff numbers at Clean Systems therefore fell by 1,321 to 6,607 as at December 31, 2004 (December 31, 2003: 7,928). Adjusted for the effect of the deconsolidation there was an increase in the headcount of 406.

As at December 31, 2004 the Facility Engineering business area employed 3,418 staff (December 31, 2003: 4,871). Adjusted for the deconsolidation of Technical Facility Systems this led to a rise of 274 employees. This development is attributable in particular to an increase in the staff abroad, primarily in companies in the Asia region. By contrast, staff was reduced as planned particularly in Germany, especially in the Technical Facility Systems but also the Products units. The reduction of 157 jobs in the Technical Facility Systems unit (since July 1, 2004 M+w Zander Gebäudetechnik GmbH) was essentially completed during the 2nd half of 2004.

In the Facility Management business area a total of 3,189 personnel were employed as at the 2004 year end (December 31, 2003: 3,057 employees). The 132 increase in personnel numbers was primarily the result of staff additions in the rapidly growing companies in Eastern Europe.

The number of employees of JENOPTIK AG, in its role as a holding company, rose from 55 to 62. The new jobs were mainly created as a result of the inclusion of the Investor Relations department, the expansion of the finance area resulting from the changeover in the accounting method to IFRS, as well as from the expansion in the area of strategic corporate development.

## REAL ESTATE.

**Cancellation of leasing obligations arising from general rental agreement.** As at the end of 2004 Jenoptik was able to terminate a long-term general rental agreement and an existing put option for real estate of the Jenoptik Pension Trust almost without affecting the result. The key requirement for this was the consent of the financing banks whose loans were partially repaid. As a result, the liability for the rents of the real estate fund as well as for the outstanding bank debts ceased. The liabilities arising from finance lease were reduced accordingly by approx. 90m euros. The balance sheet of the Jenoptik Group was reduced by an equal amount.

The Jenoptik real estate portfolio still contains two buildings in the center of Jena. The liabilities arising from the finance lease for this real estate totaled approx. 65.5m euros as at December 31, 2004 (prev. year 65.4m euros).

The occupancy level for both properties whose tenants include, amongst others, a shopping center and the Friedrich-Schiller University, was around 98 percent as at December 31, 2004.

**The properties utilized by the Jenoptik companies themselves** are essentially combined within two additional real estate funds of Jenoptik in which Jenoptik respectively holds 100 percent of the shares in the limited partnership. Both companies are fully consolidated within the consolidated financial statements. These properties were refinanced not only with the help of Jenoptik resources but also through dormant investors who are motivated by tax reasons, as well as through mortgage loans. The volume of real estate held by these two companies rose in fiscal year 2004 by 3.2 percent to 114.5m euros (prev. year 110.9m euros). Assignable loans totaled 45.5m euros (prev. year 45.7m euros). The occupancy level of the two real estate funds as at December 31, 2004 was approx. 96.7 percent.

## CAPITAL EXPENDITURE.

**Increase in intangible assets.** Intangible assets rose in 2004 by 6.7 percent to 99.1m euros (prev. year 92.9m euros). As in the previous year goodwill accounted for the largest share at 67.1m euros (prev. year 58.4m euros) and essentially comprises the goodwill from the three companies Wahl optoparts, Lechmotoren and Teraport GmbH (Teraport). The increase is primarily attributable to the payment of the variable purchase price for Wahl optoparts in 2004.

There was virtually no change in other intangible assets at 32.0m euros (prev. year 34.5m euros). These comprise patents, trademarks and software totaling 24.8m euros (prev. year 28.5m euros), plus 3.8m euros in capitalized development services (prev. year 5.6m euros) and 3.4m euros in on-account payments (prev. year 0.4m euros).

At 10.0m euros, in 2004 Jenoptik increased its capital expenditure on intangible assets by 12.4 percent compared with 2003 (prev. year 8.9m euros). These investments were offset by depreciation in the sum of 11.5m euros (prev. year 7.9m euros). The 45.6 percent increase in depreciation is attributable to, amongst other things, the intangible assets capitalized with the acquisitions at the end of 2003 which resulted in depreciation for the first time in 2004.

**Capital expenditure, disinvestments and depreciation**

in million euros

	2004	2003	Change from previous year in percent
<b>Capital expenditure</b>	48.1	54.6	- 11.9
of which intangible assets	10.0	8.9	12.5
of which tangible assets	38.1	45.7	- 16.6
<b>Disinvestment</b>	100.5	4.5	2,147.6
of which intangible assets	0.8	0.6	32.1
of which tangible assets	99.7	3.9	2,462.8
<b>Net capital expenditure</b> (Capital expenditure less disinvestments)	- 52.4	50.1	
<b>Depreciation</b>	47.6	43.3	10.0
of which intangible assets	11.5	8.7	32.5
of which tangible assets	36.2	34.7	4.4

**Capital investments\* by business division**

in million euros

	2004	2003	Change from previous year in percent
Clean Systems	17.6	19.0	- 7.1
Photonics	18.5	14.8	25.2

\*intangible and tangible assets investments

**Tangible assets fell** by 26.0 percent to 294.1m euros (prev. year 397.3m euros). Although new investment in 2004, at 38.1m euros, was 16.6 percent lower than in the previous year (prev. year 45.7m euros), net depreciation was higher at 36.2m euros (prev. year 34.7m euros).

The 103.2m euro net fall in tangible assets is mainly the result of disinvestments totaling a net 99.7m euros. The two largest items here were the result of the cancellation of the finance lease (see page 23) as well as the sale of a project building in Singapore

constructed in 2003. The balance of initial and deconsolidation came to minus 5.1m euros (prev. year + 34.7m euros), the balance of currency differences was -0.3m euros (prev. year -3.0m euros).

Total investments in tangible assets (capex) came to 38.1m euros and were therefore 16.6 percent below the previous year's level of 45.7m euros. The 7.6m euros reduction is exclusively attributable to lower investment in real estate which totaled 8.9m euros less than in the previous year.

The itemization of the capital expenditure on tangible assets is as follows (the previous year's amount and the percentage change are shown in brackets):

■ Real estate (land and buildings excluding real estate held as financial investment) 8.6m euros (10.8m euros, -20.4 percent),

■ Real estate held as financial investment 2.7m euros (6.6m euros, -59.1 percent)

■ Technical plant and machinery 7.6m euros (9.5m euros, -20.0 percent),

■ Other plant, business and office equipment 16.8m euros (17.2m euros, -2.3 percent)

■ On-account payments and work in progress 2.4m euros (1.6m euros, +50.0 percent).

In addition to capital expenditure on expansion, investment in rationalization, modernization and replacement accounted for the largest share of the investment. The Clean Systems business division accounted for 31.5 percent or 12.0m euros of the investment in tangible assets; the Photonics business division, 37.7 percent or 14.4m euros. The main investment projects here included for example a coating plant for plastic optics involving total investment of 1m euros. This plant is used to bombard growing layers with high energy ions, significantly improving the properties of the layers. The plant increases the in-house added value and enhances the productivity and profitability of the plastic optics business.

The holding company and other areas, mainly the real estate funds, invested 11.8m euros, approx. 31 percent of the Group's total investments (prev. year 20.6m euros). The largest share of this went into the expansion and upgrading of production areas in buildings which are used by Jenoptik subsidiaries as well as in the expansion and/or modernization of office premises.

**Financial assets reduced through the sale of the SC300 investment.** The financial assets of the Jenoptik Group fell by 16.8 percent in 2004 to 154.2m euros (prev. year 185.3m euros). This reduc-

tion is primarily attributable to the sale of the sc300 investment in the sum of 70.9 million euros. This was offset by the long-term portion of a shareholder loan in the sum of 49.3m euros for financing the Fab 36 Beteiligungs GmbH (Fab 36), which is involved in the financing of an AMD chip factory.

The investments in financial assets in the total sum of 88.2m euros (prev. year 52.6m euros) were offset by disinvestments in the total net sum of 82.9m euros (prev. year 14.7m euros).

Investments were characterized in particular by a shareholder loan for the investment in the Fab 36 in which M+W Zander has invested about 53m euros, 49.3m euros of which is long-term, within the framework of a financing consortium together with other suppliers. The investment is secured by, amongst other things, repayment agreements and put-call options. It was also limited to a maximum period of 5 years. This investment is therefore comparable with the one in Infineon's sc300 chip factory which was repurchased by Infineon in the 1st quarter 2004. This repurchase determined the disinvestments of fixed asset securities in the sum of 73.0m euros.

The addition to shares in associated companies is also shown as investments. The effect of DEWB's higher at equity value was felt here, increasing as a result of the equity contribution of Jenoptik's loan claims. The figure now also includes the at equity book value of the Technical Facility Systems unit.

Other loans were reduced essentially through depreciation as part of the cancellation of the finance lease (see p. 23). The cost arising from this devaluation was offset against the income from the cancellation from the books of liabilities arising from finance lease.

The shares in associated companies increased primarily through the at equity accounting of the Technical Facility Systems unit. The rate corresponds to the proportional shareholders' equity. The figure also includes the stake in DEWB AG in the sum of 13.4m euros (prev. year 16.5m euros), XTREME technologies GmbH and Fab 36.

## FINANCING MEASURES.

**Long-term financing structure.** In 2004 Jenoptik further extended the timeframe for its financing. Part of the convertible loan in the nominal sum of 62.1m euros issued in summer was used to completely replace the short-term liabilities arising from the commercial paper program (prev. year 15.0m euros).

**Shares used as an acquisition currency.** In autumn 2004 Jenoptik completed the acquisition of Wahl optoparts. The second installment of the purchase price was paid in full with new shares. Issuing new shares in return for an investment in kind enables the acquisition to be made whilst still protecting liquidity, simultaneously strengthening the Group's shareholders' equity. The value of the new shares, which were issued to the exclusion of the shareholders' option right, was geared towards the stock market price.

**Marked reduction in net debt.** In the fiscal year just past the Jenoptik Group was able to markedly reduce its net debt (financial liabilities including loans, credits and bills of exchange and liabilities arising from finance lease, less cash and short-term securities). As at December 31, 2004 this totaled 238.8m euros (prev. year 372.5m euros). The reduction of 133.6m euros was influenced by five main factors:

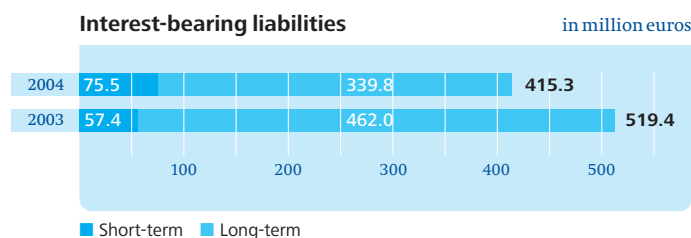
- The cancellation of the financing lease led to a reduction in the debt of around 90m euros.
- As a result of the sale of the sc300 stake the net debt was reduced by around 70m euros.
- In conjunction with the investment in the Fab 36 of AMD the net debt increased by approx 50m euros.

■ As a result of the deconsolidation of the Technical Facility Systems unit cash in hand and bank balances fell by around 17m euros, increasing the net debt accordingly.

■ A positive operating cash flow surplus reduced the net debt by a further 40m euros.

**Cash flows from current business activity.** The cash flow from current business activity (after taxes) increased by 56.5 percent to 100.8m euros (prev. year 64.4m euros). The increase is primarily attributable to pre-tax earnings which rose by 80.7m euros. In line with the lower depreciation the EBITDA (Earnings before tax, depreciation and financial result) rose by 77.9m euros. The changes in the balance sheet caused by the deconsolidation of the Technical Facility Systems unit were eliminated in the cash flow statement, in particular in the changes to the working capital and provisions. The gains arising from asset disposals include in particular the income from the sale of the sc300 stake which is therefore not included in the cash flow from operating activities. The largest item in other non-cash expenses, at 17.9m euros, was the loss arising from the deconsolidation of the Technical Facility Systems unit. The payments received from financial asset disposals were characterized by the sale of the sc300 stake. Payments received from disposals of consolidated companies were in negative territory as the cash in hand and bank balances of the Technical Facility Systems unit were no longer included. Payments from additions to shareholders' equity were the result of the shareholders' equity components of the convertible bond. Interest expense in the cash flow statement does not include the interest paid on long-term provisions in the sum of 3.9m euros nor on bonds in the sum of 1.6m euros nor the change in value of an interest swap in the sum of 2.1m euros as these did not affect liquidity.

**International finance management.** Risks that arise from fluctuations in currency rates through transactions in foreign currencies and changes in interest rates are reduced by the use of derivative financial instruments as well as offsettings within the group. Central Treasury Management operates a foreign currency risk management system that meets the requirements of a risk early warning system – as required by the Companies Act. A clear separation of functions and employee responsibilities are set out





in the Jenoptik Group guidelines and the annual strategy papers. Maximum position and loss limits, the type of derivatives and hedging instruments permitted as well as the methods used for controlling (for example market-to-market evaluation) are defined each year by the executive board.

The fact that Jenoptik products which are manufactured in Germany are rendered more expensive or cheaper as the result of fluctuations in exchange rates is something that cannot be avoided on a long-term basis through exchange rate hedging. Jenoptik generates more us dollars in sales than it spends on purchasing in us dollars. A weaker us dollar therefore has a reducing effect on sales, margin and earnings. Nevertheless, products also become more expensive or margins are reduced for supplies to countries whose economy is heavily orientated towards the us dollar, particularly within the Asiatic economic region.

Exchange rate fluctuations do not have any significant impact on the major projects in the Clean Systems business division. Services for foreign projects are for the most part purchased on location and paid for in the corresponding foreign currency. The remaining share is secured by currency futures tradings. Direct sales of Jenoptik products in the NAFTA economic region in 2004 totaled approx. 125m euros (prev. year 93.0m euros) of which sales generated by us subsidiaries made up 87.7m euros (prev. year 66.8m euros), the original costs of which are primarily incurred in us dollars.

## NET ASSET POSITION.

**Total assets reduced in 2004 despite higher sales.** These were 11.5 percent lower at 1,555.0m euros (prev. year 1,757.6m euros). The main reason is the fall in the non-current assets which were 18.0 percent down at 636.2m euros (prev. year 775.5m euros) – in particular as the result of the disinvestments in tangible assets (see page 23).

**The working capital** (total of customer receivables and inventories less trade accounts payable, bills of exchange and on-account payments received) in the sum of 176.0m euros (prev. year 233.6m euros) is heavily influenced by the accounting for projects at the

year end, standard practice in the sector, despite the application of the percentage-of-completion method (see page 28). Accordingly, qualifying date effects for individual balance sheet items increase total assets at the end of the fiscal year.

**Current assets** fell in 2004 by 6.4 percent to 918.9m euros (prev. year 982.0m euros). In this context the effects of the expansion of business in 2004 which extended the balance sheet were more than offset by the disposal of current assets as part of the deconsolidation of the Technical Facility Systems unit. Inventories fell accordingly by 32.0 percent to 184.2m euros (prev. year 270.7m euros). Receivables and other assets were down slightly at 558.3m euros (prev. year 564.4m euros). Trade accounts receivable as well as receivables from long-term order-related production, which fell by 22.9m euros to 439.6m euros (prev. year 462.5m euros), accounted for 78.7 percent of this figure (prev. year 81.9 percent). As in the previous years, in 2004 there were once again no major changes in payment terms and conditions for the Jenoptik Group in the Clean Systems business division. Fluctuations in inventories, receivables and on-account payments are determined primarily by the settlement dates and receipts of payments for major facility engineering projects.

**Cash** rose sharply as at the qualifying date December 31, 2004. At 175.0m euros (prev. year 142.6m euros) they were 22.7 percent above the figure for the prev. year. The increase in the cash is mainly attributable to the positive cash flow in the 4<sup>th</sup> quarter of 2004. Short-term securities fell to 1.4m euros (prev. year 4.2m euros) due to the sale of a package of shares.

There was also an improvement in the availability of cash. Now only 30.0m euros (prev. year 35.8m euros) are subject to disposal restrictions which – as in the previous year – are to be attributed almost exclusively to a bank loan to DEWB in the sum of 35.0m euros, secured with a Jenoptik guarantee. The disposal restriction and the guarantee are each being reduced by 5.0m euros per year as part of the redemption of the loan.



As a result of the marked fall in long-term assets, due primarily to the early cancellation of the finance lease, the intensity of investment, the asset ratio, the ratio between non-current assets and the balance sheet total, also reduced accordingly from 44.1 percent to 40.9 percent.

**Shareholders' equity increased to over 23 percent.** The shareholders' equity of the Jenoptik Group rose in fiscal year 2004 by 9.2m euros to 369.0m euros (prev. year 359.8m euros). This represents an increase of 2.6 percent. As a result of the reduction in the balance sheet total (see page 27) there was a marked rise in the shareholders' equity ratio – from 20.5 percent on December 31, 2003 to 23.7 percent at the end of 2004.

The consolidated net profit for the year and a capital increase against contributions in kind through which the second tranche of the purchase price for Wahl optoparts was paid for in 2004 using Jenoptik shares, had a positive effect on the shareholders' equity. The distribution of the convertible loan issued in 2004 into a shareholders' equity and an external capital component also had a positive effect.

The shareholders' equity was reduced by factors such as for example changes in the market value of long-term securities which Jenoptik holds available for sale, as well as currency conversions with a markedly weaker dollar than in the prev. year, although these factors did not have an effect on cash.

**Non-current debt fell by** 150.4m euros to 452.6m euros (prev. year 603.0m euros). Whilst long-term loans rose from 142.8m euros to 200.1m euros through the issue of the convertible loan, there was a marked reduction in non-current liabilities arising from finance lease from 93.5m euros to 68.5m euros (prev. year 162.0m euros). The main reason for this was the reduction in the leasing liabilities associated with real estate (see page 23) as well as redemption payments.

**Non-current liabilities to banks** fell by 157.1m euros to 71.3m euros. The reason for this on the one side is the restructuring of the promissory notes into a short-term bank liability as this is now for

a period of less than one year. Of the 40.0m promissory notes at the end of 2003, 5.0m euros were repaid in 2004. Secondly, long-term bank loans were repaid during the course of the disposal of the sc300 investment. The remaining long-term loans primarily relate to a mortgage loan in the sum of 44.9m euros which was used by a Jenoptik real estate fund to refinance the buildings in Jena which were required mainly for operational purposes. In addition, there are long-term bank liabilities arising from working capital and mortgage loans of subsidiaries. Only 0.8m euros of the non-current liabilities apply directly to JENOPTIK AG.

**The current liabilities** arising from the commercial paper program were repaid in full using some of the convertible loan (prev. year 15.0m euros).

As a result of the reclassification of the promissory notes from long-term to short-term bank liabilities, short-term liabilities to banks increased to 73.8m euros (December 31, 2003: 40.0m euros).

**Liabilities from on-account payments received fell** by 54.7m euros or 42.9 percent to 72.8m euros (prev. year 127.5m euros). These payments were received from clients for products and smaller projects of both business divisions which did not relate to long-term order production. The on-account payments will subsequently be offset against the receivables which are generated on delivery. The fall in these on-account payments received which are shown on the liabilities side is attributable to, amongst other things, the deconsolidation of the Technical Facility Systems unit and to switching in liabilities arising from long-term order production.

**The percentage-of-completion liabilities rose** by 67.2m euros to 96.9m euros (prev. year 29.7m euros). These on-account payments by customers can be procured primarily in the project and systems business if a good market position enables these payments to be asserted.

**Other current liabilities fell** by 22.3m euros to 99.5m euros (prev. year 121.8m euros). The largest single item is the high sales tax liability as a result of the settlement dates for major projects at the year end. The reduction is essentially attributable to the payment of the second installment of the purchase price for the acquisition of Wahl optoparts.

## FINANCIAL SITUATION.

**Level of debt markedly reduced.** Cash totaling 175.0m euros (prev. year 142.6m euros) and short-term securities in the sum of 1.4m euros (prev. year 4.2m euros) increased overall in 2004 to 176.4m euros (prev. year 146.8m euros). The contra items in the form of short-term bank loans in the sum of 38.8m euros (prev. year 40.0m euros), a short-term promissory notes of 35.0m euros (prev. year 0.0m euros as these were shown as long-term loans), short-term loans at 0 euros (prev. year 15.0m euros), bills of exchange at 0.4m euros (prev. year 1.1m euros) and short-term liabilities arising from finance lease in the sum of 1.3m euros (prev. year 1.3m euros), increased from 56.3m euros to 75.1m euros alone through the restructuring of the former long-term promissory notes into current liabilities.

Excluding other assets saleable at short notice and other short or long-term liabilities, this produced a net cash position in the sum of 101.0m euros, a 11.5m euro improvement by comparison with the previous year (prev. year 89.5m euros) despite the reclassification. If reduced by cash with disposal restriction this would give a net cash position of 71.0m euros (prev. year 53.7m euros), which would enable all short-term financial liabilities to be immediately cleared.

In addition, over the next five years only a small proportion of the long-term loans and bank loans will become due for payment. The remaining term of the bonds in the nominal sum of 150m euros is nearly six years. The convertible loan has a residual period of four and a half years. At a Jenoptik share price of 9.00 euros however the vast majority could be converted into equities and would therefore not have an effect on the liquidity. Nearly 94 percent of the liabilities arising from the finance lease will become

due on a gradual basis over a period of 20 to 25 years. Furthermore, a large proportion of the long-term bank loans are very long-term mortgage loans.

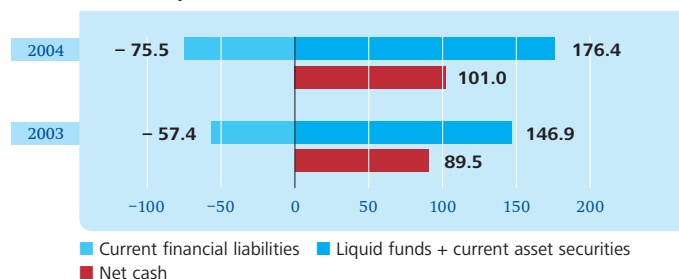
Interest distributions have resulted in a slight fall in the market value of the fixed interest bearing securities which are held in the long-term securities and form an important liquidity reserve for Jenoptik. These totaled 22.2m euros (prev. year 23.5m euros).

**Jenoptik Group financing orientated towards the long-term.** The proportion of long-term financial liabilities (loans, bonds and finance lease) as at the end of December 2004 was 81.9 percent (prev. year 89.1 percent). These fell by 7.2 percentage points since part of the long-term finance lease was cancelled and the promissory note is now included in short-term bank liabilities. By contrast, the convertible bond had a beneficial effect on non-current liabilities. Jenoptik utilized part of this convertible bond to reduce liabilities arising from the commercial paper program to zero.

The level of Group debt, the ratio between borrowed capital and shareholders' equity, was reduced in 2004 from 3.88 to 3.21. The net profit for the year which strengthened the shareholders' equity, the capital increase through contributions in kind as well as the marked reduction in financial liabilities all had a positive effect.

Financial position

in million euros



## Creation of value added

	2004		2003	
	in million euros	in percent	in million euros	in percent
Group performance (sales, income, investment result)	2,592.8	100.0	1,953.0	100.0
./. Purchased goods and services (material)	1,468.7	56.6	1,217.3	62.3
./. Purchased goods and services (other)	464.5	17.9	206.4	10.6
./. Depreciation	47.0	1.8	42.6	2.2
+ Interest income	5.8	0.2	7.7	0.4
<b>Net value added</b>	<b>618.4</b>	<b>23.8</b>	<b>494.4</b>	<b>25.3</b>

## Distribution of value added

	2004		2003	
	in million euros	in percent	in million euros	in percent
Employees (personnel expenses)	536.7	86.8	500.0	101.1
Public sector (taxes)	18.4	3.0	2.6	0.5
Creditors (interest)	44.2	7.2	37.7	7.6
Companies, shareholders	19.0	3.1	- 45.9	- 9.4
<b>Net value added</b>	<b>618.4</b>	<b>100.0</b>	<b>494.4</b>	<b>100.0</b>

**Sharp rise in net value added.** As a result of the sharp rise in sales the net value added in 2004 rose from 494.4m euros to 618.4m euros, an increase of 25.1 percent. In this context, the rise in sales was slightly higher than the increase in the value added, the value added ratio (net value added as a percentage of sales) therefore fell slightly from 25.7 percent to 24.5 percent.

The value added ratios for Clean Systems and Photonics fell as a result of the increased share of external services by comparison with the figures for the prev. years.

The clearest change in the creation of value added was produced in prepayments for materials and purchased services which reduced from 62.3 percent in 2003 to 56.6 percent in 2004, with a

simultaneous increase in other prepayments of 15.1 percent (prev. year 8.6 percent). The net profit for the year's share in the distribution of the net value added increased from minus 9.3 percent to plus 3.1 percent.

**Branches.** JENOPTIK AG does not have any branches.

**Report on post-balance sheet events.** There were no events of special importance occurring after the end of the fiscal year.

## JENOPTIK RISK MANAGEMENT

As an international technology group Jenoptik is subject to a variety of risks which are inextricably linked with entrepreneurial activities. The task is to pursue opportunities whilst minimizing the risks involved. The risk strategy is set out in a risk manual which is published throughout the Group.

**The risk-opportunities report is a key element of the Jenoptik risk management system** – in addition to the group-wide risk committee, the network of risk officers in the Jenoptik subsidiaries, together with Internal Auditing which uses the key instrument of the Jenaudit. Here, the subsidiaries submit periodic reports on all risks and opportunities on the business division level where these exceed 0.5m euros. On the JENOPTIK AG level they submit reports if risks and opportunities exceed the 1 million euro mark.

If a new risk arises between reporting periods or there is a fundamental change in an existing risk (for this purpose the minimum thresholds are 50 percent higher than the minimum thresholds for the periodic reporting), irrespective of the reporting dates an ad-hoc risk report must be produced and forwarded for the attention of the risk officer as well as the Group Executive Board. This guarantees a fast response and ensures that a full and up-to-date overview of the key opportunities and risks is maintained within the Group at all times. These minimum thresholds were set deliberately low in order to encompass as many individual risks as possible where these could have a detrimental effect on the Group on an accumulated basis. Since the risk report was introduced it has simultaneously been noted that a more consistent approach has been taken to smaller and medium-sized risks.

The risk-opportunities report includes not only the risk but also the details on the probability of occurrence, the maximum and realistic level of the risk, possible countermeasures and the name of the risk owner – in other words the employee who is responsible for the risk and/or the countermeasures and who

monitors the development of the risk position. The individual reports are collated into a Group risk-opportunities report and submitted to the Jenoptik Executive Board and Supervisory Board.

**The Jenaudit has become a central component of the risk management.** The audit is conducted by an external auditor and in most cases is in the form of a so-called Jenaudit. An interdisciplinary team is established, each one auditing a separate Group subsidiary. In this context it is not just deficiencies or errors that are identified but suggestions for improvement which are derived from the experiences of the team members and then submitted to the respective Company Management. The Jenaudits have not only proven successful as a risk management tool but have also been used by the companies to identify the associated opportunities.

In order to not only identify the deficiencies and improvements but also push through implementation, in 2003 and 2004 Jenoptik introduced the so-called “follow-ups” for the purpose of reporting to the respective Company Management and Jenoptik Executive Board on the level of implementation.

Since autumn 2004 **a newly created investment committee** has been examining all the investment projects within the Jenoptik Group involving amounts in excess of 50,000 euros. The committee reports to the Executive Board Technology. It provides support for larger Jenoptik investment, disinvestment projects throughout the Group and ensures that the Executive Board receives a regular flow of information. The members of the committee who meet as required – at least however once a quarter – are not only permanent members of Jenoptik Holding but the managing directors of the Group company planning an investment or disinvestment, as well as a representative of the management of the respective business division.

## FUTURE DEVELOPMENT RISKS.

Jenoptik seeking to improve its corporate rating. In 2004 all three rating agencies downgraded Jenoptik's corporate rating following the publication of the figures for fiscal year 2003. However, on the basis of the marked improvement in the 2004 financial statements and depending upon the development in the first half of 2005, Jenoptik expects the chance to improve the rating again. In this important task of weighing up risks against opportunities, experts not only consider purely financial parameters in their analysis but also the size of the company as well as statistics for the sector (size, cyclical nature). In this respect, Jenoptik is seen as a small to medium-sized enterprise by international comparison and therefore has a lower rating as against large groups with comparable structures. The volatility of the semiconductor market is another factor that was taken into consideration in the case of Jenoptik.

Several of Jenoptik's activities during the course of fiscal year 2004 have led to an improvement in the balance sheet and financing structure:

- The convertible bond and the capital increase against contributions in kind (see page 26) provided a positive impetus for the current and future shareholders' equity. At the same time, this made Jenoptik less dependent upon loans being granted by banks.
- With the restructuring and the subsequent sale of the majority shareholding in the former Technical Facility Systems unit Jenoptik extricated itself from a problematical market.
- The cancellation of the finance lease for part of the real estate enabled Jenoptik to markedly reduce its debt level.
- There was a significant reduction in the net debt despite a commitment to the investment in Fab 36 (AMD chip plant) secured through put-call options (see page 25).
- The maturity period of the liabilities was extended further in favour of long-term liabilities through the issue of the convertible bond which the company is able to repay primarily using its own

shares given the current share price. The majority of the finance debt now has a maturity period of four and a half to six years and over ten years in the real estate area.

**Macroeconomic risks.** Jenoptik's sales are mainly generated with investment goods. These are subject to macroeconomic fluctuations, albeit with a time delay, but generally being prone to sharper swings. Thanks to the existing order backlog it is easier to bridge temporary gaps in the investment goods area than is the case with consumer goods. Jenoptik anticipates that its one year sales forecast could fall approx. 2 to 4 percent short if global economic growth turns out 0.5 percent lower than forecast. With this kind of scenario, unless countermeasures were taken, the Photonics business division's EBIT would fall some 10 to 15 percent below target and the EBIT margin would therefore be reduced by approx. 1.0 to 1.5 percentage points. If fast countermeasures are taken the fall would be less than one percentage point. The consequences in the Clean Systems business division are likely to be similar on the sales front but markedly lower in view of the lower value-added of its EBIT and, in the absence of any countermeasures, would represent approx. 0.5 to 1.0 percentage points of the EBIT margin.

The Clean Systems business division is particularly dependent upon the free traffic of people, goods and money in its worldwide facility engineering business. Major disease epidemics or environmental disasters can delay the progress of projects and entail additional expense from ongoing fixed costs. At present, Jenoptik's business is not being affected by any such events. However, it is impossible to reliably forecast the likelihood of these risks and the associated consequences.

**Sector risks.** Jenoptik's business is subject to a certain extent upon the sector-related cycles in the semiconductor industry. As a result of the pick-up in the semiconductor industry in 2004 the share of sales generated with the semiconductor industry in 2004 increased once again to around 44 percent at Clean Systems (prev. year 40 percent) and to around 7 percent at Photonics (prev. year 5 percent). In

view of the long duration of projects however market fluctuations affect Clean Systems with a time delay and the impact on the result is less than it is on the chip manufacturers or semiconductor equipment companies.

Fluctuations in the cyclical markets can also affect customers' solvency. Jenoptik tackles this risk in major projects through on-account payments from customers and partial services billed by Jenoptik normally reflecting the progress of business and costs. For example, as at December 31, 2004 the Clean Systems business division had received customer on-account payments totaling 581.0m euros (prev. year 576.4m euros; +0.8 percent) of which 444.5m euros (prev. year 452.9m euros) were offset against receivables arising from long-term order production, 40.2m euros (prev. year 95.1m euros) related to inventories and were shown on the liabilities side, as well as 96.3m euros (prev. year 28.4m euros) were on-account payments which exceeded receivables arising from the long-term order production for a few projects (overpayments). The on-account payment ratio including overpayments as a percentage of gross inventories plus receivables from long-term order production including share in profit rose from 85.1 percent to 93.3 percent (without overpayments 77.9 percent). The risk of a bad debt loss is therefore significantly reduced through on-account payments.

Around 17 percent of sales at Photonics come from the automobile industry in the wider sense, an area which is supplied by Jenoptik with measurement technology, laser systems, components and sensors. Jenoptik expects this market in 2005 to provide only restrained positive development. If, contrary to these expectations, the sector were to entirely stagnate this could reduce the increase in sales in the Photonics business division by some 1.0 to 1.5 percentage points. Earnings would be reduced by approx. 1 to 2m euros.

In 2004 around 24 percent of sales in Photonics came from safety technology. This is an area in which the Electromechanical Systems business area operates in particular. As a result of a very long-term order backlog, sales and earnings of the Electromechani-

On-account payment as a percentage of gross inventories		in percent
	2004	2003
Clean Systems	93.3	85.1
Photonics	27.8	30.4
Group	81.8	76.6

cal Systems business area are only affected to a very minimal extent by any reductions in possible government spending. However, the budget restrictions led to a reduction in the ratio of on-account payments and to government departments extending their periods of payment. This means more liquid assets being tied up in current assets.

**Long-term orders: security versus obligation.** In addition to the security of future sales, long-term contracts pose risks primarily because of their increased volume, the large proportion of subcontractor services in some cases, the calculation risk, the risk of performance, pre-investment (reduced by on-account payments) and the risk of payment defaults. Both in Clean Systems as well as in individual areas of Photonics (here particularly in the safety technology and aerospace) Jenoptik frequently operates on the basis of long-term orders which account for around 35 to 40 percent or 0.7 to 0.8bn euros of the existing order backlog. Jenoptik tackles the risks arising from long-term agreements through detailed project controlling with rolling forecasts.

For major projects with an order volume exceeding 100m euros, so-called open-book orders often reduce the risk. Here, no fixed prices are agreed; all costs are disclosed to the customer ("open book"). However, whilst reducing the risks this also reduces the earnings potential.

In the case of very long-term contracts – particularly in the area of safety technology – the risk of possible inflation is reduced by sliding scale clauses. Jenoptik tackles the pre-investments and

the risk of payment defaults by agreeing on-account payments which are coordinated towards the progress of the project. In addition, export or other guarantees partially reduce the customer credit risk.

Jenoptik and here in particular the Facility Engineering business area, normally ensures the completion of projects on time in accordance with specific performance standards and in this context is dependent upon selected subcontractors. Here situations may arise in which the company is held liable for delays in or non-compliance with performance standards or deadlines without being able to prove that these deficiencies are attributable to the subcontractors or being able to pass on the corresponding charge.

Risks in the Photonics business division arise primarily as a result of rapid technological change. The risk of developing products which are rejected by the market is reduced by product developments frequently being carried out in close coordination with the customer and in this way by the market needs being taken into consideration in every phase of the product development. Jenoptik tackles the risk of failing to meet the technical or target costs in development by having an R+D project management comprising a team of highly qualified employees.

**Guarantees.** Guarantees are only relevant in the Group if they are issued to a non-consolidated company. These guarantees totaled 94.2m euros (prev. year 83.5m euros) at the end of 2004. The guarantee volume increased due to the deconsolidation of M+W Zander Gebäudetechnik GmbH, in which M+W ZANDER Holding AG, part of Jenoptik, continues to hold a 49 percent stake. Jenoptik guarantees 28.0m euros for M+W Zander Gebäudetechnik GmbH and, in addition 7.8m euros of other contingent liabilities. Gebäudetechnik also uses a guarantee line of the Clean Systems business division which amounts to 91.3m euros, mainly for guarantees for contract performance.

The risk of contract performance guarantees is usually low as the total contract value is normally shown as the guarantee volume even if the project is already well advanced. In addition,

there is normally a remaining claim for payment against the client, possibly entailing risk, in the amount of the order volume, less payments on account already received from the client. Contract performance guarantees therefore only entail risk if the client has paid more on account than reflects the relevant progress of the project, if the order was incorrectly costed or the contract cannot be fulfilled.

A large proportion of the total guarantee volume of the Jenoptik Group of 35m euros (prev. year 40m euros) relates to a guarantee for DEWB AG. As at December 31, 2004 30m euros (prev. year 35m euros) were restricted cash due to this guarantee. 20.0m euros or 21 percent of the guarantee is in favor of JENOPTIK medProjekt GMBH. However, some of these are secured through counter-guarantee bonds from subcontractors.

The remaining guarantees cover deposit guarantees, warranty guarantees and other collateral security.

**Risks arising from financing.** Liquidity is monitored through a daily JENOPTIK AG liquidity report that details items such as available credit lines and the daily movements of key accounts. Integrated annual budgetary planning and a monthly liquidity projection are intended to identify financing problems in good time.

**Put options,** which Jenoptik has primarily granted for the acquisition of shares in minority holdings, could use up a major portion of the cash and other funding sources. There is, however, usually no immediate earnings risk involved since the liquidity is normally used to purchase new shares. Under the current conditions however there is both a risk and an opportunity of the future share value showing a negative or positive deviation from the option agreement when the option is exercised. Significant put options currently exist for the 27.11 percent stake of the family shareholders in M+W ZANDER Holding AG and for the 30 percent minority holding in M+W Zander D.I.B. Facility Management GmbH.



**Currency risks.** Jenoptik tackles its currency and interest rate risk using a special risk management system. A clear division of responsibilities, hedging strategies defined in group directives, limits and monitoring are all intended to prevent errors and speculation. In 2004 the US dollar continued to weaken against the euro from 1.2149 US \$/euro on December 31, 2003 to 1.3621 US \$/euro on December 31, 2004. Whilst sales growth in 2004 was nominally lower as a result of the lower dollar price and both shareholders' equity and the order backlog were reduced during the conversion process, the impact on Jenoptik's result in 2004 was restricted to new orders. For all orders billed in foreign currencies Jenoptik employs exchange rate hedging instruments, primarily currency forward transactions. However, in view of the weaker dollar, there is a need to provide hedging today for future orders. This increases the prices of Jenoptik's projects and products in the dollar-based markets. The impact of this on M+W Zander's major projects is however limited since a large proportion of the value added is created in the local currency or the currency of the corresponding order. To this extent it is only those services which are rendered from Europe which are, for the most part, subject to exchange rate fluctuations. In the Photonics business division the increase in the product prices caused by hedging can only be partially offset by component supplies priced in dollars which have now become cheaper and in the long term is expected to be reflected in higher prices or lower margin contributions for new orders. A permanently weak dollar around 1.40 \$/euro would have a detrimental effect of 4 to 8m euros on the 2005 group result compared with the previous year, with the possibility of an even greater effect in the long term following the expiry of exchange rate hedging arrangements tied to existing projects.

**Interest rate risks.** The issue of a seven-year bond in autumn 2003 and of a five-year convertible bond in summer 2004, each one at fixed rates of interest, has markedly reduced the risk arising from changes in short-term interest rates. Interest hedging instruments such as interest caps and interest swaps will continue to be used. In the case of the interest swaps used by Jenoptik, a defined, variable interest rate is paid on a specific portion of the capital. In return, Jenoptik receives a specific fixed rate of interest on the same capital portion. In 2004 the risk of changes in interest rates to a 3.0m US \$ loan and a real estate loan of 43.4m euros was limited through interest swaps. The cancellation of the finance lease meant that the original underlying transaction for the 2nd interest swap as at December 31, 2004 ceased to apply.

Two interest caps, each in the sum of 2.5m euros, provide hedging for Jenoptik against sharp rises in interest rates. As a result of these interest hedging instruments and the fixed interest-bearing bonds the risk to the group of changes in short-term interests is very low. If the general level of interest rates were to rise by 1 percentage point the impact on group earnings in 2005 would probably be less than 1m euros.

**Jenoptik's real estate income** is dependent to a certain degree on the vacillations in the rental market and consequently also on the possibility of extraordinary depreciation due to reductions in value (so-called impairment). As a result of the cancellation of a large portion of the finance lease the opportunities and risks arising from real estate have been reduced. As in the previous year, a large portion of the real estate has been rented to non-group companies, in some cases with long-term leases. Changes in rental prices and the occupancy level can affect Jenoptik's income position especially in the medium term. Jenoptik sees little likelihood of this having a negative impact of more than 1m euros on Jenoptik's 2005 earnings and liquidity. Dependent upon this however it is impossible to forecast whether the real estate may suffer impairment.



**The market value of investments** is subject to sharp fluctuations which are virtually impossible to forecast. Major investments such as DEWB AG in which Jenoptik has a 34.88 percent shareholding and M+W Zander Gebäudetechnik GmbH in which M+W ZANDER Holding AG, part of the Jenoptik Group, holds a 49 percent stake, as well as the 50:50 Joint Venture Xtreme, are consolidated at equity. The possibility of the company's market value falling below the proportional shareholders' equity can not be ruled out and would lead to an impairment that does not affect liquidity.

The repayment of loan claims is fundamentally subject to risk.

The assets held by **the Pension Trust** are shown at market values. In addition to funds with fixed interest-bearing securities and a smaller equities portion, the Pension Trust holds, in particular, longer term loans at interest rates of between 6.0 and 7.9 percent. The Pension Trust also owns 4.7 million shares in DEWB AG with a market value of 11.2m euros (based on the price of 2.38 euros per share on the qualifying date of December 31, 2004) which are subject to the share price fluctuations on the stock market. Deviations caused by changing prices are initially treated as actuarial gains or losses and, where these exceed 10 percent of the pension liabilities, create entries affecting the result in the Jenoptik Group, although these would be shown in the statement of income spread over the average period in which the pensions are paid out. This is expected to have minimal effect on earnings in 2005, in the medium term it could create a charge of up to 1.0m euros per annum.

**Legal risks.** With the court of first instance having already ruled repeatedly in favor of Jenoptik in the legal proceedings between Asyst Technologies Inc. and Jenoptik for alleged patent infringement, this case was heard for the fourth time in the appellate court. At the end of March the competent federal court in Washington D.C. confirmed Jenoptik's legal opinion and rejected the patent infringement claimed by Asyst. With regard to another patent the legal action was remitted to the initial instance for formal reasons.

In addition, three private shareholders of DEWB AG have filed a legal action. The aim of this action is the purchase of the shares by the plaintiffs through Jenoptik at the price of 26.51 euros. This price corresponds to the settlement payment that was offered by Hermann Voith Beteiligungen GmbH (Voith) to the DEWB shareholders in connection with a controlling and profit transfer agreement concluded in 1993 between Voith and DEWB. In 1997 Jenoptik acquired Voith's stake in DEWB together with its obligations arising from the controlling and profit transfer agreement. The plaintiffs allege that they are entitled to the settlement payment without having to prove that they are amongst those shareholders or can attribute their shares to those shareholders who had minority shareholdings on the date the controlling and profit transfer agreement was ended and have not yet received any compensation for their shares (approx. 0.7 percent of the DEWB shares issued as at this date). The District Court of Gera rejected the legal action at the beginning of 2003. One plaintiff appealed against this ruling. The Superior Court of Jena subsequently ruled in favor of the plaintiff. Jenoptik has now appealed to the Federal Supreme Court. The cur-

rent legal action directly involves the sum of around 0.3m euros. In view of possible copy actions it is impossible to estimate the maximum risk in case Jenoptik should lose the action before the BGH contrary to expectations.

JENOPTIK medProjekt GmbH (medProjekt), a 33 percent investment held by JENOPTIK AG, has constructed a university clinic in Jena for the Free State of Thuringia involving a total contract volume of around 160m euros. As a result of outstanding receivables due to medProjekt, arbitration court proceedings between it and the Free State of Thuringia are currently pending. The Free State of Thuringia is filing its own claims against medProjekt. JENOPTIK AG has deposited a guarantee with the Free State of Thuringia in the sum of around 19m euros in favor of medProjekt. Around half of the guarantee is covered by counter-guarantees from subcontractors. JENOPTIK AG also has loan claims against medProjekt. Depending upon the outcome of the arbitration court proceedings, expected to reach a decision in the 2nd half of 2005, there is an anticipated risk to the JENOPTIK AG result of between 0 and 5m euros.

There are currently no other known legal risks that can seriously influence the Group's assets and earnings.

**Risks arising from acquisitions.** Jenoptik will continue to expand its core business areas through acquisitions. However, these do entail the risk of an excessive price being paid for the company being acquired or of it failing to fulfil Jenoptik's expectations. Jenoptik employs a thorough due diligence regime (company analysis and evaluation) to counter this risk. In the past, this has more often led to a decision not to acquire the company in question than to buy it.

Jenoptik is looking at the possibility of investing Teraport in the quoted firm of caatoosee ag. This would mean M+W Zander acquiring a majority holding in caatoosee ag without affecting liquidity. This transaction will only come to fruition providing a series of requirements are met. These requirements will actually reduce the risk arising from the acquisition in the lead period, to the amount of the Teraport investment. In view of Teraport's positive development Jenoptik sees any risk arising from this acquisition as minimal.

**IT risks.** With the exception of a group-wide Intranet, which does not however include internal accounting and distribution systems, the IT systems of both business divisions are entirely separate. A total IT outage of one system would therefore only affect certain segments of the Group. Since Jenoptik exclusively sells investment goods, distribution would only be indirectly affected by a total system outage, unlike in the case of companies who use the Internet to distribute a significant proportion of their products. The business division's SAP R/3 system is operated by two large independent providers which, for example in the case of Photonics, guarantee more than 98 percent availability. In 2004 in fact 100 percent availability was achieved. The data connections are designed on a redundant basis, with the energy supply being guaranteed by uninterrupted power supplies for fluctuations in current and by an emergency standby generator. The probability and extent of damage caused by viruses and hackers is impossible to estimate. To protect itself Jenoptik uses state-of-the-art firewalls and strict security regulations, amongst other things.

## OUTLOOK.

### OUTLOOK FOR THE DEVELOPMENT OF THE ECONOMY AS A WHOLE.

The OECD expects the pace of economic growth in 2005 to increase. This is conditional upon, amongst other things, there being no further rises in oil prices.

Asia will be unable to maintain the high pace of growth achieved in the previous year. The Asian Development Bank forecasts that the region will achieve a 6.5 percent rise in economic output in 2005, one percentage point less than in 2004. The longer term risk factors remain primarily high oil prices as well as the risk of the Chinese economy overheating. By contrast, the Tsunami disaster in December will only have a short-term impact on the economy. Although the OECD expects Chinese growth to slow to 8 percent, the experts cannot agree whether the measures taken by the government to slow the economic growth will work.

In March 2005 the IMF dramatically lowered its growth forecast for **Germany** for the current year. The German economy will only grow by 0.8 percent. In autumn 2004 the IMF had still expected to see 1.8 percent. The German economy will therefore grow at just half the rate of the euro zone which the IMF expects to grow by 1.6 percent. The main factor holding back growth in Germany remains the weak domestic economy, with exports continuing to be the driving force.

### OUTLOOK FOR THE DEVELOPMENT OF THE INDIVIDUAL JENOPTIK MARKETS.

**Optical technologies to post double-digit growth over the next five years.** According to expert opinion the market volume is expected to increase from the current 70 to 500bn euros in ten to twelve years. Expenditure on research, development and investment will also increase in 2005 according to a survey of German

manufacturers conducted by the industry association Spectaris. The majority of German companies anticipate that the majority of growth for 2005 will be achieved through exports. With a 15 percent rise in export sales and 5 percent growth in the domestic market, the sector expects an overall growth rate of 10 percent in 2005. The specialist magazine Laser Focus World forecasts that the laser market will grow by 9 percent in 2005 to around 6bn us dollars.

**For automobiles 2005** is being marked out by the Automobile Industry Association as not an easy one but one that offers potential. This will be aided by the catch-up demand for investment and a strong model program. In 2005 German manufacturers alone intend to present around 80 new models to customers. Intensified measures aimed at restructuring and rationalizing the sector will benefit high-tech providers.

The latest forecast for the global aircraft market by Airbus comes to the conclusion that between 2004 and 2023 the airlines will need more than 17,000 new aircraft to the value of 1.9 billion dollars.

**The market for safety systems on a path of growth.** One example of this is the fact that the Federal Republic of Germany's budget for military procurement in 2005 will be markedly increased for the first time once again from 3.9bn euros to 4.2bn euros in 2005. Planned expenditure on procurement will increase significantly for those items crucial to the Electromechanical Systems business area, for example vehicles and aircraft as well as military helicopters.

The market research institute VLSI predicts that **the worldwide semiconductor industry** will grow sales by 9.2 percent to approx. 235.1bn us dollars for the current fiscal year 2005. The fears that the worldwide chip market will already stagnate once again in 2005, have not been borne out. The companies, in particular the market leaders, anticipate a successful 2005. The countries of the

Asian region, in particular China, are forecast once again to achieve higher-than-average growth rates. This means that by the year 2009 China could already be the world's largest chip consumer, which will lead to a further strong shift in both production as well as development capacities.

**The flat panel industry**, which has produced growth rates in excess of 20 percent in the last two years, is pausing for breath in 2005. Following a stronger than anticipated fall in prices during 2004 the sector is now in a period of consolidation. According to sector insiders, sales in 2005 will persist at the high level reached in 2004 and then rise in the year after that. However, the sector specialist Display Search sees an end to the fall in prices still during the first half of 2005. Investments by the sector in new and more efficient production plants are continuing, particularly as a result of the competition in prices seen by the sector.

**The photovoltaic industry has developed into a boom sector.**

Whilst there is already legislation in place in Germany to promote alternative energies, in the years ahead similar legislation is planned in other leading industrialized nations such as Japan and Spain. The leading manufacturers in this sector are planning to clearly expand their capacities. Experts forecast that in the year 2020 around 60 percent of the world's energy supply will be able to be extracted from solar energy.

**The market for Facility Management will grow**- according to a study by the Market Research Institute Lünendonk - at around 8 percent per annum over the coming years. The market for bundled service contracts will grow at a very disproportionately high rate of around 10 to 15 percent annually. Experts see the process of internationalization as providing not the only impetus for growth in Facility Management. Buildings in the public sector in particular are still not being managed by Facility Management experts.

## OUTLOOK FOR FISCAL YEAR 2005 FOR THE JENOPTIK GROUP.

**Growth in sales at Photonics and in the core business of Clean Systems.** The growth in sales at Photonics and in the core business at Clean Systems will only be able to partially compensate for the drop in sales following the disposal of the majority holding in the Technical Facility Systems unit in 2005. The deconsolidation of the Technical Facility Systems unit will lead to a fall in sales volume of around 450m euros compared with 2004. For this reason the Jenoptik Group's sales in 2005 (excluding company purchases or sales) are likely to be between 1.9bn and 2.1bn euros.

The Photonics business division is also expected to post a marked increase in sales in 2005. Photonics plans to generate sales of between 385 and 400m euros from organic growth alone. This represents an increase of between 7 and 11 percent. Virtually all areas will contribute towards this result, in particular the Electro-mechanical Systems business area as well as laser diodes, plastic optics and sensors for aerospace in the Electro-Optic business area.

Following the record sales in the Clean Systems business division in 2004 during the course of the boom in semiconductors and flat panels, the business division expects to post the high level of sales achieved in 2004 thanks to the good order backlog. Excluding the Technical Facility Systems unit sales are anticipated to be between 1.5bn and 1.7bn euros. The high order backlog as at December 31, 2004, together with the continuing strong order intake up to February 2005, already cover a large proportion of these sales as at the present date.

The Facility Engineering business area plans sales of between 1.1bn and 1.2bn euros. Sales in the Facility Management business area are expected to be maintained at approx. the same level as in the prev. year. This means that the loss of sales resulting from the business transferred to Facility Engineering in 2004 in England should be offset by growth primarily in Eastern Europe. However, new projects to be awarded on the international level could, if successful, lead to a further rise in sales.

**Earnings maintained at a high level.** In 2005 the Jenoptik Group is likely to repeat the high earnings generated in fiscal year 2004. The operating EBIT is expected to be between 60 and 70m euros. This would mean an anticipated EBITDA of 100 to 110m euros corresponding to an EBITDA margin at the same level as in 2004.

The EBIT margin of the Photonics business division is expected to be once again between 9 and 10 percent, which corresponds to an EBITDA margin of 13 to 15 percent. In the Clean Systems business division, the Facility Engineering business area should achieve an EBIT margin of 1.8 to 2.5 percent, with the Facility Management business area recording an EBIT margin of 3.0 to 3.5 percent.

Following cancellation of part of the finance lease at the end of 2004 (see page 23) the contribution to the EBIT by real estate will be approx. 3 to 4m euros lower. Since there will be a similar reduction in interest expense for real estate however this will have no effect on the net profit for the year.

**New markets, products, capacities for mass production and cooperation arrangements** should contribute towards growth by the Jenoptik Group in the Photonics business division in 2005 and the years ahead.

The key, medium-term objectives in the Photonics business division include the development and expansion of production capacities for the mass production of high-tech products. The aim is to expand existing capacities and acquired know-how in, amongst other things, laser measurement systems and plastic optic components at Wahl optoparts so that in future industries that require high unit quantities such as the automobile industry can be targeted.

The second, main path of growth in Photonics will be through greater internationalization of the business. In addition to the traffic safety systems the aim e.g. is for thermographic cameras to increase the share of export sales. Alongside a new long-term

partnership agreement with the German company InfraTec GmbH, new distribution partnerships were established for the North American and Japanese markets.

Virtually all areas of the Photonics business division are planning to launch new products and technologies on the market. Just to mention a few: in the area of laser material processing for non-metallic materials, 2005 will see the continuation of developments for brittle materials such as glass or ceramics. Furthermore, the offering available to the automobile industry will be rounded off by the addition of a new laser system that can also process leather.

At the Photonics West Trade Fair (USA) in January 2005 Jenoptik presented a new, passively cooled and fiber-coupled diode laser module which achieves a marked increase in output performance. Sales of diode lasers overall should rise further in 2005. In 2005 Jenoptik will be investing around 10m euros in a new production building in Berlin for the manufacture of semiconductor elements, the basis of high-performance diode lasers. This will enable Jenoptik to respond flexibly to market requirements.

In 2005 JENOPTIK Mikrotechnik GmbH will be launching a new generation of its HEX Hot Embossing Systems. The system will meet the requirements for industrial use and should find its way out of the research labs and into the production halls of industry. To this end improvements were made in the so-called interface management, amongst other things.

The record order intake at Jena-Optronik GmbH in 2004, which exceeded the sales volume for the previous fiscal year by 37 percent, will secure the utilization of the order production capacity for 2005. It was in 2004 that the Jena-based aerospace specialist began to apply its comprehensive technological know-how in all aspects of high-quality, innovative, opto-electronic instruments and systems for the entire aerospace and security market.

In 2005 an important project for the future involving the construction of the first 5 prototypes of the PUMA armoured personnel

carrier will be started up in the Electromechanical Systems business area. ESW is involved in the entire turret/weapons stabilization system, the onboard power supply, the starter/generator as well as electrical onboard systems, fan and blower motors. 2005 will also see the commencement of construction of the radome and the backup generators for the Eurofighter (Tranche 2) as well as the continuation of the series for the OSIRIS sensor platform for the TIGER combat and support helicopter.

Following its comprehensive realignment in 2004, **the Clean Systems business division** has created the conditions required for its further development. With its clear orientation towards its core area of expertise in worldwide facility engineering for the electronics industry, M+W Zander is better placed to meet the requirements of its globally operating customers.

The new shareholder structure at M+W Zander Gebäudetechnik GmbH provides for a mid-cap corporate structure and management that reflects the actual conditions in the German market. The size of the subsidiary gives it both the necessary potential for major projects as well as the flexibility to handle medium and smaller projects. Long-term secured framework agreements for customer order-based financing, as well as a sound shareholders' equity base of around 40m euros, provides the guarantee of a stable partnership with developers and suppliers. Innovations and investments are secured through the company's own research and development department.

**The Facility Management business area** will continue to concentrate on major customers with regional or international real estate portfolios. The aim is to expand the European orientation of M+W Zander D.I.B. Facility Management GmbH (DIB FM) on a targeted basis and to consequently further increase the share of export sales. In addition to the core competencies of an integrated and integral Facility Management, DIB FM's focus will also be on new markets and business strategies such as e.g. on offers particularly tailored towards the so-called 'public-private partnership'.

**Research and development.** R+D expenses are set to rise by a further 5 to 10 percent in 2005. In this context, the R+D share of sales will also rise - from 1.4 percent to around 1.7 to 1.9 percent - as a result of lower group sales, in particular due to the deconsolidation of the Technical Facility Systems unit, an area with relatively low R+D expenses. The change in the R+D share in the Group is therefore primarily attributable to the new sales mix. Within the Photonics business division - excluding customer-financed developments and associated companies - the R+D share of sales will remain at a high level of between 6 and 7 percent.

**The number of employees** is expected to increase by a total of 400 to 600 in 2004. The largest rise in this respect will be in the Facility Management business area as part of the process of taking on new orders and the consolidation of its subsidiaries in the Czech Republic and Slovakia. Staff numbers in the Facility Engineering business area are expected to remain constant.

Photonics also plans, on balance, to add a further 40 to 80 employees, specifically at the Jena site. Sales in this business division would therefore rise at a proportionately higher rate than the growth in employee numbers. Staff efficiency and sales per employee will therefore increase further in 2005. There are no plans for any major changes in the Group administration's managerial and specialist departments.

**Financing.** In addition to cash in hand and bank balances with no restriction on disposal in the sum of 145.0m euros, Jenoptik had some 100m euros in unused credit lines at its disposal on the qualifying date as at December 31, 2004. The commercial paper program has been repaid in full and could be "reactivated" if needs be, although there are no plans to utilize the maximum sum of 100m euros. Jenoptik can also make use of its previously unused liquid financial asset reserves if necessary, at least 22m euros of which can be converted into liquid funds at any time without incurring any significant costs.

81.9 percent or 340.0m euros of the financial liabilities are medium to long-term. There are no plans for any major changes here in 2005. At the beginning of January the financing of the investment in the Fab 36 (AMD) was concluded. In this context, 26.5m euros in short-term bank loans and 18.5m euros in financing from cash balances were converted into a long-term loan with a period of 4.5 years. The period and redemption structures are geared towards the payment plans for the “Fab 36” project and the sale option with AMD.

In 2005 EADS is expected to utilize the sale option for its 30.9 percent minority holding in M+W Zander D.I.B. Facility Management GmbH. M+W Zander would then accordingly acquire the remaining shares in M+W Zander D.I.B. Facility Management GmbH for around 30m euros. The promissory notes in the sum of 35m euros will be due in autumn 2005 and Jenoptik will be seeking to repay the loan out of current funds. The aim is to further reduce the Group's gross debt.

As a result of the high level of individual payments, both in customer on-account payments and contractor invoice payments, the cash flow in the Facility Engineering business area fluctuates significantly every month. A weak first quarter is frequently offset by a good fourth quarter. It is almost impossible to form a precise cash flow prediction as a result of the deadline effects. There is a considerably more even cash flow in the Facility Management business area and the Photonics business division where cash flow from operating activities is forecast at between 50 and 65m euros. The JENOPTIK AG (Holding) cash flow, before taking account of the income from the subsidiaries, is mainly determined by the administrative costs which become immediately effective and is so predicted to be between minus 10 and minus 13m euros.

**Procurement.** Photonics will continue with its more strategically orientated procurement management. The new auditing system (see page 20) is also to be extended to all foreign suppliers in 2005. In addition, the business division will further examine the possibility of sourcing more components from Asian and East European countries.

**Capital expenditure.** Jenoptik plans to invest around 35 to 45m euros in tangible and intangible assets in 2005. The level of investment in both business divisions is therefore expected to be roughly the same as in the previous year and, driven by growth, slightly above the figure for depreciation at Photonics in particular. The focus of investment at Photonics will be on plastic optical components, amongst other things. In order to equip itself for further growth Wahl optoparts is constructing a new production building at the Triptis site for around 8m euros in conjunction with an investor. From January 2006 the intention is for the current production in various buildings to be merged together in the new building and to consequently further increase efficiency.

Jenoptik plans a further investment at the Berlin-Adlershof site where the in-house production of semiconductor components is expected to be commissioned into operation in spring 2006 (see page 40).

Jenoptik will continue to strengthen its market position as well as its product and technology portfolio through acquisitions, particularly in the Photonics business division, providing these acquisitions offer a good fit, strategic potential and the right terms and conditions. Where the opportunity arises Jenoptik will use its shares as an acquisition currency - as in the previous years - and in this way acquire suitable companies by a capital increase through contributions in kind. Vice versa, it may also dispose of companies or company segments which no longer form part of the strategic core areas of expertise.

Jena, March 23, 2005

Executive Board

Alexander von Witzleben  
Jürgen Gießmann  
Norbert Thiel



## CORPORATE GOVERNANCE.

JENOPTIK AG supports the recommendations of the German corporate governance codex. The Executive and Supervisory Boards' current declaration of compliance has been published on the Internet; Jenoptik is now fully compliant with the codex with a few exceptions:

As stipulated by the codex, Jenoptik publishes on its Internet site all reports and information that are legally required for the annual general meeting. In individual cases, however, when the interests of the company, its shareholders, or others could be negatively affected, Jenoptik does not publish this information on the Internet.

Jenoptik, moreover, has waived the deductible of the directors and officers (D&O) insurance for members of the executive and supervisory boards, despite the codex recommendation to the contrary. Jenoptik is not convinced that the motivation and responsibility of the boards would be improved through the introduction of a deductible. All members of the boards do their utmost to further the interests of Jenoptik.

The corporate governance codex recommends that the supervisory board regularly reviews the remuneration of the executive board. In order to maintain the efficiency of the supervisory board, it suffices for Jenoptik if the personnel committee, which is responsible for executive board contracts, consults with the supervisory board only when the committee or the board as a whole deems this necessary for a specific reason.

The codex recommends an individual proof of payment for each board member. Since the three-member executive board is relatively small, providing the sum total of the members' salaries and a breakdown of the salaries into fixed and variable amounts, should be sufficient to safeguard transparency. The motivating effect of variable salaries is important both for the individual members of the executive board and for the board as a whole.

For the first time, the Jenoptik Group published its financial statements in accordance with the International Financing Reporting Standards (IFRS) on December 31, 2004.

According to the codex, the group report is to be made accessible to the public within 90 days of the end of the fiscal year. Jenoptik will, however, publish its annual report for fiscal year 2004 on April 19, 2005, 19 days later than recommended. This is the result of the company's transition to IFRS accounting and the greater complexity therefore involved in compiling the Jenoptik financial statements.

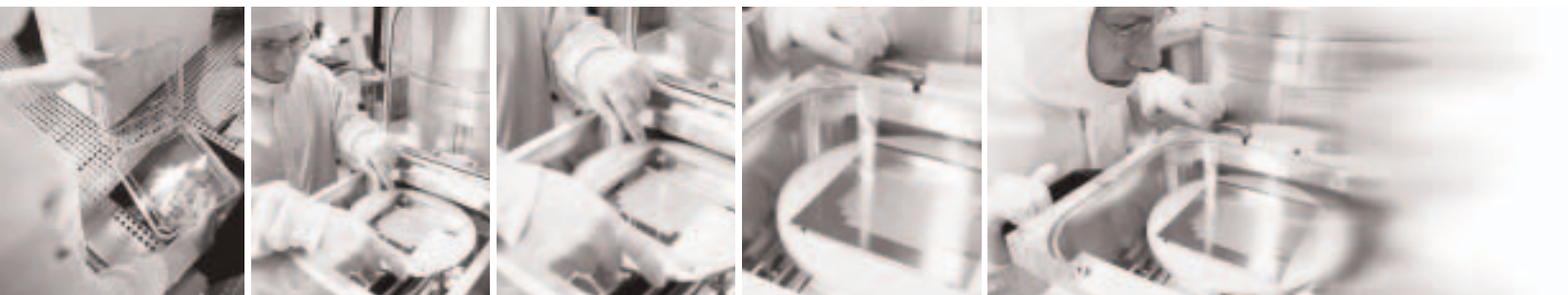
Jenoptik is also departing from the codex recommendation to publish an internet list of subsidiaries and their earnings figures from the previous fiscal year. The combination of companies partially owned by Jenoptik and fully consolidated subsidiaries with their respective financial figures into one list could indeed lead to a skewed depiction of the situation. Jenoptik prefers to rely instead on the segmental reports included in its consolidated financial statements to provide this information.

**Information on executive board remuneration.** The remuneration of the Jenoptik executive board is composed of both fixed and variable amounts. The variable part is based chiefly on the income of the business division for which the respective board members are responsible. The variable salary of the chairman of the executive board is based on the group income as a whole. The variable salary is capped at 50 percent of the full salary and can therefore not exceed the fixed part of the salary.

As another variable element in their remuneration, the executive board members also hold JENOPTIK AG share options, in accordance with the 2000 stock option plan. The share option is, however, pegged at a Jenoptik share price of over 40 euros.

No further pension commitments have been issued to supplement previous commitments for members of the executive board. Other than a company car, which is also available for their personal use, the board members receive no additional services.





## TECHNOLOGY – A MAJOR FACTOR FOR SUCCESS.

**Crankshaft measuring technology:** Rotationally symmetrical objects are measured for size and shape. Two methods of measurement are used: tactile measurement featuring direct physical contact with the object measured; and optical, contactless measurement, using sensors.

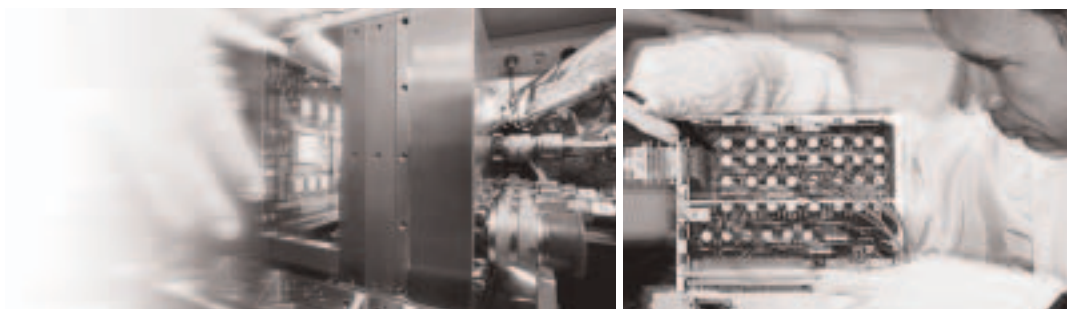
At Jenoptik, technology is a major factor for success, and the company has recognized this with increased investment in technology in 2004. Research and development expenditure was up 12 percent to 31.8 million euros compared with 2003. The following section reports on exciting projects in both of Jenoptik's business divisions. For more information on company figures, see the management report from page 19 on.

**New applications for proven technology.** Aerospace technology, semiconductor production, industrial metrology, traffic monitoring, automotive manufacturing – Jenoptik's technological prowess can be seen at work in a wide range of applications. Research and development ensure that Jenoptik continues to expand its expertise while convincing customers in new industries such as the automotive sector.

**Smooth measurement.** The automotive industry confronts its suppliers with increasingly complex tasks, including car parts of the most sensitive nature such as camshafts and crankshafts. This means that reliability and flexibility are essential, and metrology, i.e. measurement science, plays a key role in making this possible. The measurement process, for example, should not be too time-consuming, while extreme precision is necessary throughout the production process. Production facilities, moreover, need to be flexible enough to be reequipped for new products in a short period of time. Jenoptik's response to these requirements is contact-free optical ➔ crankshaft metrology. Unlike tactile metrology, contact-free metrology systems ensure flexibility and very short reequipping times, such as the CONTOUR 1000, which permits flexible crankshaft production. Even the smallest of components, such as fuel injection parts, can be measured using this technology. And Jenoptik has now completely revamped the optoelectronic channel for its entire product range – from optics and camera technology to hardware-supported image processing. The new system, born of the collaboration of developers from several different Jenoptik Group units, will also pave the way for new production technologies, including hard turning processes. This extremely precise technique does away with costly sanding, and while it does require high-performance production metrology, this is now available along with a completely new software package. All of this contributes greatly to ease and efficiency, making it much preferable to previous systems.

**State-of-the-art leather.** Stylish cars are often equipped quite extravagantly with luxuries such as leather dashboards. Leather, however, has its downside when it comes to housing airbags. Airbags require dashboards that are perforated with invisible lines of preweakening so that they can deploy properly – and JENOPTIK Automatisierungstechnik's laser tools have long been the system of choice for perforating plastic dashboards. Doing the same for leather, on the other hand, has turned out to be a daunting task. At first, the laser work created hard, visible edges, certainly not something that drivers wanted to see. Jenoptik Automatisierungstechnik developers have, however, now found a way to pre-treat the leather to ready it for the laser. Once treated, the leather no longer shows visible traces of the laser, making it possible to provide safety discreetly and without spoiling the car's good looks. The new process is yet another addition to Jenoptik's product range, which features a growing selection of laser tools for non-metals.

**Intelligent tail lights.** The sensor systems business area of JENOPTIK Laser, Optik, Systeme GmbH is now active in the automotive sector with tail lights that adapt to visibility – and come rain or fog – can light up brighter than a clear summer day. The LIDAR (Light Detection And Ranging) sensor system has already successfully passed functionality tests in ice, snow, and even in the hot desert sun. Just like radar, LIDAR is a wave-based measuring system, but whereas radar uses radio waves, LIDAR employs light waves to perform measurements. The system aims invisible, or at times visible, laser light at its target. Micro-computers calculate the distance based on the time it takes for the light to be reflected to the device. The intelligent tail light, developed by Jenoptik for a renowned automotive supplier, uses invisible infrared light (905 nanometers wavelength) to detect fog, spray, and precipitation behind the vehicle. The system can also determine the distance to the next vehicle. Another optical sensor, currently in preparation for

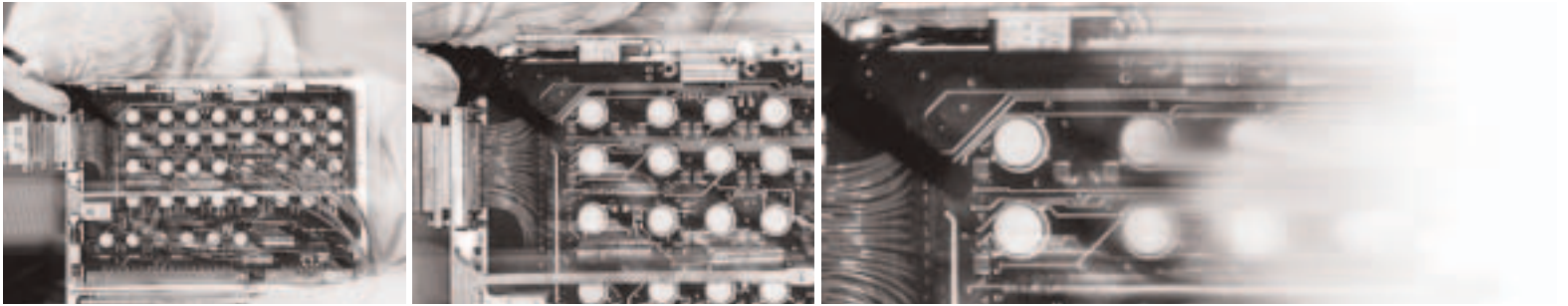


**Measuring with light:** Light travels at approximately 300,000 kilometers a second, which means that it takes only 1.3 seconds to cover the 380,000-kilometer journey to the moon. Measuring light with millimeter-precision therefore means recording a single picosecond, or one billionth of a second.

serial production, detects dirt covering the tail light, and measures sunlight intensity. Other automotive applications are possible in the future. LIDAR sensor systems can measure the distance to other vehicles, recognize people or obstacles, even in the dark, and thus warn drivers in time to avoid accidents. LIDAR also holds a great deal of promise for a whole range of other industrial sectors. The same principles can be used to test the atmosphere for aerosols, (solid and liquid airborne particles) that can also reflect light back to LIDAR devices. Atmospheric levels of gasses such as ozone, methane, and carbon dioxide can also be measured, as the system analyses the specific light absorption of molecules at different wavelengths.

Construction companies have already begun to reap the benefits of the laser “tape measure” now mass produced by Jenoptik’s HILLOS GmbH subsidiary. The system uses a red laser beam to measure distances of up to 100 meters with millimeter precision. ➔ Light measurement systems have also proven effective in industrial applications such as monitoring distances between cranes, correctly positioning elevator cars, and navigating ships into dry dock. Deutsche Telekom uses portable LIDAR-based systems to measure distances, while the weather service uses LIDAR to determine cloud elevation. LIDAR is also ideal for clocking velocity; rapidly measuring the changing distance to a single point on a vehicle makes it possible to calculate its speed. The technology is used in the speed measuring devices created by ROBOT Visual Systems GmbH, a Jenoptik subsidiary and market leader in traffic monitoring technology.

**Digital evidence.** The use of digital photography in traffic monitoring is about to take a quantum leap. While in countries in which car owners are responsible for the use of their cars (and not necessarily the drivers), a simple picture of the license plate suffices, but in countries such as Germany, in which drivers carry full responsibility for their actions, pictures of both plates and drivers are required by the courts. This is precisely the technical challenge that Jenoptik researchers have now successfully mastered. A new Jenoptik high-resolution camera is able to cope with all sorts of lighting conditions, together with highly



reflective license plates, and dark car interiors. The camera nevertheless provides a ➔ resolution and image dynamics similar to conventional film cameras, while remaining menu-driven and user-friendly. The Physikalisch-Technische Bundesanstalt in Braunschweig, a German national metrology service, is currently testing the system, and if it is given the go-ahead for use on German roads, it is expected that municipalities will begin to use it in the fourth quarter of 2005. The new monitoring technology, which does not cost more than conventional analog systems, is provided by Jenoptik's ROBOT Visual Systems GmbH. Part of the system was in fact already approved for a pilot project, in which Robot digital cameras were installed in the Thuringian Forest autobahn tunnel. An elaborate encryption method that proves the authenticity of the image while preventing manipulation has already been incorporated into the system's basic equipment.

#### Resolution and dynamics:

High-resolution images do not go blurry and "pixely" at high resolution. Image dynamics are, however, also crucial to image quality. Conventional digital cameras provide images in which details in dark areas are often unclear, while overly bright areas are lost in a sea of white. More powerful sensors allow cameras to offer an expanded range of colors and better image dynamics.

**Optics in space.** Jenoptik technology is now performing efficiently in orbit as well. Jena-Optronik GmbH equips satellites and space missions with items such as electronic instruments, sensors, and software. Its latest developmental project, the Jena Spaceborne Scanner (JSS), is to form the core of the Rapid-Eye AG commercial GIS satellite system. The scanner is powered by a system in which charge coupled devices (CCD), light-sensitive image sensors, are placed in a row. Line by line, the device scans the light reflected from the earth's surface (pushbroom principle). Each scanner is equipped with several different detectors that measure the various hues of light in order to put together multispectral images. The five-satellite system will be able to depict every point on the earth every day. In order to keep mission costs down, the project is to be limited to two launch rockets, which confronts Jena-Optronik developers with a technological challenge – the design needs to be so compact that the system fits onto a small satellite platform. Innovative solutions have already been found to keep the front optics, focal plane, and on-board data processing all down to an unparalleled size.

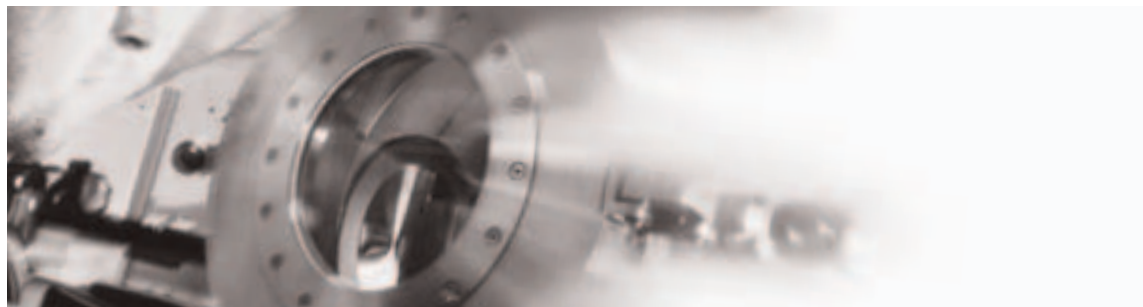


**Lithography:** This technique, closely related to photography, is used to create chip pattern on round semiconductor wafers. As ever smaller and more efficient chips are required, the wavelengths of the laser light need to be shorter. Today, 193-nanometer technology is standard, one, however, that is projected to meet its technological limits in 2009. Extreme ultraviolet (EUV) wavelengths are then expected to follow, although using EUV in chip production will first require a huge technological leap.

**Record EUV performance.** A great deal links Jenoptik with the semiconductor industry, whose optical ➔ lithography requires increasingly small chip structures at ever shorter wavelengths. To make this requirement possible, Jenoptik has been investing in the development of extreme ultraviolet (EUV) laser sources since 2000 (EUV wavelengths are located in the spectrum between visible light and weak x-ray radiation.) The XTREME technologies GmbH development team, which focuses on laser-induced plasmas and gas-discharge plasmas, has over the past three years been able to provide the most efficient laser sources to EUV lithography. They achieved a new record this past year as well – a gas-discharge plasma source produced 50 watts, the highest EUV performance ever recorded anywhere at 13.5 nanometers of wavelength. That is already almost half the power necessary for industrial production. The goal is now to ready EUV for mass production in the semiconductor industry by 2009. Since test phases normally begin three years before production, the semiconductor industry will require the first systems for evaluation in 2006. In 2004, the British company Exitech integrated EUV sources purchased from XTREME technologies GmbH into the world's first microexposure tools. They are now being used by Intel and the international semiconductor consortium International Sematech at their technological development facilities. XTREME technologies works together with a number of companies and research institutes in Japan, the United States, Britain, the Netherlands, France, Russia, Poland, Italy, and Germany. XTREME technologies continues to be supported by Germany's Ministry of Education and Research, and by the European Union's Sixth Framework Program for research and technological development.

**The digital factory.** Decreasing chip pattern place ever greater demands on lithographic photomasks. The masks provide the design of the integrated circuits created in the semiconductor photoexposure process. Teraport, a company of the Clean Systems business division, has now created the first "digital factory" component for Advanced Mask Technology Center in Dresden engineered by M+W Zander. The facility, where Advanced Micro Devices (AMD), DuPont Photomasks and Infineon Technologies all develop and produce cutting-edge lithographic photomasks, now includes something known as a fab application integration server. The Teraport invention collects data from over a thousand measuring points, maintaining the data in an archive and sending it on to the production center. This includes data on media supply and other environmental parameters, all according to a logistics model developed especially for the system. Each mask produced can be correlated with the environmental data at the time of their production in order to determine, and later avoid, possible error factors. In the future, the





process media supply data will also be sent directly to the production control system, making it possible to react to quality deficiencies immediately. The project is supported by Germany's Ministry of Education and Research.

**Solar cell know-how.** Jenoptik's m+w Zander subsidiary is a world leader in the engineering and construction of high-tech production facilities, and is number one in the technology used in the creation of turnkey chip factories. Other industries that require special production environments, such as photovoltaics, can also benefit from this expertise. m+w Zander, for example, has now completed a solar cell and solar module factory for Deutsche Cell GmbH and Solar Factory GmbH in Freiberg, Saxony, Germany, which relies on classical silicon technology. With this reference facility now completed, several new projects are now in the works. Thin-film technology promises to lower solar cell prices in the near future, as it permits conventional glass to be used instead of more expensive silicon. This could make solar cells much cheaper in the medium term. m+w Zander has planned a pilot project that will feature the new technology for Sulfurcell Solartechnik GmbH. The production line is currently in the ramp-up phase, and is set to begin full production soon.

**Proton therapy projects.** Europe's first proton therapy center, located in Munich, is to begin operations in mid-2005. m+w Zander has served as general contractor for the center. ACCEL Instruments, a technological partner on the project, has installed a 100-ton supra-conductive compact cyclotron, making it possible to treat tumors at the center with a precise proton beam that does little damage to the tissue, instead of with x-rays, the hitherto conventional method. m+w Zander must ensure extreme sub-millimeter precision in the construction of the facility, guaranteeing that it is not affected if the building settles or is shaken, while maintaining the stability of the internal temperature and humidity. m+w Zander is now commencing work on its second proton center as general contractor, an identical facility in Cologne, on which ground was broken in December 2004. Other promising proton center projects are in the offing in Italy, France, Germany, and the United States.



## TAKING RESPONSIBILITY FOR THE ENVIRONMENT BY OPTIMIZING PRODUCTION.

### Ultrasonic cleaning facility:

Ultrasonic waves can be used to help clean optical components. As even the slightest blemishes in the facility can lead to defective optical layers, the systems are under continual monitoring. At the end of the production process, the glass is dried automatically. Depending on the process, the optical components may then be processed further for quality control or coating. JENOPTIK Laser, Optik, Systeme GmbH was successful in removing highly volatile and potentially hazardous halogenated chlorinated hydrocarbons from production in 2001.

**Jena, Germany:** Jenoptik production and office buildings in the city have been renovated over the past few years, leading to savings of 1,100 megawatt-hours each year.

Our environment requires protection, and Jenoptik organizes its production processes, products and services in order to make this protection possible. Jenoptik has continued to improve the environmental and health safeguards of its optics production, while Clean Systems provides environmental protection directly to its customers, whether as a special service or as part of a facility package.

**Ultrasonic replaces solvents.** High-performance optics mean unparalleled precision, and only perfectly blemish-free glass can be used in optics processing. Ensuring spotless glass, however, requires chemicals, including chemicals classified as hazardous materials. Jenoptik is dedicated to meet this challenge responsibly by minimizing or completely replacing these materials. The company took another step towards this goal over the past year, investing some 400,000 euros in an ➔ ultrasonic optics cleaning facility. The facility works primarily with water-based cleaning agents that dispense with chlorinated hydrocarbons or fluorocarbons.

**A new monitoring system** makes it possible to trace the paths of other solvents in the production process more precisely in order to prevent these materials from entering the air and the atmosphere. A study this past year showed that between 50 and 60 percent of the 11 tons of solvents used were retrieved and disposed of properly, a figure that is to be improved in the years to come. Jenoptik also regularly examines its waste air system emissions and optical water system materials. This information is all included in an annual balance of environment-related data, now published in a JENOPTIK Laser, Optik, Systeme GmbH environmental report.

**Freeing the earth** from asphalt and cement for replacement with trees, hedges, lawns, and porous stones, has been the centerpiece of renovations on Jenoptik's outdoor areas in ➔ Jena this past year. Rainwater will now be able to penetrate the ground, with separate pipes for rainwater and mixed water ensuring that ground water is protected and industrial water can be purified. Jenoptik invested a total of 2.65m euros in the project.





**Quality and environmental management systems** have now been integrated into many of the Jenoptik companies, with all participating subsidiaries successfully passing the annual inspection in 2004.

M+W Zander's facility management division has in fact introduced ISO certification into its complex service range. M+W Zander D.I.B. Facility Management GmbH now offers to work together with its customers in creating quality management and environmental management systems – a first in the field of technical facility management. Working together closely over a long period of time, both partner companies grow in a mutual relationship that culminates in a quality certificate. If a new facility is required, environmental issues are planned into the original design. In 2004, for instance, M+W Zander D.I.B. Facility Management GmbH worked together with a petrochemical company in the Hanover area, successfully acquiring a SCC (Safety Certificate Contractors) certificate, which entails a strict investigation into working safety, health and environmental protection.

**Compliance with the** ➔ **Greenhouse Gas Emission Trading Law (TEHG)** now numbers among the many services provided by M+W Zander. Companies require specialist help in complying with the German law's complexities, and M+W Zander provides this assistance, aiding its customers in applying for emission rights, and helping them choose appropriate experts in the field. M+W Zander also provides emissions inventory services, listing measures already taken to reduce emissions, facilities in planning, and facilities that have been partly or entirely decommissioned. M+W Zander also monitors its customers' CO<sub>2</sub> emissions, and publishes their annual emission declarations.

**Modular** ➔ **heating and power station.** M+W Zander's Facility Engineering business area is now constructing a heating and power station for the AMD semiconductor plant in Dresden, allowing the facility to save large amounts of thermal discharge and CO<sub>2</sub> emissions. Nine powerful natural gas motors providing all the energy required by the plant transform over 70 percent of the natural gas into electricity, heat, and cooling systems – a remarkable rate of efficiency. And the motors' heat discharge does not go to waste, but is used to heat the facility, or provides it with cooling air by absorption refrigeration machines. All this environmental protection, planned early into the engineering process, is no mere coincidence, but the declared aim of the company.

**Greenhouse Gas Emission Trading Law (Treibhausgas-Emissionshandelsgesetz – TEHG):**

The German law, in effect since January 1, 2005, was created to implement the Kyoto Protocol of 1997, with the aim of sustainably reducing the emission of greenhouse gases.

**Combined heating and power station:**

These plants are required to guarantee power quality and reliability. In order to ensure that the highly sensitive chip production process is not disrupted, power outages of more than 10 milliseconds are not permitted, and current frequency may not deviate more than one percent from the norm.



## JENOPTIK'S CULTURAL NETWORK.

**Ernst Abbe** (1840-1905) was successful in his endeavors to combine research, industry, and social reform. Considered to be the founder of modern optical technology, Abbe laid the foundations for the optics industry in Jena. Together with Carl Zeiss, Abbe founded CARL ZEISS optical factories in Jena, while his Carl Zeiss Foundation set new standards in creating an exemplary social system.

Jenoptik enjoys a position of importance in its hometown of Jena, Thuringia, Germany, and takes its responsibilities seriously as a partner for social projects, education and science, art and culture.

**Jenoptik is there in times of need** – as was unfortunately the case in 2004 when Weimar's Duchess Anna Amalia Library went up in flames. Together the three big companies in Jena – Carl Zeiss Jena GmbH, SCHOTT Jenaer Glas GmbH and JENOPTIK AG – began a donation drive resulting in 53,340 euros for the Anna Amalia Library Society to save its valuable cultural treasures.

**The Jena Parents Initiative for Children with Cancer** has already been a recipient of Jenoptik support for years. Jenoptik CEO Alexander von Witzleben has, in fact, personally taken on the sponsorship of the organization. A donation drive at the Jenoptik New Year's reception in 2004 collected a total of 17,700 euros for Thuringia's only organization for the support of these parents.

**Special Olympics Thuringia e.V.**, an organization dedicated to sports for the mentally handicapped, will continue to receive Jenoptik support – both financial and hands-on – for its work.

**Striking a better balance of family and work.** This is an aim shared by Jena's "Family Service for Flexible Childcare" and Jenoptik. The company is involved in a pilot project conducted by the German Federal Ministry for the Family, in which regional networks for families are formed. Jenoptik is a participant in the coordinating group of the Jena project, which is active in making childcare possible outside of normal care-center hours, or in taking care of children when their parents are faced with crises and emergencies.

**The Tradition of ➡ Ernst Abbe**, whose death came a century ago this year, can be witnessed today in Jenoptik's dedication to social matters. The centenary of Abbe's death has indeed provided Jenoptik with ample occasion to strengthen its ties with Jena's Friedrich Schiller University. Jenoptik will, for instance, sponsor a prize for student research on Ernst Abbe himself. Jenoptik will also begin awarding a scholarship for doctoral work in modern optics and optoelectronics at the university's Faculty for Physics and Astronomy. Jenoptik also provides support to Weimar's Bauhaus University, Jena's University of Applied



Science, and Ilmenau's Technical University. And for researchers of the youngest generation, Jenoptik is celebrating the 15th anniversary as a sponsor of Thuringia's "Jugend forscht" youth research competition.

The "International Microoptics Conference MOC '04", a leading international microoptics conference, convened in Jena for the first time, after nine consecutive years of being held in Japan. Jena's close proximity to an entire network of institutions and companies involved in microoptics was crucial to the decision to hold the conference there. 200 experts attended the conference with JENOPTIK Laser, Optik, Systeme GmbH acting as chief sponsor.

**Jenoptik supports regional** art and cultural projects, especially those involving innovation and light. And this support is not only financial in nature. At the 2004 world premiere of the opera "Die unendliche Geschichte" (The Neverending Story) at the German National Theatre in Weimar, the story's "Auryn" symbol and captions glowed mysteriously over the stage – all courtesy of a ➡ diode-pumped solid-state laser that Jenoptik had provided the theatre for the entire length of the performance.

**Award-winning photographs** were on display at an exhibition of digital work created using Jenoptik's Eyelike™ family of cameras. The photographs were all winners of the "Best of Digital Arts" competition conducted annually since 1998 by JENOPTIK Laser, Optik, Systeme GmbH.

**10 years of Jenoptik art.** Jenoptik was able to celebrate yet another anniversary in 2004 – 10 years of Jenoptik involvement in the arts, and Jenoptik's own series of art exhibitions, "tangente". The 27<sup>th</sup> tangente exhibition was dedicated to the anniversary itself, featuring work from 21 of the previous exhibitions.

**This all goes to show** that Jenoptik has made a name for itself in culture as well, well beyond the boundaries of the Jena region. Jenoptik's determined dedication to a wide variety of projects ensures that they continue to thrive, with Jenoptik as a solid partner within a strong cultural network.

**Diode-pumped solid-state lasers:** These lasers are supported by two laser sources: a semiconductor structure that emits the laser pump radiation, which then strikes the actual laser crystal. The latter intensifies the energy from the diode, thus forming the laser beam. The white light laser, which is unique in its brilliance of color, has already been implemented at major laser shows such as the opening ceremonies of the Athens Olympic Games.

## PERSONNEL POLICY: RESPONSIBILITY AND TRUST.

Jenoptik has again expanded its staff slightly. As of December 31, 2004, Jenoptik Group had a total of 9,267 employees. M+W Zander Gebäudetechnik GmbH had an additional 1,727 employees, the company was separated from group accounting as a minority holding as of December 31, 2004. Adjusted for this figure, the group had 508 more employees than at the end of 2003. While the Photonics business division counted 2,593 staff members, Clean Systems had 6,607, and 62 worked for the group administration. The management report (from page 21 on) provides more detailed information on these developments.

**Recognizing potential and improving leadership skills.** Over the past year, Jenoptik personnel policy has focused on consolidating and expanding company strengths. It indeed takes a certain type of leadership skill to make sound decisions on a company's future, and how it is to meet its technological and commercial challenges. Jenoptik is therefore dedicated to the continual development of leadership skills.

In the beginning was the analysis: The Photonics business division conducted discussions with its managerial staff on their potential, with the results going into the newly developed "Photonics leadership program" offered in 2004. The program aims to improve managerial competence while giving impetus to a new culture of leadership. Other seminars were also offered in the program as well.

The leadership program will be continued into 2005 as well, and the analysis of staff potential proved itself to be valuable as a basis for the project. Two newly conceived support schemes for new degree-holders have also been added into the program. The "junior program" makes it easier for new employees to begin work at the company, while at the trainee program, young academics are rotated through a number of positions in the company, learning the ropes, and getting ready for later responsibilities at Jenoptik.

The Clean Systems business division also put effort into improving leadership skills in a project centered on discussions with employees. Every Clean Systems employee with managerial responsibility attended the 2004 program, entitled "Aiming – Leading – Motivating". More than 200 participants attended 20 seminars, including representatives of the works committee, and personnel experts who were able to learn more about the goals and methods used in discussions determining annual employee target agreements.



These discussions touch on employee performance, conduct, and their target agreements – and at M+W Zander beginning in 2005, recognition of potential as well. There will also be more introductory workshops and seminars for employees who have recently risen to managerial positions.

**More employees, especially in Jena.** The Photonics business division has increased its staff size by 3.8 percent to 2,593. The order situation at Wahl optoparts GmbH, for example, warranted adding 38 new jobs to have 182 employees in total. JENOPTIK Laser, Optik, Systeme GmbH added 66 employees to its staff by the end of 2004, 44 of whom were kept on board after the acquisition of the LINOS AG optics facility in Giessen, Germany. HILLOS GmbH added 10 more employees, while JENOPTIK Automatisierungstechnik GmbH and Jena-Optronik GmbH expanded their staffs by 11 and 12 members, respectively. This continues the trend of the past few years, in which Photonics business division staffs have grown parallel to its order intake.

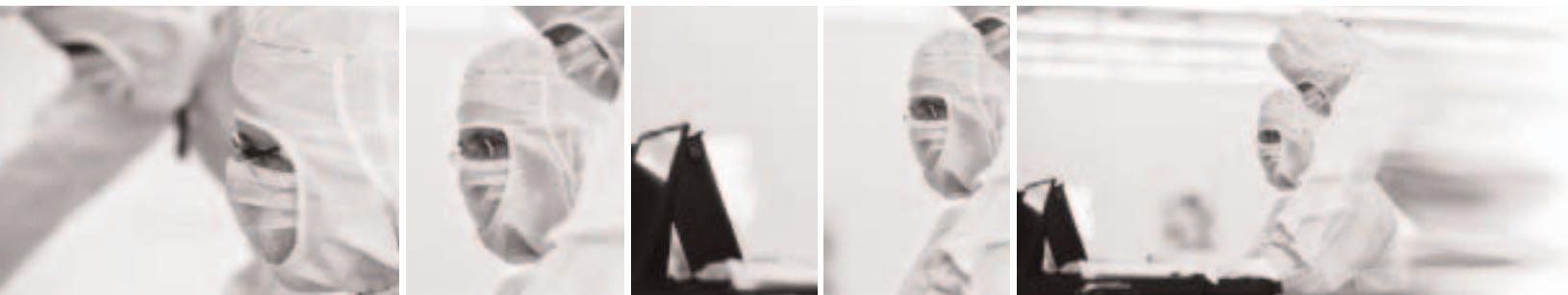
Working-time accounts have been introduced and used extensively as a means of tackling the workload in Jena-based companies such as Hillos, Jenoptik Automatisierungstechnik and Jenoptik Laser, Optik, Systeme. According to the 1999 collective agreement, the 38-hour week can be extended or shortened by up to six hours a week. Temporary positions are also used to fill short-term personnel needs.

JENOPTIK LDT GmbH has been reorganized, with the laser display technology specialist moving to Jena from nearby Gera (see page 77). The company has seen a slight reduction in its staff since 2003.

Photonics foresees a further slight increase in its staff in 2005, but is convinced that it will be able to find suitable candidates to fulfill its personnel needs. Jenoptik plans to reorient its personnel management with a particular view to recruiting qualified university graduates.

**Clean Systems realigned.** The Clean Systems business division saw great changes in its personnel make-up. As part of a management buy-out, the Technical Facility Systems unit, for one, was transformed into an independent company, M+W Zander Gebäudetechnik GmbH, in July 2004, and has now been deconsolidated. The company's 1,727 employees are thus no longer included in Jenoptik personnel statistics as of December 31, 2004.





The Jenoptik products unit has also been restructured, affecting the organization of its 106-employee Aachen site. The facility was integrated into M+W Zander Gebäudetechnik GmbH in the first quarter of 2005, leading to the reduction of 29 jobs. 22 employees were affected by staff reduction at the Stuttgart site as well. To avoid dismissals for operational reasons, however, they were offered a transition to a occupation and qualification agency.

The reorganization of the Technical Facility Systems and Products units meant the elimination of some 180 positions. The personnel reduction process continued on into the first quarter of fiscal year 2005.

A social plan was introduced as the result of constructive negotiations with works committee representatives, making use of all options in ensuring that the staff reduction is as socially responsible as possible.

The business division also gained new employees, however, especially in its eastern European subsidiaries and Facility Management sites, a trend that is expected to continue into 2005. As announced, the Facility Engineering business area hired additional employees, particularly in Asia, where more and more new chip facilities are being located.

**Expansive training system.** With 296 trainees and students at the career academy, and 20 trainees at the now outsourced Technical Facility Systems unit, Jenoptik has maintained its strong training system over the past year. The Photonics business division counted 118 trainees, while Clean Systems had 156. Kempfer & Kolakovic, a personnel service provider, also took on 22 trainees on Jenoptik's behalf.

Technical trades were predominant among the trainees such as industrial mechanics, electronics, construction mechanics, and precision optics.

**New Jenoptik labor agreement.** The new agreement was signed by the Jenoptik executive board and IG Metall in early March 2005, and is valid from January 1, 2005 (retroactive) through December 2007. All wages and salaries at the Jenoptik holding company, and at the two Jenoptik subsidiaries, Jenoptik Automatisierungstechnik and Jenoptik Laser, Optik, Systeme, in Jena and Giessen, Germany, will be raised in three steps – by 1.6 percent as of January 1, 2005, and 2 percent each at the beginning of 2006 and 2007. A new earnings participation scheme will replace the previous goal agreement system, with the new arrangement offering one-off payments linked to profits while maintaining bonuses for indivi-



dual performance. Employees at the companies will also enjoy increased flexibility in regards to their 38-hour workweeks.

The results of salary negotiations in February 2004 has been implemented in companies that follow the general wage agreement of the metal and electrical industries. For purposes of salary, distinctions will no longer be made between different classes of employees in the future. At Jenoptik's Jena sites, this regulation, creating uniform wage groups, has already been in place since 1999.

**Retirement programs: a proven combination.** Since 2001, Jenoptik has provided its employees with a program anchored in a mixture of retirement provisions. One such provision is the Unterstützungskasse Wiesbaden fund – for which employees only pay taxes when they receive their pension payments. The IG Metall trade union also offers a pension fund (Metallrenten-Pensionskasse) initiated by IG Metall and Gesamtmetall, while the Allianz AG insurance company provides private pension funds so that employees can benefit from a special German government program (“Riester-Rente”). And although the corporate pension law has been reformed repeatedly over the past few years, no major modifications have been necessary at Jenoptik. This continuity has been key to the wide acceptance among employees of the employee-financed pension model. The model has now be applied to newly acquired companies and further Jenoptik Group companies.

**Focusing on health.** Jenoptik has signed a framework agreement with a private insurance company for additional health insurance for Jenoptik employees. In Stuttgart, a new social advisement center has been opened for employees. There they receive personal advice and help concerning themselves and their families, problems in the workplace, pensions, and help concerning rehabilitation following serious illness or psychological strain. In Jena, the company also offers a comprehensive health check-up at a low price.

**Our thanks.** The executive board would like to thank the Jenoptik employees, who have ensured our continued success with their talents, creativity, and dedication to their work at Jenoptik. We would also like to express our appreciation to the Jenoptik works committee representatives. By building trust between employees and management, they have time and again been able to find the right compromise to balance the interests of the company and the needs of individual staff members.





## A GLOBAL GROUP OF STRONG INDIVIDUAL COMPANIES: THE REALIGNED CLEAN SYSTEMS.

**TFT-LCD flat panels** are liquid crystal display (LCD) monitors. TFT stands for thin-film transistors.

The Clean Systems business division, represented by the M+W Zander Group, underwent comprehensive reorganization in fiscal year 2004. Clean Systems was able to return to high earnings figures established in 2001 and 2002. The division's operating income came to 46m euros, at 2.2bn euros in sales. Clean Systems began the new fiscal year with 1.9bn euros in order intake, a new division record. Complete information on Clean Systems figures and its reorganization can be found in the management report from page 14 on.

**Total facility solutions:** The M+W Zander Group companies of Jenoptik's Clean Systems business division are in action throughout the entire lifecycle of highly complex production buildings and facilities. Their services range from design, engineering and construction to technical facility systems and facility operations. M+W Zander divides its activities into its Facility Engineering and Facility Management business areas. JENOPTIK AG holds some 73 percent of shares in M+W Zander Holding AG.

The M+W Zander Group continued its fundamental realignment program in fiscal year 2004. The group's international facility engineering business was separated further into individual companies. This was an important step towards allowing individual business units to react to their markets more quickly and flexibly, making them more attractive for new investors and shareholders. On December 30, 2004, M+W Zander sold 51 percent of M+W Zander Gebäudetechnik GmbH in a management buy-out, a company recently founded in July 2004.

### FACILITY ENGINEERING: STRUCTURES CONTINUALLY ADAPTED TO MARKET CONDITIONS.

M+W Zander's Facility Engineering business area engineers and constructs complex industrial production buildings and facilities, chiefly for the semiconductor, ➡ flat-panel, photovoltaic, pharmaceutical, and food industries, and for science and research institutions. A general contractor specializing in clean room technology, M+W Zander is a global leader in the construction of turnkey microchip plants.



### Electronics Unit.

Throughout the world, facility engineering benefited from a strong year for the electronics industry in 2004. M+W Zander's particular success was anchored in longstanding intensive relations with its key customers, and an excellent market position in Europe and the booming Asian market. M+W Zander profited equally strongly from its technological expertise almost reaching into fields involving the primary production activities of its customers. M+W Zander provides general contractor services for many of its projects.

Singapore has now become M+W Zander's global electronics base; where the company's southeast Asian activities had been coordinated over the past several years. The M+W Zander Group's worldwide activities for the electronics industry were headquartered there in autumn 2004, in a further step toward a single service policy for its globally active customers. Singapore-based M+W Zander Facility Engineering Ltd. is now in charge of leading the company's global facility engineering activities for the electronics industry from its strategic position in the all-important Asian market.

As previously announced, M+W Zander has expanded its capacities in Asia to include sites in China, India, Taiwan, Korea, Malaysia, Thailand, and the Philippines, with over 1,000 employees in the region at the end of 2004. Asia is one of the most important regions for the Clean Systems business division, with electronics companies increasing their investment in new production sites. Following Singapore and Taiwan, China has developed into one of the most important markets over the past several years. M+W Zander now counts almost 500 employees in China, with sites in Beijing, Shanghai and Suzhou, the centers of a booming electronics industry. Malaysia and, at a somewhat later date, India are also set to play important roles in the industry.

M+W Zander has been involved in the engineering and construction of new semiconductor factories for the Asian electronics industry. This past autumn, for instance, work was completed on a new facility for Infineon Technologies in Suzhou, China – after only nine months of construction.

**Flat-panel industry investing strongly in Asia.** The flat-panel industry is the second most important sector for M+W Zander's electronics facility engineering. The Jenoptik subsidiary, in one project, engineered and built the clean room facilities for AU Optronics at the Taiwanese flat-panel manufacturer's new



**Fab generations:** Flat-panel manufacturers use the term fab generations to describe the size of glass substrates used. Generation 4 and 5 production facilities, with glass substrates of 680x880 and roughly 1100x1250 millimeters, respectively, are the current industry standard. Generation 6 facilities use glass substrates 1500x1850 millimeters in size.

**Wafers** are pure silicon disks used to manufacture microchips. Wafer diameters have risen over the past few years from 150 to 200 and now to even 300 millimeters. Larger wafers allow for more chips to be manufactured in a single production process.

**300-millimeter wafers:** Chip manufacturers produce 300 millimeter wafers that provide more than twice as much surface area as their 200-millimeter predecessors, permitting a significant increase of productivity at a considerable reduction in cost. The VLSI Research institutes forecasts that in 2008 300-millimeter wafers will make up 25 percent of semiconductor sales.

production facility. The plant, now complete after roughly a year of construction, is one of Taiwan's first ➤ sixth-generation flat-panel production facilities. M+W Zander was a pioneer in applying semiconductor industry know-how to the flat-panel sector, a prescient decision that has now begun to pay dividends.

**Germany – and its Dresden region – now a European semiconductor leader.** The semiconductor industry has developed strongly in and around Dresden, Germany, with a large number of research, supplier, and production sites. And over the past ten years, M+W Zander has been significantly involved in the construction of all local facility complexes involving extreme clean room conditions. AMD's Fab36 chip plant, at an approximate total of 380m euros, is currently one of the company's most important projects. After only twelve months of construction, the installation of the factory's production equipment began in December 2004. The project also featured the design and construction of a factory-internal energy plant, which supplies energy for the new fab.

As general contractor, M+W Zander is also heading the construction of a development, center for memory products in Dresden for Infineon Technologies AG. Construction on the project began in the middle of 2004, and the production building is expected to be ready for equipment installation in April 2005, after only 10 months of construction. M+W Zander is providing a research clean room and all connected support areas for the center.

In summer 2004, M+W Zander received a follow-up contract for the expansion of Siltronic's new Fab 300-2 semiconductor factory in Freiberg, Saxony. M+W Zander was the project general contractor, which included the planning of primary supply systems and equipment hook-up. Siltronic AG opened its Fab 300-2 in June 2004, delivered by M+W Zander in turnkey condition. The facility now manufactures state-of-the-art ➤ 300-millimeter silicon wafers, which must meet significantly higher standards of crystalline quality than did earlier wafer generations, placing more exacting requirements on both production facilities and equipment.

**Research factories require exacting production environments.** M+W Zander has made a name for itself in creating production facilities for research centers, particularly in the United States, where the company has seen much success in the electronics industry. M+W Zander was able to expand its strong position



in the market further in 2004, particularly in the nanotechnology research sector. Orders arrive primarily from universities and renowned state research centers such as the Lawrence Berkeley National Laboratory, and the State University of New York.

In cooperation with Accel Instruments, M+W Zander has been able to put its capabilities to the test in the engineering and construction of complex technical facilities for the health sector. As a result, the first European proton therapy center will begin clinical operations at its Munich site in mid-2005. Another proton therapy center dedicated to the gentle treatment of tumor ailments is now slated for construction in Cologne.

**Photovoltaics:** In the photovoltaic process, solar cells transform solar energy directly into electricity.

**The ➡ photovoltaic industry is yet another booming sector,** that has formed part of M+W Zander's customer base for a number of years. The Jenoptik subsidiary has received another order from the sector in autumn 2004, following the successful completion of several projects including a solar cell production facility for Deutsche Cell GmbH in Freiberg. M+W Zander, again as general contractor, is designing and constructing a solar-cell factory for Sunways AG in Arnstadt, Germany.

### Technical Facility Systems.

M+W Zander Gebäudetechnik GmbH offers complete solutions for technologically advanced buildings and facilities. These service packages include planning, consultation, construction and operations of complex systems for air-conditioning and ventilation, heating and cooling, sanitation, metrology, control systems, and central building control. The company also offers complete energy supply centers in its range of services.

**The Jenoptik Group relinquished the majority ownership of its Technical Facility Systems unit as of December 30, 2004.** The unit's longstanding management took on 41-percent ownership of the unit, while Temco Holding, an investment company, now holds 10 percent of the enterprise. The unit was converted into a separate company, M+W Zander Gebäudetechnik GmbH, on July 1, 2004 in the run-up to its later outsourcing. The unit's restructuring and adaptation to the market as well as the now completed staff reduction were all announced together with this important step. The long-planned management buyout expands the unit's flexibility and freedom to make decisions without forfeiting the advantages



of belonging to an international corporate group. M+W Zander Gebäudetechnik now maintains 12 sites and four subsidiaries in Germany, and four further subsidiary companies located in eastern and western Europe. The enterprise ranks second among technical facility services in Germany.

**Facility technology for sophisticated requirements.** M+W Zander Gebäudetechnik GmbH provides state-of-the-art facility technology to both corporations and public institutions. M+W Zander technology maintains a “good atmosphere” in prestigious rooms such as the Zwinger Museum’s Old Masters Gallery and the Semper Opera House, both in Dresden. The world-famous “Grünes Gewölbe” (Green Vault) collection reopened in summer 2004 at its original location, a former royal residence, and is now equipped with especially developed M+W Zander ventilation systems that ensure a consistent humidity and temperature in the various exhibition showcases. The new system provides the art treasures with optimal protection from deleterious environmental factors, while offering visitors a pleasant ambiance as well.

#### **Chemical and Pharmaceuticals Unit.**

M+W Zander’s chemical and pharmaceuticals unit engineers and constructs complex production facilities, including process and control systems, for projects involving biotechnology, pharmaceuticals, active ingredients, and fine chemicals.

**In a new record time of only 17 months,** M+W Zander’s subsidiary, LSMW GmbH, completed a state-of-the-art pharmaceutical production facility for Ferring in Kiel, Germany. The order included building shell and completion of the interior, and the installation of all process and production systems, including clean room and supply systems. Ferring uses the facility to aseptically fill sterile solutions to be freeze-dried in vials.

**Automation business goes international.** Lang und Peitler Automation GmbH, a subsidiary dedicated to automation solutions for processing and manufacturing, has upgraded its international activities over the past year. The acquisition of the company S3 based in Temse, Belgium on September 30, 2003 has led to new orders from the Benelux countries in 2004. The automation specialists at Lang und Peitler have also now completed their first Russian projects, and in 2004, the company founded its own Chinese





subsidiary in Shanghai with an additional office in Nanjing. The new enterprise has already begun carrying out its first projects for renowned customers. In summer 2004, Lang und Peitler also signed a partnership agreement with the Irish automation provider Zenith Technologies Ltd., in a move toward better access to the Irish and British markets.

In 2004, LSMW and Lang und Peitler, both subsidiaries, have continued to build on a long-term relationship extending back to the 1990s. LSMW can now benefit from Lang und Peitler's German network, and has been founding its own regional offices at certain Lang und Peitler sites. The two companies have joined forces there to provide customers with complete process technology solutions.

#### **Production unit.**

M+W Zander's production unit develops, manufactures, and distributes high-quality clean room systems and components. Products include ceiling and filter systems, control and monitoring systems, air showers, high-precision air handling units and environmental chambers, and clean room cabinets and accessories.

**Asian production expanded.** The production of ➡ filter-fan units and clean room ceilings began at the company's Shanghai site in June 2003. As previously announced, the production site for clean room components underwent considerably expansion in 2004. M+W Zander Products GmbH's Chinese facility delivers its products both to M+W Zander's and other customers' Asian projects.

**Investment in product development and new technologies.** The company introduced a new rotation air shower at the CleanRoom Europe trade fair. The system removes particles from clothing when employees enter clean rooms. The new air shower's modular design allows it to be installed into ➡ clean room entrances rapidly and at low cost. The company also introduced a new ceiling system that is more robust than its predecessor and does not need to be reinforced, sparing customers additional assembly work.

**Clean room classes:** Clean-room production areas of the highest class may permit only 300 particles per cubic meter of air. Under average non-clean-room conditions, air can contain between 10 million and 50 million particles per cubic meter.

**Filter-fan units** are essential cleanroom components. They are integrated into the ceilings and floors of fab cleanrooms, keeping the air as clean as is required.



### IT unit.

Since late 2004, M+W Zander has been reviewing the integration of its IT subsidiary into caatoosee ag, a listed company. M+W Zander would thus be able to acquire a majority in caatoosee with no effect on its liquidity. M+W Zander's IT activities have been combined into its Teraport GmbH subsidiary since 2002. These activities are strongly influenced by the necessities of the electronics industry, which is expanding particularly rapidly in Asia, and a growing demand for comprehensive IT solutions. Through Sigma, caatoosee's 51-percent Indonesian subsidiary, M+W Zander would have further access to IT resources for the Asian electronics industry.

**Permanent monitoring and control of the production process.** M+W Zander has introduced its new Digital Real Time Fab at the Semicon Europe trade fair. The new system permanently monitors and controls semiconductor factory production processes. Displaying important parameters more often permits more efficient monitoring of semiconductor fabs. As the production of semiconductors can require up to 400 process steps, M+W Zander uses information logistics to prevent data from growing unmanageable. Information is filtered to allow only data relevant to system control. The company also presented its lifecycle cost model at the trade fair, which allows manufacturers to determine the full operating costs of a factory in relation to production volume and the production technologies used.

## FACILITY MANAGEMENT: A LEADING EUROPEAN SUPPLIER.

M+W Zander D.I.B. Facility Management GmbH provides facility management for buildings and production sites, with emphasis on a comprehensive view of each facility's lifecycle and uses. In addition to facility technology, the company provides a wide range of infrastructural and commercial services for buildings and other sites. M+W Zander D.I.B. is a leading facility management provider in Europe, serving over 9 million square meters of surface area in the region.

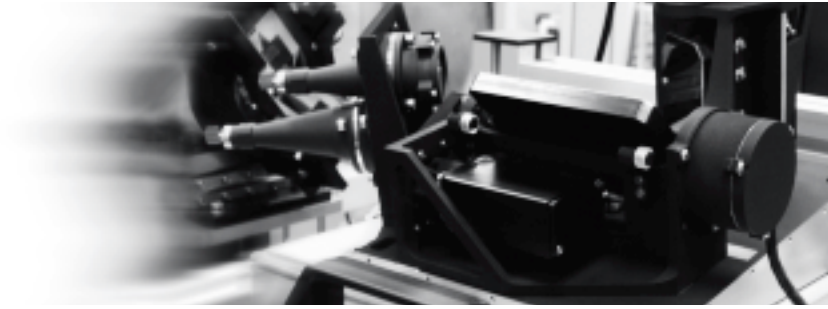




**Growth potential in technical facility management is particularly high**, with integrated services also in high demand. M+W Zander D.I.B. has long begun to focus its facility management activities on technically advanced sites, including activities close to the production process itself. In providing these services, M+W Zander D.I.B. Facility Management benefits from the M+W Zander Group's wide range of competence in facility engineering. One recent order came from Volkswagen for its "transparent automotive plant" or "Gläserne Manufaktur" in Dresden. The contract was awarded in recognition of M+W Zander's experience in facility engineering, and the high quality of two current facility management projects for Volkswagen plants in Poland.

**Order intake up in 2004, with emphasis on industry.** After new orders emanated chiefly from the financial service sector in 2003, affecting sales positively this past fiscal year, M+W Zander D.I.B. received a particularly large number of orders from the industrial sector in 2004. In one such contract, M+W Zander D.I.B. will provide technical facility management at the Munich headquarters of MTU Aero Engines, beginning in November 2004. M+W Zander is responsible there for operations directly relevant to the production process, and for the maintenance and repair of the site's power, heat, compressed air, and water supply systems. M+W Zander received further industrial-sector orders from companies such as O<sub>2</sub> and DaimlerChrysler in 2004. The company's new facility management customers outside of Germany include Bank Austria and a several trading companies in Russia.

**In 2005, the group's strong individual companies** will continue to profit from their global corporate network. The M+W Zander Group now enjoys an excellent starting position for future growth, buoyed by the reorganization of the Clean Systems business division over the past several months. Further information on the corporate outlook can be found in the management report from page 38 on.



## PHOTONICS BUSINESS DIVISION DEVELOPS STRONGLY.

**Photonics:** This “enabling technology” encompasses all optical technologies that serve to create, intensify, form, transmit, measure and make use of light. These optical technologies form a basis for innovations that are currently in development all throughout the world of high technology and in a good number of traditional fields of industrial production as well.

**Light** is an electromagnetic radiation featuring very short wavelengths.

**Digital Imaging:** Digital Imaging is the name of the Competence Center which JENOPTIK Laser, Optik, Systeme GmbH opened in Jena at the end of 2003. Development, production and distribution of digital cameras and camera modules for industrial and scientific applications were combined here and are accommodated in a modern production environment.

The ➤ Photonics business division is divided into the Electro-Optics and Electromechanical Systems business areas. Both business areas met and even surpassed their goals for 2004, with sales, income, order intake and order backlog all rising in double percentage figures. Comprehensive information on Photonics figures can be found in the management report from page 14 on.

### ELECTRO-OPTICS: PRODUCT AND TECHNOLOGY RANGE EXPANDED.

Jenoptik’s Electro-Optics business area enjoys full command of the photonics chain – from the generation and manipulation to the detection and utilization of ➤ light. In its laser technology, optics, and sensor systems units, Jenoptik develops, manufactures, and distributes components and modules, system solutions and complete facilities.

In fiscal year 2004, Jenoptik continued its strategy of expanding its technological and product portfolios, cooperating with strong partners, and creating more closely connected corporate networks. Jenoptik improved its product portfolio and enhanced its presence in important regions with new acquisitions and investments in other companies. The business division was also able to expand through the creation of new distribution partnerships. Jenoptik continued to invest in new production facilities, while expanding previous sites. And Jenoptik now has the know-how and ability to serially manufacture technologically complex components and systems - an important goal attained in 2004.

#### Sensorics Unit.

Jenoptik’s sensor systems unit’s provides in its ➤ “Digital Imaging” competence center high-resolution camera systems and OEM camera modules for professional applications, ranging from infrared to visible light. Jenoptik also develops and produces aerospace sensor systems, traffic monitoring systems, and industrial measuring machines and systems.

**Traffic safety technology – one of the most important Photonics market.** Together with its ROBOT Visual Systems subsidiary, Jenoptik is a world leader in traffic monitoring systems. Over the past two years, Jenoptik has been a key developer in the transition to digital traffic technology (see page 48), providing



both individual high-resolution digital cameras, and complete system solutions. These digital systems offer great advantages in taking photographs, maintenance, and data processing, and are less expensive to boot. Toll enforcement is one of the system's key applications, and Austria and Switzerland have been using Jenoptik components since January 2004 in their attempts to foil those who would rather not pay.

**Optical metrology up and coming.** Jenoptik's subsidiary Hommelwerke GmbH is now a leader in industrial optical metrology. Jenoptik offers both tactile and optical technologies, which can be combined together into one system. Demand for these systems is particularly high in the automotive industry. Jenoptik has thus expanded this unit internationally, especially in Asia; in autumn 2004, Hommelwerke GmbH purchased 33.33 percent of Telstar Engineering Co., Ltd. of South Korea. Telstar-Hommel now offers complete production metrology systems in ➔ South Korea.

**Aerospace companies and organizations place their trust in Jenoptik technology.** As of January 1, 2005, Jenoptik increased its interest in Jenoptik-Optronik GmbH, which is responsible for Jenoptik's aerospace activities, from 75 to 100 percent. Following years of hard work delivering error-free position control sensors, Jena-Optronik has now established itself as a long-term partner for important aerospace companies around the world. Since August 2004, for example, the company has been the standard supplier of ➔ star sensors for the new Boeing 702 satellite bus. A combination of developmental projects and long-term contracts led to record order intake figures in 2004. In December, for example, the company received a major eight-figure order from EADS SPACE Transportation for the long-term supply of 12 ➔ rendezvous and docking sensors. Developing and constructing ➔ earth observation instruments and systems is yet another Jena-Optronik's core competence, with the company receiving a major order from RapidEye AG (see page 49) this past year. Jena-Optronik is also instrumental in managing projects for innovative earth observation programs such as "Epidemio" and "Enviland".

**South Korea** is now one of the automotive industry's most important world regions.

**Sun and star sensors** are positioning sensors for satellites that determine their position in relation to the sun or the stars. The actual flight path of the satellite can be determined, and corrected accordingly, if necessary.

**Rendezvous:** The laser optics-based rendezvous system allows unmanned service vehicles to automatically approach and dock onto the ISS International Space Station.

**Earth observation systems** provide satellite data in endeavors such as the monitoring of agricultural subsidy fraud (Enviland) and the fight against the spread of disease (Epidemio). The Epidemio project uses satellite images of Africa to target malaria and ebola outbreaks.



**Binary optics:** Microoptical systems produced using a combination of microelectronics and precision optics technology. Numerous optical elements such as microgratings or microlenses can be integrated into binary optics components. Binary optics open up new optical solutions for semiconductor production and laser applications.

**VarioCAM®: novel portable thermographic cameras.** Since late 2003, VarioCAM® cameras have been a welcome addition to previously uncooled cameras. These cameras substantially contributed to sales of the “Digital Imaging” unit. The new cameras provide thermograms with a standard resolution of 320x240 pixels, and infrared images with quadruple resolution. This all makes for images brilliant as never before. Jenoptik thermal imaging cameras have been distributed by dedicated distribution partners since late 2004 (see page 20).

**The first portable digital Eyelike camera back** has graced Jenoptik’s professional photography range since autumn 2004. The camera back, with a maximum resolution of 22 megapixels, was introduced at the Photokina trade fair in Cologne – with great success. An unexpected large number of the Eyelike™eMotion22 camera backs were immediately ordered at the fair stand. The mobile unit was also honored as a “special Photokina highlight”. A distribution partnership with Sinar AG has supported the Eyelike segment since autumn 2004. Both companies cooperate closely on the technological development, production, and market placement of their products, all of which are designed for mutual compatibility. Mobile Eyelike camera backs have been distributed under the Sinar name worldwide since February 2005.

### Optics Unit.

Jenoptik’s optics unit develops and produces high-quality optical and optical coating components and optomechanical assemblies. The optics unit enjoyed a record year in 2004, boosted by the introduction of new products, a strong growth in high-performance optics sales to the semiconductor industry, the new subsidiary Wahl optoparts, and the purchase of the Linos AG optics facility in Giessen, Germany.

➔ **Binary optics benefits from semiconductor boom.** Jenoptik delivers diffractive and microoptics assemblies to leading equipment manufacturers. The semiconductor industry’s excellent year was reflected in a boost in sales and a heavy order intake.

Jenoptik increased investment in other optical technologies in 2003 in order to decrease the dependence of the unit on the semiconductor industry. And this strategy proved a success in 2004. Optical infrared components, for example, convinced new customers, especially in the security technology industry.



**In-house optics production was expanded with the new facility in Giessen**, acquired by Jenoptik from LINOS AG retroactive to January 1, 2004. The facility's 44 employees specialize in the production and distribution of optical components which had previously not been produced by Jenoptik itself. This includes cylinder and crystal optics (polarization optics) that are used in metrology, and various laser applications. The Giessen site has been organizationally integrated into Jenoptik's optics unit.

**OEM:** Original Equipment Manufacturer – the original manufacturers of components and computer systems to be used by other companies.

**Plastic optics – an integral part of Jenoptik's product portfolio.** When Jenoptik acquired Wahl optoparts GmbH in December 2003, it also acquired the company's expansive technological know-how. Its optics components are in high demand among companies within the Jenoptik Group as well, such as HILLOS GmbH (see page 76). Wahl optoparts invested around one million euros into automatic injection mold systems and new coating technologies in 2004. The company now offers reflecting, antireflex, nonreflecting, filter, and anti-scratch coatings for plastic surfaces. Wahl optoparts' services thus span the full process chain, including surface technologies. The company's broad capabilities were a decisive factor in its receiving a major medical technology order at the end of 2004.

**Microtechnology unit benefits from comprehensive plastics know-how.** JENOPTIK Mikrotechnik GmbH specializes in fields such as the hot-embossing of micro- and nanostructures in polymers. This process is used in areas such as life science, communications, and medical technology. In 2004, structures well under 100 nanometers in size were hot-embossed for the first time.

### **Laser Unit.**

Jenoptik's laser unit develops and produces laser sources that are distributed around the world in ➔ OEM trade. Jenoptik is also active as a system provider in important fields of technology directly in the market.

**Jenoptik received the 2004 VDI Plastics Innovation Prize** together with other companies for a new, environmentally friendly production process for plastic tailgates for the automotive industry. The tailgates are embossed with a pre-formed colored multilayered film that makes varnishing work superfluous. The new Jenoptik process also ensures that excess bits of films are removed. Jenoptik is a world leader in laser plastics processing, and plays a key role in the introduction of the new technology to car





**Diode lasers** are used primarily as activation sources for solid-state lasers (diode-pumped solid-state lasers). Activating solid-state lasers with high-performance diode lasers instead of conventional flash lamps leads to an increase in efficiency and beam quality. More energy can be packed into a minute diameter, leading to new applications in the field of materials processing.

**Solid-state lasers** provide a high level of laser beam coherence with an extremely parallel laser beam, which can, however, vary greatly in its intensity as it overlaps itself. The goal of current research in the field is to radiate materials homogeneously, i.e. at a steady level of intensity. Both the laser beam position and profile must be monitored simultaneously.

producers and suppliers. The method has been continually adapted for use in the processing of further non-metals such as textiles, leather, and brittle materials (see page 47). Customers have already accepted delivery of the first systems, while the technology continues to be developed further. In an innovation introduced last year, several production steps can now be combined into one system, with lasers now installing breaking points, and cutting dashboard edges or contours at the same time.

**HILTI laser distance measurement systems and positioning instruments are produced in Jena.** HILLOS GmbH, a joint venture of Jenoptik and HILTI AG, produces the world's leading laser distance measurement systems and positioning instruments for construction, as commissioned by HILTI. Over the past few years, Jenoptik has established and expanded serial production of the systems, including all connected logistical and quality-management requirements, thus expanding its valuable know-how in the area of mass high-tech production. HILLOS expanded its staff to 95 employees in 2004, coinciding with an impressive rise in sales. HILTI laser systems are developed in cooperation with JENOPTIK Laser, Optik, Systeme GmbH.

**Jenoptik high-performance ➡ diode lasers take back the market.** All producers had problems with their energy units in 2001 and 2002, particularly with their reliability. Jenoptik was early to recognize this situation, but was not able to stop the trend. Investment in comprehensive quality management and user friendliness have already seen success, with its customer base growing by a third in 2004. Jenoptik is one of the first manufacturers capable of the industrial production of this, the most efficient type of laser, and with a lifespan of 20,000 hours. Jenoptik also introduced a new cooling system that will be much easier to use.

**Integrating ➡ solid-state lasers into micromaterials processing systems:** This is the goal of research conducted by Göttinger Innovavent GmbH, a new company acquired by Jenoptik in July 2004. The company aims to advance research on optics systems, techniques and processes for laser applications to be used



in research and industry. Innovavent has always acquired its laser sources and high-performance optics from Jenoptik, which in turn plans to invest strongly in the new company, making it into an important link between Jenoptik's development of laser and optics technologies, and their use in industry.

**Laser projection unit now a full-fledged company.** This completes the reorientation of JENOPTIK LDT GmbH from an R+D-driven company to a market-oriented provider of high-tech investment goods. Since January 2005, the company has been responsible for the development and production of ➔ RGB lasers as well, which made it necessary for it to move from Gera to Jena. Laser projection has continued to gain acceptance for use in flight simulation and planetariums. In December 2004, for example, a new Beijing planetarium opened, using Jenoptik technology for its projection system.

**Jenoptik RGB lasers, featuring uniquely brilliant colors,** are in demand around the world as state-of-the-art show lasers. Jenoptik distributes these lasers as JenLas® WhiteLight, which feature a brilliance of color otherwise unknown in such systems, made possible by their use of diode-pumped solid-state lasers instead of gas as a source. In one prominent application, several ➔ WhiteLight lasers projected images onto sculptures at the opening ceremonies of the Athens Olympics in 2004.

**A novel forensics laser** was the first product to emerge from Jenoptik's partnership with Spectra-Physics (USA). Its size and weight make the new laser unique, allowing it to be used right at the scene of the crime. The unit works with a 5-watt Jenoptik ➔ thin-disk laser, using ➔ fluorescence derived from organic substances that reflect the laser light clearer than the previously standard uv light. This makes it possible to see items such as fingerprints without having to return to the lab. Jenoptik and Spectra-Physics have been working together on the production, distribution, and service of thin-disk lasers since autumn 2003.

The JenLas® garnet, a Jenoptik thin-disk laser for use in laser marking, was also successfully introduced to the market in 2004. With an output power of 16 watts, the system is more efficient and, sporting a similar design, can easily replace its 8-watt predecessor.

**Laser display technology (RGB lasers)** are lasers in which each pixel is composed of three color pixels, red, green and blue (RGB). A pump laser intensifies the light several times over, splitting it into three colors in several phases. A modulator forms the laser light for each color channel to produce the video signals. The three colors are combined optically and sent through an optical fiber to a scanner, which then projects the laser beam line by line onto a projection surface to form the image.

**White light lasers:** Pure white light (like sunlight) is a great rarity in laser light. As white is not actually a color, but a combination of all the spectral colors together, the slightest aberration can cause the light to no longer be white.

**Thin-disk lasers:** The active laser medium is a flat crystal disk between 100 and 200 microns in diameter. The disk is cooled horizontally from one side and pumped with diode lasers from the other side. Through a compact mirror system, the pump radiation reaches the crystal in several places, providing a high degree of efficiency. The laser beam features an excellent focus with extremely flexible scaling of laser power.

**Fluorescence:** Some substances, primarily organic, become fluorescent when they are radiated with light of a specific wavelength, making items such as fingerprints and body fluids visible.





**Trolley lift systems** transport trolleys in two separate lifts from the lower deck to the passenger deck of large aircraft such as the Airbus A380.

## **ELECTROMECHANICAL SYSTEMS BUSINESS AREA: A PREFERRED SUPPLIER TO THE AUTOMOTIVE AND AEROSPACE INDUSTRIES.**

Jenoptik's Electromechanical Systems business area provides complex technological solutions for defense and civilian technology, specializing in the development, production, and adaptation of drive and stabilization systems. Defense technology makes up approximately 75 percent of the unit's sales.

**Lechmotoren GmbH** has been providing a strong boost to the Electromechanical Systems business area since December 2003; the business area had previously consisted primarily of ESW-Extel Systems Wedel. Initial joint projects were successfully completed in 2004, when ESW and Lechmotoren delivered and started up the auxiliary converter that powers Sweden's Itino regional train.

**ESW's airplane ➔ trolley-lift system now in use.** Lufthansa's Airbus A340-600 has been flying with a new service concept since spring 2004 – food and drinks are sent up from a below-deck kitchen, by means of a new trolley-lift system, to the passenger decks. Developed and built by ESW, the technologically sophisticated lift is designed for flexibility. Unlike building walls, airplane walls are not entirely firm, and constantly in motion. Jenoptik technology is also in use aboard the Airbus A380, where two lifts move the trolleys between the separate passenger decks.

ESW, furthermore, supplies aircraft with deicing components, and control boxes that link the controls for up to 190 heating points on pipes, floor plates, water tanks, and liquid seals. ESW also provides the heaters that stabilize the temperature of the freight area, and the sensors that monitor the aircraft's tilt angle during takeoff.

**ESW – a select high-tech supplier.** In 2004, the Airbus aircraft company announced that it would focus its purchases on select suppliers that are more active in research and development projects – and that includes ESW.

ESW was afforded Q1 supplier status in 2004 by the German Rail (Deutsche Bahn) for its train-tilting components. ESW ➡ tilting technology is now also being tested by several Chinese train companies. And since summer 2004, Britain's West Coast Main Line trains have also been racing down curvy rail routes at 200 kilometers an hour – all thanks to ESW tilting technology.

ESW's receives major orders chiefly for developmental projects and the serial production of products previously developed. In 2004, for example, ESW received an order for the serial production of weather radomes for the NH90 transport helicopter. Following its rescue hoist, which went into serial production in December 2004, this is ESW's second important component for the NH90.

**A major order for the stabilization and on-board power supply systems** was received in 2004 for Greece's 170 Leopard 2A6 tanks. Delivery began in early 2005 and will continue through 2008. The ESW systems ensure the tanks' accuracy in difficult terrain. ESW is also cooperating with its partner MTU to develop major power components for the tank.

**Tilting technology:** When taking sharp curves, train cars using the technology tilt up to 8 degrees towards the inner side of the track using computer-powered tilting technology, similar to the way motorcyclists lean into curves. Using this technology, tilting trains can round curves between 25 and 40 percent faster than conventional trains.

## PHOTONICS CONTINUES TO GROW.

This glimpse into the Electro-Optics and Electromechanical Systems business areas clearly shows that Jenoptik has followed through with the strategic development of the Photonics business division – expanding its technological competence while working together with strong distribution partners around the world. Jenoptik plans to maintain this strategy in 2005 and the years to come, while remaining open to growth through new acquisitions as well. Further information on the outlook can be found from page 38 on.

# CONSOLIDATED FINANCIAL STATEMENTS OF JENOPTIK AG AS AT DECEMBER 31, 2004.

## CONSOLIDATED STATEMENT OF INCOME.

IFRS				
	Note No.	2004 TEUR	2003 TEUR	Change TEUR
Sales	1	2,522,955	1,921,985	600,970
Cost of sales	2	2,229,934	1,717,738	512,196
<b>Gross profit</b>		<b>293,021</b>	<b>204,247</b>	<b>88,774</b>
Research and development expenses	3	31,791	28,358	3,433
Selling expenses	4	73,777	67,761	6,016
General administrative expenses	5	108,556	114,885	-6,329
Other operating income	6	75,063	53,352	21,711
Other operating expenses	7	72,835	37,583	35,252
<b>Result from operating activities</b>		<b>81,125</b>	<b>9,012</b>	<b>72,113</b>
Net investment income/expense	8	-10,402	-24,174	13,772
Net interest income/expense	9	-33,297	-28,128	-5,169
<b>Financial result</b>		<b>-43,699</b>	<b>-52,302</b>	<b>8,603</b>
<b>Earnings before tax</b>		<b>37,426</b>	<b>-43,290</b>	<b>80,716</b>
Income taxes	10	11,176	4,990	6,186
Deferred taxes	10	7,201	-2,403	9,604
<b>Earnings after tax</b>		<b>19,049</b>	<b>-45,877</b>	<b>64,926</b>
Minority interests' share of earnings	11	6,227	6,049	178
Net profit		12,822	-51,926	64,748
Earnings per share in euros	12	0.26	-1.07	-
Earnings per share (diluted) in euros		0.26	-1.07	-

**CONSOLIDATED BALANCE SHEET** (with prior year comparatives).**ASSETS****IFRS**

	Note No.	31.12.2004 TEUR	31.12.2003 TEUR	Change TEUR
<b>A. Non-current assets</b>		<b>636,181</b>	<b>775,519</b>	<b>- 139,338</b>
Intangible assets	13	99,113	92,934	6,179
Tangible assets	14	230,935	252,209	- 21,274
Investment properties	15	63,201	145,093	- 81,892
Shares in associated companies	17	33,523	18,159	15,364
Financial assets	18	120,647	167,179	- 46,532
Other non-current assets	19	16,924	10,871	6,053
Deferred tax assets	20	71,838	89,074	- 17,236
<b>B. Current assets</b>		<b>918,861</b>	<b>982,033</b>	<b>- 63,172</b>
Inventories	21	184,179	270,741	- 86,562
Accounts receivable and other assets	22	558,269	564,432	- 6,163
Securities	23	1,367	4,248	- 2,881
Restricted cash	24	30,000	35,792	- 5,792
Cash and cash equivalents	24	145,046	106,820	38,226
<b>Total assets</b>		<b>1,555,042</b>	<b>1,757,552</b>	<b>- 202,510</b>

**SHAREHOLDERS' EQUITY AND LIABILITIES**

	Note No.	31.12.2004 TEUR	31.12.2003 TEUR	Change TEUR
<b>A. Shareholders' equity</b>	25	<b>369,007</b>	<b>359,764</b>	<b>9,243</b>
Subscribed capital		135,290	126,984	8,306
Capital reserve		186,727	167,629	19,098
Other reserves		14,029	29,357	- 15,328
Own shares held		- 48	- 599	551
Minority interests	26	33,009	36,393	- 3,384
<b>B. Non-current liabilities</b>		<b>452,564</b>	<b>603,000</b>	<b>- 150,436</b>
Pension provisions	27	56,314	59,694	- 3,380
Other non-current provisions	29	20,654	5,816	14,838
Non-current financial liabilities	30	339,796	461,933	- 122,137
Other non-current liabilities	31	33,958	58,230	- 24,272
Deferred tax liabilities	20	1,842	17,327	- 15,485
<b>C. Current liabilities</b>		<b>733,471</b>	<b>794,788</b>	<b>- 61,317</b>
Tax provisions	28	15,175	11,819	3,356
Other current provisions	29	67,879	87,183	- 19,304
Current financial liabilities	30	75,462	57,405	18,759
Other current liabilities	32	574,955	638,381	- 64,128
<b>Total shareholders' equity and liabilities</b>		<b>1,555,042</b>	<b>1,757,552</b>	<b>- 202,510</b>

## CONSOLIDATED STATEMENT OF MOVEMENTS

	Subscribed capital	Capital reserve
in TEUR		
<b>Balance as at 01.01.2003</b>	<b>105,820</b>	<b>142,577</b>
Issue of new shares	21,164	25,322
Sale of own shares	0	- 124
Dividends paid	0	0
Change in consolidated companies	0	0
Valuation of financial instruments	0	0
Currency differences	0	0
Other changes	0	- 146
Earnings after tax	0	0
<b>Balance as at 31.12.2003</b>	<b>126,984</b>	<b>167,629</b>
Issue of new shares	8,306	14,139
Convertible bond	0	4,906
Sale of own shares	0	53
Dividends paid	0	0
Change in consolidated companies	0	0
Valuation of financial instruments	0	0
Currency differences	0	0
Other changes	0	0
Earnings after tax	0	0
<b>Balance as at 31.12.2004</b>	<b>135,290</b>	<b>186,727</b>

## IN SHAREHOLDERS' EQUITY.

Cumulative profit	Reserves			Own shares held	Minority	Total
	Fair value measurement	Hedging	Cumulative currency differences			
82,482	284	- 12,320	0	- 7,038	39,947	351,752
0	0	0	0	0	0	46,486
0	0	0	0	0	0	- 124
- 14,221	0	0	0	0	- 6,035	- 20,256
1,137	0	0	0	0	0	1,137
0	1,006	16,003	0	0	557	17,566
3,173	0	0	0	0	- 1,846	1,327
12,190	0	0	- 8,451	6,439	- 2,279	7,753
- 51,926	0	0	0	0	6,049	- 45,877
32,835	1,290	3,683	- 8,451	- 599	36,393	359,764
0	0	0	0	0	0	22,445
0	0	0	0	0	0	4,906
0	0	0	0	541	0	594
0	0	0	0	0	- 8,164	- 8,164
- 2,371	0	0	- 304	0	- 1,129	- 3,804
0	- 13,431	2,822	0	0	0	- 10,609
1,894	0	0	- 3,020	0	- 308	- 1,434
- 13,740	0	0	0	10	- 10	- 13,740
12,822	0	0	0	0	6,227	19,049
31,440	- 12,141	6,505	- 11,775	- 48	33,009	369,007



## CONSOLIDATED STATEMENT OF CASH FLOWS.

	2004 TEUR	2003 TEUR
Earnings before tax	37,426	-43,290
Interest	33,297	28,128
Depreciation	50,591	47,025
Impairment	645	16,464
Profit/loss on disposal of fixed assets	-38,187	-1,379
Other non-cash expenses/income	20,872	1,570
Operating profit/loss before working capital changes	104,644	48,518
Increase/decrease in provisions	31,948	12,052
Increase/decrease in working capital	-24,600	-8,116
Increase/decrease in other assets and liabilities	-3,711	18,200
<b>Net cash from operating activities before income tax</b>	<b>108,281</b>	<b>70,654</b>
Income taxes paid	-7,524	-6,239
<b>Net cash from operating activities</b>	<b>100,757</b>	<b>64,415</b>
Receipts from disposal of intangible assets	447	563
Payments for investments in intangible assets	-10,002	-8,892
Receipts from disposal of tangible assets	9,400	5,778
Payments for investments in tangible assets	-36,950	-51,271
Receipts from disposal of financial assets	95,821	47,149
Payments for investments in financial assets	-65,325	-36,598
Payments for the sale of consolidated companies	-16,622	0
Payments for acquisition of consolidated companies	-2,640	-44,778
Interest received	10,639	9,073
<b>Net cash used in investing activities</b>	<b>-15,232</b>	<b>-78,976</b>
Receipts from contributions to equity	4,906	46,485
Receipts from sale of own shares	546	6,170
Payments for purchase of own shares	-58	0
Dividend payments to shareholders	-8,164	-20,256
Receipts from issue of bonds and loans	101,868	157,968
Repayments of bonds and loans	-109,470	-101,329
Receipts from/repayments for finance leases	735	-116
Change in Group financing	-346	-7,168
Interest paid	-35,974	-30,526
<b>Net cash used in/from financing activities</b>	<b>-45,957</b>	<b>51,228</b>
<b>Change in cash and cash equivalents</b>	<b>39,568</b>	<b>36,667</b>
Foreign currency translation changes in cash and cash equivalents	-1,342	4,740
Cash and cash equivalents at the beginning of the period	106,820	65,413
<b>Cash and cash equivalents at the end of the period</b>	<b>145,046</b>	<b>106,820</b>

# JENOPTIK AG: NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR FISCAL YEAR 2004.

## DETAILS OF THE GROUP STRUCTURE.

**Parent company.** The parent company is JENOPTIK AG, Jena, entered in the Gera commercial register in department B under number 146.

JENOPTIK AG is listed on the German stock exchange (Deutsche Börse) in Frankfurt and included in the TecDax. JENOPTIK AG operates in the Photonics Technologies and Clean Systems Technologies business divisions.

In the Photonics business division Jenoptik dominates the photonic chain – from the generation to the application of light as a tool for industry.

The companies within the Clean Systems business division specialise in planning, constructing and operating complex production facilities for highly technological industries.

Please see the sections on business divisions for detailed information on these areas.

**Accounting policies.** The consolidated financial statements of JENOPTIK AG for 2004 were prepared for the first time in accordance with International Reporting Standards (IFRS) and the interpretations of the International Financial Reporting Interpretations Committee (IFRIC).

Reporting for the fiscal year 2004 is in compliance with the obligatory standards and interpretations applicable and presents fairly the net assets, financial position and results of operations of the Jenoptik Group. The transition of the accounting is in accordance with the rules of IFRS 1 “First-time Adoption of International Reporting Standards”.

The Jenoptik Group has applied IFRS 2 “Share-based Payment”, IFRS 3 “Business Combinations”, IFRS 4 “Insurance Contracts” and IFRS 5 “Non-current Assets Held for Sale and Discontinued Operations” early. Furthermore, amendments to standards reviewed as part of the so-called Improvements Project and the

amended standards IAS 32 “Financial Instruments: Disclosure and Presentation” and IAS 39 “Financial Instruments: Recognition and Measurement” have been accounted for. Prior year figures have been determined applying the same principles.

The consolidated financial statements are prepared in Euro. Unless noted elsewhere all amounts are in thousands of Euro (TEUR). The statement of income is prepared on a cost of sales basis.

The fiscal year of JENOPTIK AG and its subsidiaries is the calendar year except for Xtreme Technologies GmbH, Jena. This company, whose year end is September 30 prepares interim financial statements for twelve months to the December 31 for consolidation purposes.

The preparation of the consolidated financial statements in compliance with IFRS requires assumptions to be made for certain items which may have an effect on the amounts in the balance sheet or statement of income of the Group and on the disclosure of contingent assets and liabilities.

**Conversion of accounting to IFRS.** Some of the accounting, valuation and consolidation principles applied to date in the consolidated financial statements of JENOPTIK AG in accordance with the German commercial code are changed by the first-time adoption of IFRS.

The disclosures required with regard to the transition from HGB to IFRS are shown in the reconciliation.

The accounting and valuation adjustments to comply with IFRS requirements as at January 1, 2003 have been made in accordance with IFRS 1 as debits or credits to retained earnings with no effect on results as if IFRS had always been applied.

The influences of the conversion of previous accounting under HGB to IFRS financial statements on the net assets, financial position and operating results are shown in the reconciliation.

**Companies included in consolidation.** All material entities in which JENOPTIK AG exercises indirect or direct control (“control concept”) are included in the consolidated financial statements. Control as defined in IAS 27 “Consolidated and Separate Financial Statements” exists where the possibility exists to govern the financial and operating policies of an entity so as to obtain benefits from its activities. Inclusion in the consolidated financial statements is from the point at which control over the company is possible in accordance with the “Control Concept”. It ends when this is no longer possible. In addition to JENOPTIK AG the consolidated financial statements include 32 (2003 41) domestic and 46 (2003 41) foreign companies fully consolidated. These include two investment funds (special funds). 11 entities (2003 6), in which there are no material new acquisitions, were consolidated for the first time in the fiscal year 2004.

The joint venture companies HILLOS GmbH, Jena, MPS Air Base Construction, Israel, Herzeliya and MEISSNER-BARAN Ltd., Israel, Jerusalem are each included proportionally at 50 % in the consolidated financial statements in accordance with IAS 31 “Interests in Joint Ventures”.

In accordance with IAS 28 “Investments in Associates” four domestic associated companies are accounted for using the at equity method. For investments recognised “at equity” the acquisition costs are increased or decreased annually by the appropriate changes in equity held by Jenoptik. All other investments are accounted for at fair value in accordance with IAS 39. If no reliable fair value can be determined then measurement is at amortised cost.

JENOPTIK AG did not consolidate 50 (2003 45) subsidiaries. These primarily include off-the-shelf companies. The effect of the non-consolidated companies on the net assets, financial position and operating results of the Group is immaterial; their sales

amount to 1.1 % of Group sales, their earnings 0.0% of Group earnings and their equity 1.4 % of Group equity. These are disclosed under financial assets as shares in affiliated companies.

The Jenoptik Group has transferred certain properties into limited partnerships (Kommanditgesellschaft) as part of so-called sale-and-leaseback-transactions which are not consolidated under HGB. The property funds Saaleaue Verwaltungsgesellschaft mbH & Co. Vermietungs KG, Jena (SAALEAUE) and LEUTRA SAALE Gewerbegrundstücksgesellschaft mbH & Co. Vermietungs KG, Jena (LEUTRA SAALE) are consolidated in the IFRS consolidated financial statements under IAS 27 in connection with SIC-12 “Consolidation-Special Purpose Entities”.

The composition of the Jenoptik Group can be seen from the following table:

Number of companies	2004	2003
JENOPTIK AG and fully-consolidated subsidiaries		
Domestic	33	41
Foreign	46	41
Subsidiaries measured at purchase cost		
Domestic	26	23
Foreign	24	22
Associated companies		
Domestic	4	2
Foreign	0	0
Proportionally consolidated companies		
Domestic	1	1
Foreign	2	1
	<b>136</b>	<b>131</b>

A listing of JENOPTIK AG shareholdings has been filed in the commercial register at the District Court of Gera (HRB 146). The material subsidiaries included in the consolidated financial statements are listed in an appendix to the notes to the financial statements.

As a result of the proportional consolidation of joint ventures the following amounts are included in the Group financial statements:

in TEUR	2004	2003
Long-term net assets	1,752	1,566
Short-term net assets	8,875	5,795
Shareholders' equity	4,797	3,775
Borrowings	5,830	3,586
Sales	19,404	4,943
Income	60	223
Expenses	6,209	2,649
<b>Net profit for the year</b>	<b>13,255</b>	<b>2,517</b>

The companies measured "at equity" have the following proportional balances:

in TEUR	2004	2003
Long-term net assets	64,880	5,696
Short-term net assets	240,257	107,453
Shareholders' equity	57,071	39,788
Borrowings	248,066	73,361
Sales	11,507	30,695
<b>Net loss for the year</b>	<b>-16,747</b>	<b>-5,224</b>

The balance sheet figures at December 31, 2004 include the companies belonging to the facility management sub-group. Facility management is not shown in the figures of the income statement since these were fully-consolidated in the current financial year and not valued at equity until December 31, 2004. Thus the sales and results of Gebäudetechnik are included in the Group statement of income.

Those companies exempt from publication of their financial statements in accordance with § 264 (3) or § 264b HGB are disclosed under obligatory disclosures and supplementary information under HGB.

**Company acquisitions and disposals.** Company acquisitions are accounted for in accordance with the purchase method. As part of the allocation of the purchase price all assets and liabilities as well as certain contingent liabilities are measured at market value. Furthermore, identifiable intangible assets are capitalised. The remaining difference is capitalised as goodwill and not amortised systematically but subject to an annual impairment test.

At December 31, 2004 the remaining 25 % of Jena-Optronik GmbH, Jena was purchased. The acquisition price amounted to TEUR 2,080 and a remaining difference of TEUR 786 resulted which was capitalised as goodwill. In the financial year 2004 no further material acquisitions were made by JENOPTIK AG.

In 2003 DRAGEBA Wohnbaugesellschaft mbH, Triptis (DRAGEBA) and its subsidiary WAHL optoparts GmbH, Triptis (WAHL) were purchased. DRAGEBA merged with JENOPTIK AG as at January 1, 2004. After the merger the variable purchase price agreed in the purchase contract was met by the issue of new shares. This increased the investment book value of WAHL relevant for the capital consolidation.

Furthermore, JENOPTIK Photonics AG merged with JENOPTIK AG, Hommel Incotec GmbH, Karlsruhe merged with Hommelwerke GmbH, Villingen-Schwenningen and Performing Light Inc., New York merged with Liebmann Optical Company Inc., Easthampton. The mergers were all business combinations under common control for Group purposes. For the consolidated financial statements there were no effects from the mergers on the statement of income.

sis Surface Inspection Systems GmbH, Munich (sis) was fully consolidated until September 30, 2004. The Jenoptik Group sold 38 % of its shares and still holds 49.95 % of the shares in sis at December 31, 2004. Since, after the sale of the shares control no longer exists, sis is no longer fully consolidated but due to materiality disclosed as an investment and measured at fair value.

With effect from January 1, 2004 M+W Zander Vierte Verwaltungsgesellschaft mbH, Stuttgart merged with M+W Cleanroom Products GmbH, Stuttgart. As part of the merger the latter company was renamed as M+W Zander Products GmbH, Stuttgart.

With effect from January 1, 2004 GTG Gesellschaft für Technisches Gebäudemanagement mbH, Wiesbaden merged with M+W Zander D.I.B. Facility Management GmbH, Nuremberg.

In September 2004 M+W Zander (UK) Ltd., Newcastle (UK) transferred its facility engineering business unit to M+W Zander FE UK Ltd., Chippenham as part of an asset deal.

M+W Zander Facility Engineering GmbH, Stuttgart transferred all assets and liabilities (asset deal) from the Electronics business unit to M+W Zander FE GmbH, Stuttgart with effect from October 1, 2004.

With effect from January 1, 2004 M+W Zander Facility Engineering GmbH transferred the investments related to the Electronics business unit to M+W Zander Holding AG, Stuttgart.

The following investments were affected by the spin-off:

- M+W Zander (S) PTE Ltd., Singapore
- M+W Zander France S.A.R.L., Courtaboeuf (France)
- M+W Zander Italia s.r.l., Milan (Italy)
- Reinraum- und Halbleitertechnologie REHATEC Planungsgesellschaft mbH, Emdingen
- M+W Facility Engineering NL B.V., Amsterdam (Netherlands)
- SC 300 Beteiligungs GmbH, Stuttgart
- M+W Zander U.S. Inc., Plano/Texas (USA).

Under the purchase agreement dated August 16, 2004 the following companies were sold directly by M+W Zander Facility Engineering GmbH to M+W Zander Facility Engineering Pte. Ltd., Singapore:

- M+W Zander Equipment Trading & Services (Shanghai) Co. Ltd.
- M+W Clean Systems (Shanghai) Co. Ltd.
- M+W Zander (Shanghai) Co. Ltd. (cash formation 2004)

Under the purchase agreement dated December 15, 2004 the business interests (37.5 %) in Fab36 Beteiligungs GmbH (Fab36), Stuttgart were sold to M+W Zander FE GmbH, Stuttgart.

On September 16, 2004 the European investments of the Electronics business unit were transferred by M+W Zander Holding AG to the newly formed M+W Zander FE GmbH.

The shares in M+W Zander U.S. Inc., Plano, M+W Zander (S) PTE Ltd., Singapore and in M+W Zander FE GmbH (including its direct investments) were transferred to the newly formed M+W Zander Facility Engineering Pte. under a contract dated September 16, 2004. M+W Zander Facility Engineering Pte. acts as parent company worldwide and M+W Zander FE GmbH as parent company in Europe for the Electronics business unit.

The internal Group transactions described above have no effect on net assets, financial position and the operating results.

The significant sale of shares during the financial year related to M+W Zander Gebäudetechnik GmbH. Under the purchase agreement dated December 29/30, 2004 41 % was sold to management as part of a management buyout and 10 % sold to another investor for a symbolic value of TEUR 1. M+W Zander Gebäudetechnik GmbH has arisen from spinning off of all the assets and liabilities and investments of the Technical Facility Systems unit of M+W Zander Facility Engineering GmbH. Thus, only a 49 % share of the capital, which is directly held by M+W Zander Holding AG, remains in the consolidated financial statements as at December 31, 2004. In accordance with IAS 27 the sub-group M+W Zander Gebäudetechnik GmbH had to be deconsolidated due to the loss of control over the parent company.

The following companies were, thus, no longer consolidated within M+W Zander Holding AG as at December 31, 2004:

- M+W Zander Gebäudetechnik GmbH, Stuttgart
- Hau.S GmbH, Jena
- Samuel Zimmermann GmbH, Stuttgart
- Krantz TKT Brandschutztechnik GmbH, Aachen
- M+W Zander España S.A., Barcelona (Spain)
- M+W Zander Hungaria Kft., Budapest (Hungary)
- M+W Zander Energie + Anlagen GmbH, Kulmbach

The Group earnings were reduced by TEUR 17,892 from the deconsolidation. The remaining shares are valued at TEUR 17,292 under shares in associated companies as a consequence of the result of

the change from capital consolidation to “at equity” valuation. As a result of the closeness of the share disposals to the year end M+W Zander Gebäudetechnik GmbH and its subsidiaries are included in the statement of income for the financial year 2004.

**Consolidation methods.** The assets and liabilities of the domestic and foreign companies included in the consolidated financial statements are subject to the uniform accounting policies applicable to the Jenoptik Group. For the companies measured “at equity” the same accounting policies are used for determining proportional equity.

At the time of acquisition capital consolidation is performed by offsetting the investment book values with the proportional, newly valued equity of the subsidiaries at the time of acquisition. The assets and liabilities of the subsidiaries are accounted for at fair values. Furthermore, contingent liabilities are provided for. A positive difference arising does not directly represent goodwill to be accounted for. The difference is first allocated to identifiable intangible assets. The remaining amount represents the goodwill.

The silent reserves and charges realised are accounted for in the subsequent consolidation in accordance with the corresponding assets and liabilities, depreciated and/or released. Goodwill capitalised is not amortised but subject to an annual impairment test in accordance with IFRS 3. Negative goodwill is charged directly to the statement of income. Those write-ups or write-downs on shares in Group companies accounted for in the single entity financial statements are reversed again in the consolidated financial statements.

The determination of goodwill as part of the first “at equity” valuation is carried out in the same way as the initial consolidation of subsidiaries as part of the full consolidation.



Receivables and payables as well as expenditure and income between consolidated companies are eliminated. Intra-group trade transactions are performed based on market prices and on transfer prices that are determined based on the “arm’s length” principle. Profits from intra-group transactions included in inventories have been eliminated. Consolidation entries which have an effect on income are subject to deferred taxation, whereby deferred tax assets and deferred tax liabilities are offset where the payment period and taxation authority are the same.

**Foreign currency translation.** In the single entity financial statements of Group companies prepared in local currency monetary items in foreign currency (liquid funds, receivables, liabilities) are valued at the balance sheet date rate. Foreign exchange differences are taken to the statement of income. Non-cash items in foreign currency are measured at their historical rates.

Translation of financial statements of companies included in the consolidation, prepared in foreign currency, is performed based on the concept of functional currency in accordance with IAS 21 “The Effects of Changes in Foreign Exchange Rates”, using the modified balance sheet date rate method. Since our subsidiaries conduct their operations financially, commercially, and organisationally independently the functional currency is identical with the relevant country currency of the company. Exceptions to this are two Israeli and two Chinese companies who prepare their financial statements in USD and a holding company in Singapore that reports in Euro.

Assets and liabilities are consequently translated at the balance sheet date rate and expenses and income at the average rate for the year. The difference arising on foreign currency translation is offset against equity in a special currency translation reserve without any income effect.

Foreign exchange differences resulting from translation in the previous year within the Jenoptik Group are disclosed in the currency translation reserve with no effect on income.

Accounting in accordance with the rules of IAS 29 “Financial Reporting in Hyperinflationary Economies” is not necessary since there are no material subsidiaries located in highly inflationary countries within the Jenoptik Group.

The major rates used for translation can be seen from the following table:

		Average annual rate		Balance sheet date rate	
		1 EUR =		2004	2003
USA	USD	1.24025	1.16288	1.36210	1.26301
Singapore	SGD	2.11785	2.08002	2.22620	2.14500
Gr. Britain	GBP	0.69174	0.69505	0.70505	0.70482
Switzerland	CHF	1.54518	1.53145	1.54290	1.55792
Hungary	HUF	248.03746	254.28403	245.97000	262.50000
China	RMB	10.72124	9.44368	11.26220	10.34630
Brazil	BRL	3.64548	3.47116	3.61620	3.59760
Russia	RUB	35.84430	35.22310	37.78800	36.55800
Poland	PLZ	4.45900	4.46840	4.08450	4.70190

## ACCOUNTING POLICIES.

Accounting policies are applied uniformly within the Jenoptik Group.

**Goodwill.** For all business combinations prior to the conversion to IFRS the exemption provisions of IFRS 1 have been applied. In accordance with the accounting policy to date (§ 301 HGB) all goodwill was offset against capital reserves in equity. In the first IFRS financial statements goodwill is adopted at net book value on the basis of the simplifications in IFRS 1. Goodwill offset against reserves is not capitalised.

For all business combinations after the time of conversion the rules of IFRS 3 are applied.

Goodwill in accordance with IFRS 3 represents the positive difference between the acquisition costs for a business combination and the newly valued assets and liabilities acquired, including contingent liabilities, which remains after the purchase price has been allocated and, thus, the intangible assets identified. In terms of their values the assets and liabilities identified as part of this price calculation are not measured at their carrying values to date but at their fair values.

Goodwill is recognised as an asset and tested at least annually at a specified time for impairment. Impairment losses are recorded in the income statement as expenses and are not reversed in subsequent periods.

Negative goodwill on capital consolidation is credited to the income statement immediately in accordance with IFRS 3. The credits are included in other operating income.

**Intangible assets.** Intangible assets acquired for a consideration, mainly software, patents, customer relationships, are capitalised at acquisition costs. Intangible assets with a finite useful life are depreciated straight-line over their useful economic lives. Useful

lives are between three and ten years. The group reviews its intangible assets with finite useful lives as to whether they are impaired (see section “Impairment of tangible and intangible fixed assets”).

Intangible assets with indefinite useful lives are reviewed at least once a year for impairment.

Development expenses are capitalised if a newly developed product or process can be clearly separately identified, is technically feasible and is intended either for internal use or sale. Furthermore, in order to capitalise the development expenses it should be reasonably certain that these are covered by future financial inflows. Capitalised development expenses are amortised over the expected sales period of the products. Research expenses shall be recognised as operating expenses in accordance with IAS 38 “Intangible assets”. Acquisition or production costs include all costs directly attributable to the development process and appropriate portions of the general overheads related to development. Where the recognition criteria as an asset are not met the costs are recognised as an expense in the year they are incurred. Financing costs are not capitalised.

**Tangible assets.** Tangible assets are carried at historical acquisition or production cost less accumulated depreciation. Where necessary acquisition or production cost is reduced by impairment. Government grants are deducted from acquisition or production costs in accordance with IAS 20 “Accounting for Government Grants” (see section “Government Grants”). Production costs are based on directly attributable costs and proportional material and production overheads including depreciation.

There were no revaluations of tangible assets in accordance with the option in IAS 16.

Borrowing costs are treated directly as expenses as set out in IAS 23 “Borrowing Costs”.

Tangible asset repair costs are always expensed. Subsequent acquisition costs are capitalised for components of tangible assets which are renewed at regular intervals and fulfil the recognition criteria of IAS 16.

Depreciation is mainly based on the following useful lives:

	Useful life
Buildings	25 – 40 years
Technical equipment and machines	4 – 20 years
Other equipment, factory and office equipment	3 – 10 years

If assets are no longer used, sold or abandoned the profit or loss from the difference between the sales proceeds and the net book value is recorded in other operating income or other operating expenses.

**Impairment of tangible and intangible assets.** For tangible and intangible assets with finite useful lives belonging to the Jenoptik Group an assessment is made at each year end whether the appropriate assets are showing any indications of impairment in accordance with IAS 36 “Impairment of Assets”.

If there are such indications the recoverable amount of the asset is calculated in order to determine the relevant impairment loss.

The recoverable amount is the higher of an asset’s fair value less costs to sell and its value in use

The fair value less costs to sell is the amount obtainable from the sale of an asset in an arm’s length transaction between knowledgeable and willing parties.

Value in use is determined on the basis of the present value of the future cash flows expected. This is based on an appropriate interest rate before tax which reflects the risks of the assets which have not yet been accounted for in estimated future cash flows.

If the recoverable amount of an asset is estimated as lower than its book value it is then written down to the recoverable amount. Impairment losses are recorded immediately as expenses.

Where there is a reversal of impairment in a subsequent period the carrying amount of the asset is adjusted to reflect the recoverable amount determined. The maximum limit for reversal of an impairment loss is determined as the carrying amount of the purchase or production costs which would have been determined had no impairment loss been recognised in previous periods. The impairment loss reversal is recorded immediately in the income statement.

**Leasing.** Leased tangible assets fulfil the conditions for finance leases in accordance with IAS 17 if all the significant risks and rewards related to ownership are transferred to the relevant Group company. All other leasing contracts are classified as operating leases.

#### Finance lease.

Under finance lease the relevant assets are capitalised at the inception of the lease at the lower of the fair value of the assets and the present value of the minimum lease payments. These assets are depreciated straight-line for the shorter of their useful economic lives or term of the leasing agreement if the purchase of the leased asset is not probable at the end of the leasing period. The payment liabilities from future leasing instalments are discounted and accordingly recognised as liabilities.

### Operating leasing.

Rental income from operating lease agreements is written off straight line to the income statement in accordance with the term of the appropriate lease.

Any discounts received and receivable as incentives to enter into a leasing contract are also apportioned on a straight-line basis over the term of the lease.

**Investment properties.** Investment properties are recognised at amortised purchase or production costs. The fair value of these properties is additionally disclosed. It is determined using the discounted cash flow model. The method was partially confirmed by valuation reports from an external appraiser. Normal depreciation is over 25 to 40 years.

Impairment losses on investment property are accounted for in accordance with IAS 36 if the value in use or fair value less disposal costs for the relevant asset are below its carrying value. Where the reasons for accounting for an impairment loss in previous years are no longer relevant an appropriate impairment loss reversal is accounted for.

Tangible assets rented under finance leases are capitalised at the lower of fair value and the present value of the leasing rates and depreciated over the shorter of expected useful life and the leasing term.

**Financial instruments.** Financial instruments are contracts that give rise to both a financial asset of one entity and a financial liability or equity instrument for another entity. In accordance with IAS 32 these include, on the one hand, primary financial instruments such as trade accounts receivable and trade accounts

payable or financial receivables and financial payables. On the other hand, they also include derivative financial instruments which are used to hedge risks from exchange rate and interest rate changes.

Financial assets and financial liabilities are recognised in the Group balance sheet from the point at which the Group becomes a contractual party to the financial instrument. Financial assets are capitalised from their settlement date.

Financial instruments are measured depending on their classification in the categories “Receivables and loans” (at amortised cost) and “available-for-sale” (at fair value).

The amortised cost of a financial asset or liability is the amount at which

- a financial asset or financial liability is initially recognised
- less potential repayments of capital and
- less any impairment losses or provisions for non-payment as well as
- less accumulated allocation of any difference between the original amount and the repayment amount (for example discount) when finally due.

Discount is apportioned using the effective interest method over the term of the financial asset or financial liability.

For current receivables and current liabilities the amortised costs generally represent nominal value or repayment value.

The fair value is generally the market or stock exchange value. If there is no active market the fair value is determined using financial mathematical methods, e.g. by discounting estimated future cash flows at the market interest rate or by applying recognised option price models and checked by confirmations from the banks that process the transactions.

#### Primary financial instruments.

**Shares in companies.** Initial recognition is at purchase cost including transaction costs.

For the Jenoptik Group all shares in subsidiaries and investments in quoted public limited companies which are not fully consolidated, partially consolidated or “at equity” included in the Group financial statements, are classified as “available for sale” and valued in subsequent periods at fair value.

Changes in value of “capital investments available for sale” are recorded directly in equity.

Shares in non-listed subsidiaries and investments qualify as “financial assets available for sale”. However, they are principally stated at acquisition cost since there is no active market for these companies and their fair values cannot be reliably determined with a reasonable amount of effort. Where there are indications of lower fair values these are applied.

**Loans.** Loans relate to amounts lent by the Jenoptik Group which, in accordance with IAS 39, have to be valued at amortised cost.

**Securities.** Securities belong to the category “financial assets available for sale” and are measured at fair value. This valuation is neutral within equity until disposal. Initial valuation is at purchase cost on the settlement date and corresponds with fair value.

**Trade accounts receivable.** Trade accounts receivable do not attract interest due to their short-term nature and are measured at nominal value less an adequate amount estimated for expected bad debts.

**Other receivables and assets.** Other receivables and assets are measured at amortised acquisition costs. All recognisable bad debt risks are accounted for in the form of allowances.

**Cash and cash equivalents.** Cash and cash equivalents are cash balances, cheques and immediately accessible bank balances the original maturity of which is up to three months and which are measured at nominal value.

**Restricted cash.** Restricted cash is separately disclosed.

**Financial liabilities and equity instruments.** Financial liabilities are measured at amortised cost applying the effective interest method. Financial liabilities which have an effect on income being measured at fair value are not treated like this. This type of financial liability does not currently exist.

An equity instrument is a contract that evidences a residual interest in the assets of the group after deducting all of its liabilities.

**Bank liabilities.** Bank loans attracting interest and overdrafts are accounted for at the amounts received less directly allocable issuing costs. Finance costs, including repayment or capital repayment of payable premiums, are accounted for in accordance with the accruals principle applying the effective interest method and increase the book value of the instrument where they are not repaid at the time they arise.

**Liabilities.** Liabilities which do not represent the primary transaction in a permissible hedging transaction and are not held for trading are measured at amortised cost in the balance sheet. Differences between the historical acquisition costs and the redemption amount are accounted for using the effective interest method.

Liabilities from finance leasing agreements are stated at the net present value of the minimum lease payments.

**Convertible bonds.** Convertible bonds are regarded as combined financial instruments which comprise of a borrowing and an equity element. The valuation of the borrowing element on the date of issue is based on discounted future cash flows at a reasonable interest rate normal for the market. The interest rate is based on interest rates of comparable, non-convertible debt instrument. The interest expense of the borrowing component is determined using this interest rate. The issue costs are accounted for in the cash flows in the determination of borrowing components. The difference between the amount determined above and the actual interest received is written back to the book value of the convertible bond,

The difference between the income from issuing the convertible bond and the fair value of the borrowings component represents the embedded option to convert the liability into equity of the Group. The value of this option represents the equity component.

#### **Derivative financial instruments.**

Within the Jenoptik Group derivative financial instruments are used as hedges to control risks from interest and currency fluctuations. They serve to reduce the volatility in results from interest and currency risks.

Derivative financial instruments are not used for speculative purposes. The use of derivative financial instruments is subject to a Group manual authorised by the Board which represents a written fixed guideline with regard to the treatment of derivative financial instruments.

The objective of a fair value hedge is to neutralise the market value changes in assets and liabilities with the market value changes of the hedging transaction in the other direction. A profit or loss arising on the market value changes of a hedging transaction should be taken to the income statement immediately. With regard to the hedged risk with effect from commencement of the hedge, the underlying transaction should also be taken to the income statement.

Cash-flow hedging is described as the process of fixing future variable cash flows. As part of cash flow hedging the Jenoptik Group hedges currency risks. Changes in the fair value of derivative financial instruments hedging a cash flow risk are documented. If hedging relationships are classified as effective the changes in fair value are directly recorded in equity. Changes in value from financial instruments classified as non-effective are recorded directly in the income statement.

**Inventories.** Inventories are stated at the lower of acquisition or production cost and net realisable value.

Production cost includes production-related full costs determined on the basis of normal utilisation of capacities. In addition to direct costs they include a share of material and production overheads as well as depreciation of assets used in production to the extent that these are attributable to the production process. Administration costs are accounted for if they can be allocated to production. Borrowing costs are not capitalised as a part of acquisition or production costs in accordance with IAS 23. Where amounts are lower at the balance sheet date due to decreased prices in the sales market, these should be applied. Similar items in inventories are principally valued using the average method.

The net realisable value is the estimated selling price less the expected costs of completion and costs arising up to sale.

**On-account payments received.** On-account payments received from customers are accounted for under liabilities unless they are for long-term construction contracts (percentage-of-completion method).



**Long-term construction contracts.** Revenue and profit from long-term construction contracts are recorded according to their level of completion in accordance with IAS 11 (percentage of completion method). The stage of completion results from the proportion of contract costs incurred for work performed until the end of the fiscal year to the estimated total contract costs at the year end (cost to cost method). Losses on long-term construction contracts shall be fully recognised immediately in the fiscal year in which the losses are identified irrespective of the stage of completion of contract activity.

Long-term construction contracts which are measured using the percentage of completion method are disclosed as receivables or payables from construction contracts depending on the amount of progress billings. These are measured at production cost plus proportional profit in relation to the stage of completion reached. Where the cumulative contract result (contract costs plus contract result) is higher than the amount of on-account payments received the balance for contracts in progress is disclosed as an asset under receivables due from long-term construction contracts. If a negative balance remains after deducting the on-account payments received then this is disclosed as a liability under liabilities for long-term construction contracts. Expected losses on contracts are accounted for through deductions or provisions and are determined accounting for recognisable risks.

**Deferred taxes.** The accounting for and valuation of deferred taxes is in accordance with IAS 12 "Income Taxes". Deferred taxes are calculated based on the internationally common balance sheet oriented liability method. Deferred tax assets and deferred tax liabilities are disclosed as separate items in the balance sheet in order to account for the future tax effect of timing differences between the measurement of assets and liabilities in the balance sheet and for tax purposes.

For tax loss carry forwards deferred tax assets are only recognised if their realisation is probable in the near future. Deferred tax assets and liabilities are accounted for at the amount of the expected tax charge or tax credit in subsequent fiscal years based on the tax rate valid at the point of realisation.

Allowances should be made against deferred tax assets which are not expected to be utilised in the foreseeable future.

Deferred tax assets and deferred tax liabilities are offset where the tax authority and term are identical. In accordance with the rules of IAS 12 deferred tax assets and liabilities are not discounted.

**Provisions for pensions and similar obligations.** Pensions and similar obligations include the pension commitments of the Group from defined benefit and defined contribution pension plans. For defined benefit pension plans pension obligations are determined in accordance with IAS 19 "Employee Benefits" applying the so-called "Projected unit credit method". Annual actuarial reports are obtained for this. The calculation is based on trend assumptions of 2.75 % (2003 2.75 %) for salary development, of 1.75 % (2003 1.75 %) for pension development and a discount rate of 5.0 % (2003 5.25 %).

The mortality rates are determined in accordance with the current tables by Prof. Dr. Klaus Heubeck (1998).

Actuarial gains and losses which exceed the range of 10.0% of the higher of the present value of the defined benefit obligation and fair value of the plan assets should be allocated over the average remaining service period. The service cost is disclosed under personnel expenses, the interest portion of the addition to the provision under the financial result.

The defined contribution pension systems (e.g. direct insurance) offsets the obligatory contributions directly as cost. Provisions for pensions are not set up for these as Jenoptik is not subject to an extra obligation in addition to the premium payment.

**Tax provisions.** Tax provisions include obligations from current taxes on income.

Deferred taxes are disclosed as separate items in the balance sheet.

**Other provisions.** In accordance with IAS 37 “Provisions, Contingent Liabilities and Contingent Assets” provisions are recognised where there is a current obligation to a third-party as a result of a past event which will probably lead to an outflow of resources and the amount of which can be reliably estimated. This means that the probability of it occurring has to be above 50 %. Other provisions are only recognised if there is a legal or constructive obligation to a third-party.

Provisions which do not already lead to a outflow of resources in the subsequent year are measured at their discounted settlement amount at the balance sheet date where the interest effect is material. Discounting is based on pre-tax interest rates which reflect the current market expectations with regard to interest effects and those risks specific to the liability. The settlement amount comprises expected cost increases.

Provisions are not offset against reimbursement claims.

**Government grants.** IAS 20 differentiates between capital grants for long-term assets and income-related grants.

IAS 20 basically provides for the treatment of grants to impact income in the correct period.

For long-term assets in the Jenoptik Group grants are deducted from acquisition costs. By deducting grants from acquisition costs the depreciation volume is determined on the basis of lower acquisition costs.

**Contingent liabilities.** Contingent liabilities are possible obligations that arise from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not within the control of the Jenoptik Group. Furthermore, present obligations can represent contingent liabilities if the probability of an outflow of resources is not sufficient to recognise a provision and/or the amount of the obligation cannot be measured with sufficient reliability. Contingent liabilities are measured at the scope of the liability at the balance sheet date.

**Statement of Income.** Production costs include cost of sales. This item also includes the cost of warranty provisions. Research and development expenses not capitalised as well as write-downs against development expenses are also disclosed under cost of sales.

In addition to personnel and non-personnel costs as well as selling function depreciation, selling expenses include mailing, advertising, sales promotion, market research and customer service costs. General administrative expenses include personnel and non-personnel costs as well as depreciation relating to the administration function.

Income from release of provisions is, in accordance with IAS 8 “Accounting Policies, Changes in Accounting Estimates and Errors”, offset against the expense items in which the provisions were originally set up. Thus, reversals of provisions are recognised in the relevant functional costs in which the provisions were also recorded.

Offsetting of income and expenses is transparent since material amounts are separately disclosed.

Other taxes are included in other operating expenses. Dividend income is recorded at the time it legally arises.

## KEY FIGURES BY BUSINESS DIVISION AND OTHER AREAS.

	Clean Systems Technologies		of which Facility Management		of which Facility Engineering		Photonics Technologies	
in TEUR	2004	2003	2004	2003	2004	2003	2004	2003
Sales	2,151,506	1,630,486	407,969	397,086	1,759,116	1,260,254	359,798	282,559
of which Germany	1,324,098	1,040,917	324,376	320,781	1,008,889	733,183	158,323	146,083
European Union	257,382	139,743	49,687	23,915	214,107	116,128	103,012	67,398
Other European	52,035	74,365	33,712	38,936	18,324	35,429	21,959	12,287
NAFTA	80,593	62,899	194	13,324	80,399	63,082	43,531	30,115
South East Asia/Pacific	416,955	301,596	0	0	416,955	301,596	21,796	21,368
Other	20,443	10,966	0	130	20,443	10,836	11,177	5,308
Sales with other business divisions	5,638	5,365	148	81	5,490	5,284	850	621
Operating result (EBIT)*	46,000	-6,931	15,312	10,112	32,539	-14,102	34,517	26,082
Earnings before taxes, depreciation, interest, amortisation (EBITDA)	67,980	12,498	20,310	14,938	49,172	1,037	53,411	41,473
Result from associated companies	535	0	0	0	535	0	-1,928	-1,825
Earnings after tax before profit/loss adoption	7,255	-25,900	12,662	9,537	-8,259	-28,471	26,142	16,839
Research and development expenses	8,056	6,497	0	0	8,060	6,497	25,089	23,163
Net cash from/used in operating activities	80,652	18,557	0	0	0	0	42,522	31,841
Total assets	835,349	939,454	126,728	113,483	708,621	825,971	348,307	327,444
Segment liabilities	733,478	881,702	102,329	98,987	631,149	782,715	202,041	216,235
Tangible and intangible assets	84,390	123,028	11,750	13,754	72,640	109,274	112,117	78,681
Investments excluding company acquisitions	17,645	18,987	3,637	5,140	14,008	13,847	18,536	14,808
Depreciation and amortisation	20,722	20,134	4,680	4,827	16,042	15,307	18,472	15,391
Employees (annual average)	7,560	7,815	3,089	2,917	4,471	4,898	2,429	2,169

\* including loss from deconsolidation of the Technical Facility Systems unit of TEUR 17,892 in 2004.  
Consolidation effects in the balance sheet were attributed to the Facility Engineering business area.

## KEY FIGURES BY REGION.

Other, adjustments		Group	
2004	2003	2004	2003
11,651	8,940	2,522,955	1,921,985
11,217	8,625	1,493,638	1,195,625
435	315	360,829	207,456
0	0	73,994	86,652
0	0	124,124	93,014
0	0	438,751	322,964
0	0	31,620	16,274
-6,488	-5,986	0	0
608	-10,139	81,125	9,012
7,369	-3,061	128,760	50,910
-4,684	-154	-6,077	-1,979
-14,348	-36,816	19,049	-45,877
-1,354	-1,302	31,791	28,358
-22,417	14,017	100,757	64,415
371,386	490,654	1,555,042	1,757,552
163,765	107,424	1,099,284	1,205,361
196,742	288,527	393,249	490,236
11,946	20,815	48,127	54,610
7,795	7,078	46,989	42,603
63	65	10,052	10,049

in TEUR	Clean Systems Technologies		Photonics Technologies	
	2004	2003	2004	2003
Sales	2,151,506	1,630,486	359,798	282,559
of which domestic*	1,324,098	1,040,917	158,323	146,083
of which foreign*	827,408	589,569	201,475	136,476
Operating result (EBIT)	46,000	-6,931	34,517	26,082
of which domestic**	19,950	-11,862	33,088	24,780
of which foreign**	26,050	4,931	1,429	1,302
Investments in tangible and intangible assets	17,645	18,987	18,536	14,808
of which domestic**	12,802	14,543	18,082	14,793
of which foreign**	4,843	4,444	454	15
Net assets	835,349	939,454	348,307	327,444
of which domestic**	489,738	699,152	333,393	314,053
of which foreign**	345,611	240,302	14,914	13,391

\*by location of the customer

\*\*by location of the companies

## SEGMENT REPORTING.

Segmentation is performed on the basis of risks and opportunities, recognition is based on the internal organisational and management structure as well as on internal reporting to the executive and supervisory boards. In accordance with this the Jenoptik Group is segmented into the primary segments of the business divisions Clean Systems and Photonics. The Clean Systems business division is, due to its size, sub-divided into the business areas Facility Engineering and Facility Management. The secondary reporting format is based on geographical aspects. The business relationships between companies within the segments of the Jenoptik Group are based on prices which are also agreed with third-parties.

## HISTORICAL SUMMARY OF FINANCIAL DATA.

in EUR millions	H G B						
	1997*	1998	1999	2000	2001	2002	2003
<b>Fixed assets</b>	<b>428.8</b>	<b>348.1</b>	<b>284.4</b>	<b>269.2</b>	<b>344.0</b>	<b>361.2</b>	<b>487.9</b>
Intangible assets	7.3	13.2	15.3	15.0	12.7	27.2	29.7
Tangible assets	346.3	191.4	99.4	111.4	125.8	133.6	140.5
Financial assets	75.2	143.5	169.7	142.8	205.5	200.4	317.7
<b>Current assets</b>	<b>660.6</b>	<b>732.2</b>	<b>686.4</b>	<b>772.4</b>	<b>832.8</b>	<b>893.5</b>	<b>946.7</b>
Net inventories	223.7	204.7	161.6	114.6	170.4	141.5	246.7
of which on-account payments received	283.1	266.7	139.3	557.1	365.8	507.6	400.2
Receivables and other assets	357.8	469.4	394.1	473.1	485.0	617.0	562.7
Liquid funds and short-term securities	79.1	58.1	130.7	184.7	177.4	135.0	137.3
Prepaid and deferred expenses and other	5.1	4.8	2.2	6.9	5.3	2.4	10.0
<b>Shareholders' equity</b>	<b>294.6</b>	<b>375.9</b>	<b>401.9</b>	<b>463.1</b>	<b>487.8</b>	<b>430.6</b>	<b>396.9</b>
Subscribed capital	76.7	94.6	96.2	96.2	105.8	105.8	127.0
Capital reserves	164.7	218.3	222.0	219.2	177.2	129.9	121.5
Revenue reserves	15.6	19.1	54.0	97.9	168.7	183.6	179.0
Minority interests	11.9	12.4	11.3	9.7	7.6	-3.2	4.0
Unappropriated earnings / losses	25.7	31.5	18.4	40.1	28.5	14.5	-34.6
<b>External funds</b>	<b>799.7</b>	<b>708.3</b>	<b>570.6</b>	<b>585.1</b>	<b>694.2</b>	<b>826.3</b>	<b>1,046.4</b>
Accruals	169.6	220.0	184.3	253.9	334.9	327.3	413.3
Liabilities	630.1	488.3	386.3	331.2	359.3	499.0	633.1
of which financial liabilities**)	358.5	229.9	110.2	55.8	81.3	204.8	263.7
of which trade accounts payable	199.9	186.0	226.8	225.3	183.6	164.2	185.7
of which other and miscellaneous liabilities	71.7	72.4	49.3	50.1	94.4	130.0	183.7
Deferred income	0.2	0.9	0.5	0.3	0.1	0.3	1.2
<b>Total assets</b>	<b>1,094.5</b>	<b>1,085.1</b>	<b>973.0</b>	<b>1,048.5</b>	<b>1,182.1</b>	<b>1,257.2</b>	<b>1,444.5</b>
Change compared to prior year							
Fixed assets	29.8 %	-18.8 %	-18.3 %	-5.3 %	27.8 %	5.0 %	35.1 %
Current assets	43.4 %	10.8 %	-6.3 %	12.5 %	7.8 %	7.3 %	6.0 %
Shareholders' equity	13.6 %	27.6 %	6.9 %	15.2 %	5.3 %	-11.7 %	-7.8 %
External funds	49.6 %	-11.4 %	-19.4 %	2.5 %	18.6 %	19.0 %	26.6 %
Share of total assets							
Fixed assets (asset ratio)	39.2 %	32.1 %	29.2 %	25.7 %	29.1 %	28.7 %	33.8 %
Current asset	60.4 %	67.5 %	70.5 %	73.7 %	70.5 %	71.1 %	65.5 %
Shareholders' equity (equity ratio)	26.9 %	34.6 %	41.3 %	44.2 %	41.3 %	34.3 %	27.5 %
External funds (external funds ratio)	73.1 %	65.3 %	58.6 %	55.8 %	58.7 %	65.7 %	72.4 %
Dividends		14.2	18.4	25.3	28.1	14.2	
per share		0.38	0.50	0.70	0.70	0.35	
in % of subscribed capital		15.0 %	19.1 %	26.3 %	26.6 %	13.4 %	
Return on dividend based on year-end price 31. 12.			3.0 %	2.2 %	3.3 %	3.8 %	
Net financial liabilities***)	279.4	171.8	-20.5	-128.9	-96.1	69.8	126.4
in % of adjusted total assets	27.7 %	16.9 %	-2.5 %	-15.2 %	-9.7 %	6.4 %	9.9 %

## HISTORICAL SUMMARY OF FINANCIAL DATA.

in EUR millions	IFRS		
	2002	2003	2004
<b>Non-current assets</b>	<b>625.1</b>	<b>775.6</b>	<b>636.2</b>
Intangible assets	29.3	92.9	99.1
Tangible assets	242.7	252.2	231.0
Investment properties	115.8	145.1	63.2
Financial assets	139.0	167.2	120.7
Shares in associated companies	13.7	18.2	33.5
Other non-current assets	3.0	10.9	16.9
Deferred tax assets	81.6	89.1	71.8
<b>Current assets</b>	<b>1,005.9</b>	<b>982.0</b>	<b>918.8</b>
Inventories	295.3	270.8	184.2
Accounts receivable and other assets	577.8	564.4	558.2
Securities	3.1	4.2	1.4
Cash and cash equivalents	129.7	142.6	175.0
<b>Shareholders' equity</b>	<b>351.8</b>	<b>359.8</b>	<b>369.0</b>
of which subscribed capital	105.8	127.0	135.3
<b>Non-current liabilities</b>	<b>428.2</b>	<b>603.0</b>	<b>452.6</b>
Pension provisions	50.8	59.7	56.3
Other non-current provisions	24.0	5.8	20.7
Non-current financial liabilities	313.2	462.0	339.8
Other non-current liabilities	34.9	58.2	34.0
Deferred tax liabilities	5.3	17.3	1.8
<b>Current liabilities</b>	<b>851.0</b>	<b>794.8</b>	<b>733.4</b>
Tax provisions	9.9	11.8	15.2
Other current provisions	57.1	87.2	67.8
Current financial liabilities	147.8	57.4	75.5
Other current liabilities	636.2	638.4	574.9
<b>Total assets</b>	<b>1,631.0</b>	<b>1,757.6</b>	<b>1,555.0</b>
Change compared to prior year			
Non-current assets		24.1 %	- 18.0 %
Current assets		- 2.4 %	- 6.4 %
Shareholders' equity		2.3 %	2.6 %
Non-current liabilities		40.8 %	- 24.9 %
Current liabilities		- 6.6 %	- 7.7 %
Share of total assets			
Non-current assets (asset ratio)	38.3 %	44.1 %	40.9 %
Current assets	61.7 %	55.9 %	59.1 %
Shareholders' equity (equity ratio)	21.6 %	20.5 %	23.7 %
External funds (external funds ratio)	78.4 %	79.5 %	76.3 %
Dividends	14.2	0.0	0.0
per share	0.35	0.00	0.00
in % of subscribed capital	13.4 %	0.0 %	0.0 %
Return on dividend based on year-end price 31. 12.	3.8 %	0.0 %	0.0 %
Net financial liabilities*)		372.6	238.9
in % of adjusted total assets		24.5 %	18.7 %

## Notes to HGB.

\*) Including esw since October 1, 1997.

\*\*) Liabilities to banks, bills of exchange and bonds

\*\*\*) Financial liabilities less liquid funds and short-term securities.

## Notes to IFRS.

\*) Financial liabilities less cash and securities.



## HISTORICAL SUMMARY OF FINANCIAL DATA.

in EUR millions	H G B						
	1997 *	1998	1999	2000	2001	2002	2003
<b>Sales</b>	<b>1,275.8</b>	<b>1,597.9</b>	<b>1,395.9</b>	<b>1,572.3</b>	<b>2,001.5</b>	<b>1,584.5</b>	<b>1,982.2</b>
Export share	72.9 %	41.4 %	60.3 %	57.8 %	51.8 %	42.9 %	38.1 %
Gross profit	213.4	265.1	191.3	231.4	246.5	194.7	197.8
in % of sales	16.7 %	16.6 %	13.7 %	14.7 %	12.3 %	12.3 %	10.0 %
EBITDA <sup>1)</sup>	69.7	107.0	85.3	102.5	132.6	95.3	45.1
in % of sales	5.5 %	6.7 %	6.1 %	6.5 %	6.6 %	6.0 %	2.3 %
<b>Operating income (EBIT) <sup>2)</sup></b>	<b>29.8</b>	<b>54.3</b>	<b>55.0</b>	<b>82.5</b>	<b>109.1</b>	<b>64.8</b>	<b>7.9</b>
in % of sales	2.3 %	3.4 %	3.9 %	5.2 %	5.5 %	4.1 %	0.4 %
<b>Earnings before tax</b>	<b>34.0</b>	<b>30.8</b>	<b>40.0</b>	<b>96.5</b>	<b>107.5</b>	<b>46.3</b>	<b>-19.6</b>
in % of sales	2.7 %	1.9 %	2.9 %	6.1 %	5.4 %	2.9 %	-1.0 %
<b>Net income/loss</b>	<b>27.3</b>	<b>22.2</b>	<b>33.3</b>	<b>86.6</b>	<b>88.3</b>	<b>40.3</b>	<b>-25.8</b>
in % of sales	2.1 %	1.4 %	2.4 %	5.5 %	4.4 %	2.5 %	-1.3 %
Cash flow <sup>3)</sup>	87.3	102.0	106.0	192.5	204.2	44.2	98.6
Change compared to prior year							
Sales	47.4 %	25.2 %	-12.6 %	12.6 %	27.3 %	-20.8 %	25.1 %
Gross profit	27.6 %	24.2 %	-27.8 %	21.0 %	6.5 %	-21.0 %	1.6 %
EBITDA	29.8 %	53.5 %	-20.3 %	20.2 %	29.4 %	-28.1 %	-52.7 %
Operating income (EBIT)	17.8 %	82.2 %	1.3 %	50.0 %	32.2 %	-40.6 %	-87.8 %
Net income/loss	160.0 %	-18.7 %	50.0 %	160.1 %	2.0 %	-54.4 %	-164.0 %
Employees (average)	6,423	8,523	6,668	5,664	6,683	8,786	10,065
Personnel expenses (incl. pensions)	260.1	358.1	301.2	303.2	351.9	427.0	494.7
Personnel ratio (in % of sales)	20.4 %	22.4 %	21.6 %	19.3 %	17.6 %	26.9 %	25.0 %
Sales per employee (in TEUR)	198.6	187.5	209.3	277.6	299.5	180.3	196.9
Cost of materials (incl. purchased services)	907.9	835.1	946.3	900.9	1,258.3	879.3	1,207.3
Materials ratio (in % of sales)	71.2 %	52.3 %	67.8 %	57.3 %	62.9 %	55.5 %	60.9 %
Research and development expenses	32.6	36.4	29.2	22.5	28.2	29.5	31.4
in % of sales	2.6 %	2.3 %	2.1 %	1.4 %	1.4 %	1.9 %	1.6 %
Net value added	302.6	404.3	349.5	398.6	460.7	476.1	481.0
in % of company performance <sup>4)</sup>	21.7 %	23.5 %	22.8 %	24.8 %	22.2 %	28.4 %	23.6 %
of which shareholders, company share (net income)	9.0 %	5.5 %	9.5 %	21.7 %	19.2 %	8.5 %	-5.4 %
Return on sales after interest and tax	2.1 %	1.4 %	2.4 %	5.5 %	4.4 %	2.5 %	-1.3 %
Total turnover of assets	1.17	1.47	1.43	1.50	1.70	1.26	1.37
Total return on capital after interest and tax	2.5 %	2.1 %	3.4 %	8.3 %	7.5 %	3.2 %	-1.8 %
Return on shareholders' equity after tax (at balance sheet date)	9.3 %	5.9 %	8.3 %	18.7 %	18.1 %	9.4 %	-6.5 %
Adjusted equity ratio <sup>5)</sup>	28.5 %	35.8 %	46.7 %	52.8 %	47.9 %	36.8 %	28.7 %
Fixed assets financed by shareholders' equity	68.7 %	108.0 %	141.3 %	172.0 %	141.8 %	119.2 %	81.4 %
Fixed assets and inventories financed by shareholders' equity and long-term external funds	56.0 %	82.9 %	101.2 %	134.3 %	106.3 %	99.2 %	83.2 %
Asset cover <sup>6)</sup>	439.9 %	494.7 %	1,199.7 %	1,022.1 %	785.5 %	590.7 %	538.5 %
Inventory turnover (at balance sheet date)	2.5	3.4	4.6	2.3	3.7	2.4	3.1

## HISTORICAL SUMMARY OF FINANCIAL DATA.

in EUR millions	IFRS	
	2003	2004
<b>Sales</b>	<b>1,922.0</b>	<b>2,523.0</b>
Gross profit	204.2	293.0
in % of sales	10.6 %	11.6 %
EBITDA <sup>1)</sup>	50.9	128.8
in % of sales	2.6 %	5.1 %
<b>Result from operating activities<sup>2)</sup></b>	<b>9.0</b>	<b>81.1</b>
in % of sales	0.5 %	3.2 %
<b>Earnings before tax</b>	<b>-43.3</b>	<b>37.4</b>
in % of sales	-2.3 %	1.5 %
<b>Earnings after tax</b>	<b>-45.9</b>	<b>19.0</b>
in % of sales	-2.4 %	0.8 %
Net cash from/used in operating activities	64.4	100.8
Change compared to prior year		
Sales	-	31.3 %
Gross profit	-	43.5 %
EBITDA	-	153.0 %
Result from operating activities	-	801.1 %
Earnings after tax	-	-141.5 %
Employees (average)	10,049	10,052
Personnel expenses (incl. pensions)	500.0	536.7
Personnel ratio (in % of sales)	26.0 %	21.3 %
Sales per employee (in TEUR)	191.3	251.0
Cost of materials (incl. purchased services)	1,217.3	1,468.7
Materials ratio (in % of company performance)	62.3 %	56.6 %
Research and development expenses	28.4	31.8
in % of sales	1.5 %	1.3 %
Net value added	494.4	618.4
in % of company performance <sup>4)</sup>	25.3 %	23.8 %
of which shareholders', company share	-9.3 %	3.1 %
Return on sales before interest and tax	0.5 %	3.2 %
Total turnover of assets	1.09	1.62
Total return on capital before interest and tax	0.5 %	5.2 %
Return on shareholders' equity before tax (at balance sheet date)	-12.0 %	10.1 %
Adjusted equity ratio <sup>5)</sup>	17.6 %	21.1 %
Non-current assets financed by shareholders' equity	46.4 %	58.0 %
Non-current assets financed by shareholders' equity and long-term external funds	113.7 %	120.3 %
Asset cover <sup>6)</sup>	142.7 %	159.7 %
Ratio of on-account payments <sup>7)</sup>	76.6 %	81.8 %

## Notes to IFRS.

## Definitions:

<sup>1)</sup> EBIT before depreciation/write-ups on tangible and intangible assets.

<sup>2)</sup> Operating income before interest and net investment result; in 2003 before costs of capital measures.

<sup>3)</sup> Earnings after tax + changes in provisions + depreciation/write-ups, each excl. effects from first-time consolidation and deconsolidation.

<sup>4)</sup> Company performance = sales plus other operating income and net investment result.

<sup>5)</sup> Shareholders' equity less intangible assets/total assets less intangible assets, cash and cash equivalents and securities.

<sup>6)</sup> Shareholders' equity/tangible assets excl. property => ratio of plant, machinery, equipment financed by shareholder's equity.

<sup>7)</sup> Ratio of on-account payments = on-account payments received/gross inventories plus receivables from long-term order production incl. profit share.

## Notes to HGB.

## Definitions:

<sup>1)</sup> EBIT before depreciation/write-ups on tangible and intangible assets.

<sup>2)</sup> Operating income before interest and net investment result; in 2003 before costs of capital measures.

<sup>3)</sup> Net income + changes in accruals + depreciation/write-ups, each excl. effects from first-time consolidation and deconsolidation.

<sup>4)</sup> Company performance = sales plus other operating income and net investment result.

<sup>5)</sup> Shareholders' equity less intangible assets/total assets less intangible assets and liquid funds incl. short-term securities.

<sup>6)</sup> Shareholders' equity/tangible assets excl. property => ratio of plant, machinery, equipment financed by shareholders' equity.

## NOTES TO THE STATEMENT OF INCOME.

**1 Sales.** Sales increased overall by TEUR 600,970 or 31.3 % to TEUR 2,522,955 compared to 2003.

Sales include sales from applying long-term construction contracts amounting to TEUR 346,405.

The Jenoptik Group sold the majority in M+W Zander Gebäudetechnik GmbH, which belongs to the Clean Systems business division, on 30 December 2004. Consequently M+W Zander Gebäudetechnik GmbH is consolidated "at equity" as at December 31, 2004. Sales of M+W Zander Gebäudetechnik GmbH amounting to TEUR 408,700 are included in Group sales.

The segment reporting includes an analysis of sales by business division and geographical region.

**2 Cost of sales.** Cost of sales increased overall by TEUR 512,196 or 29.8 % to TEUR 2,229,934 compared to 2003.

Cost of sales includes the costs incurred in generating sales. This item also includes provisions made for transactions dependent on sales.

**3 Research and development expenses.** Research and development expenses include all expenses allocable to research and development. Research and development expenses increased overall by TEUR 3,433 or 12.1 % to TEUR 31,791 compared to 2003.

**4 Selling expenses.** Selling expenses mainly comprise marketing costs, sales commissions, publicity work and advertising. Selling expenses increased overall by TEUR 6,016 or 8.9 % to TEUR 73,777 compared to 2003.

**5 General administrative expenses.** General administrative expenses include personnel and non-personnel costs as well as depreciation relating to the administration function.

General administrative expenses decreased by TEUR 6,329 or 5.5 % to TEUR 108,556 compared to 2003.

**6 Other operating income.**

in TEUR	2004	2003
Income from disposal of fixed assets	39,875	3,069
Income from exchange gains	8,748	10,028
Income from government grants	4,786	5,399
Income from release of bad debt allowances	2,179	5,308
Income from damages claims	1,301	2,242
Income from services, transfers and rental	3,740	5,234
Income from release of provisions	193	13,066
Income from the release of accruals of interim profits	1,239	1,239
Income from the early payment of finance lease liabilities	3,212	0
Miscellaneous	9,790	7,767
	<b>75,063</b>	<b>53,352</b>

Income from exchange rate changes mainly include gains on exchange rate fluctuations on foreign exchange receivables and payables between transaction date and payment date and exchange gains from valuations at the balance sheet date. Exchange losses from these transactions are disclosed under other operating expenses.

Income on disposal of fixed assets of TEUR 39,875 (2003 TEUR 3,069) includes income from the sale of the investment in sc 300 of TEUR 30,752.

This income is matched by interest expenses of TEUR 5,054 and tax expenses of TEUR 4,757.

Furthermore, income of TEUR 5,579 is included from the sale of a building in Singapore which was built as part of a customer contract in the prior year.

The income from the early payment of finance lease liabilities is mainly from amended interest conditions and is, however, matched by an interest expense as part of the revaluation of an interest swap (interest hedging instrument).

Income from the release of provisions is allocated to other operating income where the provisions were set up in prior periods against other operating expenses.

#### 7 Other operating expenses.

in TEUR	2004	2003
Exchange losses	12,075	13,404
Increase in allowances	12,853	3,128
Increase in provisions	2,292	3,268
Losses on disposals of fixed assets	1,687	2,224
Other taxes	1,045	1,180
Costs of services and rental	3,828	2,207
Cost of valuation of derivatives	1,212	2,125
Losses on deconsolidation	17,892	0
Restructuring costs	14,096	0
Other personnel expenses	2,637	1,243
Miscellaneous	3,218	8,804
	<b>72,835</b>	<b>37,583</b>

The loss on deconsolidation of TEUR 17,892 is wholly from the sale of the majority of M+W Zander Gebäudetechnik GmbH and its subsidiaries. The restructuring costs of TEUR 14,096 are also mainly related to the Gebäudetechnik unit in which capacities were reduced as part of a social plan and further redundancies.

Increases to bad debt allowances are only included under other operating expenses if these are outside of the ordinary activities of the company in question. In the fiscal year 2004 these primarily relate to the Clean Systems business division.

#### 8 Net investment income/expense.

in TEUR	2004	2003
Result from investments	- 723	- 515
Result from investments in associated companies	- 6,077	- 1,979
Write-downs on financial assets and long-term securities	- 3,602	- 21,680
	<b>- 10,402</b>	<b>- 24,174</b>

The result from investments in associated companies predominantly includes the losses of DEWB AG (DEWB) and Xtreme Technologies GmbH (Xtreme). The increase in losses in 2004 is due, above all, to the negative result of DEWB.

The decrease in write-downs on financial assets and long-term securities is mainly due to the write-down of a loan to DEWB of TEUR 14,287 which was only included in the prior year. The write-off was based on an obligation taken up in 2003 to transfer loan receivables of JENOPTIK AG to the free capital reserves in order to strengthen DEWB's equity without acquiring new shares.

**9 Net interest income/expense.**

in TEUR	2004	2003
Income from financial asset securities and loans	5,143	1,871
Other interest and similar income	5,789	7,691
Other interest and similar expenses		
Interest portion of leasing rate for finance lease	8,802	8,593
Interest portion of increase to pension provisions less interest on plan assets	3,891	6,016
Interest portion on compound interest on loans	1,570	84
Other interest and similar expenses	29,966	22,997
	<b>-33,297</b>	<b>-28,128</b>

**10 Income taxes.** Income taxes comprise the current taxes (paid or owed) on income in the individual countries as well as the deferred taxes. The calculation of the actual tax expense for the Jenoptik Group is subject to the tax rates applicable or announced at the balance sheet date.

Deferred taxes are calculated at the relevant national income tax rates. For domestic companies as at December 31, 2004 a corporation tax rate of 25 % (31.12.2003 25 %) plus solidarity levy of 5.5 % on the corporation tax liability charged and an effective trade tax rate of 12.53 % (31.12.2003 12.53%) were applied for calculating deferred taxes. Accounting for the solidarity levy and trade tax on income a tax rate of 38.91 % (2003 38.91 %) was determined for the calculation of deferred taxes for domestic companies. The temporary increase in the corporation tax rate from 25 % to 26.5 % in

2003 due to the Flood Victim Solidarity Law had no material significance in the consolidated financial statements and, thus, there was no change in the effective tax rate for 2003.

For foreign companies the calculation of deferred taxes is based on the tax rates applicable in each specific country.

Deferred taxes are accounted for as tax expenses or income in the statement of income unless they relate to items included in equity which do not impact income in which case they are also accounted for as part of equity with no impact on income.

According to their origin income taxes are classified as follows:

in TEUR	2004	2003
Income taxes		
Clean Systems Technologies	13,512	4,403
Photonics Technologies	675	587
JENOPTIK AG (Holding)	-3,011	0
Total	11,176	4,990
(of which out-of-period)	(-3,022)	(-1)
Deferred taxes		
On timing differences	14,175	-11,882
(of which out-of-period)	(0)	(1,639)
On losses carried forward	-6,974	9,479
Total	7,201	-2,403
Income taxes	18,377	2,587

At the balance sheet date the Jenoptik Group has unused tax losses carried forward of approx. EUR 428 million (31 December 2003 EUR 417 million) which can be set off against future profits. Within the immediate future it is expected that losses carried forward of EUR 88 million (31 December 2003 EUR 70 million) will be utilised. With regard to these losses a deferred tax asset has been accounted for amounting to EUR 34 million (31.12.2003 EUR 27 million). With regard to the remaining losses carried forward of EUR 340 million (31.12.2004 EUR 347 million) no deferred tax asset has been accounted for. The losses can be carried forward for an unlimited period of time.

The following deferred tax assets and liabilities have arisen from recognition and measurement differences on individual balance sheet items and on tax losses carried forward.

in TEUR	Deferred tax assets		Deferred tax liabilities	
	31.12.2004	31.12.2003	31.12.2004	31.12.2003
Intangible assets	2,608	5,723	4,143	4,114
Tangible assets	1,462	1,581	15,154	41,455
Financial assets	22,679	36,606	238	7,767
Inventories	513	1,706	1,712	1,182
Accounts receivable and other assets	2,000	11,306	9,487	7,731
Provisions	13,099	13,696	4,615	86
Liabilities	46,132	72,912	5,186	4,940
Gross value	88,493	143,530	40,535	67,275
(of which long-term)	(69,722)	(120,674)	(22,754)	(56,583)
Allowances	-14,687	-24,471	0	0
Offsetting	-46,959	-57,441	-46,959	-57,441
Consolidation	11,438	879	8,266	7,493
Tax losses carried forward	33,553	26,577	0	0
Balance sheet amount	71,838	89,074	1,842	17,327



The following table shows the tax reconciliation of the expected tax expense/income for the relevant fiscal year to the actual tax expense/income disclosed. In order to calculate the expected tax expense/income the tax rate valid for the fiscal year 2004 of 38.92 % (2003 38.91 %) was multiplied by the IFRS result before tax.

in TEUR	2004	2003
Earnings before tax	37,426	- 43,290
Expected tax expense/income at 38.91 %	14,562	- 16,845
Changes in expected tax rate		
Non-deductible expenses and tax-free income	23,073	- 8,179
Changes in allowances against deferred taxes	- 10,337	19,039
Permanent differences	- 524	11,229
Effects of tax rate differences	- 2,975	- 1,123
Effects of tax rate changes	- 326	- 1,949
Taxes from previous years	- 3,727	2,014
Exchange differences	- 587	- 1,923
Other tax effects	- 782	324
<b>Actual tax expense</b>	<b>18,377</b>	<b>2,587</b>

**11 Minority interests share of profit/loss.** The minority interest share of group earnings amounted to TEUR 6,227 (2003 TEUR 6,049). Of this TEUR 3,864 (2003 TEUR 4,130) relates to the Clean Systems business division. The other shares in results mainly related to property companies.

**12 Earnings per share.** Earnings per share represents the net profit divided by the weighted average number of shares outstanding.

In calculating the diluted earnings per share the dilution effects are accounted for in determining the weighted average of outstanding shares. The weighted average of outstanding shares is adjusted for the effect of the options granted in the convertible bond assuming all options are exercised.

	31. 12. 2004	31. 12. 2003
Net profit in TEUR	12,822	- 51,926
Weighted average outstanding shares	49,715,761	48,448,000
Earnings per share in euros	+ 0.26	- 1.07
Dilutive effects	885	0
Weighted average outstanding shares (diluted)	51,869,817	48,448,000
Earnings per share (diluted) in euros	+ 0.26	- 1.07

## NOTES TO THE BALANCE SHEET.

### 13 Intangible assets.

in TEUR	Development costs	Patents, trademarks, software, customer relations	Goodwill	Payments on account for intangible assets	Total
<b>Purchase and manufacturing cost and production cost</b>					
Balance as at 01.01.2004	5,824	48,975	73,863	393	129,055
Currency differences	0	9	- 147	0	- 138
Change in consolidated companies	0	- 907	7,768	0	6,861
Additions	498	7,129	0	2,375	10,002
Disposals	395	3,396	0	140	3,931
Reclassifications (+/-)	- 610	- 294	0	805	- 99
<b>Balance as at 31. 12. 2004</b>	<b>5,317</b>	<b>51,516</b>	<b>81,484</b>	<b>3,433</b>	<b>141,750</b>
<b>Depreciation, balance as at 01.01.2004</b>	<b>185</b>	<b>20,515</b>	<b>15,421</b>	<b>0</b>	<b>36,121</b>
Currency differences	0	21	- 26	0	- 5
Change in consolidated companies	0	- 527	- 1,161	0	- 1,688
Additions	1,302	9,171	42	0	10,515
Impairment	218	585	141	0	944
Disposals	218	2,947	0	0	3,165
Reclassifications (+/-)	0	- 85	0	0	- 85
<b>Balance as at 31. 12. 2004</b>	<b>1,487</b>	<b>26,733</b>	<b>14,417</b>	<b>0</b>	<b>42,637</b>
<b>Net book value as at 31. 12. 2004</b>	<b>3,830</b>	<b>24,783</b>	<b>67,067</b>	<b>3,433</b>	<b>99,113</b>
<b>Net book value as at 31. 12. 2003</b>	<b>5,639</b>	<b>28,460</b>	<b>58,442</b>	<b>393</b>	<b>92,934</b>

Apart from goodwill there are no intangible assets with an unde-fined useful life.

There are no restrictions on use of intangible assets.

As part of the opening balance sheet the goodwill offset against reserves under HGB before 1 January 2003 was not reversed in accordance with the simplification option in IFRS 1. Thus, exist-ing goodwill results almost exclusively from company acquisitions since 1 January 2003.

Goodwill capitalised relates mainly to goodwill from the pur-chase of DRAGEBA with its subsidiary WAHL in December 2003 amounting to TEUR 31,380 TEUR. 6,446 of the increase in goodwill in 2004 is also related to this acquisition and results from paying a

part of the purchase price in the fiscal year 2004 through issuing new JENOPTIK shares. The cash generating unit to which goodwill is allocated represents the subsidiary WAHL. For this cash generating unit an impairment test is carried out annually to determine whether there is any potential loss in value in goodwill which is not amortised ordinarily. The recoverable amount which is to be compared with the cash generating unit as part of the impairment test is determined by the value in use. The value in use is based on a risk-adjusted, market-oriented interest rate.

No impairment adjustment is required for the WAHL goodwill or for any other goodwill as at December 31, 2004.

#### 14 Tangible assets.

	Land, buildings	Technical equipment and machines	Other equip- ment, factory and office equipment	On-account payments and construction in progress	Total
in TEUR					
<b>Purchase and manufacturing costs</b>					
Balance as at 01.01.2004	193,349	81,668	125,095	3,702	403,814
Currency differences	- 182	- 475	- 502	5	- 1,154
Change in consolidated companies	- 4,036	- 575	- 8,726	0	- 13,337
Additions	8,588	7,565	16,831	2,425	35,409
Disposals	15,322	3,304	10,702	707	30,035
Reclassifications (+/-)	1,344	316	736	- 2,425	- 29
Balance as at 31.12.2004	183,741	85,195	122,732	3,000	394,668
<b>Depreciation, balance as at 01.01.2004</b>	35,021	39,280	77,007	297	151,605
Currency differences	- 46	- 225	- 239	- 1	- 511
Change in consolidated companies	- 1,219	- 428	- 6,623	0	- 8,270
Additions	5,290	9,280	18,446	0	33,016
Impairment	- 502	204	0	0	- 298
Disposals	1,188	2,461	8,210	35	11,894
Reclassifications (+/-)	0	- 9	94	0	85
Balance as at 31.12.2004	37,356	45,641	80,475	261	163,733
Net book value as at 31.12.2004	146,385	39,554	42,257	2,739	230,935
Net book value as at 31.12.2003	158,328	42,388	48,088	3,405	252,209

Disposals of land and buildings related mainly to the early release of the finance leasing contract with KORBEN Verwaltungsgesellschaft mbH & Co. Vermietungs KG, Grünewald (KORBEN). The reduction in fixed assets due to changes in the group of consolidated companies is mainly due to the deconsolidation of the Gebäudetechnik unit.

There are no restrictions on use of tangible assets.

An investment grant amounting to TEUR 2,153 was deducted from the acquisition costs of tangible assets.

There are no commitments for the purchase of tangible assets.

**15 Investment properties**

in TEUR	
<b>Purchase and manufacturing cost</b>	
<b>Balance as at 01.01.2004</b>	<b>164,279</b>
Currency differences	327
Additions	2,716
Disposals	88,115
Reclassifications (+/-)	128
<b>Balance as at 31. 12. 2004</b>	<b>79,335</b>
<b>Depreciation, balance as at 01. 01. 2004</b>	<b>19,186</b>
Additions	3,458
Disposals	6,510
<b>Balance as at 31. 12. 2004</b>	<b>16,134</b>
<b>Net book value as at 31. 12. 2004</b>	<b>63,201</b>
<b>Net book value as at 31. 12. 2003</b>	<b>145,093</b>

Investment properties amounting to TEUR 63,201 held as at December 31, 2004 mainly represent two building complexes in the town centre of Jena which were sold to third-party property funds between 1995 and 1997. Jenoptik is the main tenant of these properties and sub-lets them to third parties. Due to the long-term nature of the rental contract the buildings are classified as finance leases even though there is no repurchase obligation by Jenoptik at the end of the contract.

The valuation of investment properties is at carrying value amounting to TEUR 63,201 (31.12.2003 TEUR 145,093). The fair value is determined based on the discounted cash flow method. Under

this method the net rentals (excluding energy costs) are determined and discounted over the total remaining useful lives. The interest rate applied represents a normal market interest rate accounting for an inflation deduction and risk premium. In order to check the reasonableness of the valuation appraisal reports were obtained on an individual basis. The fair value of the investment properties thus calculated amounts to TEUR 65,078 (31.12.2003 TEUR 149,490).

At the end of the fiscal year 2004 the finance leasing relationship with KORBEN ended early due to cancellation of the rental agreement and the repurchase obligation. Accordingly investment properties amounting to TEUR 56,306 were disposed of from the Group balance sheet.

Furthermore, a building built in Singapore for a customer in 2003 was sold to the customer at the beginning of the current fiscal year. As a result investment properties decreased by TEUR 25,470.

Rental income from investment properties held at each year end amounted to TEUR 5,171 (2003 TEUR 9,609). Group sales additionally include rental income amounting to TEUR 4,431 from the company KORBEN Immobilien sold at the end of 2004.

The direct operating costs for the rented areas of the properties accounted for at each year end amounted to TEUR 6,439 (2003 TEUR 11,471) and for non-rented areas amounted to TEUR 116 (2003 TEUR 1,276).

## 16 Leasing.

### Finance leasing.

**The Group as lessee.** The assets which are used under finance leases are included in capitalised tangible assets at TEUR 34,590 (2003 TEUR 103,558), their purchase and manufacturing costs amount to TEUR 51,384 (2003 TEUR 121,578) at the balance sheet date.

These assets primarily consist of investment properties with a net book value of TEUR 30,377 (purchase and manufacturing costs TEUR 43,833).

For the buildings the present value of the minimum lease payments covers the main acquisition costs or legal ownership will be transferred at the end of the leasing term.

For buildings and equipment under finance leases purchase options mainly exist which should be exercised. The borderline loan interest rates on which the contracts are based vary, depending on market position and timing of the inception of the lease, between 5.968 % and 8.994 %.

In the fiscal year lease payments amounting to TEUR 12,625 have been charged against income.

Leasing payments due in the future can be seen in the following table:

TEUR	up to 1 year	2-5 years	more than 5 years	Total
Minimum lease payments	2,985	9,271	131,934	144,190
Interest portion included in payments	1,601	5,157	67,698	74,456
Present value	1,384	4,114	64,236	69,734

The present value of the minimum lease payments amounts to TEUR 69,734.

### Operating leasing.

**The Group as lessee.** Payments under leasing agreements amounting to TEUR 26,864 have been charged against income.

As at the balance sheet date the Group had open commitments from non-cancellable operating leases which are due as follows:

TEUR	Minimum lease payments from operating leases
Up to 1 year	20,612
2-5 years	33,079
More than 5 years	29,210
<b>Total</b>	<b>82,901</b>

**The Group as lessor.** Income from leasing fixed assets during the fiscal year amounted to TEUR 11,876 (2003 TEUR 12,088).

As at the balance sheet date the Group had agreed the following minimum lease payments with lessees:

TEUR	Minimum lease payments from operating leases
Up to 1 year	7,448
2-5 years	27,346
More than 5 years	6,577
<b>Total</b>	<b>41,371</b>

Rental income with no specified term is included at the amount of rental income until the earliest possible date for cancellation. Probable sub-letting of areas or extension options on rental contracts have not be included in the calculation.

**17 Shares in associated companies.** Shares in associated companies increased during the fiscal year from TEUR 18,159 to TEUR 33,523. Most of the increase (TEUR 17,842) was due to the "at equity" valuation of M+W Zander Gebäudetechnik GmbH.

**18 Financial assets.**

TEUR	Shares in affiliated companies	Loans to affiliated companies and participations	Participating interests	Long-term interests	Other loans	Total
<b>Purchase costs, balance as at 01.01.2004</b>	<b>31,266</b>	<b>30,818</b>	<b>23,455</b>	<b>89,470</b>	<b>40,218</b>	<b>215,227</b>
Currency differences	0	0	-1	0	0	-1
Change in consolidated companies	-197	-264	-320	0	0	-781
Additions	2,156	51,080	4,790	20	9,847	67,893
Disposals	2,969	779	1,197	53,095	915	58,955
Reclassifications (+/-)	1,374	-15,588	66	-66	0	-14,214
<b>Balance as at 31.12.2004</b>	<b>31,630</b>	<b>65,267</b>	<b>26,793</b>	<b>36,329</b>	<b>49,150</b>	<b>209,169</b>
<b>Depreciation, balance as at 01.01.2004</b>	<b>26,449</b>	<b>16,407</b>	<b>3,070</b>	<b>-17,073</b>	<b>19,195</b>	<b>48,048</b>
Additions	0	0	492	20	23,587	24,099
Disposals	2,216	35	140	-19,863	179	-17,293
Write-ups	0	0	-3,249	-9,307	910	-11,646
Reclassifications (+/-)	0	-12,564	20	-20	0	-12,564
<b>Balance as at 31.12.2004</b>	<b>24,233</b>	<b>3,808</b>	<b>6,691</b>	<b>12,097</b>	<b>41,693</b>	<b>88,522</b>
<b>Net book value as at 31.12.2004</b>	<b>7,397</b>	<b>61,459</b>	<b>20,102</b>	<b>24,232</b>	<b>7,457</b>	<b>120,647</b>
<b>Net book value as at 31.12.2003</b>	<b>4,817</b>	<b>14,411</b>	<b>20,385</b>	<b>106,543</b>	<b>21,023</b>	<b>167,179</b>

Of additions to loans to affiliated companies and investments TEUR 49,330 is due to the long-term portion of the loan to Fab36 which participated in the financing of the AMD chip factory in Dresden. The loan is secured by repayment plans and put options with AMD.

Disposals of long-term securities related to the sale of the sc300 participation. The purchase costs for these were TEUR 51,129 and depreciation for them was TEUR -19,863.

Furthermore, long-term securities include the securities of both consolidated special funds amounting to TEUR 22,238 (2003 TEUR 23,514). Special funds have a long-term investment strategy and mainly hold fixed interest securities.

All securities are available for sale in accordance with IAS 39.

A realised profit of TEUR 12,134 (2003 TEUR 0) was generated during the fiscal year from the sale of securities.



**19 Other non-current assets.** Other non-current assets include:

in TEUR	31.12.2004	31.12.2003
Derivatives	8,165	3,126
Receivable from sale of building	5,322	0
Reinsurance coverage	2,322	1,903
Miscellaneous	1,115	5,842
	<b>16,924</b>	<b>10,871</b>

The derivatives relate to forward exchange contracts which provide long-term protection against risks. The whole item of derivative financial instruments is described in more detail in note 33.

The receivable from the sale of building relates to the disposal of a building in Singapore as described in Note 6.

**20 Deferred taxes.** The development of the balance sheet item of deferred taxes is described under note 10.**21 Inventories.**

in TEUR	31.12.2004	31.12.2003
Raw materials and supplies	44,615	39,173
Work in progress	116,271	206,377
Finished goods and merchandise	15,752	17,035
Property held for disposal	91	90
Payments on account	7,450	8,066
	<b>184,179</b>	<b>270,741</b>

Fair value represents book value. Write-downs, in terms of gross value, amounted to TEUR 18,496 (2003 TEUR 31,571). The reduction in value is also due to the disposal of stock written off as part of the deconsolidation of Gebäudetechnik. From this the net realisable value amounted to TEUR 184,179 (2003 TEUR 270,741). Write-ups of previously written down assets amounted to TEUR 290.

**22 Short-term accounts receivable and other assets.**

in TEUR	31.12.2004	31.12.2003
Trade accounts receivable	316,097	388,828
Receivables due from long-term construction contracts	123,473	73,711
Receivables due from non-consolidated, affiliated companies	20,262	39,485
Receivables due from participating interests	45,888	9,788
Other current assets	52,549	52,620
	<b>558,269</b>	<b>564,432</b>

The fair values of trade accounts receivable are represented by their book values. Allowances of TEUR 15,091 have been accounted for.

Receivables due from long-term construction contracts less on-account payments received amounting to TEUR 123,473 (2003 TEUR 73,711) include customer-specific construction contracts with asset balances where manufacturing costs incurred, including profit portions, which exceed on-account payments received. The total of asset and liability balances of manufacturing costs,

including profit portions, for construction contracts disclosed under receivables or liabilities from long-term construction contracts amounts to TEUR 571,694 (2003 TEUR 530,479). During the fiscal year on-account payments received amounting to TEUR 545,157 (31.12.2003 TEUR 486,472) in total were offset against receivables or liabilities from long-term construction contracts.

Contract income amounted to TEUR 475,818 for the fiscal year.

Of the increase in receivables from investments an amount of TEUR 27,524 relates to the deconsolidation of the Gebäudetechnik unit. The receivables result from the cash management receivables consolidated until now. A further TEUR 4,500 relates to the short-term part of the shareholder receivables from Fab36.

For those other current assets disclosed there are no material ownership or availability restrictions. Bad debts are accounted for using allowances. Other current assets are predominately not subject to interest.

Other current assets include:

in TEUR	31.12.2004	31.12.2003
Other receivables from tax authorities	15,561	13,676
Insurance receivables	6,504	2,582
Prepayments	5,893	4,797
Compensation receivables	4,326	0
Derivatives	3,249	3,102
Loans to third parties	3,217	4,332
Subsidies receivable	1,726	1,139
Creditors with debtor balances	1,415	5,134
Other miscellaneous assets	10,658	17,858
	<b>52,549</b>	<b>52,620</b>

The following positive fair values arise from derivative financial instruments:

in TEUR	31.12.2004	31.12.2003
Transactions to hedge against		
Exchange rate risks from future payment flows (Cash flow hedges): Forward exchange contracts, long-term	8,165	3,126
Exchange rate risks from future payment flows (Cash flow hedges): Forward exchange contracts, short-term.	1,445	2,015
Forward exchange contracts without hedge accounting, short-term	597	1,072
Investment risks: Share options	1,191	0
Interest caps	16	15
Total short-term	3,249	3,102
<b>Total</b>	<b>11,414</b>	<b>6,228</b>

The whole item of derivative financial instruments is described in more detail in note 33.

### 23 Short-term securities. Securities available for sale

in TEUR	31.12.2004	31.12.2003
Fair value	1,367	4,248

The short-term securities represent securities “available for sale” which are measured at fair value. Changes in value are treated neutrally within equity until disposal.

**24 Cash and cash equivalents and restricted cash.**

in TEUR	31.12.2004	31.12.2003
Cheques, cash in hand, credit balances and funds due any time	145,046	106,820
Restricted cash	30,000	35,792
	<b>175,046</b>	<b>142,612</b>

Restricted cash relates to securities for a bank loan granted to one of the JENOPTIK AG companies consolidated "at equity". The restrictions will be lifted in line with the development of the repayment of the loan.

Due to the deconsolidation of the Gebäudetechnik unit cash in hand of TEUR 16,623 is no longer included in the consolidated balance sheet as at December 31, 2004.

**25 Shareholders' equity.** The development of JENOPTIK AG's equity is shown in the statement of movements in shareholders' equity.

**Subscribed capital.** Subscribed capital amounts to TEUR 135,290 and is divided into 52,034,651 bearer shares. The change in subscribed capital of TEUR 8,306 is due to a capital increase against contribution in kind by the issue of 3,194,651 no-par value bearer shares.

The Federal State of Thuringia holds 14.80 % of the shares in JENOPTIK AG at December 31, 2004 and Mrs Wahl-Multerer holds 5.83 %. Free float in JENOPTIK AG amounted to 79.37 % at the balance sheet date.

**Authorised capital.** By resolution of the annual general meeting on 9 June 2004 the executive board was authorised, with the approval of the supervisory board by 30 May 2009, to increase the nominal capital of the company by up to TEUR 30,000 through one or several issues of new no-par value bearer shares in exchange for cash and/or contributions in kind. The executive board is authorised, with the approval of the supervisory board, to exclude the subscription rights of shareholders in certain cases. The exclusion applies to fractional amounts, for capital increases through contributions in kind for purchasing companies and investments, for capital increases in exchange for cash contributions for the purpose of issuing shares to employees of JENOPTIK AG or of affiliated companies as well as for capital increases through cash contributions, where the proportion of new shares, including the exercise of other entitlements to exclude rights, does not exceed 10 % of the nominal capital in existence at the time of filing the authorised capital and, the issue price of the new shares is not materially below the stock exchange price.

**Conditional capital.** Nominal capital of up to TEUR 10,582, divided into 4,070,000 shares, is conditionally increased. The conditional increase will only be carried out if the owners of the subscription rights exercise these and the company does not grant its own shares to fulfil the subscription rights or as part of the existing authorisation increases nominal capital in exchange for a contribution.

Furthermore, basic capital is conditionally increased in connection with the convertible bond by up to TEUR 31,200 through the issue of up to 12,000,000 new no-par value bearer shares. Where own shares are not used the conditional increase will only be carried out where the holder or owner of option certificates or conversion rights exercise their options or conversion rights and/or the holders obliged to convert fulfil their duty to convert. Further details regarding convertible bonds are given under note 30.

The new shares participate in the profits for the fiscal year in which, at the time the conversion right is exercised, a profit distribution resolution has not yet been drafted by the annual general meeting.

**Capital reserve.** The capital reserve includes the premiums on issuing shares. During the fiscal year 2004 the capital reserve increased by TEUR 19,098 to TEUR 186,727 as part of the capital increase through the premium on the proportional nominal capital.

**Reserves.** Reserves comprise the results generated and not distributed by companies included in the consolidated financial statements. Additionally, reserves include the adjustments recorded from the first-time application of IFRS and the differences on capital consolidation which were offset against reserves up to December 31, 2002.

Movements in deferred taxes not impacting income reduced reserves by TEUR 686 in the fiscal year 2004.

Furthermore, changes in the value of securities available for sale to be accounted for without impacting income amounting to TEUR 13,431 are included in reserves. Likewise, the effective part of the change in value of derivatives for hedging cash flows to be recorded with no impact on income as part of hedge accounting is also included and amounts to TEUR 2,822.

**Own shares.** Own shares amounting to TEUR 48 (6,143 shares) are deducted from equity. In the prior year the amount offset was TEUR 599.

**26 Minority interests.** Minority interests in shareholders' equity mainly relate to the property companies LEUTRA SAALE and SAALEAUE as well as the minority interests in M+W ZANDER Holding AG.

**27 Provision for pensions and similar obligations.** Provisions for pensions are set up on the basis of provision plans for commitments for old-age, invalidity and death. The provisions by the Group vary depending on the legal, tax and economic situation of each country and depend, as a rule, on the length of service and the salary of the employee. Pension provision within the Group is based on both defined contribution and defined benefit plans. Under defined contribution plans the company pays contributions on the basis of statutory or contractual conditions or on a voluntary basis to state or private pension plans.

Once the contribution has been paid there are no further obligations for the company.

Most pension plans are based on defined benefit plans whereby these are distinguished between provision-based and externally financed pension plans.

Pension provisions for the benefit obligations are determined in accordance with the projected unit credit method, which is common internationally, in accordance with IAS 19. Under this method future commitments are valued at the balance sheet date according to proportional benefits earned. As part of this valuation trend assumptions are accounted for the relevant values which affect the amount of the benefit. For all benefit systems actuarial calculations are required.

In the years 2001 and 2002 material pensions were transferred to JENOPTIK Pension Trust e.V. (Pension Trust) by way of cumulative assumption of liabilities.

The plan assets held in the Pension Trust are compared to the pension commitments in accordance with IAS 19.

## Pension provisions:

in TEUR	31. 12. 2004	31. 12. 2003
Present value of funded obligations	69,105	63,274
Present value of unfunded obligations	54,310	56,821
Fair value of plan assets	- 58,180	- 60,011
Present value of net liability	65,235	60,084
Actuarial gains/losses not accounted for	- 8,921	- 390
<b>Net liability recorded in the balance sheet</b>	<b>56,314</b>	<b>59,694</b>

## Change in net liability recognised in the balance sheet:

in TEUR	31. 12. 2004	31. 12. 2003
<b>Net liability as at 01. 01. 2004</b>	<b>59,694</b>	<b>50,326</b>
Net expense recognised in the consolidated statement of income	7,033	10,062
Transfers	- 7,119	2,313
Pension payments	- 3,294	- 3,007
<b>Net liability as at 31. 12. 2004</b>	<b>56,314</b>	<b>59,694</b>

## Net expense recognised in the consolidated statement of income:

in TEUR	31. 12. 2004	31. 12. 2003
Current service cost	3,061	4,046
Interest cost	6,166	6,016
Expected return on plan assets	- 2,275	0
Cost of claims purchased in the fiscal year	81	0
<b>Total expense</b>	<b>7,033</b>	<b>10,062</b>

## Actual gains on plan assets:

in TEUR	31. 12. 2004	31. 12. 2003
<b>Actual gains</b>	<b>- 1,832</b>	<b>- 571</b>

## Actuarial assumptions:

in %	31. 12. 2004	31. 12. 2003
Discount rate as at 31. 12. 2004	5.00	5.25
Return on plan assets	3.79	0.00
Future salary increases	2.75	2.75
Future pension increases	1.75	1.75

Actuarial gains or losses result from changes in balances and differences in current trends (e.g. salary increases, pension increases) compared to the calculation assumptions. In accordance with IAS 19 this amount is recorded over the future average remaining service lives of the employees and recognised as income or expense if, at the beginning of the fiscal year the net cumulative unrecognised actuarial gains or losses exceed 10 % of the higher of the pension commitment, or the fair value of plan assets at the beginning of the fiscal year.

The above amounts are included in the personnel costs of the functional areas, interest expense on obligations is included in other net interest income/expense under note 9.

**28 Tax provisions.** Taxes are described in detail under note 10.

**29 Other provisions.** The development of other provisions and accruals is as follows:

	Personnel	Warranties	Possible losses	Legal and litigation costs	Obligatio from sale of property	Compensation claims	Miscellaneous	Total
in TEUR								
<b>Balance as at 01.01.2004</b>	<b>32,538</b>	<b>10,291</b>	<b>4,755</b>	<b>3,977</b>	<b>0</b>	<b>0</b>	<b>41,438</b>	<b>92,999</b>
Currency differences	- 109	- 75	- 25	- 13	0	0	- 72	- 294
Change in consolidated companies	- 6,066	- 851	- 2,406	- 1,453	0	0	- 42,894	- 53,670
Increases	32,404	11,084	10,247	3,875	4,903	4,326	30,272	97,111
Compound interest	183	0	99	0	0	0	- 296	- 14
Utilisation	16,120	3,873	3,698	807	0	0	12,180	36,678
Release	1,530	1,905	786	1,017	0	0	5,683	10,921
Reclassifications (+/-)	- 6,914	0	13	0	0	0	6,901	0
<b>Balance as at 31.12.2004</b>	<b>34,386</b>	<b>14,671</b>	<b>8,199</b>	<b>4,562</b>	<b>4,903</b>	<b>4,326</b>	<b>17,486</b>	<b>88,533</b>

Personnel provisions include in particular non-current service awards, flexi-time credits, pre-retirement schemes, severance payments and similar obligations.

Legal and litigation costs are mainly related to three cases amounting to TEUR 4,562 which are described in detail in the Group management report.

Miscellaneous provisions relate to many recognisable specific risks and uncertain obligations which are accounted for at the probable amount required to settle them.

The expected payment terms of other provisions are as follows:

in TEUR	up to 1 year	2-5 years	more than 5 years	31.12.2004
Personnel provisions	25,245	9,007	134	34,386
Warranty provisions	13,003	1,668	0	14,671
Possible losses on open transactions	7,595	604	0	8,199
Legal and litigation costs	3,641	921	0	4,562
Obligation from property sales	0	0	4,903	4,903
Provision for compensation claims	4,326	0	0	4,326
Miscellaneous provisions	14,068	2,919	499	17,486
	<b>67,878</b>	<b>15,119</b>	<b>5,536</b>	<b>88,533</b>



**30 Financial liabilities.** Details of current and non-current financial liabilities can be seen in the following table:

	up to 1 year	2–5 years	more than 5 years	31.12.2004
Bonds (2003)	0 (15,000)	56,436 (0)	143,642 (142,843)	200,078 (157,843)
Bank liabilities (2003)	73,818 (40,041)	10,832 (107,033)	60,430 (50,072)	145,080 (197,146)
Liabilities on bills of exchange (2003)	366 (1,068)	0 (0)	0 (0)	366 (1,068)
Liabilities from finance leases (2003)	1,278 (1,296)	4,220 (5,673)	64,236 (156,312)	69,734 (163,281)
<b>Total (2003)</b>	<b>75,462 (57,405)</b>	<b>71,488 (112,706)</b>	<b>268,308 (349,227)</b>	<b>415,258 (519,338)</b>

Of the liabilities disclosed in the Group balance sheet TEUR 23,235 in total are secured by mortgage. The security relates to the liabilities of the M+W Zander Group.

Bonds comprise the following:

	Nominal value (in EUR million)	Weighted average remaining term (in years)	Weighted average effective interest (in %)
Senior bond	150.0	5.9	8.834
Convertible bond	62.1	4.6	5.775

The fixed interest security ("Senior bond") was issued on November 6, 2003 with a nominal volume of TEUR 150,000. The payment amount was 98.678 % of the nominal volume. This fixed interest security has a term of 7 years and attracts interest at a nominal rate of 7.875 % until it matures on November 15, 2010. Accounting for transaction costs the effective interest rate amounts to 8.834 %. Before November 15, 2006 JENOPTIK AG may repurchase up to 35 % of the bond volume, for a repurchase price already agreed, using funds from carrying out one or several

capital increases for cash. Furthermore, as from 15 November 2007 JENOPTIK AG can repay part of or the whole bond early at a repurchase price already agreed.

With effect from July 23, 2004 a convertible bond was issued amounting to TEUR 62,100. The term of the convertible bond amounts to 5 years in units of TEUR 10 each. The conversion right into shares of JENOPTIK AG can be exercised under certain conditions from September 1, 2004 until July 9, 2009 at a conversion price of EUR 12.7165. The interest coupon amounts to 2.5 % and is due annually, starting from July 23, 2005. The repayment value at the end of the term (July 23, 2009) amounts to TEUR 63,333. Repayment of the convertible bond can be made at a share price of EUR 7.63 per share as opted by the company (so-called soft mandatory) using up to 4,833,419 shares. Only any remaining value (at share prices below EUR 12.7165 per share) has to be paid in cash. The convertible bond can be cancelled at any time by JENOPTIK AG from August 23, 2007 if the share price of JENOPTIK AG exceeds 135 % of the conversion price for a period of 20 of 30 consecutive stock exchange trading days before the day of the announcement of the repayment. A premature repayment of the convertible bond can only be made via shares.

The division of the convertible bond into equity and borrowing components was made on the issue date. The market value of the borrowing component was determined by discounting the cash flows applying an interest rate common to the market for a

fixed interest bond without conversion options of 5.775 %. The equity component is the resulting differences between the nominal volume of the convertible bond and the market value of the borrowing component. The equity component amounting to TEUR 4,907 and transaction costs of TEUR 1,430 are included in equity.

In the subsequent periods borrowings components are accounted for at amortised acquisition costs applying the effective interest method. The equity components remain unchanged.

As at December 31, 2004 JENOPTIK AG has access to credit lines amounting to TEUR 208,951, whereby TEUR 99,039 is not utilised.

Normal market interest rates have been agreed for liabilities to affiliated and associated companies.

Detailed information regarding hedging of existing interest risks is given under note 33.

**31 Other non-current liabilities.** Other non-current liabilities comprise:

in TEUR	31.12.2004	31.12.2003
Non-current accruals	17,376	17,604
Pensions JENOPTIK-Vermögens-verwaltungsgesellschaft	15,738	15,738
Derivatives	145	92
Borrowings building Singapore	0	19,833
Miscellaneous non-current liabilities	699	4,963
	<b>33,958</b>	<b>58,230</b>

The non-current accruals include interim profits on properties amounting to TEUR 16,105 (2003 TEUR 17,344) which are allocated on a straight-line basis over the remaining term of the leasing contract.

Obligations from the transfer of pensions to the Pension Trust amount to TEUR 15,738 (31.12.2003 TEUR 15,738). The payment of the liability has been deferred until December 31, 2020 and will then be repaid on a straight line basis by 2064. Interest on this liability amounts to 7.91 % p.a.

**32 Other current liabilities.** This item includes:

in TEUR	31.12.2004	31.12.2003
Liabilities from payments received on-account	72,808	127,473
Trade accounts payable	278,019	342,516
Liabilities for long-term construction contracts	96,936	29,704
Liabilities to affiliated companies	9,803	15,603
Liabilities to participating interests	17,892	1,275
Miscellaneous current liabilities	99,497	121,810
	<b>574,955</b>	<b>638,381</b>

Of the increase in liabilities to participating interests TEUR 15,219 results from the liabilities consolidated until now from the deconsolidated Gebäudetechnik unit.

in TEUR	31.12.2004	31.12.2003
Other liabilities from taxes	41,426	28,062
Liabilities to employees	9,167	17,461
Other liabilities from social security	7,732	11,206
Purchase price liabilities	4,255	21,915
Derivatives	5,695	2,774
Liabilities to Jenoptik Vermögens-verwaltungsgesellschaft (Pension Trust)	4,240	0
Financial liabilities to third parties	4,639	2,190
Accruals	3,116	2,315
Interest liabilities from financial liabilities	2,807	2,358
Other liabilities for insurance premiums	2,430	0
Liabilities to employees' accident insurance	2,356	872
Miscellaneous liabilities	11,634	32,657
	<b>99,497</b>	<b>121,810</b>

The following negative fair values arise from derivative financial instruments:

in TEUR	31. 12. 2004	31. 12. 2003
Transactions to hedge against		
Exchange rate risks from future payment flows (Cash flow hedges): Forward exchange contracts, long-term	145	92
Exchange rate risks from future payment flows (Cash flow hedges): Forward exchange contracts, short-term	221	37
Forward exchange contracts without hedge accounting	1	71
Swaps	4,671	2,666
Options	802	0
Total short-term	5,695	2,774
<b>Total</b>	<b>5,840</b>	<b>2,866</b>

The whole item of derivative financial instruments is described in more detail in note 33.

**Group cash flow statement.** The cash and cash equivalents include exclusively payment means recognised in the balance sheet.

The cash flow statement provides information on cash flows, separately for cash flows from/used in operating activities, from investing activities and from financing activities. Cash flow from operating activities is indirectly derived starting from the earnings before tax. The earnings before tax are adjusted for non-cash expenses (mainly depreciation) and income. Cash flow from operating activities is calculated after accounting for changes in working capital. Cash flow from operating activities increased by 56.4 % to TEUR 100,757 (2003 TEUR 64,415). The reason for this is above all the higher earnings before tax by TEUR 80,716. In order to obtain cash flow from/used in operating activities, from the profits on disposal of fixed assets, which amounted to TEUR 38,187

(2003 TEUR 1,379) in 2004, are deducted. The changes in the balance sheet due to the deconsolidation of the Gebäudetechnik unit have been eliminated in the cash flow statement. The largest item in the other non-cash expenses is the deconsolidation loss from the Gebäudetechnik unit amounting to TEUR 17,892. Furthermore, the non-cash portions of the “at equity” results are accounted for here.

Cash flow used in investing activities amounts to TEUR – 15,232 (2003 TEUR – 78,976). Cash receipts on the disposal of financial assets, which rose from TEUR 47,149 to TEUR 95,821, mainly include the receipts from the sale of sc300. Receipts from the disposal of consolidated companies are negative since on selling the Gebäudetechnik unit cash and bank balances were removed which exceeded the purchase price by TEUR 16,622. Payments for investments in financial assets rose to TEUR 65,325 (2003 TEUR 36,598). The most important addition is the shareholder loan to Fab36 which has invested in the new AMD chip factory in Dresden as part of a financing structure.

Investing activities comprise, in addition to tangible and financial assets, the addition of capitalised development expenses.

In addition to cash outflows from dividend payments and the repayment of loans, financing activities include income from the granting of bonds as well as changes in other financial activities. Cash inflows from the granting of bonds and loans amounted to TEUR 101,868 (2003 TEUR 157,968). The largest single item here is the issue of the convertible bond which contains a borrowing element amounting to TEUR 55,764. Receipts from increases to equity of TEUR 4,906 comprise the equity components of the convertible bond. Both the company bond in 2003 and the convertible bond in 2004 were used mainly to repay other loans – the payment for repayment of bonds and loans amounted to TEUR 109,470 (2003 TEUR 101,329).

Changes in balance sheet items used in the development of the cash flow statement are not directly derivable from the balance sheet since effects of foreign currency exchange and changes in companies consolidated are non-cash and are eliminated.

## OTHER NOTES.

### 33 Financial instruments.

#### Hedging policy and risks.

As part of its operating activities and in its financing activities the Jenoptik Group is exposed in particular to exchange rate and interest rate fluctuations. The company's policy is to eliminate or reduce these risks by entering into hedging transactions. All hedging measures are coordinated and performed centrally by the Group treasury.

**Hedging guidelines.** Guidelines exist for the foreign currency and interest hedging policies across the Group which are based on the minimum requirements for performance of trading transactions by the banks as issued by the Federal Office for Monitoring Financial Services.

Large national and international banks whose credit standing is constantly checked by leading rating agencies, act as partners for entering into hedging transactions.

**Currency risk.** In order to hedge against currency risk forward exchange contracts, foreign exchange options and combined interest and currency swaps are used. These transactions relate to the hedging of major cash flows in foreign currency from the operating business (in particular sales).

The Jenoptik Group hedges planned sales and material purchases in foreign currency on a net basis using forward exchange contracts and currency options, depending on estimation of the market. Hedging in the fiscal year 2004 mainly covered the US Dollar and British Pound.

**Interest risk.** An interest risk, i.e. potential fluctuations in the value of a financial instrument based on changes in market interest rates, is a threat above all for medium and long-term fixed interest receivables and liabilities. In order to hedge interest swaps, interest caps, combined interest/currency swaps and interest contracts are entered into depending on the market situation.

If financial funds are passed on to subsidiaries within the Jenoptik Group these are structured in line with refinancing.

**Liquidity risk.** A liquidity forecast based on a fixed period of time in the future, credit lines available but not fully utilised within the Jenoptik Group and availability of constant issue programmes worldwide ensure that liquidity is always available.

**Default risk.** Default risk for financial assets is inherent in the danger of the default of a partner and, therefore, as a maximum at the amount of the positive current values due to the relevant contracting party. The risk from the originating financial instrument is covered by the allowance for bad debts. Since derivative financial instruments are only taken up with large banks and, as part of risk management, limits are set for each contracting party, the actual default risk is low.

#### Derivative financial instruments.

**Currency derivatives.** At the balance sheet date the value of outstanding forward exchange contract transactions entered into by the Group amounted to:

in TEUR	31.12.2004	31.12.2003
Forward currency contracts:		
USD/EUR-sales	50,990	67,470
USD/EUR-purchases	1,662	819
GBP/EUR-sales	193	0
GBP/EUR-purchases	668	938
EUR/SGD-sales	1,797	167
Taiwan Dollar-sales	0	2,629
	<b>55,310</b>	<b>72,023</b>

The hedging of each underlying transaction is performed by a cash flow hedge (securing the fluctuations in future payment flows). The underlying transactions mainly relate to the sales of products. The risk hedged is always the currency risk.

The agreements serve to hedge significant currency exchange rate risks in the years 2005 and 2006 and are renewed as necessary.

The M+W Zander Group is excluded from hedging.

The M+W Zander Group has chosen not to apply hedge accounting in accordance with IAS 39. A profit or loss arising on the market value changes of a derivative financial instrument should be taken to the income statement immediately. With regard to the hedged risk with effect from commencement of the hedge, the underlying transaction should also be taken to the income statement. The net profit for the year has been charged with TEUR 556 from changes in fair value from currency derivatives,

As at December 31, 2004 the fair values of the Group currency derivatives amounted to TEUR 9,838 (2003 TEUR 5,809) These amounts are based on market values confirmed by banks.

The fair values of currency derivatives amounting to TEUR 8,060 (2003 TEUR 4,737), which are for hedging cash flow and analysed as effective, were accounted for in equity.

#### Options.

**Put options of the M+W Zander Group.** The put options are to hedge the risk of investment in Fab36. These represent so-called American options which enable constant exercise during their term and are, therefore, classified as current assets. The term of the put options runs until April 1, 2008. The exercise rate amounts to USD 5.00 (agreed translation rate 1 USD/1 EUR).

The fair value and book value of the options amount to TEUR 1,191 as at December 31, 2004. Acquisition costs amounted to TEUR 1,610. The change in fair value of TEUR 419 was charged against income.

**Put options of JENOPTIK AG.** JENOPTIK AG owns a put option via DEWB shares in which it acts as taker. The term of the put option runs until February 28, 2005. The exercise rate amounts to EUR 6.95.

The fair value and book value of the option amounted to TEUR 802 as at December 31, 2004. The change in fair value of TEUR 89 was charged against income.

#### Interest swap.

Interest swap 1 (fixed interest payer)	TEUR 43,393 (2003 TEUR 43,393)
Term	Dec. 30, 2004 – Dec. 30, 2009
Fixed interest rate	5.65 %

The interest swap was purchased in order to maintain a future interest risk from the payment of leasing instalments with a variable externally financed portion from December 30, 2004 at a level of 5.65 % for five years.

The fair value of the swaps as at December 31, 2004 amounts to TEUR – 4,657 (2003 TEUR – 2,585).

The interest swap has, after the premature release of finance lease KORBEN no effective hedging connection with an underlying transaction and, therefore, impacts income. Currently this interest swap is being used to reduce the interest risks of other variable financing transactions.

Interest swap 2 (fixed interest payer)	TUSD 3,000 (2003 TUSD 3,000)
Term	June 19, 2002 – June 20, 2005
Fixed interest rate	3.99 %

The interest swap was purchased in order to maintain a future interest risk from the payment of credit interest at a maximum interest level of 3.99 % p.a. for three years.

The fair value of the swap as at December 31, 2004 amounted to TEUR – 14 (2003 TEUR – 81). These amounts are based on market values at the balance sheet date as confirmed by banks.

**Interest caps.** Interest caps are to minimise the risk of variable interest charges on loans.

The following interest caps have been accounted for:

Interest cap 1	TEUR 2,556 (2003 TEUR 2,556)
Term	Aug. 1, 2000 – Aug. 1, 2007
Maximum interest rate	6.00 %

The fair value and the book value of the cap as at December 31, 2004 amounted to TEUR 0.3 (2003 TEUR 5).

Interest cap 2	TEUR 2,556 (2003 TEUR 2,556)
Term	Dec. 16, 1997 – Dec. 18, 2007
Maximum interest rate	5.50 %

The fair value and the book value of the cap as at December 31, 2004 amounted to TEUR 1.5 (2003 TEUR 10).

Interest cap 3	TEUR 8,000 (2003 TEUR 0)
Term	March 31, 2004 – Dec. 31, 2008
Maximum interest rate	4.00 %

The fair value and the book value of the cap as at December 31, 2004 amounted to TEUR 14 (2003 TEUR 0).

The market values of the derivative volumes are determined using market data at the balance sheet date.

### 34 Commitments and contingent liabilities.

in TEUR	31. 12. 2004	31. 12. 2003
Liabilities from guarantees	94,197	83,487
Other contingent liabilities	10,454	4,409
	<b>104,651</b>	<b>87,896</b>

Of the guarantees TEUR 35,000 related to a guarantee for the associated company DEWB and TEUR 28,016 to the associated company M+W Zander Gebäudetechnik GmbH. Furthermore, there is a guarantee for warranty contracts amounting to TEUR 19,999 for the Jena clinic. Furthermore, M+W Zander Gebäudetechnik GmbH, which was deconsolidated as at December 31, 2004, uses lines of guarantee from M+W Zander Facility Engineering GmbH amounting to TEUR 91,292.

**35 Other financial commitments.** Financial commitments from rental and leasing contracts are described in note 16.

Additionally, there are other financial commitments on loan contracts for loan instalments not yet paid out amounting to TEUR 1,674 and from purchase orders of TEUR 31,314.

There is a commitment to the Sparkasse Jena-Saale-Holzland, Jena for the adoption of a loan receivable amounting to TEUR 5,000 plus interest incurred up to the time of issue. The earliest possible date of issue is June 30, 2006 and this depends on the maintenance of a two-month term.

**36 Legal disputes.** JENOPTIK AG or one of its Group companies are involved in several court or arbitration cases which have a substantial influence on the economic position of the Group.

For more information on pending legal disputes we refer to the section “Legal risks” in the Group management report.

For any potential charges from court or arbitration cases adequate provisions have been accounted for in the relevant Group companies for litigation risks and litigation costs where these are for events before the balance sheet date and the probability of an outflow of economic resources is estimated by the legal representatives of the company as being more than 50 %. Adequate insurance coverage exists.

**37 Post balance sheet events.** The executive board authorised the financial statements on March 23, 2005 for approval by the supervisory board.

**38 Related party disclosures according to IAS 24.** Related parties are defined in IAS 24 as entities or people which/who control or are controlled by the Jenoptik Group to the extent that these are not already included in the consolidated financial statements as consolidated companies. Control exists if a shareholder holds more than half of the voting rights in JENOPTIK AG or on the basis of the constitutional conditions or contractual agreement has the possibility to direct the financial and business policies of the management of the Jenoptik Group.

All business transactions with non-consolidated subsidiaries, joint ventures and associated companies are undertaken under normal market conditions.

Members of the executive board and supervisory board of JENOPTIK AG are members in supervisory boards in other companies with which JENOPTIK AG has relationships as part of its normal operating activities. All transactions with these companies are conducted under conditions which are normal between unrelated parties.

Remuneration of members of the supervisory and executive boards amounts to TEUR 1,553 in total.

Remuneration of members of the supervisory and executive boards comprises entirely of short-term benefits due to employees.



## COMMENTS ON THE EFFECTS OF CONVERSION FROM HGB TO IFRS (RECONCILIATION).

### Reconciliation of profits and losses for 2003.

		HGB		IFRS
in TEUR	Note No.		Effects of conversion to IFRS	
Sales	39	1,982,199	- 60,214	1,921,985
Cost of sales	39	1,784,438	- 66,700	1,717,738
<b>Gross profit</b>		<b>197,761</b>	<b>6,486</b>	<b>204,247</b>
Research and development expenses	40	31,390	- 3,032	28,358
Selling expenses		68,225	- 464	67,761
General administrative expenses		112,906	1,979	114,885
Other operating income	41	65,493	- 12,141	53,352
Other operating expenses	42	51,014	- 13,431	37,583
<b>Result from operating activities</b>		<b>- 281</b>	<b>9,293</b>	<b>9,012</b>
Net investment income/expense	43	- 10,843	- 13,331	- 24,174
Net interest income/expense	44	- 5,923	- 22,205	- 28,128
<b>Financial result</b>		<b>- 16,766</b>	<b>- 35,536</b>	<b>- 52,302</b>
<b>Earnings before tax</b>		<b>- 17,047</b>	<b>- 26,243</b>	<b>- 43,290</b>
<b>Extraordinary result</b>	45	<b>- 2,531</b>	<b>2,531</b>	<b>0</b>
Income taxes		4,853	137	4,990
Deferred taxes		0	- 2,403	- 2,403
Other taxes*		1,358	- 1,358	0
<b>Earnings after tax</b>		<b>- 25,789</b>	<b>- 20,088</b>	<b>- 45,877</b>

\* in IFRS disclosed under other operating expenses

The transition to IFRS took place on January 1, 2003.

Comments on the transition from HGB to IFRS are made below.

## ASSETS

		HGB		IFRS	HGB		IFRS
in TEUR	Note No.	31. 12. 2002	Effects of conversion	31. 12. 2002	31. 12. 2003	Effects of conversion	31. 12. 2003
<b>Non-current assets</b>		<b>361,224</b>	<b>263,907</b>	<b>625,131</b>	<b>487,850</b>	<b>287,669</b>	<b>775,519</b>
Intangible assets	46	27,179	2,075	29,254	29,700	63,234	92,934
Tangible assets	47	133,642	109,104	242,746	140,473	111,736	252,209
Investment properties	47	0	115,809	115,809	0	145,093	145,093
Shares in associated companies		13,721	0	13,721	16,699	1,460	18,159
Financial assets	48	186,682	-47,701	138,981	300,978	-133,799	167,179
Other non-current assets	49	0	3,046	3,046	0	10,871	10,871
Deferred tax assets	50	0	81,574	81,574	0	89,074	89,074
<b>Current assets</b>		<b>895,964</b>	<b>109,873</b>	<b>1,005,837</b>	<b>956,639</b>	<b>25,394</b>	<b>982,033</b>
Inventories	51	141,541	153,779	295,320	246,686	24,055	270,741
Accounts receivable and other assets	52	619,443	-41,677	577,766	572,630	-8,198	564,432
Securities	53	10,172	-7,103	3,069	4,649	-401	4,248
Cash and cash equivalents	54	124,808	-59,395	65,413	132,674	-25,854	106,820
Restricted cash	54	0	64,269	64,269	0	35,792	35,792
<b>Total assets</b>		<b>1,257,188</b>	<b>373,780</b>	<b>1,630,968</b>	<b>1,444,489</b>	<b>313,063</b>	<b>1,757,552</b>

## TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES

in TEUR	Note No.	31. 12. 2002	Effects of conversion	31. 12. 2002	31. 12. 2003	Effects of conversion	31. 12. 2003
<b>Shareholders' equity</b>	59	<b>430,604</b>	<b>-78,852</b>	<b>351,752</b>	<b>396,914</b>	<b>-37,150</b>	<b>359,764</b>
Subscribed capital		105,820	0	105,820	126,984	0	126,984
Capital reserve		129,865	12,712	142,577	121,512	46,117	167,629
Other reserves		198,114	-127,668	70,446	144,387	-115,030	29,357
Own shares held		0	-7,038	-7,038	0	-599	-599
Minority interests		-3,195	43,142	39,947	4,031	32,362	36,393
<b>Non-current liabilities</b>		<b>128,543</b>	<b>299,666</b>	<b>428,209</b>	<b>289,838</b>	<b>313,162</b>	<b>603,000</b>
Pension provisions	55	41,665	9,126	50,791	43,247	16,447	59,694
Other non-current provisions	56	0	23,987	23,987	0	5,816	5,816
Non-current financial liabilities	57	70,494	242,690	313,184	226,233	235,700	461,933
Other non-current liabilities	58	16,384	18,515	34,899	20,358	37,872	58,230
Deferred tax liabilities	50	0	5,348	5,348	0	17,327	17,327
<b>Current liabilities</b>		<b>698,041</b>	<b>152,966</b>	<b>851,007</b>	<b>757,737</b>	<b>37,051</b>	<b>794,788</b>
Tax provisions		8,611	1,325	9,936	9,349	2,470	11,819
Other current provisions	56	277,031	-219,912	57,119	360,662	-273,479	87,183
Current financial liabilities	57	134,263	13,542	147,805	36,410	19,927	56,337
Other current liabilities	58	278,136	358,011	636,147	351,316	288,133	639,449
<b>Total shareholders' equity and liabilities</b>		<b>1,257,188</b>	<b>373,780</b>	<b>1,630,968</b>	<b>1,444,489</b>	<b>313,063</b>	<b>1,757,552</b>

**39 Sales and cost of sales.** Sales and cost of sales are lower in 2003 for IFRS compared to HGB mainly due to the accounting for long-term construction contracts.

**40 Research and development expenses.** Due to the capitalisation of development expenses under IFRS the research and development expenses are lower in comparison to the HGB financial statements for 2003.

**41 Other operating income.** Other operating income in the IFRS financial statements for 2003 is lower than in HGB by TEUR 12,141. The reason for the reduction is, firstly, the deduction of government grants from the acquisition costs of the appropriate assets and, secondly, the release of provisions and allowances in the functional costs in which they were originally provided.

**42 Other operating expenses.** Other operating expenses under IFRS are TEUR 14,789 lower than in the comparable HGB financial statements for 2003. The lower other operating expenses in IFRS are due to the different treatment of the external costs of TEUR 8,196 for the issue of the convertible bond which are not included in other operating expenses under IFRS. An effect in the other direction results from the merger loss of TEUR 2,351 included in other operating expenses under IFRS but disclosed as an extraordinary expense under HGB.

**43 Net investment income/expense.** The net investment expense is lower in total by TEUR 13,331 compared to the HGB financial statements for 2003. The main reason for this is the write-down of the loan to DEWB of TEUR 14,287 under IFRS.

**44 Net interest income/expense.** The lower net interest expense by TEUR 22,205 under IFRS is mainly due to the extension in the companies consolidated. The interest expense of the property fund as well as of sc300 were particularly significant. Furthermore, the interest expenses from finance lease of TEUR 8,593 are charged against net interest under IFRS.

**45 Extraordinary result.** There is no extraordinary result under IFRS. Accordingly, the items under the extraordinary result for HGB are disclosed under other operating expenses for IFRS.

## RECONCILIATION OF THE BALANCE SHEET ITEMS TO THE OPENING BALANCE SHEET JANUARY 1, 2003.

**46 Intangible assets.** In accordance with HGB intangible assets amounted to TEUR 27,179 as at December 31, 2002. According to IFRS intangible assets were TEUR 2,075 higher and amounted to TEUR 29,254.

As part of the first-time consolidation of Teraport GmbH, Stuttgart goodwill of TEUR 5,804 and patents and software of TEUR 6,022 were capitalised under IFRS. Under HGB the goodwill was offset against reserves.

The intangible assets under IFRS were reduced by impairment of a customer list capitalised under HGB amounting to TEUR 14,260.

Development expenses capitalised under IFRS increased intangible assets by TEUR 2,613. Adjustments to useful lives and depreciation methods led to an increase in intangible assets of TEUR 1,070.

As part of the opening balance sheet the goodwill offset against reserves under HGB before January 1, 2003 was not reversed in accordance with the simplification option in IFRS 1.

**47 Tangible assets including investment properties.** Tangible assets and investment properties amounted to TEUR 133,642 in accordance with HGB and TEUR 358,555 in accordance with IFRS as at December 31, 2002. Thus, these were TEUR 224,913 higher under IFRS than under HGB.

This is mainly due to the extended number of consolidated companies under IFRS as well as the property leasing agreements classified as finance leases under IFRS.

For tax and legal liability reasons the Jenoptik Group has transferred some of its properties into limited partnerships (property funds), which are not consolidated under HGB since JENOPTIK AG is not general partner in these.

In the IFRS financial statements the property companies SAALAEUE and LEUTRA SAALE are fully consolidated. JENOPTIK AG is limited partner of both companies. By being granted the right of use of the rental property as main tenant and the right to sub-let the rental object Jenoptik or rather JORENT, which belongs 100 % to JENOPTIK AG, has the majority of the benefits from the business activities of SAALAEUE and LEUTRA SAALE. Since the objects of SAALAEUE and LEUTRA SAALE mainly serve Jenoptik the conditions of IAS 27 in connection with SIC-12 are fulfilled. SAALAEUE and LEUTRA SAALE are, therefore, consolidated in accordance with IFRS.

Furthermore, Jenoptik concluded a property leasing contract with Firmicus Verwaltungsgesellschaft mbH & Co. KG, Munich (FIRMICUS) in 1997. The leasing property comprises an externally let business and office building in Jena. After reviewing the criteria of IAS 17 this leasing contract has been classified as a finance lease since JENOPTIK AG, despite the lack of a put option, has the majority of the rewards and risks of ownership due to the long-term nature of the rental contract.

A further property leasing contract with the company HETTA Verwaltungsgesellschaft mbH und Co. Vermietungs KG, Munich (HETTA) has been classified as a finance lease.

Additionally, the property leasing contract with KORBEN was classified as a finance lease.

Through the consolidation of LEUTRA SAALE and SAALAEUE tangible assets increased by TEUR 105,075. Of these TEUR 26,418 relates to investment properties. Through the consolidation of JORENT technical equipment and machines have increased by TEUR 7,687.

The classification of the leasing contract with KORBEN led to an increase in tangible assets of TEUR 65,744. Of these TEUR 55,615 relates to investment properties. Other finance lease contracts led to an increase in tangible assets of TEUR 32,612 which is classified entirely as investment properties.

Changes in useful lives and depreciation methods led to an increase in tangible assets of TEUR 10,474, mainly in machines, equipment and furniture.

Both own used and investment properties are recognised at depreciated cost and were measured at the time of the opening balance sheet date after an impairment test at value in use (own used property) or at market value (externally let property).

**48 Financial assets.** Financial assets excluding shares in associated companies amounted to TEUR 186,682 under HGB as at December 31, 2002. In accordance with IFRS financial assets excluding shares in associated companies were TEUR 47,701 lower and amounted to TEUR 138,981.

The lower value of financial assets under IFRS is primarily due to the consolidation of the two property funds SAALAEUE and LEUTRA SAALE. In financial assets under HGB both property funds are included at the amount of the capital invested in them as investments. Furthermore, the loans granted to both property companies are part of financial assets under HGB. As part of the consolidation of the property companies under IFRS compared to HGB the assets and liabilities are adopted and internal Group transactions consolidated.

As a result of the extended number of companies consolidated for IFRS there are TEUR 44,577 less investments under IFRS and TEUR 12,392 less shares in affiliated companies. Due to the assets adopted as part of the consolidation long-term securities increased under IFRS by TEUR 65,587.

The BROOKS shares to be recognised at fair value under IFRS led to a write-down for IFRS of TEUR 11,743.

Under IFRS, contrary to HGB, a long-term loan was discounted by TEUR 11,744.

**49 Other non-current assets.** Other non-current assets amounted to TEUR 3,046 in the opening balance sheet under IFRS. Under HGB there is no separation of other non-current and other current assets. Thus, other non-current assets under IFRS include the non-current portion of other assets under HGB of TEUR 2,247. Furthermore, other non-current assets under IFRS include derivatives with a positive market value which act to hedge risks long-term.

**50 Deferred tax assets and liabilities.** In accordance with IAS 12 the IFRS balance sheet includes for the first time deferred tax assets amounting to TEUR 81,574 and deferred tax liabilities amounting to TEUR 5,348 for temporary differences between the values in the tax and Group balance sheets. Where the tax creditor and due period are the same deferred tax assets and deferred tax liabilities have been offset.

Deferred tax assets in the IFRS opening balance sheet include deferred tax on tax losses carried forward amounting to TEUR 36,058.

**51 Inventories.** Inventories under IFRS are TEUR 153,779 higher than under HGB and amount to TEUR 295,320 in the opening balance sheet. The main reason for this is that TEUR 145,895 of the on-account payments received disclosed as liabilities under IFRS are for on-account payments which were not allocated to long-term construction contracts. Payments on account for long-term construction contracts are offset to the amount of receivables from long-term construction contracts under IFRS. Liabilities from long-term construction contracts amounting to TEUR 66,304 are disclosed since the on-account payments received exceed the degree of completion. Under HGB on-account payments amounting to TEUR 507,644 were deducted from inventories.

Due to the changes in accounting methods for long-term construction contracts the balance of work in progress decreased.

**52 Accounts receivable and other assets.** In accordance with HGB accounts receivable and other assets amounted to TEUR 619,443 as at December 31, 2002. Under IFRS these were TEUR 41,677 higher and amounted to TEUR 577,766.

Receivables and other assets mainly changed due to the different companies consolidated under IFRS as well as differing accounting policies for long-term construction contracts under IFRS which led to recognition of receivables from long-term construc-

tion contracts. The extended number of companies consolidated led to a decrease in receivables from affiliated companies and investments of TEUR 18,618.

Other assets decreased by TEUR 61,404 in total under IFRS compared to HGB. This is mainly due to the valuation of a receivable from the Pension Trust from the disposal of DEWB shares. Since the receivable is subject to a postponement of priority, this represents an equity-substituting loan under IFRS. The value of the receivable thus represents the balance of the plan assets against the pension commitment in the Pension Trust.

**53 Securities.** Securities were TEUR 7,103 lower in the opening balance sheet under IFRS and amounted to TEUR 3,069. This is predominantly due to own shares held by Jenoptik amounting to TEUR 7,038 which are not shown as assets under IFRS but deducted from internal Group equity.

**54 Cash and cash equivalents.** Liquid funds amounted to TEUR 124,808 in total under HGB as at December 31, 2002 compared to TEUR 129,682 under IFRS.

The increase in liquid funds of TEUR 4,874 is due to the differences in companies consolidated.

Restricted cash includes TEUR 50,000 which is held as security for a loan of DEWB AG as well as fixed-term deposits amounting to TEUR 14,269 with terms of 3 to 12 months.

**55 Pension obligations.** In accordance with HGB pension obligations amounted to TEUR 41,665 as at December 31, 2002. Under IFRS these were TEUR 9,126 higher and amounted to TEUR 50,791. Under IFRS the valuation of pension obligations is under the projected unit credit method which, contrary to the HGB partial credit entry method, in addition to salary increases, requires a normal market interest rate to be used for discounting purposes (5.5 % under IFRS, 6.0 % under HGB).

As part of the opening balance sheet under IFRS the pension obligations are primarily accounted for as the balance of plan assets and the pension obligations in the Pension Trust.

In the opening balance sheet the actuarial gains and losses are completely accounted for ("Fresh start") in accordance with the simplification options under IFRS 1.

**56 Other non-current and current provisions.** Total other non-current and current provisions amounted to TEUR 277,031 under HGB compared to TEUR 81,106 under IFRS as at December 31, 2002. Thus, these were TEUR 195,925 lower under IFRS than under HGB.

This is mainly due to the accrued liabilities being disclosed, contrary to HGB, in liabilities under IFRS. These mainly relate to the provisions included under HGB for contract follow-up costs of TEUR 148,934, the accruals for outstanding supplier invoices of TEUR 11,935 and the accruals for credit notes outstanding of TEUR 10,392 as well as a small portion of other provisions.

**57 Non-current and current financial liabilities.** Total non-current and current financial liabilities amounted to TEUR 204,757 under HGB as at December 31, 2002. Under IFRS these were TEUR 256,232 higher and amounted to TEUR 460,989.

Liabilities due to banks increased by TEUR 93,716 to TEUR 248,473 (under HGB TEUR 154,757). This is exclusively due to change in the companies consolidated.

Due to the leasing transactions to be classified as finance leases under IFRS but not under HGB, leasing liabilities of TEUR 162,516 resulted in the opening balance sheet.

**58 Other non-current and current liabilities.** Other non-current and current liabilities amounted to TEUR 294,241 under HGB compared to TEUR 671,046 under IFRS as at December 31, 2002 and were, thus, TEUR 376,805 lower under HGB.

The changes in other liabilities can be seen from the following table:

in TEUR	HGB 31.12.2002	IFRS 1.1.2003	Change
Liabilities from on-account payments received	0	145,895	145,895
Trade accounts payable	164,178	317,277	153,099
Liabilities on bills of exchange	0	283	283
Liabilities from long-term construction contracts	0	66,304	66,304
Liabilities to affiliated companies and investments	43,356	9,639	-33,717
Miscellaneous non-current liabilities	16,384	34,899	18,515
Miscellaneous current liabilities	70,602	96,749	26,147
<b>Total non-current and current liabilities</b>	<b>294,520</b>	<b>671,046</b>	<b>376,526</b>

The main reason for the large increase in other liabilities under IFRS is the disclosure of on-account payments of TEUR 145,895 under liabilities and the accrued liabilities amounting to TEUR 171,261 disclosed under liabilities for IFRS. Furthermore liabilities from long-term construction contracts under IFRS increased total other liabilities by TEUR 66,304, which were deducted from inventories under HGB and, thus, were not part of liabilities.

The reduction in liabilities due to affiliated companies and investments mainly results from the consolidation of the property funds.

**59 Reconciliation of equity in TEUR.** In agreement with the simplification option under IFRS 1 (First-time Adoption of IFRS) the cumulative translation differences are deemed to be zero at the time of the IFRS opening balance sheet.

The material influencing factors on changed shareholders' equity under IFRS are illustrated in the following table:

in TEUR	
<b>Shareholders' equity under HGB as at 31.12.2002</b>	<b>430,604</b>
Capitalisation of development expenses	2,613
Changes in useful lives and depreciation methods in tangible and in intangible fixed assets	7,786
Changed valuation in fixed assets	- 16,398
Effects of property partnerships as finance leases	- 6,533
Impairment of property	- 47,833
Discounting of long-term loans	- 11,747
Interim result Korben	- 19,822
Adjustment to inventory valuation	5,855
Effects of long-term construction contracts	18,171
Valuation of receivables and other assets	- 16,554
Valuation of assets in pension trust	- 46,392
Valuation of pensions and similar commitments	- 24,603
Amended accounting for provisions	763
Valuation of liabilities	- 1,313
Effects of deferred taxes	76,226
Effects of changes in consolidated companies	- 9,701
Varied valuation of Available for sale	- 11,855
Disclosure of own shares in shareholders' equity	- 7,038
Disclosure of other shareholders	43,142
Other adjustments	- 13,619
<b>Shareholders' equity under HGB as at 01.01.2003</b>	<b>351,752</b>
<b>Change</b>	<b>- 78,852</b>

**Reconciliation of cash flow statement.** The effects of the conversion on cash flow are illustrated below. The main reasons are the changes in companies consolidated under IFRS, the change in allocation of net interest within the cash flow statement, the different amount and classification of balance sheet items and the use of the "percentage of completion method".

in TEUR		Effects of conversion to IFRS	
	HGB		IFRS
Net cash from operating activities	51,705	12,710	64,415
Net cash from/used in investment activities	- 115,416	36,440	- 78,976
Net cash from/used in financing activities	82,097	- 31,570	50,527
Cash changes in cash and cash equivalents	18,386	18,281	36,667
Exchange rate and other changes to cash and cash equivalents	- 10,520	15,260	4,740
Cash and cash equivalents at the start of the period	124,808	- 59,395	65,413
<b>Cash and cash equivalents at the end of the period</b>	<b>132,674</b>	<b>- 25,854</b>	<b>106,820</b>



## OBLIGATORY AND SUPPLEMENTARY DISCLOSURES UNDER HGB.

### Obligatory disclosures under §292a HGB and § 264 (3) or § 264b HGB

The consolidated financial statements of JENOPTIK AG have been prepared in accordance with § 292 a HGB in line with the rules of the IASB with an exemption from preparation of consolidated financial statements under HGB. At the same time the consolidated financial statements and Group management report are in line with the European Union Directive on Consolidated Accounting (83/349/EWG), whereby this directive has been interpreted accordingly in compliance with Standard No. 1 (GAS 1) "Exempt Consolidated Financial Statements under § 292a HGB" issued by the German Accounting Standards Committee (GASC). In order to maintain equivalence with consolidated financial statements prepared in accordance with the German Commercial Code all disclosures and information required by HGB and, which are in addition to the obligatory disclosures necessary for IFRS, are published.

Due to their inclusion on the consolidated financial statements of JENOPTIK AG the following fully consolidated affiliated German companies are exempt from the duty to publish annual financial statements in accordance with § 264 (3) or § 264b HGB.

- SAALAEUE Verwaltungsgesellschaft mbH & Co. Vermietungs KG, Jena
- LEUTRA SAALAE Gewerbegrundstücksgesellschaft mbH & Co. Vermietungs KG, Jena
- ROBOT Visual Systems GmbH, Düsseldorf
- Hommelwerke GmbH, Villingen-Schwenningen
- JENOPTIK Automatisierungstechnik GmbH, Jena
- ESW-EXTEL Systems Wedel Gesellschaft für Ausrüstung GmbH, Wedel
- JENOPTIK Laser, Optik, Systeme GmbH, Jena
- LECHMOTOREN GmbH, Altenstadt
- WAHL optoparts GmbH, Triptis

### Material accounting differences between HGB and IFRS.

The accounting and consolidation methods adopted under IFRS differ materially from HGB requirements in the following points:

**Goodwill.** As part of the purchase price allocation to be performed under IFRS 3 Business Combinations goodwill to be capitalised represents the remaining difference after all identifiable assets and liabilities, including contingent liabilities, have been valued at market value. Goodwill is not amortised but is subject to an annual impairment test. Under HGB goodwill may be offset against reserves. JENOPTIK AG utilised this option until December 31, 2002.

**Fixed assets.** In accordance with IAS 38 development expenses are capitalised on fulfilment of the criteria listed. Under HGB internally generated intangible assets cannot be capitalised.

In accordance with IFRS both intangible and tangible assets are amortised/depreciated over their useful economic lives in accordance with their usage. The application of tax-motivated useful lives is not permitted if these do not represent economic useful lives.

Investment properties are accounted for in accordance with IAS 40 "Investment Properties". These are recognised at their acquisition costs. For the subsequent valuation IAS 40 permits a valuation at fair value or at acquisition costs. The Jenoptik Group performs the subsequent valuation based on amortised cost.

Impairment is systematically identified in accordance with IAS 36. It is ensured that the book value of an asset does not exceed its recoverable amount. The recoverable amount is the higher value comparing value in use and fair value less selling costs.

Furthermore, the depreciation method, useful lives and remaining value are checked under IAS 16.

Depreciation is based on the useful economic lives of the relevant assets.

**Leasing.** In accordance with IAS 17 leased assets are to be accounted for by the person who has the majority of the opportunities and rewards from the leased asset. Due to a lack of relevant rules in German accounting requirements, as a rule, the leasing pronouncements from the tax authorities are used in the commercial code consolidated financial statements and these are different from the rules of IAS 17 with regard to the classification of leasing relationships.

**Profit realisation.** In accordance with IAS 11 sales and results are realised for long-term contracts in accordance with the progress of the project, if project progress can be determined reliably ("percentage of completion"). Under HGB sales and results cannot be realised until the contract has been fulfilled.

**Derivatives and hedging.** Derivatives are financial instruments in accordance with IAS 39 "Recognition and Measurement" to be classified as financial instruments available for trading and valued at market value except for hedge accounting. Changes in value should be recognised in the income statement. If derivatives serve to hedge cash flows as part of a cash flow hedge and fulfil the conditions for hedge accounting, then the effective portion of the change in value is recorded neutrally in equity. Under HGB derivatives are, as open transactions, not accounted for.

**Shareholders' equity.** Under IFRS own shares are offset against shareholder's equity and are not capitalised as assets as in HGB.

The equity component of the convertible note is disclosed as an increase in equity. The borrowings component is included in the balance sheet as a liability at discounted market value.

**Pension provisions.** Under IAS 19 pension provisions are valued applying the projected unit credit method which, contrary to the partial projected unit credit method under § 6a EStG (Income Taxes Act), accounts for expected future increases in pensions and salaries. Furthermore, according to IFRS and contrary to HGB a normal market interest rate should be applied and adjusted annually as appropriate.

Additionally, pension provisions will be offset by plan assets in accordance with IAS 19.

**Provisions.** Provisions are set up in accordance with IAS 37 "Provisions, Contingent Liabilities and Contingent Assets" if the probability of an outflow of funds is over 50 % and the value can be estimated reliably. A provision will then only be made if an external obligation exists. Expense provisions are therefore not permitted under IFRS. Furthermore, medium and long-term provisions are discounted under IFRS if the effect of discounting is material.

**Grants.** Grants (as a rule investment grants) are deducted from acquisition costs and reduce future depreciation. In the HGB financial statements to date the option to account for grants as income immediately in the income statement was exercised.

**Deferred taxes.** Deferred taxes are calculated on the basis of the balance sheet oriented liability method in accordance with IAS 12. Deferred tax assets are accounted for on tax losses carried forward to the extent that it is expected that these will be utilised.

**Companies included in consolidation.** Under IFRS the companies consolidated are determined by the “control” concept. In accordance with IAS 27 “Consolidated and Separate Financial Statements” in connection with SIC-12 a consolidation of so-called purpose enterprises is to be performed if a controlling influence can be exercised from an economic point of view. Under HGB the legal requirements are most important.

#### Supplementary disclosures under § 285 HGB.

**Number of employees.** The average number of employees is analysed as follows:

	31.12.2004	31.12.2003
Blue-collar workers	2,417	2,548
White-collar workers	7,635	7,501
Trainees	268	262
	<b>10,320</b>	<b>10,311</b>

In proportionally consolidated companies an average of 31 (2003 16) employees were employed.

Since the deconsolidation of the Gebäudetechnik unit did not take place until December 31, 2004 the employees of Gebäudetechnik in Germany are completely included in the average number whereby they are no longer included at the balance sheet date as at December 31, 2004.

#### Cost of materials and personnel expenses.

TEUR	31.12.2004	31.12.2003
<b>Cost of materials</b>		
Raw materials, consumables, supplies and purchased merchandise	685,724	925,539
Cost of purchased services	782,991	291,748
	<b>1,468,715</b>	<b>1,217,287</b>
<b>Personnel expenses</b>		
Wages and salaries	448,969	408,160
Social security and pension costs	87,733	91,876
	<b>536,702</b>	<b>500,036</b>

#### GERMAN CORPORATE GOVERNANCE CODE.

The executive and supervisory boards of JENOPTIK AG declare themselves in agreement with the German Corporate Governance Code in accordance with § 161 AktG (German Public Companies Law). The declaration has been made permanently available to shareholders via the Internet pages of JENOPTIK AG. Furthermore, the declaration is available for viewing at JENOPTIK AG.

## EXECUTIVE BOARD.

The following were appointed members to the executive board during the fiscal year 2004:

	Additional appointments at
<b>Alexander von Witzleben</b> Chairman of the executive board of JENOPTIK AG	■ Analytik Jena AG (SB Chair) ■ Deutsche Effecten- und Wechsel-Beteiligungs- gesellschaft AG (SB Chair) ■ Carl Zeiss Meditec AG (SB vice Chair) ■ Feintool International Holding AG, Lyss (Ccb member) ■ Krone GmbH (SB member until 31. 12. 2004) ■ M+W ZANDER Holding AG (SB [ig] Chair) ■ PVA TePla AG (SB Chair)
<b>Jürgen Gießmann</b> Vice chairman of the executive board of JENOPTIK AG	■ Loy & Hutz AG (SB Chair) ■ MEISSNER-BARAN Ltd., Jerusalem (Ccb [ig] member) ■ M+W ZANDER US Operations Inc., Plano (Ccb [ig] member)
<b>Norbert Thiel</b> Executive board member of JENOPTIK AG	■ M+W ZANDER Holding AG (SB [ig] member)

The personal costs for the executive board amounted to TEUR 1,453 for fiscal year 2004. This amount includes a fixed salary of TEUR 1,173. Furthermore, a provision was set up for bonus obligations amounting to TEUR 280. During the fiscal year bonuses for 2003 of TEUR 87 were also paid out.

For former executive board members pension payments of TEUR 226 were made during the fiscal year. The pension provision for former executive board members amounts to TEUR 4,028 at the balance sheet date.

## Abbreviations

SB	Supervisory Board
Ccb	Comparable controlling body
ig	Internal group appointment
*	Employee representative

## SUPERVISORY BOARD.

The following ladies and gentlemen were appointed members to the supervisory board during fiscal year 2004:

	Additional appointments at
<b>Prof. Dr. h. c. Lothar Späth</b> Former Minister President, Vice chairman Europe, Merrill Lynch, Gerlingen (Chairman and member of the supervisory board)	■ BIZERBA GmbH & Co. KG (SB Chair) ■ Herrenknecht AG (SB Chair) ■ JC Decaux S.A., Paris (Ccb Member) ■ KUNZ Holding GmbH & Co. KG (SB Chair) ■ PT Sigma Cipta Caraka, Jakarta (Ccb Chair) ■ SUEBA USA Corporation, Houston (Ccb Member) ■ SÜBA Wien Bau- und Baubetreuungs AG, Wien (Ccb Chair) ■ Verlagsgruppe Georg von Holtzbrinck GmbH (SB Member)
<b>Ralf Tänzer*</b> Formerly 1st Representative of IG Metall Administration Office Jena-Saalfeld, Jena (Vice chairman of the supervisory board)	■ Carl Zeiss Jena GmbH (SB Member) ■ Stahlwerk Thüringen GmbH (SB Member)
<b>Birgit Diezel</b> Finance Minister of the Free State of Thuringia, Erfurt	None
<b>Dr. Merve Finke von Berg*</b> Authorised signatory and head of law, insurances and internal audit of M+W ZANDER Holding AG, Stuttgart	None
<b>Martin Griebel*</b> Dipl.-Ing. for electronics/electrical engineering JENOPTIK Automatisierungstechnik GmbH, Jena	None
<b>Prof. Dipl.-Ing. Jörg Menno Harms</b> Director of Menno Harms GmbH – International Management Services, Stuttgart	■ CA Leuze GmbH & Co. KG (Ccb Member) ■ Dürr AG (SB Member) ■ Groz Beckert KG (SB Vice chair) ■ Heraeus Holding GmbH (SB Member) ■ Hewlett-Packard GmbH (SB Member) ■ Württembergische Hypothekenbank AG (SB Member)

	Additional appointments at
<b>Dr. Franz Wilhelm Hopp</b> Former member of the executive board of ERGO Versicherungsgruppe AG, Düsseldorf	■ Frankfurter Volksbank eG (Ccb Member) ■ GfKL Financial Services AG (SB Member) ■ HSBC Trinkaus & Burkhardt KG aA (Ccb Member) ■ IDEENKAPITAL Media Finance AG (SB Chair) ■ iii Internationales Immobilien Institut GmbH (SB Member) ■ Karstadt Quelle Bank GmbH (SB Member) ■ MEAG Munich ERGO Kapitalanlagegesellschaft mbH (SB [ig] Member) ■ Österreichische Volksbanken-AG, Wien (Ccb [ig] Member) ■ TMW Immobilien AG (SB Member) ■ TMW Real Estate Group L.P. (Ccb [ig] Member) ■ Victoria Volksbanken AG, Wien (Ccb [ig] Member)
<b>Siegfried Joos*</b> Member of the works' council of m+w Zander Facility Engineering GmbH, Stuttgart	None
<b>Wolfgang Kehr*</b> Regional manager in the work area of wages policy IG Metall Region Frankfurt/ Main	None
<b>Thomas Klippstein*</b> Product manager for JENOPTIK Laser, Optik, Systeme GmbH, Jena	None
<b>Dieter Kröhn*</b> Electrical mechanic at ESW-EXTEL Systems Wedel Gesellschaft für Ausrüstung mbH, Wedel	None
<b>Prof. Dr. Dr. h. c. mult. Johann Löhn</b> President of the Steinbeis-Hochschule, Berlin	■ Deutsche Effecten- und Wechsel-Beteiligungsgesellschaft AG (SB Member) ■ M & A Consultants AG (SB Member) ■ MWG-Biotech AG (SB vice Chair) ■ Primion Technology AG (SB Chair) ■ Wirthwein AG (SB Member) ■ Zeppelin GmbH (SB Member)
<b>Dr. Klaus Mangold</b> Executive advisor to the chairman of DaimlerChrysler AG for Central and Eastern Europe and Central Asia, Stuttgart	■ Chubb Corporation, Warren (Ccb Member) ■ Leipziger Messe GmbH (SB Member) ■ Magna International, Inc., Toronto (Ccb Member) ■ METRO AG (SB Member) ■ Universitäts-Klinikum Freiburg (Ccb Member)

## Additional appointments at

**Günther Reißmann**

Chairman of the Group works' council  
of JENOPTIK AG, Jena

None

**Werner Schmidt**

Chairman of the executive board of Bayerische  
Landesbank - Girozentrale, Munich

■ Deka-Bank Deutsche Girozentrale AdöR (Ccb Member) ■ Deutsche Kreditbank AG (SB [ig] Member) ■ Deutsche Lufthansa AG (SB Member) ■ Drees & Sommer AG (SB vice Member) ■ Herrenknecht AG (SB vice Member) ■ Landesbank Saar Girozentrale AdöR (Ccb [ig] vice Chair) ■ LB (SWISS) Privatbank AG, Zürich (Ccb [ig] Chair) ■ Liquiditäts-Konsortialbank GmbH (Ccb deputy member) ■ Wieland-Werke AG (SB Member)

**Prof. em. Dr. Ing. Prof. h. c. mult. Dr. h. c.****Dr.-Ing. E. H. Hans-Jürgen Warnecke**

Former president and honorary senator for the  
Fraunhofer Gesellschaft zur Förderung der ange-  
wandten Forschung e.V., Munich

■ IMIG AG (SB Member) ■ IQvolution AG (SB Member) ■ MAHLE GmbH (SB Member)  
■ Rohde & Schwarz Messgerätebau GmbH (SB Member) ■ WANDERER-WERKE AG (SB Member)

At the end of the fiscal year supervisory board members held 2,898 shares as well as 8,775 options on shares of JENOPTIK AG. The total remuneration of the supervisory board represented the fixed remuneration of TEUR 100 set out in the constitution for the fiscal year 2004. One performance-related bonus was not paid out due to there being no dividend distribution for fiscal year 2003. The amount of TEUR 100 was distributed accounting for the chairman and vice chairman of the supervisory board and the chairman and members of the committees among the members of the supervisory board as follows: Prof. Dr. h.c. Lothar Späth (Chairman) EUR 6,283.40; Ralf Tänzer (vice Chairman): EUR 8,628.60; Birgit Diezel: EUR 3,276.28; Dr. Merve Finke von Berg: EUR 5,085.71;

Martin Griebel: EUR 6,085.71; Prof. Dipl.-Ing. Jörg Menno Harms: EUR 6,085.71; Dr. Franz Wilhelm Hopp: EUR 6,585.71; Siegfried Joos: EUR 6,085.71; Wolfgang Kehr: EUR 5,085.71; Thomas Klippstein: EUR 6,085.71; Dieter Kröhn: EUR 5,085.71; Prof. Dr. Dr. h.c. mult. Johann Löhn: EUR 5,085.71; Dr. Klaus Mangold: EUR 6,085.71; Günther Reißmann: EUR 6,085.71; Werner Schmidt: EUR 5,085.71; Prof. Dr. Ing. Dr. h.c. mult. Hans-Jürgen Warnecke: EUR 5,085.71. The annual remuneration of supervisory board members will be paid subsequently (in 2004 for fiscal year 2003). The difference to the total amount relates to members who left during the fiscal year 2003.

Jena, 23 March 2005



Alexander von Witzleben  
Chairman of the executive board



Jürgen Gießmann  
Vice Chairman of the executive board



Norbert Thiel  
Member of the executive board



## AUDITORS' REPORT

We have audited the consolidated financial statements, composed of the balance sheet, statement of income, shareholders' equity account, capital flow account, and notes for the fiscal year from January 1 to December 31, 2004. The preparation of the consolidated financial statements and group management report in accordance with the International Financial Reporting Standards (IFRS) are the responsibility of the company's executive board. Our responsibility is to provide an evaluation of the consolidated financial statements based on our audit.

We conducted our audit of the consolidated financial statements in accordance with German auditing regulations and the standards accepted in Germany for the audit of financial statements as determined by the Institut der Wirtschaftsprüfer in Deutschland (IDW). These standards require that we plan and perform the audit such that the consolidated financial statements is free of major error. Knowledge of the business activities, the economic and legal conditions affecting the group, and the likelihood of error, are taken into account in the determination of the auditing process. The figures and accounts provided in the consolidated financial statements are examined on the basis of random inspection. Our audit includes the assessment of the accounting principles used, and of the chief estimates made by the legal representatives, as well as an evaluation of the overall presentation of the consolidated financial statements and group management report. We are of the opinion that our audit provides a reasonably sound basis for our evaluation.

We are of the opinion that the consolidated financial statements and group management report, in accordance with the IFRS, provide a realistic depiction of the group's assets, finances, income, and cash flow in the course of the fiscal year.

Our audit, which pertained to the consolidated financial statements provided by the executive board for the period from January 1 to December 31, 2004, was met with no reservations. It is our opinion that, as a whole, the group management report provides a realistic depiction of the group's condition and suitably represents future developmental risks.

We furthermore confirm that the group's consolidated financial statements and management report for the fiscal year from January 1 to December 31, 2004 fulfill the requirements necessary to exempt the group from the obligation to file group consolidated financial statements and a group management report in accordance with German law.

Berlin, March 23, 2005

KPMG Deutsche Treuhand-Gesellschaft  
Aktiengesellschaft  
Wirtschaftsprüfungsgesellschaft

Dr. Schindler  
Auditor

Dr. Kronner  
Wirtschaftsprüfer

## SCIENTIFIC ADVISORY COUNCIL.

(as at December 2004).

### Norbert Thiel

JENOPTIK AG, Jena, Chairman

### Prof. Dr. Bernd Wilhelmi

Jena, Vice chairman

### Prof. Dr. Hartmut Bartelt

Institut für Physikalische Hochtechnologie e.V., Jena.

### Prof. Dr. Karlheinz Brandenburg

Fakultät für Elektrotechnik, Technische Universität Ilmenau.

### Prof. Dr. Herwig Brunner

Fraunhofer Institut für Grenzflächen- und Bioverfahrenstechnik, Stuttgart.

### Prof. Dr. Gerhard Fettweis

Fakultät für Elektrotechnik,  
Mannesmann Mobilfunk Stiftungslehrstuhl,  
Technische Universität Dresden.

### Prof. Dr. Albert Hinnen

CLONDIAG Chip Technologies GmbH, Jena.

### Prof. Dr. Bernd Höfflinger

Institut für Mikroelektronik, Universität Stuttgart.

### Prof. Dr. Wolfgang Karthe

Fraunhofer Institut für Angewandte Optik  
und Feinmechanik, Jena.

### Prof. Dr. Johann Löhn

Steinbeis-Stiftung, Berlin.

### Prof. Dr. Jürgen Petzoldt

Fakultät für Elektrotechnik und Informationstechnik,  
Institut für Elektrische Energiewandlungen  
und Automatisierung,  
Technische Universität Ilmenau.

### Prof. Dr. Wolfgang Probst

Essingen.

### Prof. Dr. Claus Razim

Salzburg.

### Prof. Dr. Roland Sauerbrey

Institut für Optik und Quantenelektronik,  
Friedrich-Schiller-Universität Jena.

### Prof. Dr. Michael Schenk

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### Prof. Dr. R. Dieter Schraft

Fraunhofer Institut für Produktionstechnik  
und Automatisierung, Stuttgart.

### Judon Stoeldraijer

ASML, La Veldhoven, Niederlande.

### Prof. Dr. Günther Tränkle

Ferdinand-Braun-Institut für Höchstfrequenztechnik, Berlin.

### Prof. Dr. Andreas Tünnermann

Fraunhofer Institut für Angewandte Optik  
und Feinmechanik, Jena.

### Dr. Bärbel Voigtsberger

Hermisdorfer Institut für Technische Keramik e.V., Hermisdorf.

## SUPERVISORY BOARD REPORT.

Dear Shareholders,

JENOPTIK AG supervisory board worked intensively on the company's situation and strategy in fiscal year 2004. The board was involved in all important company decisions, providing advice to management. In accordance with the supervisory board's mission as stipulated by law and the company's articles of association, the board continually monitored management throughout the year.

The supervisory board met with the executive board six times to discuss company business based on information provided by the executive board in oral and written reports. These reports and discussions touched on key Jenoptik Group affiliates, major orders and projects, treating in detail company figures, and possible deviations from planning and their causes. Supervisory board meetings also included the comprehensive discussion of all measures and business that require the approval of the board. In addition to these meetings, the supervisory board chairman remained in continual contact with the executive board chairman, receiving important information on company business events.

During fiscal year 2004, the supervisory board's work focused most strongly on Jenoptik's strategy for the future and the extent to which this strategy has been implemented so far.

While the audit committee met three times in 2004, and the personnel committee four times, the supervisory board created a new capital market committee and ad-hoc committee to deal with a complex issue. The mediation committee did not need to be called into session (as stipulated by the German Codetermination Law (MitbestG 27.3).

The audit committee's meetings dealt with the group's interim reports, financial statements and consolidated financial

statements, the detailed discussion of reports with the balance sheet auditor, the changeover of group accounting to the IFRS standard (including matters concerning the first IFRS balance sheet of January 1, 2003), and the supervision of the group's risk management system.

In 2004, the members of the personnel committee worked chiefly on the extension and conditions of executive board member contracts.

The capital market committee, in line with its particular area of competence, deliberated on the issue of a Jenoptik convertible bond, and on the use of authorized capital in 2004 as part of a capital increase against contributions in kind.

At its December 13, 2004 meeting, the supervisory board adopted its declaration of compliance, in accordance with section 161 of the German Stock Law. Compliance with the recommendations of the government committee is examined using a corporate governance checklist. Deviations from these recommendations are explained in the "corporate governance" section of this report (see page 43). The system of remuneration for executive board members is also explained in the section.

KPMG Deutsche Treuhand-Gesellschaft Aktiengesellschaft Wirtschaftsprüfungsgesellschaft was appointed to be primary balance sheet auditor and group balance sheet auditor for fiscal year 2004 by the general shareholders' meeting. The JENOPTIK AG consolidated financial statements were compiled for the first time in accordance with the International Financial Reporting Standards (IFRS). The auditor submitted the unqualified approval of JENOPTIK AG's financial statements, the consolidated financial statements, and the combined management report and group management report for 2004, including the group accounting and early risk detection systems.

The audit results were provided to the members of the supervisory board immediately upon their completion, and were discussed thoroughly both in the audit committee and in full plenary session. Auditor representatives also took part in meetings, reporting fully on the main points and results of the audit, and answering questions. The supervisory board, after completing its own audit, approved the auditor's findings, and authorized the financial statements and consolidated financial statements submitted by the executive board; the financial statements of JENOPTIK AG have thus been confirmed.

The supervisory board would like to thank the executive board and each and every employee for their personal dedication to their work, and we would also like to thank the shareholders for their trust in us. We would lastly like to show our appreciation to the employee representatives for their constructive cooperation.

Jena, April 2005

On behalf of the Supervisory Board



Prof. Dr. h.c. Lothar Späth

Chairman



■ Eleven Jenoptik trainees successfully pass their exams at the Chamber of Industry and Commerce of the German State of Thuringia. 50 young people around Germany finish their training at Jenoptik companies.

■ JENOPTIK Automatisierungstechnik GmbH receives the Innovation Prize of the Association of German Engineers (VDI) for its contributions to a new laser processing system for plastic car tailgates.

■ M+W Zander receives a major order from AU Optronics for the design and construction of a clean-room facility for a new flat-panel factory. The order was valued within the nine-figure dollar range.

■ ESW-Extel Systems Wedel receives a long-term order for stabilization and electronic drive systems to be used in Greece's Leopard 2 tank.

■ JENOPTIK Laser, Optik, Systeme GmbH acquires LINOS AG's optics unit in Giessen, Germany.

■ Jenoptik issues a convertible bond with a volume of approx. 60 million euros. The bond can be converted into up to 4.884 million shares.

■ JENOPTIK Laser, Optik, Systeme GmbH and Spectra-Physics introduce a portable forensic laser used to collect clues to help solve crimes. The system is a first for the European market.

■ "Best of digital Arts" – the Jenoptik gallery presents digital photographs from five years of Jenoptik's Eyelike™ photo competition.

■ 64 young people around Germany begin their technical and commercial training with Jenoptik companies.

■ Two Photonics companies, ESW-Extel Systems Wedel, and Jena-Optronik, are given special status as suppliers of particular excellence. While Jena-Optronik GmbH is appointed the standard supplier of star sensors for the Boeing 702 satellite bus, ESW is named an Airbus "alpha supplier" to be integrated further into future Airbus research and development projects.

## JANUARY / FEBRUARY

## APRIL

## JUNE

## JULY

## MARCH

## MAY

## AUGUST



■ Jenoptik provides state-of-the-art lasers for the opening opera performance of "Die unendliche Geschichte" (The Never-Ending Story) at Weimar's German National Theatre. The production is a unique collaboration of high-technology and the arts.

■ Up-and-coming researchers compete at the 14<sup>th</sup> Thuringia state youth research competition "Jugend forscht", supported by Jenoptik. 68 young talents submitted 34 projects for consideration.

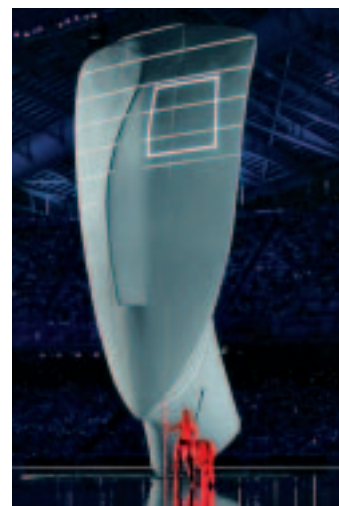
■ JENOPTIK Laser, Optik, Systeme GmbH introduces ProgRes™ STAR to the market, a new camera system for microscopic image documentation.



■ Jena-Optronik GmbH receives an order for image processing systems to be used in the "RapidEye" satellite-based earth observation system. The systems are to be delivered in 2005 and 2006 to the Canadian company MacDonald Dettwiler and Associates LTD, RapidEye AG's main contractor.

■ M+W Zander receives a follow-up order from Siltronic AG for the expansion of its new semiconductor factory, "Fab 300-2", in Freiberg, Germany. The order comes to 20.75 million euros.

■ As of July 1, JENOPTIK Laser, Optik, Systeme GmbH acquires all shares in Innovavent GmbH, a Göttingen-based start-up company specializing in research into laser applications for science and industry.



■ Four Jenoptik lasers are in use during the opening ceremonies of the Athens Olympic Games. The lasers are used to project images onto sculptures and a screen of water 20 meters in height.



■ JENOPTIK Laser, Optik, Systeme GmbH expands its Eyelike product range to include the Eyelike™ eMotion™, a portable digital camera back for medium format cameras.

■ M+W Zander D.I.B. Facility Management GmbH starts providing technical facility management at MTU, a manufacturer of airplane engines, at the company's Munich site. The order was valued within the eight-figure euro range.

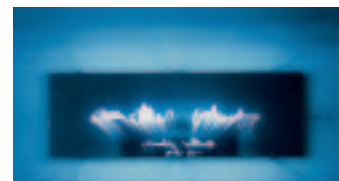
■ M+W Zander receives a 74-million-euro order to engineer and construct the Infineon Technologies developmental center in Dresden.

■ To honor the 100<sup>th</sup> anniversary of Ernst Abbe's death on January 14, 2005, Jenoptik and Jena's Friedrich Schiller University conduct a student competition on "the legacy of the reformer, Ernst Abbe".

■ XTREME technologies GmbH uses an EUV laser source to produce extreme ultraviolet rays of 50 watts. This is the highest EUV performance achieved to date at 13.5 nanometers wavelength.



■ After only 12 months of construction, the installation of process equipment begins at AMD's second chip facility in Dresden. M+W Zander, a Jenoptik subsidiary, is the general contractor for the project, in an order valued at over 60 million euros.



■ Ten years of Tangente – ten years of Jenoptik support for the arts. An anniversary exhibition includes artwork from the 27 Tangente exhibitions of the decade.

■ Jenoptik and Jena's Friedrich Schiller University's Faculty of Physics and Astronomy sign a cooperative agreement. The main purpose of the agreement is a Jenoptik doctoral scholarship, to be awarded for the first time in 2005 as a part of the Ernst Abbe commemorative year.

## SEPTEMBER

■ The M+W Zander Group's world-wide facility engineering activities for the electronics industry are combined into a single unit, based in Singapore.

■ Hommelwerke GmbH acquires 33.33 percent of the South Korean company Telstar Engineering Co. Ltd. Telstar develops, produces, and distributes contact measurement technology.

■ M+W Zander equips Dresden's world-famous "Grünes Gewölbe" (Green Vault) art collection with custom ventilation systems.

## OCTOBER

■ Wahl optoparts GmbH receives an order from a renowned medical technology manufacturer for the production and assembly of optoelectronics units. The 5-million-euro order is to run two years.



## NOVEMBER

■ M+W Zander, a Jenoptik subsidiary, successfully completes a new factory for Infineon Technologies AG in Suzhou, China. M+W Zander engineered and constructed the new back-end production facility for memory products.

■ JENOPTIK Laser, Optik, Systeme GmbH and SINAR AG of Switzerland enter into a partnership for the future development, production, and distribution of professional digital camera backs.

## DECEMBER



■ Jena-Optronik GmbH receives another major order from the aerospace industry. The eight-figure-euro order involves the delivery of 12 rendezvous sensors for EADS SPACE Transportation space transporters.

■ JENOPTIK Laser, Optik, Systeme GmbH and the Dresden-based InfraTec GmbH conclude a long-term contract for the distribution and delivery of Jenoptik infrared cameras. The contract is valued at several million euros.

SELECTED SUBSIDIARIES AND AFFILIATED COMPANIES.

As of December 31, 2004

JENOPTIK AG									
CLEAN SYSTEMS TECHNOLOGIES					PHOTONICS TECHNOLOGIES				
72.89 %	M+W ZANDER Holding AG <sup>1)</sup>				100 %	ESW-EXTEL Systems Wedel Gesellschaft für Ausrüstung mbH <sup>1)</sup>			
100 %	M+W Zander Facility Engineering GmbH <sup>2)</sup>		69.10 %	M+W Zander D.I.B. Facility Management GmbH <sup>2)</sup>		100 %	Hommelwerke GmbH <sup>1)</sup>		
100 %	Lang und Peitler Automation GmbH		100 %	M+W Zander (Schweiz) AG		100 %	JENOPTIK Automatisierungstechnik GmbH <sup>1)</sup>		
100 %	BIAS Beratende Ingenieure für Automationssysteme GmbH		100 %	M+W Zander Facility Management GmbH Austria		100 %	JENOPTIK Laser, Optik, Systeme GmbH <sup>1)</sup>		
100 %	LSMW GmbH Total Life Science Solution		100 %	M+W Zander UK Ltd.		100 %	ROBOT Visual Systems GmbH <sup>1)</sup>		
100 %	M+W Zander Products GmbH		100 %	M+W Zander Facility Management Polska Sp. z.o.o		100 %	WAHL optoparts GmbH <sup>1)</sup>		
100 %	M+W Zander Facility Engineering Pte Ltd. <sup>2)</sup>		100 %	M+W Zander PersonalDienste GmbH		100 %	JENOPTIK LDT GmbH <sup>4)</sup>		
100 %	M+W Zander (s) PTE Ltd., Singapore					100 %	JENOPTIK Mikrotechnik GmbH <sup>4)</sup>		
100 %	M+W Zander FE GmbH					100 %	Jena-Optronik GmbH <sup>4)</sup>		
100 %	M+W Zander Italia S.r.l. <sup>3)</sup>					74.88 %	JENOPTIK Laserdiode GmbH <sup>4)</sup>		
100 %	M+W Zander FE UK, Ltd. <sup>3)</sup>					50 %	HILLOS GmbH		
100 %	M+W Zander Clean Systems (Shanghai) Co. Ltd.					50 %	XTREME technologies GmbH		
100 %	M+W Zander (Taiwan) Pte Ltd.					100 %	LECHMOTOREN GmbH <sup>5)</sup>		
100 %	M+W Zander U.S. Inc.								
49 %	M+W Zander Gebäudetechnik GmbH <sup>2)</sup> *								

<sup>1)</sup> Subsidiary of JENOPTIK AG

<sup>2)</sup> Subsidiary of M+W ZANDER Holding AG

<sup>3)</sup> Subsidiary of M+W Zander FE GmbH

<sup>4)</sup> Subsidiary of JENOPTIK Laser, Optik, Systeme GmbH

<sup>5)</sup> Subsidiary of ESW-Extel Systems Wedel

\* Fully included in consolidation until December 30, 2004: consolidated at equity as of December 31, 2004.