



# What drives us..

● is the lasting endeavor to take Pfeleiderer AG one step further every day, using all the knowledge, ingenuity and energy we have at our disposal. Only by asking the right questions can we find the right answers and ideas, producing faster results, keeping us out front of the competition ... **Annual Report 2001**

PFLEIDERER AG

ANNUAL REPORT 2001

## Group Figures

		1. 1.–31. 12. 2001	1. 6.–31. 12. 2000	1. 6. 99–31. 5. 00
Sales	(euro in millions)	1,427.4	830.3	1,437.8
EBITDA	(euro in millions)	175.3	107.0	167,6
EBIT	(euro in millions)	88.2	55.3	72.1
Net income				
– before taxes	(euro in millions)	51.4	38.3	3.0
– after taxes	(euro in millions)	35.4	23.5	– 8.6
DVFA/SG earnings	(euro in millions)	16.6	14.4	15.7
DVFA/SG cash flow	(euro in millions)	114.6	69.5	121.5
Equity	(euro in millions)	222.9	223.4	244.7
Total assets	(euro in millions)	1,186.8	1,185.6	1,249.9
Subscribed capital	(euro in millions)	109.3	109.3	109.3
Investments	(euro in millions)	94.0	59.5	215.2
Personnel expenses	(euro in millions)	337.9	192.8	339.4
Employees	(as of end of period)	9,185	9,708	10,238

## Key Figures per Share

		1. 1.–31. 12. 2001	1. 6.–31. 12. 2000	1. 6. 99–31. 5. 00
DVFA/SG earnings <sup>1</sup>	(euro)	0.39	0.34	0.37
DVFA/SG cash flow <sup>1</sup>	(euro)	2.68	1.63	2.85
Dividend	(euro)	0.20	0.20	0.30

<sup>1</sup> based on total share issue of 42,685,000

## Divisions 1. 1.–31. 12. 2001

		Wood-based Panels	Doors and Windows	Insulation Technology	Infra- structure Technology
Sales	(euro in millions)	760.0	149.4	197.8	322.9
EBITDA	(euro in millions)	110.5	– 4.6	37.8	44.6
EBIT	(euro in millions)	68.1	– 9.0	16.0	33.7
Investments	(euro in millions)	21.0	25.5	12.7	26.7
Employees	(as of end of period)	4,035	1,453	1,428	2,010

**BUSINESS CENTER WOOD-BASED PANELS**

■ This is Pfeleiderer AG's biggest Business Center, comprising 13 plants and over 4,000 employees, making it one of Europe's leading suppliers of wood-based panels and surface-treated products for the furniture and interior fittings industries. With its brands DUROPAL® and Thermopal®, Pfeleiderer Wood-Based Panels is the recognized trendsetter, with established design competence in the field of interior fittings. Around 50 percent of sales totaling euro 760 million were recorded outside Germany in 2001. With its two plants in Poland, Pfeleiderer AG is already participating in the sustained economic up-turn taking place in eastern European growth markets.

**BUSINESS CENTER DOORS AND WINDOWS**

■ With its brands WIRUS®, MORALT® and SVEDEX®, Pfeleiderer AG is Germany's leading supplier of interior doors, and with its WIRUS® brand windows a specialist supplier of plastic windows. Pfeleiderer AG employs 1,450 people in this Business Center, which has sales of euro 149.4 million.

**BUSINESS CENTER INSULATION TECHNOLOGY**

■ In the space of just ten years, Pfeleiderer AG has grown to become the second biggest European producer of glass wool insulation material. Today, seven plants stretching from Belgium to Russia and employing over 1,400 people produce URSA® brand glass wool insulation material. Pfeleiderer Insulation Technology recorded sales of euro 197.8 million in 2001, of which 62 percent came from outside Germany. This Business Center is now focusing on the further internationalization of its activities, especially in the eastern European growth markets.

**BUSINESS CENTER INFRASTRUCTURE TECHNOLOGY**

■ The Infrastructure Technology Business Center comprises four segments: Rail Traffic, Masts, Telecommunication and Wind Power. Pfeleiderer AG is an experienced and innovative supplier of product systems and services, manufacturing specialist products for energy, rail traffic and telecommunications infrastructures, as well as for energy generation. Its leading technological know-how, high level of internationalization and excellent competitive position in Germany, Europe and the USA are an ideal basis for gaining new markets. Over 2,000 people are employed in this Business Center, which reported sales of euro 322.9 million in 2001.

**BUSINESS CENTER WOOD-BASED PANELS**

**Business Unit Engineered Wood West**

- Gütersloh, Plant 1
- Gütersloh, Plant 2
- Gütersloh, Plant 3
- Neumarkt, Plant 2
- Neumarkt, Plant 3
- Rheda-Wiedenbrück

**Business Unit Engineered Wood East**

- Grajewo (Poland)
- Wieruszow (Poland)

**Business Unit Blockboard**

- Bad Tölz
- Spexard

**Business Unit Thermopal**

- Leutkirch

**Business Unit Duropal**

- Arnsberg

**Business Unit Eltec**

- Arnsberg

**BUSINESS CENTER DOORS AND WINDOWS**

**Business Unit Doors**

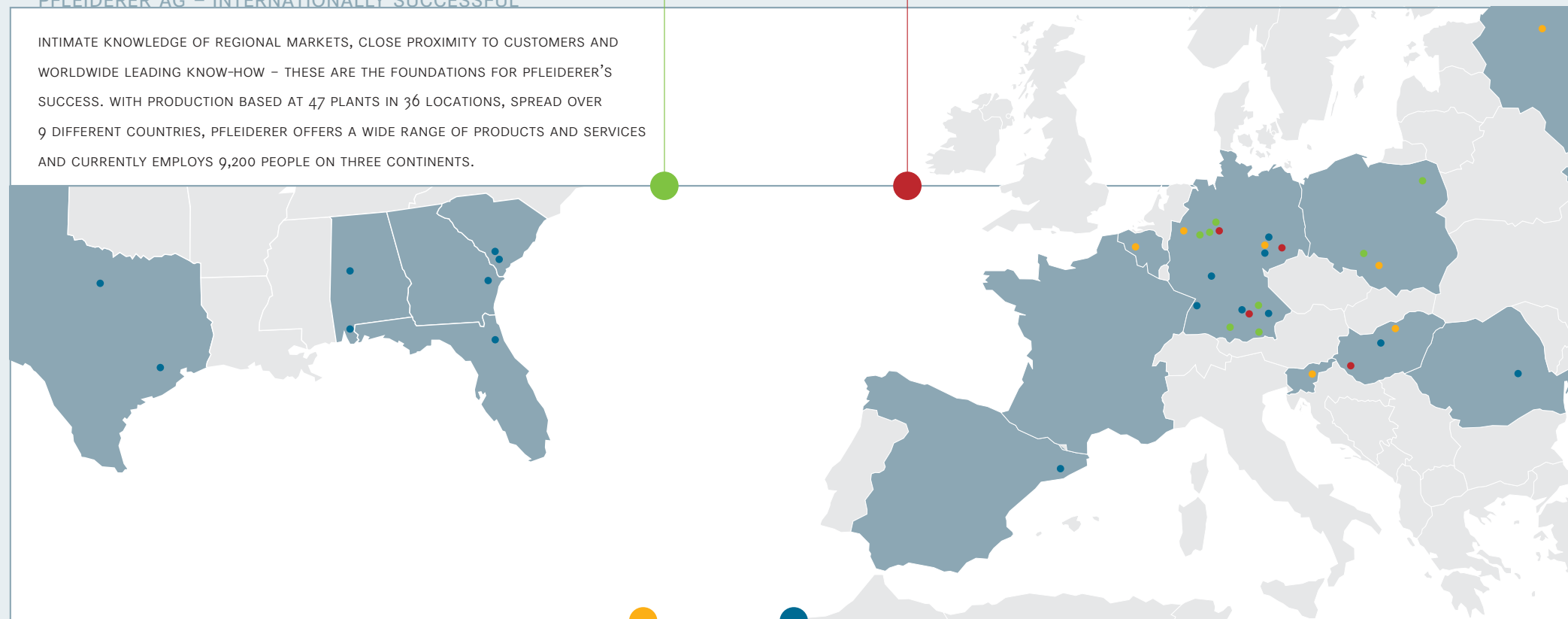
- Oettingen
- Mittweida
- Lenti (Hungary)

**Business Unit Windows**

- Rietberg-Mastholte

**PFLEIDERER AG – INTERNATIONALLY SUCCESSFUL**

INTIMATE KNOWLEDGE OF REGIONAL MARKETS, CLOSE PROXIMITY TO CUSTOMERS AND WORLDWIDE LEADING KNOW-HOW – THESE ARE THE FOUNDATIONS FOR PFLEIDERER'S SUCCESS. WITH PRODUCTION BASED AT 47 PLANTS IN 36 LOCATIONS, SPREAD OVER 9 DIFFERENT COUNTRIES, PFLEIDERER OFFERS A WIDE RANGE OF PRODUCTS AND SERVICES AND CURRENTLY EMPLOYS 9,200 PEOPLE ON THREE CONTINENTS.



**BUSINESS CENTER INSULATION TECHNOLOGY**

**Business Unit Europe Central**

- Delitzsch
- Wesel

**Business Unit Europe West**

- Desselgem (Belgium)

**Business Unit Europe East**

- Dabrowa Gornicza (Poland)
- Novo mesto (Slovenia)
- Salgótarján (Hungary)
- Tschudowo (Russian Federation)

**BUSINESS CENTER INFRASTRUCTURE TECHNOLOGY**

**Business Unit Rail Traffic**

- Coswig
- Gernsbach
- Langen
- Neumarkt
- Brasov (Rumania)
- Constanti (Spain)
- Lábatlan (Hungary)

**Business Unit Masts**

- Coswig
- Dinkelsbühl
- Leipzig

**Business Unit Wind Power**

- Neumarkt, concrete masts
- Neumarkt, FRP-poles
- Regensburg

**Business Unit USA**

- Bartow, Florida
- Bay Minette, Alabama
- Belville, Texas
- Claxton, Georgia
- Early Branch, South Carolina
- Estill, South Carolina
- Mansfield, Texas
- Tuscaloosa, Alabama

**Business Unit Water**

- Coswig

**Business Unit Water**

- Neumarkt

# THE VALUE DRIVERS

... ARE THE FORCES THAT INSPIRE US AND KEEP US MOVING, KEEP US LOOKING FOR FRESH CHALLENGES. FOR OUR OWN SAKE AND FOR THAT OF OUR CUSTOMERS AND SUPPLIERS, FOR OUR SHAREHOLDERS AND INVESTORS, EMPLOYEES AND THE ENVIRONMENT IN WHICH WE OPERATE.

SUCCESS BECOMES EVIDENT AS WE MAKE FUNDAMENTAL CHANGES TO CORPORATE STRUCTURES AND CULTURE. CHANGES THAT HAVE ACCOMPANIED OUR COMPANY OVER THE LAST TWO YEARS. OUR CLEAR ORIENTATION TOWARDS THE CAPITAL MARKET HAS MADE PFLEIDERER AG MORE THAN JUST A SUPPLIER OF PRODUCTS.

TODAY, PFLEIDERER STANDS FOR KNOW-HOW, OUTSTANDING TECHNOLOGY, AN INTERNATIONAL OUTLOOK AND MANAGEMENT COMPETENCE. CREATING ADDED VALUE – TODAY AND TOMORROW.

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## INTRODUCTION BY THE CHIEF EXECUTIVE



Dr. Jürgen Koch

Michael Ernst

Dr. Wolfgang Pinegger

Dr. Ralf H. Bufe

Hans H. Overdiek

STRENGTHENING CORE BUSINESS. USING MARKET OPPORTUNITIES.

EXPANDING GROWTH SEGMENTS. PFLEIDERER AG IS ON THE WAY TO A NEW FUTURE.

## Ladies and gentlemen,

While 2001 was a difficult year for Pfeleiderer AG, it was still one marked by success. Thanks to the hard work of all our business centers we met – and even slightly exceeded – our targets, ending with EBT of euro 51.4 million, despite the extremely unfavourable economic climate. This achievement is a fair reward for the efforts of the past two years, in which your company has reverted to profit-orientated growth following extensive restructuring and consolidation. At a time when news of the economy is still full of insolvencies, profit warnings and notices of disappointing profits, we have more than achieved our goals:

- The Wood-Based Panels business center is the most important source of sales and earnings for our Group, and we are one of the most profitable suppliers in the industry in Europe.
- Income in the Doors and Windows business center improved substantially during 2001. In the face of a continuing fall in demand, and high pressure on prices, acquiring the SVEDEX® brand has strengthened our leadership in the German market for interior doors.
- In the Insulation Technology business center, turnaround was achieved through dynamic sales growth in the Eastern European markets. With the construction of a new plant in the Moscow area, we are continuing to expand our market presence.
- Infrastructure Technology reported good sales and profit growth, particularly within the business units Rail Traffic and Masts/USA. The Telecommunication business unit secured major letters of intent, despite delays in building up the UMTS network in Germany. Our Wind Power business is developing fully on schedule.

We have the ability to build on this foundation, but we should not rest. Despite growing expectations of a general economic revival during the second half of 2002, the dramatic weakness of the domestic construction sector, surplus capacity and massive competition and pressure on prices in significant markets compel us to continue adapting our structures to match the markets and seeking to enhance performance.

This is a challenge we are tackling with confidence and energy. We intend to achieve a complete strategic reorientation of Pfeleiderer AG. This is based on operating with even more success on national and international markets, expanding international activities still further, and strengthening profitability on a sustained basis. This will make us even more attractive as a capital market investment for institutional and private investors.

The key factors are strengthening our core business, exploiting market opportunities and expanding growth areas. With this in mind, we are forging the path to a new future for Pfeleiderer AG. In the name of the entire Executive Board, I am happy to invite you to accompany us – it will be worth it.

I would like to thank all our employees for their loyalty and enthusiasm, all employee representatives for being fair and constructive partners, and you, our shareholders, for your trust and support.

Neumarkt, May 2002



Dr. Ralf H. Bufe

Chairman and CEO of Pfeleiderer AG

## REPORT BY SUPERVISORY BOARD



Ernst-Herbert Pfeleiderer

WE CAN BUILD ON THE SUCCESS OF 2001.

NOW WE NEED TO SET COURSE FOR DYNAMIC CORPORATE GROWTH.

Ladies and Gentlemen, Dear Shareholders, Friends and Partners of Pfeleiderer AG,

During 2001, the Supervisory Board of Pfeleiderer AG performed its duties as required by law and the corporate articles. This involved the constant supervision of management activities and the provision of advice based on four ordinary meetings of the Supervisory Board – one each quarter. At these meetings, the Executive Board reported extensively on the state of the Company and current business developments. The standing committee of the Supervisory Board also met twice during the year under review. In addition, a regular exchange of views and information took place between the Chairman of the Supervisory Board and the CEO. The mediation committee under Article 27 (3) of the German Co-Determination Act (“Mitbestimmungsgesetz”) did not meet during the past financial year.

The Supervisory Board was kept informed about fundamental issues involving corporate planning, particularly in the areas of financial, investment and manpower planning. Where approval was required for decisions and measures undertaken by the Executive Board, the members of the Supervisory Board carefully examined the proposals put forward at their meetings and passed resolutions based on both written and oral information.

On December 1, 2001, Mr Helmut Rauscher, Chief Financial Officer of Pfeleiderer AG since 1997, ended his membership of the Board in order to concentrate on other tasks. Mr Rauscher has worked for the Pfeleiderer Group for almost four decades, playing a crucial role during its rise to become an internationally operating conglomerate. He parts with our special thanks and the warm regards of our Company. Since December 1, 2001, the new Chief Financial Officer is Dr. Jürgen Koch.

In accordance with the resolution passed by the General Meeting on July 10, 2001, as Chairman of the Supervisory Board, I engaged Ernst & Young Deutsche Allgemeine Treuhand AG Wirtschaftsprüfungsgesellschaft, Stuttgart, to audit the Financial Statements of 2001, taking into account the bookkeeping records and Management Report of Pfeleiderer AG and the Consolidated Financial Statements and Group Management Report. The audit also assessed material additions in the form of fixed assets, the treatment of new acquisitions in first-time consolidation, the management of trade receivables and the plausibility of the assumptions, statements and forecasts contained in the Management Report.

The Financial Statements and Consolidated Financial Statements as of December 31, 2001 and the summarized Group Management Report, including the Management Report of Pfeleiderer Aktiengesellschaft, were audited by Ernst & Young Deutsche Allgemeine Treuhand AG Wirtschaftsprüfungsgesellschaft and received an unqualified audit opinion.

The Supervisory Board also examined the Financial Statements and Consolidated Financial Statements prepared by the Executive Board and the summarized Management Report and Group Management Report, the audit report of the auditor having been submitted in good time to all members of the Supervisory Board. The public auditor attended the discussions of the committee of the Supervisory Board and reported on the findings of his audit. The Supervisory Board's examination of the Financial Statements, the Consolidated Financial Statements and the summarized Management Report and Group Management Report revealed no irregularities. The Supervisory Board concurs with the auditors' findings. It approves the Financial Statements for fiscal 2001 and has ratified them in accordance with Article 172 of the German Stock Corporation Act.

The Supervisory Board supports the Executive Board's proposal for the appropriation of net profit. Accordingly, payment of a dividend of euro 0.20 to all entitled shareholders will be proposed at the General Meeting to be held on July 2, 2002.

Ernst & Young Deutsche Allgemeine Treuhand AG Wirtschaftsprüfungsgesellschaft, Stuttgart also audited the Management Report pursuant to Section 312 of the German Stock Corporation Act with respect to relationships maintained with affiliated companies (dependence report). The auditors have issued the following opinion:

"Within the terms of our audit and assessment of the Company performed in accordance with professional standards, we hereby confirm that

1. the information and data contained in the report are correct,
2. payments made by the Company for legal transactions, as specified in the Report, were not inappropriately high."

The Supervisory Board also examined the Report of the Executive Board on the Company's relationship to affiliated companies. It has no objections to the final statement of the Executive Board contained in the Report, or the results of the examination by the auditors.

On behalf of all members of the Supervisory Board, I would like to thank the Executive Board, all employees and the employee representatives of our Company very warmly for their professional and personal commitment during the past 12 months. Pfeleiderer AG performed well during 2001 in a difficult economic climate. It is now important that we set our sights on ensuring dynamic and profitable business growth over the long term for the benefit of the Company, its employees, customers and shareholders.

Neumarkt, May 2002



Ernst-Herbert Pfeleiderer

Chairman of the Supervisory Board of Pfeleiderer AG

# MANAGEMENT REPORT

- COURSE OF QUALITATIVE GROWTH SUCCEEDS
- RESTRUCTURING STARTS TO TAKE EFFECT

## GENERAL SYNOPSIS

### GLOBAL ECONOMY STILL SHOWING SIGNS OF WEAKNESS

#### Economic Outlook

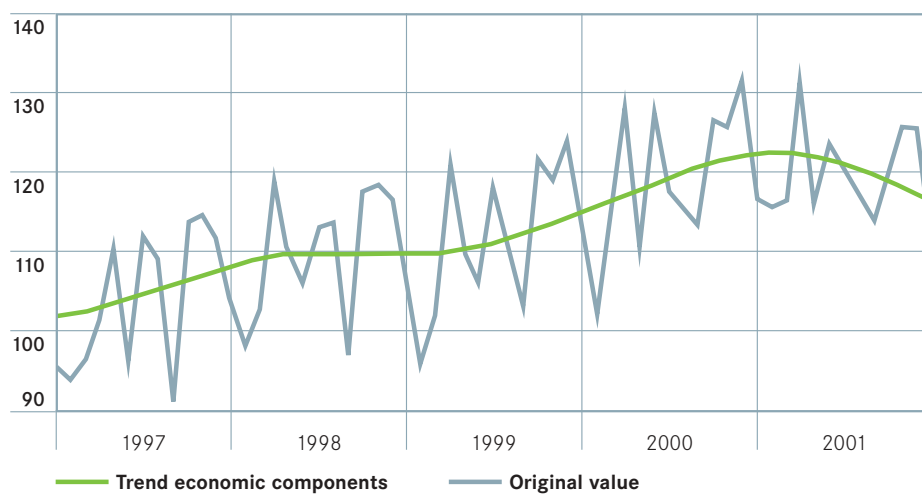
The global economic crisis of 2001 left very few countries unaffected. Towards mid-year, economic growth virtually ground to a standstill. This was particularly the case in the high tech industries, which had to face up to drastic downward corrections of their figures. The first flickers of improvement, which began to appear towards the end of the summer, were promptly extinguished by the terrorist attacks of September 11 in the USA before they could take hold. As a result, the global economy remained in a state of shocked limbo for several months, before finally starting to pick up towards the end of 2001.

The global business climate index issued by the ifo Institute for Economic Research in Munich, based on quarterly data taken from 80 countries around the world, fell to its lowest point since records were first started in 1981. Experts expect the generally weak state of the economy to continue for a while yet, while prospects for the future have at best returned to the level they were at before the attacks on the World Trade Center in September 2001. While this indicates that the global economic downturn is not yet over, it does seem to be drawing to a close. Experts are now predicting that the economy will have bottomed out in Germany by the second quarter of 2002.

The seriousness of the global economic situation in 2001 was clearly reflected by the fiscal policy of the US Federal Reserve Bank. In view of the decline in economic activity, the target interest rate for Federal Funds was lowered in seven steps by 3 percent from the beginning of 2001, with a further four changes occurring after September 11 bringing interest rates down by a total of 1<sup>3</sup>/<sub>4</sub> percent. The rate for Federal Funds of the US Central Bank at the end of 2001 at a nominal 1.75 percent was its lowest rate for 40 years.

Germany saw a drastic cutback in corporate expenditure during 2001, with inventories heavily pruned back, leading to a virtual stagnation in economic growth. Gross domestic product grew by just 0.6 percent, the lowest increase since 1993, when Germany was then hit by a sharp recession.

## Economic Analysis of Manufacturing



(Source: Federal Statistics Office: Economic Forecast – Manufacturing)

Economic activity continued to slow down over the last 12 months of 2001. Seasonally adjusted GDP figures for the 1<sup>st</sup> quarter of 2001 showed growth of just 0.4 percent compared to the same period of the previous year. However, this level was barely reached in the second quarter, while the third quarter recorded a downturn of -0.1 percent. The year 2001 ended with figures for the fourth quarter showing economic stagnation.

As economic prospects became dimmer, companies successively reduced their spending on capital equipment and construction. Capital expenditure was down by 3.4 percent compared to 2000, contrasting strongly with a nearly 9 percent increase in that year. With regard to investment in building and construction activity, the downturn was even more radical. Following a decline of 2.5 percent in 2000, expenditure in this area was down by as much as 5.7 percent in 2001. Changes made in company inventories further slowed down economic growth by 0.6 percent.

Domestic demand decreased by 0.5 percent in 2001. According to the Federal Statistics Office, part of the weakening of overall growth is due to calendar effects. Manufacturing, excluding the construction sector, had to contend with a decline in economic growth of 0.3 percent. In the construction sector, value added decreased by as much as 6.6 percent – the seventh year in a row that this sector has been in decline.

(Sources: OECD, ifo, HWWA, Federal Statistics Office, Federal Bank)

## SECTOR-BY-SECTOR DEVELOPMENT

### Wood-Processing Industry

The German wood processing and furniture manufacturing industry had to absorb strong drops in sales, returning its worst results since 1995, according to the Association of German Wood and Plastics Processing Industries (HDH). Sales for the sector overall were down by 3.1 percent over the previous year to euro 39.4 bn. Sales in the furniture industry – the most important user of wood-based panels from Pfeleiderer – shrank by around 1.6 percent in Germany during fiscal 2001. The market for kitchen furniture was particularly affected, down by 4.1 percent, while manufacturers of living, dining and bedroom furniture reported sales figures of minus 3.7 percent. On the other hand, figures reported by office and shop outfitters were slightly up by 0.5 percent over the previous year. Meanwhile the wood trade reported a downturn of 5.5 percent to euro 16 bn.

The two fiscal half-years diverged during 2001. The overall slump in the economy and the fall in sales was most marked during the 4<sup>th</sup> quarter.

### Insulation Materials

Several factors have affected the market for insulation materials over the last few years, both nationally and internationally. While the construction sector in Germany continues to develop sluggishly and has production surpluses, the market for insulation material in Eastern Europe is growing dynamically.

The Eastern European economies have been going through a steady boom since 1996. Following the economic crisis that affected individual countries during the eighties, in particular Russia, these markets are now recovering and growing sustainably again. All have old real estate and housing with inefficient forms of energy usage. That explains why insulation materials in these countries, both in new buildings as well as in the renovation of old realty, are playing such an important role for the improvement of energy usage, and why this is a determining factor for the high growth rates which continue to be recorded in this market.

The European Insulation Manufacturers Association expects the Western European market to continue to grow by an average of 2.1 percent (CAGR) until 2009. This contrasts with growth rates of 4.6 percent forecast up to 2009 for the Eastern European region.

### Doors and Windows

The level of local authority building permission in Germany is the vital statistic when examining what changes took place in the Doors and Windows segment of the market. Overall, the volume of buildings completed fell by 6 percent in Germany in 2001 (source: German Central Association of the Construction Industry – ZDB). Sales in the apartment sector declined by 15 percent, while public and commercial construction was down by between 2 to 3 percent. And while the ZDB is expecting the slowdown in investment activity to gradually flatten out, it is still forecasting a downturn of around 4 percent in apartment construction in 2002 (source: FAZ 9.1.02).

One particularly serious factor is the decline in the house renovation sector (– 24.9 percent). The Eastern German market (2001: – 33.2 percent) lost nearly 50 percent of its volume over the last three years. The main reason for this appears to be the ending of tax relief and an oversupply of apartments in the market. That would explain why the German windows market slumped again in 2001, down by 18.1 percent. Only 17.4 million window units were sold in 2001, contrasting with sales of around 19.5 million units in 2000.

### **Infrastructure Technology**

Developments in the rail traffic, energy supply, telecommunications and wind power markets are particularly relevant with regard to Pfleiderer's Infrastructure Technology Business Center. Unfortunately, telephone network providers have deferred the capital expenditure needed to set up and maintain GSM and UMTS networks, which is now scheduled to be spread over the coming years. However, analysts at Dresdner Bank still expect around euro 180 billion to be spent in creating the pan-European UMTS network. At the same time, expenditure by the German railway company Deutsche Bahn to expand its existing track network, as well as spending by regional network and European infrastructure providers, is running on schedule. And new market opportunities are arising in the international energy markets, following the setting up and expansion of power grids partly run by the private sector, as well as from the use of alternative energy sources.

This trend is underpinned by the German Renewable Energies Act (EEG) passed in 2001, which lays down minimum payments for the production of regenerative energy – a matter of major importance not only for the wind power sector. German wind power capacity rose by 44 percent in 2001. The Federal Government has made it its target to double the amount of renewable energy by 2010 in answer to environmental pollution caused by carbon dioxide emissions.

**GROUP REPORT****GREATER EARNINGS POWER GIVES VALUE-ORIENTED GROWTH****Sales** (euro in millions)

	1. 1. 2001 – 31. 12. 2001	1. 6. 2000 – 31. 12. 2000	1. 6. 1999 – 31. 5. 2000
Wood-Based Panels	760.0	455.5	752.8
Doors and Windows	149.4	106.4	215.0
Insulation Technology	197.8	111.1	215.4
Infrastructure Technology	322.9	159.1	270.0
<b>Total</b>	<b>1,427.4</b>	<b>830.3</b>	<b>1,437.8</b>

**EBITDA** (euro in millions)

	1. 1. 2001 – 31. 12. 2001	1. 6. 2000 – 31. 12. 2000	1. 6. 1999 – 31. 5. 2000
Wood-Based Panels	110.5	75.2	92.4
Doors and Windows	– 4.6	0.6	9.3
Insulation Technology	37.8	12.7	17.3
Infrastructure Technology	44.6	26.0	42.9
<b>Total</b>	<b>175.3</b>	<b>107.0</b>	<b>167.6</b>

**EBIT** (euro in millions)

	1. 1. 2001 – 31. 12. 2001	1. 6. 2000 – 31. 12. 2000	1. 6. 1999 – 31. 5. 2000
Wood-Based Panels	68.1	47.9	44.0
Doors and Windows	– 9.0	– 2.8	2.7
Insulation Technology	16.0	0.8	– 4.2
Infrastructure Technology	33.7	21.0	34.0
<b>Total</b>	<b>88.2</b>	<b>55.3</b>	<b>72.1</b>

## Earnings

	2001		1. 6. – 31. 12. 2000		1999/2000	
	euro million	+/- in %	euro million	+/- in %	euro million	+/- in %
<b>Total operating performance</b>	<b>1,459.4</b>	<b>100.0</b>	<b>828.7</b>	<b>100.0</b>	<b>1,455.5</b>	<b>100.0</b>
Cost of materials	- 771.1	- 52.8	- 433.1	- 52.3	- 776.8	- 53.4
<b>Gross earnings</b>	<b>688.3</b>	<b>47.2</b>	<b>395.6</b>	<b>47.7</b>	<b>678.7</b>	<b>46.6</b>
Personnel expenses	- 337.9	- 23.2	- 192.9	- 23.3	- 339.4	- 23.3
Other expenses and income	- 175.2	- 12.0	- 93.7	- 11.3	- 168.1	- 11.5
Investment earnings	0.1	0.0	- 2.0	- 0.2	- 3.6	- 0.2
<b>EBITDA</b>	<b>175.3</b>	<b>12.0</b>	<b>107.0</b>	<b>12.9</b>	<b>167.6</b>	<b>11.6</b>
Depreciation on assets	- 87.1	- 6.0	- 51.7	- 6.2	- 95.5	- 6.6
<b>EBIT</b>	<b>88.2</b>	<b>6.0</b>	<b>55.3</b>	<b>6.7</b>	<b>72.1</b>	<b>5.0</b>
Interest earnings	- 36.8	- 2.5	- 24.1	- 2.9	- 34.7	- 2.4
Extraordinary results	0.0	0.0	7.1	0.9	- 34.4	- 2.4
<b>EBT</b>	<b>51.4</b>	<b>3.5</b>	<b>38.3</b>	<b>4.6</b>	<b>3.0</b>	<b>0.2</b>
Taxes on income and earnings	- 16.0	- 1.1	- 14.8	- 1.8	- 11.6	- 0.8
<b>Net income</b>	<b>35.4</b>	<b>2.4</b>	<b>23.5</b>	<b>2.8</b>	<b>- 8.6</b>	<b>- 0.6</b>

For the purpose of this table, depreciation of current assets is shown under Other expenses and income

## Earnings

Despite difficult economic and trading conditions, Pfeleiderer AG achieved stable sales volume in fiscal 2001, with pre-tax earnings of euro 51.4 million exceeding expectations. In the previous fiscal year – a seven-month short year running from June to December 2000 – the company reported an EBT of euro 38.3 million. The growth in earnings is particularly noticeable when comparing figures with the last full fiscal year 1999/2000, where EBT came to just euro 3.0 million. This result included an extraordinary charge for restructuring of euro 34.4 million.

The fact that sales, and thus earnings, are normally far stronger for Pfeleiderer in the second half of the year makes comparison of the full fiscal year 2001 with the short year (7 months) even more difficult. For that reason, the figures in this report also include the last full financial year 1999/2000.

The Pfeleiderer Group reported total sales of euro 1,427.4 million (2000: euro 830.3 million) in fiscal 2001. Sales from outside Germany accounted for 45.4 percent of total sales in the Pfeleiderer Group in fiscal 2001, up on short fiscal year 2000 at 43.7 percent. This shows that Pfeleiderer's growth continues to be led by the expansion of its international business. Our Infrastructure Technology Business Center is well positioned in the US market, while our Wood-Based Panels and Insulation Technology Business Centers are providing excellent entry points in Eastern Europe, a strategy we intend to build on in 2002.

Earnings before interest, taxes, depreciation and amortization (EBITDA) came to euro 175.3 million (2000: euro 107.0 million), while earnings before interest and taxes (EBIT) came to euro 88.2 million (2000: euro 55.3 million). The slight decline in EBITDA and EBIT margins can be explained by the high unadjusted seasonal figures for short fiscal year 2000. As comparison with the last full fiscal year 1999/2000 shows, these margins have improved in reality.

At 52.8 percent, cost of materials as a percentage of total operating performance reached nearly the same level as in the short fiscal year. However, when compared to the last full fiscal year 1999/2000, this figure is down by 0.6 percent. This is due to improvements made in the use of materials and their procurement.

Personnel expenses as a percentage of total operating performance remain almost unchanged. The average number of employees decreased from 10,115 in fiscal 1999/2000 to 9,883 in short fiscal 2000 and down to 9,220 in fiscal 2001. Gross earning per employee in fiscal 1999/2000 came to euro 67,000, in the short fiscal year 2000 to euro 60,000 (extrapolated) and to euro 75,000 during the reporting year.

Other operating expenses include typical overheads, as well as freight charges and maintenance costs. Both these cost areas are of particular significance for Pfeleiderer due to the intensity of plant and transportation operations. Accordingly, just a slight increase in these expenses led to a direct percentage increase as part of total operating performance from 11.5 percent (fiscal 1999/2000) to 12.0 percent (2001). The increase in freight charges can be attributed to the Insulation Technology Business Center as plants in Eastern Europe were supplied from Western Europe as an interim measure in a strategic drive to expand our market presence in the region. Planned capital expenditure locally will enable products to be supplied directly in future, further reducing freight charges.

Depreciation as a percentage of total operating performance continued to decline throughout the reporting period. The reason for this lies in the relatively high levels of depreciation in fiscal 1999/2000 as write downs calculated using the declining balance method diminish on major investments made in previous years – this particularly applies to the new particleboard plant in Neumarkt.

The slight percentage increase in interest charges compared to 1999/2000 is due among others to a slight increase in overall debt. Overall debt includes liabilities to lenders shown in the balance sheet and also includes the asset-backed securities financing program (ABS) started in fiscal 2001.

The tax ratio (taxes on earnings computed against pre-tax earnings) is around 31 percent, some 8 percentage points lower than the previous year. In 2000, taxes included charges relating to the audit carried out for tax periods up to 1997.

### **Balance Sheet Structure**

The balance sheet total for the Pfeleiderer Group in fiscal 2001 increased slightly to euro 1,186.8 million during the short fiscal year 2000 (2000: euro 1,185.6 million). Fixed assets accounted for around 55 percent of the balance sheet total as of December 31, 2001, representing a

## Balance Sheet Structure

	31.12. 2001		31.12. 2000		31. 5. 2000	
	euro million	+/- in %	euro million	+/- in %	euro million	+/- in %
Fixed assets	654.6	55.2	690.0	58.2	751.8	60.1
Current assets	529.0	44.6	491.7	41.5	495.8	39.7
Prepaid expenses	3.2	0.3	3.9	0.3	2.3	0.2
	<b>1,186.8</b>	<b>100.0</b>	<b>1,185.6</b>	<b>100.0</b>	<b>1,249.9</b>	<b>100.0</b>
Equity	222.9	18.8	223.4	18.8	244.7	19.6
Accruals	161.8	13.6	177.1	14.9	195.5	15.6
Financial liabilities	565.3	47.6	573.1	48.3	646.3	51.7
Other liabilities	235.7	19.9	211.1	17.8	161.4	12.9
Deferred charges	1.1	0.1	0.9	0.1	2.0	0.2
	<b>1,186.8</b>	<b>100.0</b>	<b>1,185.6</b>	<b>100.0</b>	<b>1,249.9</b>	<b>100.0</b>

reduction of 3 percentage points compared to December 31, 2000 and about 5 percentage points on May 31, 2000. The decline is due to divestments, but also to goodwill carried under intangible assets being offset against equity capital.

## Capital Expenditure

Capital expenditure in fiscal 2001 came to euro 94.0 million, putting it higher than spending for the seven-month period of the previous fiscal year. Spending was mainly directed at the sleeper production plant in Langen and Spain, the concrete mast factory in California, the transfer of door production to Oettingen, improvements to the insulation factory in Serpuchov in Russia and technical plants at various sites in the Wood-Based Panels Business Center.

The increase in current assets is especially due to the higher holdings of cash and cash equivalents. The largest increases in inventories originated in the Wood-Based Panels and Infrastructure Technology areas. With regard to the latter segment, this has been the result of increased volumes. On the other hand, Wood-Based Panels exploited price advantages, leading to higher inventories of raw materials, supplies and purchased merchandise as of the balance sheet cut-off date of December 31, 2001.

As in the previous year, the equity ratio was around 19 percent. It is planned to increase this to 25 percent over the medium term. In absolute terms, equity capital remains at the same level as on the last balance sheet cut-off date. This comes from contributions to equity capital from current earnings, as well as the countering effects of offsetting goodwill against equity capital. Outstanding goodwill from the acquisition of 50 percent of the holdings in Pfeleiderer Türen GmbH & Co. KG should be particularly mentioned in this respect. Due to lower asset holdings, around 34 percent of assets are covered by equity capital. In the previous year this figure was around 32 percent.

	Formula	31.12.2001	31.12.2000
Asset ratio (%)	Fixed Assets : Total Assets	55.2 %	58.2 %
Asset investment ratio (%)	Depreciation* : Capital Expenditure	91.0 %	68.3 %
Sales to inventories ratio (less payments in advance)	Sales* : Inventories	7.4	8.3
Sales to trade receivables ratio	Sales* : Trade Receivables	7.0	6.8
Equity ratio (%)	Equity : Balance sheet total	18.8 %	18.8 %
Asset coverage ratio (%)	Equity : Tangible Assets	38.4 %	37.6 %

\* annualised

The marked decline in accruals compared to May 31, 2000 is mainly due to the dissolving of accruals set up in fiscal 1999/2000 for restructuring.

Return on Capital Employed (ROCE) increased from 8 percent in fiscal 1999/2000 to 11.5 percent in fiscal 2001. Pfeleiderer's various business centers each made their own contribution to Group ROCE. Wood-Based Panels achieved a ROCE of 15.5 percent, making it the most profitable in the industry, while Insulation Technology recorded 10.5 percent and Infrastructure Technology – the highest earning business center – reported 20.2 percent. The Doors and Windows Business Center failed to provide a positive contribution to ROCE due to its negative EBIT.

### Financing

Refinancing of the Pfeleiderer Group is directed at securing the company's long-term future. Long-term liabilities from loans have maturity period up to 2008 and carry an average interest charge of less than six percent.

In August 2001, Pfeleiderer AG commissioned the agency Fitch Ratings Ltd. to carry out a rating and was given a BBB to senior unsecured debt, putting the Group within the investment grade. The rating is due to be reassessed in mid-2002.

No exchange rate risks are expected due to the relatively low level of business conducted outside the euro and dollar areas and careful currency hedging. The same applies to interest rate risk on existing credit lines and fixed borrowing conditions during the reporting period.

### Derivative Financial Instruments

Derivative financial instruments are only used by the Pfeleiderer Group to hedge risks from currency and interest rates for transactions which are part of the company's normal operations. These activities are generally conducted centrally by Pfeleiderer AG and by Pfeleiderer Finance B.V. on behalf of the company's consolidated companies.

**Value Added Account**

	2001		1. 6. – 31. 12. 2000		1999/2000	
	euro million	+/- in %	euro million	+/- in %	euro million	+/- in %
<b>In</b>						
Sales	1,427.4		830.4		1,437.8	
Other income	85.2		34.0		45.8	
<b>Total</b>	<b>1,512.6</b>	<b>100.0</b>	<b>864.4</b>	<b>100.0</b>	<b>1,483.6</b>	<b>100.0</b>
Cost of materials	771.1	51.0	433.1	50.1	776.8	52.4
Other costs	228.3	15.1	124.3	14.4	234.2	15.8
Depreciation	87.1	5.7	51.7	6.0	95.5	6.4
<b>Net value added</b>	<b>426.1</b>	<b>28.2</b>	<b>255.3</b>	<b>29.5</b>	<b>377.1</b>	<b>25.4</b>
<b>Out</b>						
Personnel expenses	337.8	79.3	192.9	75.6	339.4	90.0
Taxes	16.0	3.8	14.8	5.8	11.6	3.1
Loans (interest)	36.9	8.7	24.1	9.4	34.7	9.2
Company, shareholders	35.4	8.3	23.5	9.2	- 8.6	- 2.3
	<b>426.1</b>	<b>100.0</b>	<b>255.3</b>	<b>100.0</b>	<b>377.1</b>	<b>100.0</b>

Total performance increased by about 2 percent compared to fiscal 1999/2000. The under-proportional increase in material costs is due to greater efficiency in procurement and processing. Lower depreciation compared to fiscal 1999/2000 is due to reduced write downs under the declining balance method applying to major investments made in previous years.

The largest part of net value added – 79.3 percent – accrued to employees from wage and salary payments. Both the company and its shareholders are participating in the growth in net value added. The tax rate was also considerably lower, 2 percentage points down compared to the short fiscal year. The same applies to paid interest, down from 9.4 to 8.7 percent.

**Pfleiderer AG's Asset Situation**

As of balance sheet cut-off date, December 31, 2001, Pfleiderer AG was carrying a balance sheet profit of euro 15,215,000. Compared to the short fiscal year 2000, this is a reduction of euro 3,182,000. The balance sheet profit is mainly affected by the absorption of holdings amounts of euro 72,266,000. This includes holdings in affiliated companies which did not make dividend payments in the previous fiscal year due to their differing financial years. This figure was adjusted following the granting of a subsidy of euro 55,000,000 to Pfleiderer Bauelemente GmbH & Co. KG, Neumarkt in order to offset extraordinary depreciation on its revalued holdings in Pfleiderer Türen GmbH & Co. KG, Neumarkt.

Transfer of financial activities to other consolidated companies was particularly responsible for the reduction of the balance sheet total of euro 713.5 million to euro 540.1 million. As the holding company, Pfleiderer AG is only responsible for strategic activities and the direction of the Group.

### Dealings with Affiliated Companies

In its report on dealings with consolidated (affiliated) companies, Pfleiderer AG made the following statement for fiscal 2001:

“Taking into account all circumstances known to us when the transactions were reported, appropriate compensation was received in all cases. No measures were taken at the instruction or on in the interests of Pfleiderer Unternehmensverwaltung GmbH & Co. KG or companies associated with Pfleiderer Unternehmensverwaltung GmbH & Co. KG.”

## PFLEIDERER WOOD-BASED PANELS

### GOOD PROFITABILITY DESPITE DIFFICULT MARKET CONDITIONS

#### ■ SOLID SALES DESPITE LOWER DEMAND

#### ■ NEGATIVE PRICES AFFECT EBITDA

PARTICLEBOARD, MEDIUM DENSITY FIBREBOARD (MDF), ORIENTED STRAND BOARD (OSB) AND BLOCKBOARD DOMINATE THE WOOD-BASED PANELS MARKET. IN PURE SALES TERMS, THE MOST IMPORTANT PRODUCT IS PARTICLEBOARD, A UNIVERSAL MATERIAL WIDELY USED FOR BUILDING CONSTRUCTION AND INTERIOR DESIGN.

Pfleiderer Wood-Based Panels is the Group's largest business center and one of Europe's leading suppliers, employing 4,035 people and operating 13 plants. In 2001, around 50 percent of sales amounting to euro 760.0 million were generated by this center outside Germany. Pfleiderer Wood-Based Panels has an excellent position in the market, particularly in Eastern Europe, where it is participating in a sustained upturn in the growth markets of Poland and Russia.

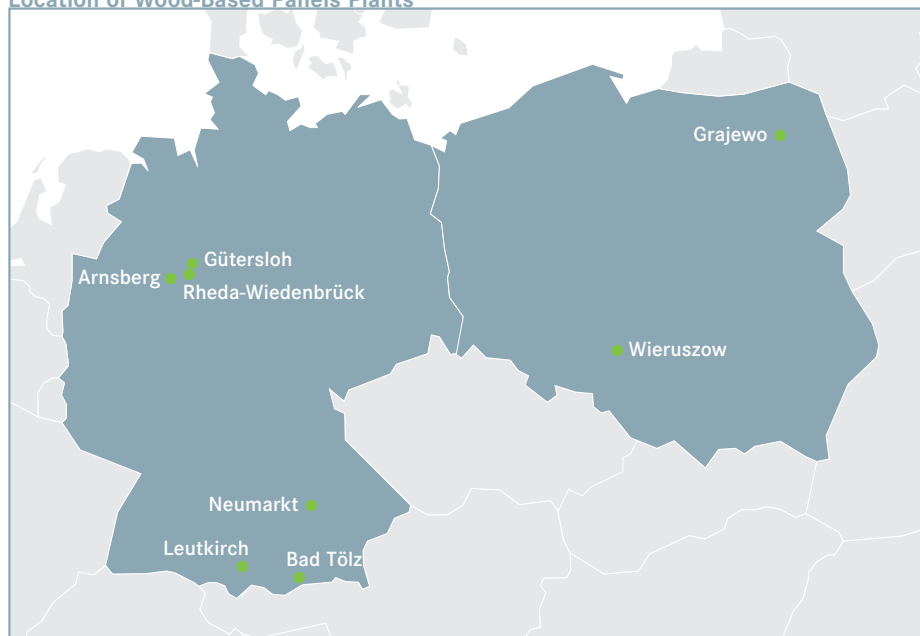
### Focus on Raw and Finished Particleboard

Pfleiderer is a major manufacturer of raw and surface finished particleboard, the latter involving either direct surfacing (DBS) or high pressure laminates (HPL) or HPL elements – with well established brands on the markets such as Thermopal®, DUROPAL®, INNOTEC® and ELTEC®.

In Germany, Pfleiderer's biggest segment of the market is particleboard, with a volume of 4,763 thousand cubic meters. The slight decline on the previous year (2000: 5,067 thousand cubic meters) can be explained by lower sales in the furniture and the tongue and groove boards segments, the latter being highly dependent on the building industry – itself hit by a weak economy. Pfleiderer Wood-Based Panels supplies particleboards as a construction base material for furniture production and interior paneling, and has a market share of 12 percent.

Compared to the simpler materials, surface-finished wood-based materials are decorative components. Pfleiderer is highly active in this segment, offering comprehensive systems involving extensive ranges of direct surfaced (DBS) and highly-resistant HPL products. With a volume of 3,014 thousand cubic meters, direct surfaced particleboard is the second largest segment in Germany after raw particleboard. Pfleiderer is market leader in this segment, with a market

### Location of Wood-Based Panels Plants



share of 24 percent. The high pressure laminated boards (HPL) market currently has an annual volume of 32,000 thousand square meters. With its brands DUROPAL® and Thermopal®, Pfeleiderer has a market share in this segment of 14 percent. Wood-Based panels account for 806 thousand cubic meters, with Pfeleiderer holding 13 percent of the market (sources: EPF, VHI, Federal Office of Statistics).

Pfleiderer's Wood-Based Panels Business Center issued its first Design Report in the spring of 2001, underlining its competence as a major trendsetter. The trends indicator, to be published again in 2002, comprises an analysis of trends in interiors and the latest colours for decorative design. Pfeleiderer Wood-Based Panels is thus providing finishing industries and interior designers with wood-based panels in line with the latest trends.

### Increased Sales Despite Weak Economy

The weak economy caused wide fluctuations in prices for wood-based materials during the reporting period 2001. Although prices rose strongly in 2000, a peak was reached in the period 2000 - 2001, only to be followed by retrenchment (source: VHI Report). The market for particle-board was particularly affected by this downward movement. Pfeleiderer Wood-Based Panels fell in price by around 3.5 percent on average compared to fiscal 2000. However, lower prices were cushioned to some extent by greater sales volumes. On the other hand, average prices for HPL remained stable and even moved upwards by 3 percent. Here, too, sales volumes remained stable. Prices for directly coated particleboard increased by 2 percent during 2001, while sales volumes increased by 6 percent.

Apart from the domestic market, Polish production sites for Pfeleiderer Wood-Based Materials were also hit by the weak economy. Here prices for unfinished particleboard declined by 6 percent. Volumes sold were also considerably lower, down by 17 percent.

Expansion of exports has been a focal activity, greatly offsetting the economic slump in Germany. Nevertheless, exports could not fully compensate for the economic downturn.

Despite the downturn in demand, Pfeleiderer Wood-Based Panels reported sales of euro 760.0 million in 2001 (short fiscal 2000: euro 455.5 million). As a result, this business center contributed 53 percent of Pfeleiderer's total sales. However, weak markets took their toll on sales in the end, particularly in the third and fourth quarters of 2001, normally the time of year where the biggest volumes are recorded.

Sales analysis shows that 50.5 percent of sales were made in Germany and 19.5 percent in other EU countries, while 26.0 percent were accounted for by other non-EU countries in Europe and 4.0 percent by the rest of the world. This illustrates how stable our foreign sales remain, at 49.5 percent.

The biggest selling products were the brands INNOTEK® and DUROPAL®, accounting for 60.5 percent, followed by our Polish brands (for the domestic market) adding 24.8 percent, with Thermopal contributing 13.9 percent and ELTEC® 0.8 percent to total sales in the Wood-Based Panels Business Center.

As a result of the downturn in prices, earnings before interest, taxes, depreciation and amortization (EBITDA) for fiscal 2001 came to euro 110.5 million, a slight decline (short fiscal 2000: euro 75.2 million). Earnings before interest and taxes (EBIT) were also slightly down at euro 68.1 million (short fiscal 2000: euro 47.9 million).

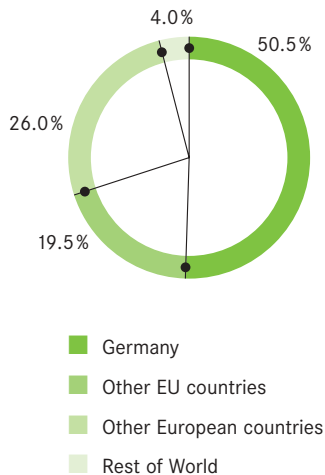
On the other hand, the cost structure of this business center is excellent. With a ROCE of 15.5 percent, Pfeleiderer Wood-Based Panels is now one of the most profitable suppliers in the industry. Production capacities are being used optimally so that further growth is only possible by expanding production capacity. Gross earning per employee have increased to around euro 93,000 as a result of the cost savings introduced.

### Bundling Procurement Activity

The wood-based materials industry is faced with an oligopoly with regard to the supply of chemical raw materials and paper. This aside, the general supply situation is good. Parallel to sales, prices being paid moved downwards during the reporting period.

Wood supplies have been strongly affected by the German Renewable Energy Act (EEG), as the new legislation has resulted in increasing competition for used wood as a resource. As of January 1, 2002, Pfeleiderer bundled its procurement activities for all types of wood by setting up Interwood GmbH. Interwood GmbH operates on behalf of our consolidated plants, as well as for third party contractors. All opportunities to reduce costs are being exploited by permanently optimizing the logistics of the procurement process.

With regard to wood prices, the wood-based materials industry in Central and Western Europe profited from the effects of the storm "Lothar". However, cheaper material prices were neutralized overall by the negative effects of lower sales.



### Foreign Sales

Being able to use the company's own combined heat-power plants has kept the energy costs of production to a minimum. In 2001, a new combined heat-power generator came on stream at the Gütersloh site. These state-of-the-art energy units have significantly lower emissions than the statutory levels, almost fully cover all energy needs, and can be used with a wide range of fuels. This ensures economic operation, even when fuels become scarce.

### Capital Expenditure

Capital expenditure came to euro 21.0 million for the Wood-Based Panels Business Center in 2001. The engineered wood segment makes intensive use of capital, so that cost leadership and targeted segmentation are essential for success. Pfeleiderer has achieved this through a policy of investing in the most modern technology available.

Spending by leasing on the new heat-power generator in Gütersloh came to around euro 50 million. As a result, this site has a highly competitive energy cost structure.

A new "Contipress" costing around euro 11 million has been installed in order to expand HPL production capacity in Arnsberg. Spending on replacements as part of the modernisation of production plants, as well as stricter environmental rules relating to particle production, led to further expenditure of around euro 4 million.

## PFLEIDERER DOORS AND WINDOWS BETTER PERFORMANCE AND QUALITY

### ■ POSITIVE EBIDTA ON MONTHLY BASIS AT END OF YEAR

### ■ MARKET CONSOLIDATION PUTS PRESSURE ON PRICES

Pfeleiderer is Germany's leading supplier of interior doors with its brands WIRUS®, MORALT® and SVEDEX®, while its WIRUS® brand makes Pfeleiderer a specialist supplier of plastic windows as well as front doors made of plastic or aluminum suited to a wide variety of purposes. Pfeleiderer reported sales of euro 149.4 million for this business center, which employed 1,453 people.

Both the windows and doors markets in Germany are marked by strong fragmentation – characterised by a large number of small suppliers with a strong regional focus. With a market share of 9.8 percent, Pfeleiderer is the biggest supplier of interior doors in the German market. Following the acquisition of SVEDEX® in the Autumn of 2001, the company's market share has now increased to 12.8 percent. (Source: B+L Marktdaten, HH 2002)

### Restructuring Production

Restructuring in the Doors Business Center started in fiscal 2000 has resulted in greater productivity in all areas throughout 2001. Following the closure of the Gütersloh and Versmold locations in 2000, production was moved to Oettingen and Mittweida, while the production and logistics network operating between Oettingen, Mittweida and Lenti in Hungary was reorganized.

THE WINDOWS MARKET IN GERMANY IS STRUCTURED ACCORDING TO FRAME MATERIAL. THE BIGGEST SHARE IN 2001 IS HELD BY PLASTIC WINDOWS, WHICH ACCOUNT FOR 54.9 PERCENT. WOODEN FRAMES STILL ACCOUNT FOR AROUND 22.4 PERCENT OF ALL FRAMEWORK MATERIAL USED. THE MARKET FURTHER BREAKS DOWN INTO ALUMINIUM FRAMES (18.4 PERCENT) AND ALUMINIUM-WOOD FRAMES (4.3 PERCENT).

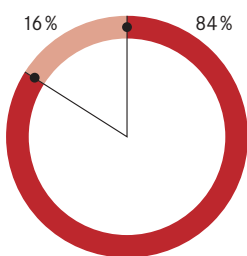
As a result, door production has now been redistributed. The Oettingen plant produces industrial doors, high-quality interior doors and special doors. Lenti in Hungary produces interior doors as well as products for inventory, while Mittweida now only produces door frames. This division and concentration of forces has resulted in a drastic reduction in logistics costs among our sites, while customers can now be fully supplied as quickly as possible. Now that we have overcome some start-up problems with new production methods and the high-bay store in Mittweida, we have achieved a sound basis for transparent operating procedures and cost structures, and thus for successful overall cost management.

The negative market trend in the construction industry was largely offset in the Windows business unit by excellent teamwork by the sales and market teams, and the production and logistics departments. The continuing process of market concentration is also an optimistic sign for the future – in the first half of 2001 alone, several big windows manufacturers with three-figure sales disappeared from the market. This has enabled us to make savings in the Windows segment in the second half of 2001 and to improve sales.

### Acquisition of SVEDEX® Door Brand

As of November 1, 2001, Pfeleiderer acquired the “SVEDEX®” brand, including all rights, licences, customer relations and sales organisations from SVEDEX® Türenwerke GmbH & Co. KG, Monheim. The immediate integration of marketing and sales activities of SVEDEX® Türenwerke into Pfeleiderer Türen GmbH & Co. KG ensured continuity with SVEDEX® customers before they could drift away to other suppliers.

By acquiring and successfully integrating these brands, Pfeleiderer Doors has increased its market share by 3.0 percent to 12.8 percent (source: B+L Marktdaten, HH 2002), thereby securing its market leadership in the German doors market. The Pfeleiderer door brands MORALT® and WIRUS® and the SVEDEX® doors barely overlap with regard to market segments and sales structures. Production of all three brands at Pfeleiderer’s existing doors production sites is resulting in better capacity utilization in a shrinking market, and is producing big cost advantages.



Sales by Business Unit

### Sales

Pfeleiderer’s Doors and Windows Business Center reported sales of euro 149.4 million for fiscal 2001 (short fiscal 2000: euro 106.4 million) and employed 1,453 people. Negative EBITDA (earnings before interest, taxes, depreciation and amortization) of euro – 4.6 (previous year: euro 0.6) was the result of a very difficult market in the first quarter of 2001. However the cost situation for materials improved considerably during the year.

The Doors business unit accounted for 84 percent of sales in this business center. Sales came to euro 124.8 million in 2001, falling below target. There are several reasons for this: apart from a general fall in demand in the market, the closure of the Gütersloh plant and the transfer of production to Mittweida and Oettingen proved more expensive than originally forecast.

The negative earnings before interest and taxes (EBIT) amounting to 9.0 million euros largely resulted in the first quarter of 2001 (euro - 7.2 million) and were cushioned during the rest of the year as restructuring started to take effect. Cutting back 472 jobs also had the effect of increasing gross earnings per employee to around euro 45,000.

### **Greater Quality Control**

A decisive part of restructuring in the Doors and Windows Business Center involved making significant improvements to product quality. Rigorous improvement in production quality control and the introduction of a 100-percent check on most industrial doors and frames has resulted in better quality standards in delivered goods, and reduced quality-related costs by around 40 percent.

Stricter quality controls were not only introduced in production, but also in orders processing and cost management. Tightening up the inspection of inward goods based on defined profiles for procured materials, together with a more vigorous following up of claims, has created higher quality standards right from the start of the production chain.

Part of the ongoing analysis and assessment of customer claims and returned goods includes taking direct action in production to prevent reoccurrence. This has led to a more direct dialogue between producer and customer, enabling suggestions for improvements to be incorporated directly in the production process.

As a result of this tight organisation of quality management and production control, the internal error rate in production has fallen by more than 40 percent.

### **Capital Expenditure**

Capital expenditure in the Doors and Windows Business Center came to euro 25.5 million in fiscal 2001.

The Doors and Windows Business Center is still facing a difficult market, with continual consolidation taking place. In view of this, we are concentrating on optimizing the internal structure of the business center so that it can continue to assert itself on the market.

## PFLEIDERER INSULATION TECHNOLOGY

### HIGH GROWTH POTENTIAL IN EASTERN EUROPE

- IMPROVED PRODUCTIVITY AND MORE SALES IN EASTERN EUROPE
- MARKET SHARE IN WESTERN EUROPE UP 2 PERCENT

Pfleiderer is currently producing URSA® brand glass wool insulation material and various local brands in seven European plants, employing 1,428 people. Over the last ten years, Pfleiderer has emerged as the second largest European producer of glass wool insulation material, and continues to expand internationally. The logistics and production chain which stretches from Belgium to Russia is being strengthened, particularly in Eastern Europe – markets with above-average growth potential. Pfleiderer Insulation Technology is already making 62 percent of its sales – amounting to euro 197.8 million – outside Germany.

#### Market Leader in Eastern Europe

The European market for insulation materials breaks down into several product categories: glass wool accounts for 30 percent of the market volume, rock wool for 22 percent, foam for 42 percent and other products 6 percent. In 2000, the European insulation market had a total sales volume of euro 5.4 billion (source: Freedonia). Western Europe has a 31 percent of global share and is the biggest market outside the USA. The German market itself accounts for around 35 percent of the European market.

While growth rates on the German market are set to increase only slightly by 1–2 percent from 2003 onwards, an average growth rate of 2.1 percent is expected in the West European market for the period 1999 to 2009 (source: Eurima – European Insulation Manufacturers Association). In Eastern Europe, however, much higher rates of around 4.6 percent up to 2006 are forecasted. In particular Russia (13.9 percent), the Czech Republic (9.9 percent), the Ukraine (9.3 percent) and Poland (6.8 percent) all have very attractive growth rates.

Pfleiderer Insulation Technology was able to increase its market share in its home market of Germany from 4 percent in 1992 to around 17 percent in fiscal 2001 (source: Fachvereinigung Mineralfaserindustrie e.V.). This makes Pfleiderer the second biggest supplier of glass wool insulation material in the German market. In Eastern Europe, Pfleiderer has a share in the glass wool market of between 40 to 60 percent by its own calculation, making it undisputed market leader.

The oligopoly that characterises the market is defined by high start-up investments in production plant and complex know-how, both with regard to production and logistics. Around 80 percent of sales is made through wholesalers in the building industry. A further 20 percent is directed at DIY centers and consumers. The market has a high local focus, making customer proximity and short delivery times an essential element of success. Order books in Germany and Western Europe have a typical aging before completion of between two to three days, in other markets such as Russia this figure is much higher.

THE USE OF INSULATION MATERIAL IN HOUSE CONSTRUCTION, RENOVATION AND REPAIR WORK IS INFLUENCED BY ECONOMIC CONSIDERATIONS. HOWEVER, LEGISLATION SUCH AS THE ENERGY SAVING ORDINANCE (ENEV 2002) IN GERMANY IS HELPING STIMULATE DEMAND. RISING OIL PRICES TOGETHER WITH INCREASING HEATING COSTS ARE ALSO HAVING A POSITIVE INFLUENCE ON THE USE OF INSULATION MATERIAL.

**Main Brand URSA®**

URSA® is Pfeleiderer Insulation Technology’s main brand, which has an international reputation and is excellently positioned. Using this as a basis, Pfeleiderer is planning the targeted diversification of its production portfolio in a drive to create a comprehensive insulation material system for the building industry. This will produce cross selling potential resulting from synergies in sales, marketing and distribution.

With its affiliated company Mehr+Held GmbH, Pfeleiderer also has its own development and construction company which erects production plants for insulation materials.

Several measures were undertaken in 2001 to tighten up cost controls and make production more efficient. In developing improved compression technology for insulation material, freight forwarding was able to arrange lighter and more efficient transportation of goods. The R&D department also succeeded in creating a more economical adhesive, further increasing efficiency when using the material.

**Increased Sales Volumes**

Following a general downturn in construction activity in Germany, especially in the construction of new houses, this business center faced lower sales levels in 2001. Prices, however, remain stable. In Eastern Europe, both prices and sales volumes increased slightly.

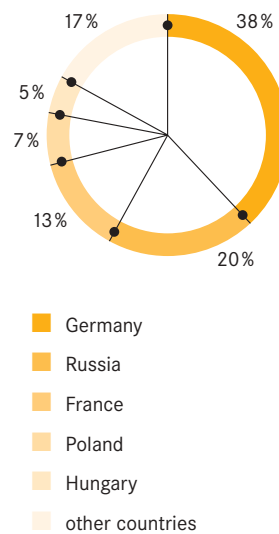
Overall, Pfeleiderer Insulation Technology managed to increase the total amount of glass wool sold by 11 percent in 2001. In Eastern Europe alone, sales volumes increased by 28 percent compared to the previous year. With a total volume of 69.3 million square meters in the markets in which Pfeleiderer Insulation Technology is present, this business center has an overall market share of 15 percent – in Germany this figure is around 17 percent and in Eastern Europe around 19 percent.

Price levels vary widely in Europe – in Western Europe glass wool costs around euro 16 per square meter, while in Central Europe this figure is around euro 25 per square meter due to the better quality product mix.

**Productivity Exceeds Target**

The Insulation Technology Business Center increased sales from euro 111.1 million in short fiscal 2000 to euro 197.8 million in 2001, thereby exceeding expectations.

Our business unit East made the biggest contribution to sales for the business center, adding euro 78.3 million. The sustained increase in sales and earnings is largely due to greater volumes sold in Russia, together with improved productivity and more favourable cost structures in production. Sales campaigns in Romania and Hungary had a positive effect on sales and earnings in these regions, with the Romanian market developing better than expected in 2001. In Poland, the crisis experienced in the national construction industry was clearly felt, leading to lower demand. Over-capacities in the Polish market put added pressure on prices. However, our Polish plant continued to produce at full capacity due to large orders for the Russian market.



Sales by Region

Our business unit West recorded an increase in sales of around 30 percent in the reporting period compared to the previous year. This was especially due to an increase in sales in France. As the market improved, capacity utilization increased correspondingly by over 15 percent. The market share in Western Europe increased in total by 2 percent.

Earnings before interest, taxes, depreciation and amortization (EBITDA) for the Insulation Technology Business Center improved to euro 37.8 million in fiscal 2001, while earnings before interest and taxes (EBIT) increased to euro 16.0 million.

### **Procurement**

Glass wool is produced from the following raw materials: barium, binding agent, used glass, soda, naphthalene and sand. Two-thirds of raw material costs are accounted for by barium and the binding agent. Pfeleiderer Insulation Technology has its own research and development team, which is working continuously on ways to optimize material costs.

No dependencies on specific suppliers exist, and delivery agreements are normally made on a yearly basis. Production costs have fallen by 10 percent year-on-year during the last few years as a result of rationalisation and greater efficiency.

Due to the characteristics of the product, inventories of glass wool normally stand at around 15 – 20 days production. Normal supply times in Germany are between two to three days. A 24-hour service has been introduced in high-density population centres to encourage greater customer loyalty.

### **Quality Management**

Pfeleiderer Insulation Technology has a certified integrated management system complying to ISO 9001 and ISO 14001. At the start of fiscal 2001, the quality management system was adapted to comply with the changed standard ISO 9001:2000. The system used is described in the quality management handbook, together with detailed instructions relating to production and working methods. The system fully complies with existing standards and is supported by the employees.

### **Growth Lies in the East**

Around euro 12.7 million was spent on replacement parts and rationalisation overall in Pfeleiderer's plants in fiscal 2001. In the Delitzsch plant, a cold repair of the glass bath was necessary as part of cyclical maintenance.

The complete new construction of the Serpuchov plant near Moscow in Russia has been budgeted at a double-digit amount in millions. The plant should be completed by December 2002.

## PFLEIDERER INFRASTRUCTURE TECHNOLOGY

### KNOW-HOW AND INNOVATION LEAD TO NEW MARKETS

#### ■ WELL ABOVE TARGET

#### ■ ABOVE AVERAGE GROWTH IN RAIL TRAFFIC AND MASTS

The Infrastructure Technology Business Center comprises the business units Rail Traffic, Masts, Telecommunication and Wind Power. All business units concerned have a high level of internationalisation. This, and their outstanding positions in the markets of Germany, Europe and the USA, are providing excellent conditions for gaining new markets. Pfeleiderer is already gaining from growth markets on three continents. Sales came to euro 322.9 million in fiscal 2001, with around 2,010 employees.

#### **Rail Traffic – German Know-How Highly Respected Internationally**

Pfleiderer Infrastructure Technology's Rail Traffic business unit offers a wide range of products and modern track systems. These include system solutions for urban and intercity rail traffic using state-of-the-art technology that will take us securely into the future. Solid track technology has been continually improved over recent years, with highly specialised tailor-made solutions now available. In 2001, over 50 percent of the so-called "Concrete 2 Block Sleepers" produced were supplied for the Cologne-Rhine/Main Project. Apart from that, our new "Rheda 2000®" technology made a successful debut as a base component in the high-speed Berlin – Halle/Leipzig link.

A major strength of this business unit is the good geographic distribution of its production sites. Sleeper technology at the Rhine/Main site (Frankfurt and Langen) has been thoroughly modernised as part of the process of concentrating production at Langen. In Coswig, conditions have been created for more flexible production technology, enabling the plant to efficiently produce a wide range of different concrete sleepers.

Throughout 2001, Rail Traffic experienced a constant high level of demand from outside Germany – particularly from Spain. After a period of very quiet business up to around August 2001, demand picked up in Germany strongly after September. Apart from its own products, Pfeleiderer also supplied a whole plant for concrete sleeper production in Greece and has built a sleeper production plant in Romania. The company has also gained new customers in the urban rail segment. Like Germany, the Spanish market also registered a strong upturn in rail traffic infrastructure business. Thanks to this business unit's high quality and extensive know-how, Pfeleiderer products enjoy an excellent reputation. In order to meet increased demand, the existing sleeper production plant in Travipos, Spain has been expanded and a new points sleeper production built.

Further positive developments are expected with regard to the sale of rail track products and systems. This follows more favourable political conditions relating to rail traffic infrastructure business on the national and international markets. Pfeleiderer is carefully watching the international markets – particularly in Eastern Europe and the Far East, but also in the USA – its

objective being to increase market shares where possible in these important international segments. One example of our success can be seen in our involvement in the Dutch high-speed project HSL-Zuid, where Pfeleiderer "Rheda 2000®" solid track technology was selected as the technical basis of the system. In the coming two years, technical conditions will be created for the project during an extensive engineering phase, enabling track to be laid without hitches in the two years thereafter.

### **Masts Business Unit – Market Leader in the USA**

The Masts business unit produces mast and tower systems made of concrete, steel and plastic, all capable of withstanding high loads. Our mast and towers are used by utility services, traffic systems and telecommunications providers. Pfeleiderer is undisputed market leader in Germany with regard to lighting, overhead power and advertising masts.

With its US affiliate Newmark International, Inc., Pfeleiderer Masts has very high-growth and a profitable foundation. Newmark headquarters are located in Birmingham, Alabama where five concrete plants, one steel works and two plants for glass fibre mast production operate. A total of around 500 people are employed by the US affiliate Newmark International. A decisive factor in its success has been the deregulation of the American power markets. Restructuring has resulted in the setting up of small and medium-sized power plants. The federal state supply of electricity has been privatized, so that power grids can now be run and inter-connected across state borders.

Newmark is serving this growth market with concrete and steel masts, these having proved more suited compared to wooden masts to the warm and humid climate of the South East of the USA. This growth is being supported by the construction of a further concrete mast plant in Barstow, California, which will serve the South-West.

Demand from the utilities market was strong in fiscal 2001, resulting in high capacity utilization in the concrete mast plants in the USA. Extensions completed in 2000 in various plants have enabled higher production and sales levels, especially in 2001. Following the transfer of the steel mast plant in Texas, USA, this area will now profit from a high level of demand, despite the fact that the US steel mast market is highly competitive.

The collapse in winter 2001 of the US Enron Corp., as holding company of Enron Wind has not had a significant effect on sales of wind power towers.

### **Telecommunication Business Unit – Turnkey Solutions for Telecom Providers**

Pfeleiderer Infrastructure Technology's Telecommunication business unit can look back on more than 25 years experience in the production of poles, street-lighting and airfield guidance masts made of glass-fibre reinforced plastic. Now this business unit also produces antenna masts for mobile phone transmitter stations. Products range from small 10 m plastic masts for rooftops and open spaces, to antenna masts higher than 100 m made of spun concrete.

But Pfeleiderer supplies more than just masts for antennas. As a main contractor, Pfeleiderer Infrastructure Technology now offers complete turnkey systems for the construction of UMTS and GSM networks. This range of products and services runs from site acquisition to the complete construction of the mobile phone station itself, as well as network planning and the installation and commissioning of systems technology. Our services are also now in demand internationally. Pfeleiderer is present with complete mobile phone transmitter masts and turnkey systems for the mobile phone networks of Poland, France and Turkey.

In the German telecommunications market, the hesitant strategy of network providers with regard to UMTS has led to cautious ordering of transmitter masts. The financial crisis of some network providers is also having a negative effect on the market as a whole. The conditions laid down in 2000 for the awarding and holding of UMTS licences remain unchanged, with mobile phone companies obliged to provide coverage to at least 25 percent of the population in Germany by 2003.

In fiscal 2001, further package agreements with network technology suppliers operating in the construction of GSM and UMTS networks were signed. These deals will result in more than 250 orders in fiscal 2002 to construct turnkey transmitter sites. With order books full for 4 months, the Telecommunication business unit started 2002 in a secure position.

#### **Wind Energy Business Unit – Plant Engineering a Growth Market**

Pfeleiderer Wind Energy GmbH is an independent subsidiary of Pfeleiderer Infrastructure Technology that produces turnkey wind power converters, including all related planning and consulting services. This product range is the result of extensive experience gained in the application of Pfeleiderer masts for wind power converters. The company's experience in the application of towers has now been extended by development know-how from Windtec GmbH and the "Multi-brid" technology of aerodyn Engineering GmbH, whose patents and licences have been acquired by Pfeleiderer. A modern assembly plant was set up in 2001 to directly apply these core competences in the construction of wind power converters. As of August last year, key functional components used in wind power converters are being assembled and tested in Coswig.

In fiscal 2001, the Wind Energy business unit assembled its first series production of onshore plants. In October 2001, a 1.5 megawatt plant was built in Zurndorf in Austria, followed in November by a smaller 600 kilowatt unit in Batzhausen. Further 1.5 megawatt plants are already in the planning stage.

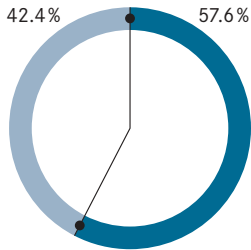
#### **Growing Demand for Onshore and Offshore Units**

The US wind energy market grew by 60 percent in 2001, thanks to supportive tax relief and the setting up of guidelines and standards for renewable energies. Wind power converters are now installed in 26 states, producing a total capacity of 4,258 megawatts.

In Germany, total installed capacity is currently running at 8,754 megawatts. In the last two years, capacity of installed plants in the wind energy market doubled. In November and December of 2001, more new plants went on stream in Germany than originally expected. A market prognosis for the coming years indicates that an additional 4,500 megawatts will be installed in Germany by 2004.

With its offshore “Multibrid” technology, Pfleiderer Wind Energy is the world’s first system solution provider for wind power converters at sea. This development is already under way and we expect to install the first prototype in 2003.

Pfleiderer technology will be widely used as international wind energy markets develop, especially in the Far East. Licensing agreements are helping to optimize the way we apply our specialist know-how.



■ Germany  
■ Foreign

#### Foreign Share of Sales

### Sales and Earnings

With sales of euro 322.9 million, the Infrastructure Technology Business Center contributed around 23 percent to Group sales in 2001 (short fiscal 2000: 19 percent). Of this, 42.4 percent was achieved outside Germany. The sluggish development of the telecommunications market with regard to UTMS networks in Germany and Europe has been compensated for by above average growth in the Rail Traffic and Masts business units.

Thanks to a booming US market, the Masts business unit reported the strongest sales in Pfleiderer Infrastructure Technology Business Center, contributing euro 161.5 million. This was followed by Rail Traffic, which recorded sales of euro 94.8 million. Both these business units improved much more than expected in fiscal 2001, making an important contribution to earnings. Earnings before interest and taxes (EBIT) came to euro 33.7 million for the Infrastructure Technology Business Center in fiscal 2001 (short fiscal 2000: euro 21.0 million). Earnings before interest, taxes, depreciation and amortization (EBIDTA) in fiscal 2001 came to euro 44.6 million (short fiscal 2000: euro 26.0 million).

### Quality Assurance

Pfleiderer Infrastructure Technology has developed its own supplier and materials quality assurance system to ensure the quality of materials and third-party products used. Only those suppliers who have passed this approval process are used. The test criteria used include quality and price, as well as evidence of insurance and warranty coverage, work safety and environmental aspects. Material approval is based primarily on quality specifications and evidence of quality levels.

**Procurement – Supply Chain Management Ensures Efficient Inventories**

The Infrastructure Technology Business Center operates a long-term supplier policy. Contacts are on an international level, and intensive cooperation with plants in the United States ensure ongoing synergetic effects. Apart from that, cooperation strategies are set up with selected suppliers, resulting in optimal prices and supply lines for our international plants. Modern business-to-business procurement instruments such as the Internet are providing us with optimal cost and time advantages.

Series production of concrete sleepers by Rail Traffic enables just-in-time supply of most of the raw materials needed.

In the Masts business unit, the variety of types and specifications of specific customers in the production of masts requires large volumes in stock so that short term customer deadlines can be met.

**Investment Directed at Expanding Capacity in the USA**

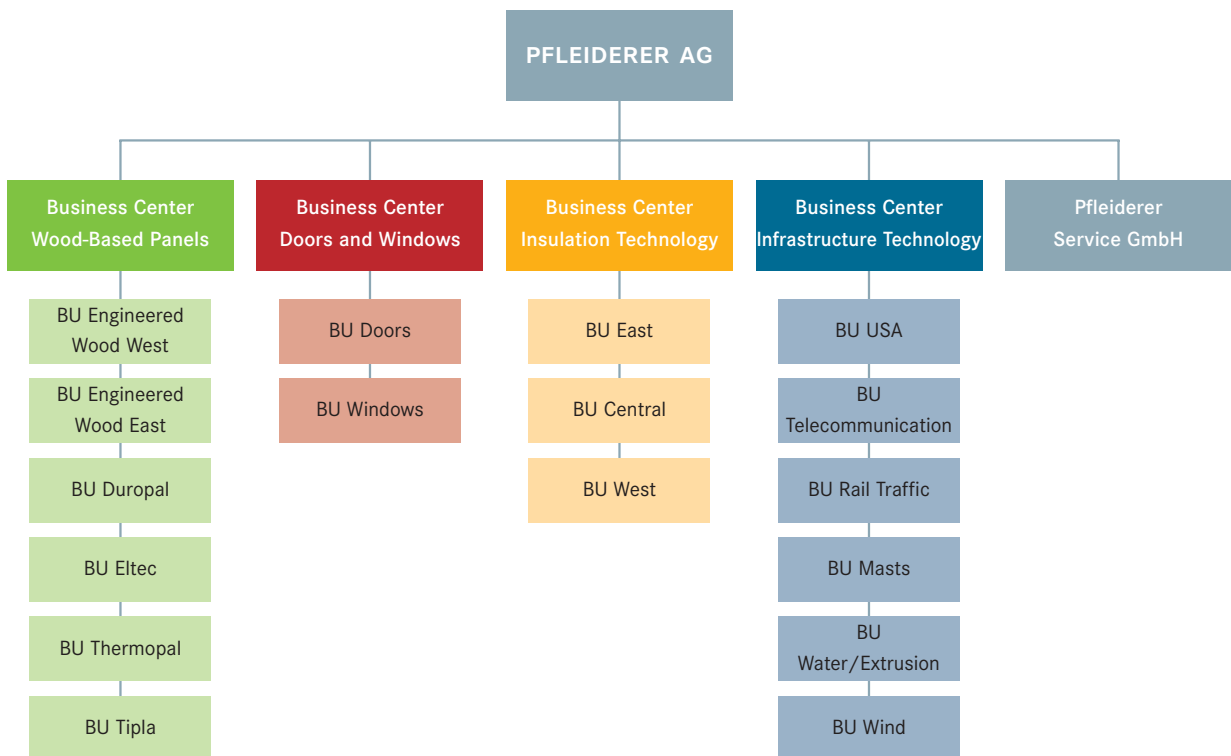
The Infrastructure Technology Business Center invested a total of euro 26.7 million in fixed assets in fiscal 2001. The main thrust of investment activity was directed at the extension of the points sleeper plant in Langen, and the setting up of two sleeper plants in Romania and Spain. The sleeper plant in Romania came on stream in November 2001, while the Spanish factory is due to be completed in the first quarter of 2002.

In the Masts business unit, the first construction phase of a new cement mast factory in Barstow, California involved spending totalling euro 1.7 million. A further current investment project in the Wind Power Business Unit is connected with a 5 MW offshore plant based on Multibrid technology.

## ORGANIZATION

### CLEAR STRUCTURES

The organizational structure of the Pfeleiderer Group remains unchanged. In 2000 it was decided to divide operations into four Business Centers encompassing a total of 17 operative business units, each with responsibility for its own results. Strategic management of the Group lies with a holding company directed by an Executive Board and run by small efficient corporate units as central management overseeing all the major corporate functions. Other internal and external service activities have been bundled together in a separate service company.



No significant changes were made to the corporate structure of the Pfeleiderer Group during the reporting period 2001. In the Wood-Based Panels Business Center, Pfeleiderer AG and Franz Binder Ges.m.b.H. agreed to terminate their joint venture running under Mitteldichte Faserplatten Hallein GmbH & Co. KG with effect from September 1, 2001. As a result, Pfeleiderer AG transferred back its shares in Binder Ges.m.b.H, which in turn took over sole ownership and management of MDF Hallein. This aside, Pfeleiderer remains a buyer of MDF from Hallein. This means that MDF retains an important role in the strategic re-positioning of Pfeleiderer in this product segment.

## PERSONNEL REPORT

### MOTIVATION, QUALIFICATION AND RESPONSIBILITY

Personnel has taken on much greater significance for the Pfeleiderer Group over the last few years in view of the fact that our competitive and market advantages are largely determined by the quality and motivation of our employees.

As of December 31, 2001 the Pfeleiderer Group employed 9,232 people (2000: 9,755). Of these, 2,797 were involved in management and clerical activities, and 6,107 in production. In order to ensure a sustained increase in competitive ability, restructuring measures in 2001 involved the loss of around 500 jobs.

#### Employees of the Pfeleiderer Group

(as of December 31, 2001, includes company organs)

Segment	2001		2000	
	In Germany	Abroad	In Germany	Abroad
AG/Corporate Units	42	0	45	0
Service Units/Freight	258	10	205	17
BC Wood-Based Panels	2,990	1,052	3,148	1,087
BC Doors and Windows	1,203	239	1,811	256
BC Insulation Technology	417	1,013	509	968
BC Infrastructure Technology	1,082	926	1,058	907
<b>Total</b>	<b>5,992</b>	<b>3,240</b>	<b>6,520</b>	<b>3,235</b>

At present, 60 employees are currently in pre-retirement part-time work schemes. In 2001, 90 employees of Pfeleiderer AG celebrated their 25<sup>th</sup> anniversary with the company and 16 employees their 40<sup>th</sup> anniversary.

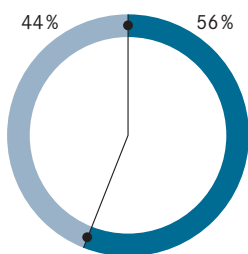
#### Personnel Development

Following restructuring over the last few years, the Pfeleiderer Group has become an enterprise with modern management methods and its own corporate culture, capable of reacting quickly to changes, ensuring it retains its strongly value-oriented direction.

In a drive to promote a flexible management culture, Pfeleiderer introduced the Balanced Scorecard method for senior management in 2001. Now senior managers are compensated according to personal performance and their contribution to the value growth of the segment they are responsible for. This system initially only applied to Pfeleiderer's top managers, but will successively be expanded to include all employees not subject to trade union wage agreements. The system not only includes a transparent performance-based pay component oriented to economic value added – annual employee assessment involves setting targets as part of an element that ensures improved dialogue between employee and supervisor, a central aspect of our corporate philosophy.

### Stock Option Scheme

Following approval by the Shareholders' Meeting in 2001, senior management is now entitled to participate in a stock option scheme as Stage Two of Pfeleiderer's Long Term Incentive Scheme. This follows on the heels of the stock appreciation rights scheme, offered to a smaller group of senior managers in 2000. The stock option scheme involves a maximum of 4,268,500 subscription options which can be issued up to June 30, 2006. The premium price option model ensures that the price paid per share when exercising the option is at least 110 percent of the base price in each case. What is common to both schemes is the not inconsiderable personal investment in Pfeleiderer stock required as a start-up commitment. The high level of participation of around 80 percent of managers in the stock appreciation right scheme, and around 50 percent in the stock option scheme, shows that our senior managers have a sustained identification with the Group, its goals and those of its shareholders as part of shareholder value orientation.



- Industrial Jobs
- Commercial Jobs

### Training at Pfeleiderer

#### Training

Pfeleiderer places value on training its own employees: the company provides vocational training for 24 different commercial and industrial jobs at 12 training sites. At present, 329 persons are undergoing training, 184 of whom for industrial vocations and 145 for commercial occupations.

#### Young German Researchers in "Jugend forscht"

For years, Pfeleiderer has taken part in the Federal scheme "Jugend forscht" (literally: "Youth Researches"). This tradition continued in 2001, with regional sponsorship offered for the annual competition to find Germany's best young researchers.

As far as we know, we are the only company in Germany that has taken the "Jugend forscht" idea one step further, allowing our own trainees to take part in the competition. Part of Pfeleiderer's contribution also involves a "training camp" lasting several days, where school-children up to the age of 15 can take their ideas beyond pure research and get a practical taste of what the world of work is like. This initiative is a fixed part of training in the Pfeleiderer Group and an important motivating tool, stimulating innovation, creativity and enthusiasm.

### Junior Consultants

Pfleiderer's award-winning Junior Consulting Scheme is part of the process of ensuring a supply of young talent and has been successfully practised by the company for many years. Awarded a special mention of merit by the German Association of Commercial Chambers, the scheme has been further enhanced in the reporting year. Combining learning as part of project management with learning in a seminar environment continues to find a high level of acceptance among graduates. It also ensures in the medium term that particularly successful trainees have an opening for further qualification on completion, providing initial contact with the demanding responsibilities of tomorrow. In terms of operative activity, the Junior Consultant comes into contact with all functional areas of the company, and undertakes a wide range of activities as a first step in developing broad-based corporate knowledge. The intensive contact between senior managers and trainees, as well as among the trainees themselves, together with the inter-meshing of duties and competences, creates a challenging and flexible road along which all can grow together. This is the basis for Pfleiderer's upcoming talents. The internal choice of consulting projects was so large that the number of people taking part will be trebled in the coming year.

### Pfleiderer Business Campus

All our personnel development activities have now been bundled together in the Pfleiderer Business Campus, started in 2001. The Campus offers a series of training, qualification and consulting courses directed at employees working in both managerial, commercial and production capacities. Pfleiderer Business Campus provides the framework for all further training and management develop schemes, is a center of learning and development for organisational change, as well as a driving force promoting changes in corporate culture.

Another module that will be receiving increasing attention in coming years relates to how the inspiration and reservoir of ideas that stems from our employees can be tapped. While in the past we have concentrated on classic works improvement schemes, Pfleiderer Ideas Management will offer more, in particular an opportunity to introduce ideas which bring about change. Inventors will participate economically in their ideas, bearing part of the responsibility for the future development of the Pfleiderer Group at all levels and areas.

In 2001, Pfleiderer introduced employee assessment as a new management instrument. Together with senior management and employees, we have set up a broad-based method to develop Pfleiderer competences. The core element in employee assessment is self-assessment by the employee, together with outside assessment by that person's immediate supervisor with regard to the abilities and skills needed to deal with current duties. The assessment is then discussed in dialogue, and common measures agreed in order to better match tasks to personal

THE WORKS COUNCIL OF THE PFLEIDERER GROUP IS ALSO AN IMPORTANT CLIENT FOR THE PFLEIDERER BUSINESS CAMPUS. ON THE ONE HAND, MEMBERS OF THE COUNCIL TAKE PART IN ALL THE TRAINING ACTIVITIES ON OFFER JUST LIKE OTHER EMPLOYEES. AT THE SAME TIME, THEY ALSO PARTICIPATE IN DETERMINING THE CONTENTS OF COURSES AND HAVE A ROLE TO PLAY IN DECIDING AND REALISING CORPORATE CULTURE.

abilities, making employees more successful in their work. The development of abilities and skills, especially management competence, was given particular attention in 2001 and will be intensified in the coming years. Our goal is to extend personal outlook and to find new areas of responsibility for all employees. Employee development is thus much more than just training seminars – it starts at school, continues at university and in our Junior Consulting Scheme, reaching its pinnacle in a career in the Company, and extends to looking after older members of staff as they move towards retirement.

In 2002, we plan to extend the contents of our training, qualification and consulting projects and implement them in all Pfeiderer AG sites. The range of opportunities for employees working in production will also be increased, while the “qualification compass” will be used to take into account and enhance individual development potential.

At the beginning of 2002, we introduced a Group-wide method of assessing potentials, taking us closer our envisioned goal of replacing senior management from within the company, where possible.

## **ENVIRONMENTAL REPORT**

### **PRACTISING ENVIRONMENTAL PROTECTION IS BENEFICIAL ECONOMICALLY**

#### **More than Legislation Demands**

As an industrial production company, the Pfeiderer Group feels particularly responsible for careful use of resources and the protection of our natural environment. In order to implement an effective environmental policy, Pfeiderer has created a structure of environmental supervisors and inter-functional consultants to ensure that the company implements environmental protection beyond the requirements of the law. Meetings are held several times a year to deal with questions of further training, as well as to discuss relevant changes in the law and to look at basic questions such as synergies, updating of management, etc.

In this connection, draft legal changes are examined and discussed, so that Pfeiderer's interests can be represented at an early stage in the law-making process.

Experience has shown that the implementation of EU directives on environmental protection has led to a series of changes in national law. Of particular relevance are the new German Technical Standards for Air Quality, as well as the German Ordinance on Used Wood. In both cases, Pfeleiderer's production plants already comply with the new regulations. Pfeleiderer managers and employees with responsibility in this area have taken part in regular talks and discussions with local authorities and government ministries in the run-up to the new legislation. Existing heat-power plants in Neumarkt and Gütersloh already operate well below the legal thresholds as defined by the 17<sup>th</sup> Federal Ordinance for Emission Protection.

A regular round of discussion panels took place in Neumarkt, Gütersloh and Rheda-Wiedenbrück during fiscal 2001, in which the general public was informed at Pfeleiderer plants about production processes and aspects relating to environmental protection. In these talks, local residents, politicians and other interested parties were able to exchange views directly with management responsible for the local Pfeleiderer production site. Our experts answered relevant questions and provided early notification, for example about planned investments.

### **Measures in 2001**

As a production company, we are obliged to leave disused production plants in a state that presents no danger to the environment. To this end, recycling and disposal measures costing around euro 300,000 were carried out in fiscal 2001 at the insulation materials plant in Hamburg, in the artificial resins plant in Peiting, as well as in certain areas of the particleboard production site in Leutkirch. As such, these measures are unique, resulted in the closure of the areas described, and are carried separately under current costs for waste disposal.

In Leutkirch, a study is currently being carried out throughout the site to determine what historical waste, if any, is present. This purely preventative measure underlines Pfeleiderer's firm commitment to the environment – ensuring that our production has as little negative impact as possible on our natural resources and surroundings, as well as by producing products which are inherently ecologically acceptable. It is also a means of determining any risks associated with the site itself, of classifying them, and where necessary, taking appropriate remedial action.

### **Determining and Dealing with Production-Related Legacy of Hazardous Waste**

As a result of earlier activity involving wood impregnation, some production sites in past decades had an environmental impact on the soil and ground water. Long before environmental protection had taken on its present-day significance, Pfeleiderer understood the need to solve problems created earlier as a result of impregnation activity, a method that has long since been abandoned. In the 80s, the company worked intensively on improving the fixing properties of wood preservatives, developing and implementing new technologies – pointing the way forward for the industry as a whole.

Potential hazards to the subsoil following decades of storing impregnated wood such as railway sleepers and telegraph poles have been effectively remedied by in situ treatment of the soil using state-of-the-art technology.

For example, following a tar oil accident in Neumark at the end of the 1980s resulting in the pollution of ground water, continuous hydraulic recovery methods were used to rectify the situation. This particular environmental recovery operation remains subject to regular monitoring through a dense network of ground water measurement boreholes, and is optimised where necessary in close cooperation with the local authority.

For the last two years, treated water obtained through this purification method has been used in production. This effectively substitutes water that would otherwise have to be drawn from the public drinking water supply. The ongoing hydraulic recovery pays for itself – proving that the environment and the economy are not necessarily mutually exclusive.

## **RESEARCH AND DEVELOPMENT REPORT**

### **INNOVATION BASED ON PAST EXPERIENCE**

Research and development activity by the Pfeleiderer Group has concentrated on product-specific innovations and the optimisation of established processes. A total of 214 employees are working continuously on the improvement of product ranges, more efficient use of raw materials and new production methods.

#### **Wood-Based Panels**

The Wood-Based Panels Business Center spent around euro 1.2 million overall on R&D activity in 2001.

At the Rheda plant, the R&D department succeeded in recycling old particleboard and separating particles and chemicals using an innovative thermo-hydrolytic process. Around euro 1.4 million has been invested in the development of this test unit.

#### **Insulation Technology**

Research and development activity by Pfeleiderer Insulation Technology has been concentrated to one department. Working with laboratories and production units in our plants, both product-specific innovation and basic research is being carried out. Apart from improving the existing product portfolio, development capacities at our affiliate Mehr+Held GmbH are being expanded and improved.

During the reporting period 2001, Pfeleiderer Insulation Technology owned 18 own patents, with a further 32 patents currently pending. Other R&D activity concentrated on the following areas:

1. Concentrated development of an economical and heat-resistant, low emission adhesive based on SiO<sub>2</sub> resulting in savings of around 39 percent in raw material costs. This will open further applications for glass wool e.g. for the aircraft and automobile industries.
2. Higher compression of rolled insulation material, providing savings on freight and packing charges.
3. Reduction of fibre splitting by developing anti-splitting devices.

### **Infrastructure Technology**

As systems business and user-optimized solutions grow in significance, so too has the strengthening of R&D activity in the Infrastructure Technology Business Center become more important. This involves creating specialist know-how, in particular by expanding our own qualified resources. With 16 employees working in research and development, the Infrastructure Technology segment is one of the most important areas of development in the Pfeleiderer Group.

In the Rail Traffic business unit, surveying and laying track systems on different substructures underpins the structural and dynamic properties of rail track used in high-speed and urban rail solutions. Here, too, environmental aspects must be taken into account such as noise level, vibration, optical aspects and ground water. At the same time, increasing importance is being attached to theoretical evidence relating to design – RAMS analysis (Reliability, Availability, Maintainability and Safety) – with which technical system solutions must be tested and verified with regard to their long-term safety and functional ability.

Naturally, an important part of R&D activity is also directed at optimising existing product solutions for concrete sleepers, adapting them to overcome specific technical difficulties where they arise.

New applications are constantly being developed for concrete. One major area in which we are involved is the development of concrete sign gantries for use in conjunction with the planned truck toll in Germany, as well as innovative concrete towers made in individual modules that can be used for very high wind power converters.

In the Wind Energy business unit, Pfeleiderer's Multibrid technology has put it at the forefront of development of innovative wind power converters solutions for operation at sea. Following successful conclusion of the current development and testing phase, the first Multibrid prototypes will be erected in 2003, with series production of offshore plants scheduled to start in 2004.

## RISK REPORT

### RECOGNISE OPPORTUNITY. OVERCOME RISK

A major task of Pfeiderer's corporate management is to identify existing risk early, to monitor how it develops – also with regard to damage potential – and to take suitable action to limit, compensate or overcome it.

As prescribed by the German Control and Transparency Act, a risk management system has been installed, a early warning system including

- Risk determination and assessment
- Determination of how current risk is being acted on
- Determination of additional means of dealing with risk
- Follow-up of risk and actions taken

Planning and control systems in the Pfeiderer Group have been established in our Business Centers and in the Corporate Center. Ongoing reporting and monthly monitoring by the Business Center involving members of the Executive Board, ensures that the Group's Executive Board is provided with comprehensive information quickly. Established guidelines are being continually updated and refined. Coordination within the Group lies to a centralised service center responsible for organization. The internal audit, also responsible for Pfeiderer's consolidated holdings, carries out regular inspections to ensure economic efficiency, organisational and operational compliance. The audit also makes sure, in accordance with an annually fixed schedule, that the Group is adhering to general legal requirements and its internal guidelines. Risk potential is further reduced through an installed quality management system, a central legal department, the centralisation of Group treasury activities and institutionalised cooperation with a major insurance broker.

The Executive Board has also issued a guideline which specifically lays down actions to be taken and responsibilities relating to risk, including any necessary specific instructions. The risk management center, part of Group Central Services, is particularly charged with improving the system, coordinating actions and monitoring, as well as drafting Group reports and passing on information about risk quickly and securely to the Executive Board. It also plays an important function in supporting the Business Centers in carrying out the functional duties involved in risk management.

The operative areas themselves are responsible for recognising risk in good time and dealing effectively with it. All forms of risk, together with any potential damage and their probability occurring are assessed. In order to draw up a risk inventory for each particular business center, workshops are run on a center-by-center basis, involving senior management and employees from the production plants. The member of the Executive Board responsible for each particular business center also takes part in the workshop. Results are then compiled in a detailed risk report, which is duly placed before the whole Executive Board for discussion. After this, the report is presented to the Supervisory Board and the company's public auditor. The risk report, which is completed at the end of each fiscal year together with the risk inventories taken from each Business Center, is regularly updated during the course of the year.

## General and Specific Risks

### General Risks Relating to the Economy and Our Industries

Engineered wood, doors and windows, and insulation material are dependent – to varying extents – on the economic situation of the construction and furniture sectors. The danger of a further downturn in the construction sector does exist, potentially affecting Doors and Windows and, to a lesser extent, Wood-Based Panels. Insulation Technology faces no particular risks, as stricter regulations concerning the use of energy and the requirements for insulation in new buildings should work in favour of more demand. Apart from this, the Insulation Technology Business Center is moving towards greater independence from the domestic market due to its foreign production sites. With regard to the Infrastructure Technology Business Center, the collapse of the Enron Group, itself a producer of wind power converters and a customer of ours in Germany, will only result in time delays for orders of our own wind power converters.

Changes in legislation, regulations and taxation rules which could have a significant effect on the development of the company are neither in force nor in preparation. Legislation on feeding electricity into the power supply network – an important factor for our wind power business – is expected to remain in force. No fundamental technological changes are known with regard to the use or production of the company's products.

### Operational Risks

**SALES AND TRADE RECEIVABLES RISKS:** None of our Business Centers fears the entry of major new competitors into the market. On the other hand, the possibility of once potent customers becoming insolvent cannot be (totally) excluded in any of our Business Centers. However, the risk of customers defaulting on trade receivables is regularly covered by insurance. While welcome large volumes of business are being conducted with some customers, which in case of their failure could result in a noticeable reduction in sales and earnings, none of our Business Centers is so dependent on any one customer that this could pose a serious threat to that Business Center's existence.

The modern logistics center set up in Mittweida in Thüringen (Thuringia), with its computer-controlled high-bay storage facilities ensures fast, flexible and economical processing of orders for the Doors business unit. The danger of downtime caused by fire or plant breakdown is covered by insurance. However, longer stoppages would almost inevitably lead to losses in orders or even customers.

**RESEARCH AND DEVELOPMENT RISKS:** A legal dispute concerning proprietary rights affecting the Insulation Materials Business Center resulted in an expected charge on earnings over the last two years. Similar risks will be excluded in future, as we are now setting up our own patent research unit. No technology lags exist with regard to major products or areas significant either in terms of costs or earnings.

In the insulation material segment, Pfeleiderer is paying careful attention to the efforts of rock wool producers to enter the pitched roof insulation market with newly developed products. But while we are improving quality and reducing manufacturing costs in an effort to face up to potential new competition, we see no serious risks here in the foreseeable future.

**PRODUCTION AND PROCUREMENT RISKS:** The company's products are mainly produced using continuously operating machinery, or in plants operating a multi-shift system. Breakdowns and production stoppages are being counteracted in all business centers through proactive preventative maintenance management. With regard to wood processing in all its forms, the danger of fire or explosion cannot be entirely ruled out. On the fire prevention side, extensive technical equipment (sprinklers/firewalls, etc.) and organisational measures are in place, as well as extensive emergency and catastrophe contingencies, should an incident occur. Our own fire service carries out regular practice runs, an important part of which involves cooperating with local municipal fire services. Major damages are covered by appropriate insurances policies for direct fire damage, as well as for potential losses due to operational stoppages.

Our production units must maintain fixed production and emission thresholds as laid down in the operating licences. Where sites are extended or production capacity changed, licences must be renewed. Pfeleiderer sees no concrete risk here.

Due to the type of raw materials used, the company is not dependent on specific suppliers. Together with adequate stockholding, appropriate procurement logistics are used to ensure that raw materials are available on time. Currently, the company sees no risk of a massive increase in the price of raw materials. The company has reduced its dependency on the cost of energy in its Wood-Based Panels Business Center by setting up centralized power generation plants, in which old wood can be used as a fuel.

**PERSONNEL RISKS:** The company sees no risks in procuring and retaining specialists and management in the company. The application of targeted personnel development also ensures that potentials are kept in the company. Pfeleiderer's Long-Term Incentive Scheme is a further instrument which will help senior managers to identify strongly with the Group. Our trainee scheme for graduates is directed at building up specialist corporate know-how and producing replacements for senior positions. For many years now, training and updating within the Group has been run as a specialist function within the personnel department.

### **Financial Risks**

The Treasury department is charged with planning and controlling Group finances. While debtor management is primarily a responsibility of the operative areas, the Treasury department also oversees this area. Considerable importance is being attached to the careful monitoring of limits laid down by credit insurance coverage. Derivative financial instruments are only used by the Treasury department, specifically for hedging purposes.

No mentionable exchange rate risks are expected due to the relatively low level of business conducted outside the euro and dollar zones, as well as through careful hedging of currency risk. The same applies to interest rate risk on existing credit lines and fixed borrowing conditions during the reporting period.

**Legal Risks**

Legal action and similar disputes which could have a significant effect on the earnings or business of the Group, or one of its operative areas, are neither pending, nor have any such actions been notified. The Central Legal department is charged with ensuring that legal matters are dealt with correctly in terms of form and content, in particular with regard to the drafting of contracts and the conduct of legal actions on behalf of the Group.

**IT and Other Risks**

Part of the risk involved in IT and data processing has been reduced by outsourcing hardware to a specialist provider, especially mainframes and data networks. At the same time, new personnel have strengthened this area of the company and audited the security concept for potential weaknesses.

In view of the consequences of the terror attacks in September 2001 it seems likely that insurers will be demanding significantly higher premiums. This additional burden is being minimized by commissioning an insurance broker to make a systematic assessment of the alternatives.

**Overall Risk**

No recognizable single risks to the Pfleiderer Group in terms of damage potential or probability exist which could endanger the existence of the company. No risks can be recognized for the foreseeable future which might threaten the substance of the company after 2002. The number of risks taken up in the Group Risk Report has declined insignificantly compared to the previous year. Nearly half of all risks determined have a damage potential of less than euro 1 million.

## INVESTOR RELATIONS REPORT

### INFORMATION AND TRANSPARENCY CREATES TRUST

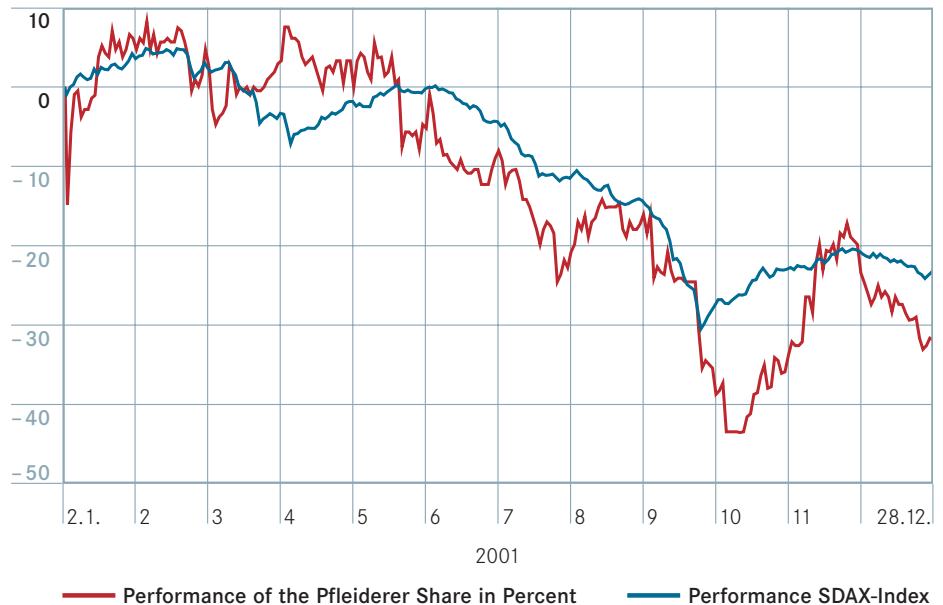
- INCREASED IR ACTIVITIES
- TRANSITION TO REGISTERD SHARES

#### Developments of the Capital Market in 2001

Share prices on the capital markets in 2001 were marked by a generally weaker economy and uncertainty arising from numerous profit and sales warnings. The terrorist attacks on September 11 resulted in further uncertainty and a general retreat from the capital markets.

In line with the overall market trend, Pfeleiderer's share also performed disappointingly. Compared to the start of the year 2001, the share price increased by euro 0.98, rising during the course of the year to a maximum of euro 11.33. However, share price performance remained disappointing overall, despite increased investor relations efforts. This must be ascribed to the depressed mood on the markets, as the value of the company is not adequately reflected in its present share price.

**CHART: Share Price Compared to SDAX** (Basis: January 1 – December 31, 2001)



### Transition to Registered Shares

In accordance with the resolution of the Shareholders' Meeting on July 10, 2001, Pfeleiderer shares were transformed to registered shares at a ratio of 1:1 on October 22, 2001 and now have the stock exchange number WKN 676 474. We decided to move over to registered shares as this permits us to come into contact with our shareholders, enabling direct and intensive communication. In line with this policy, we shall continue to produce regular letters to shareholders in 2002.

Pfeleiderer further intensified investor relations activities in what proved to be a difficult year for the stock markets. The Executive Board took part in numerous meetings with analysts, investors and journalists, as well as running two international roadshows and presenting the company at international investment conferences. At a presentation for the Renewable Energy Forum in London, management was able to communicate Pfeleiderer's particular know-how in specialist areas such as wind energy.

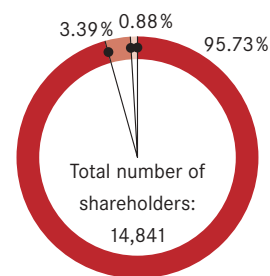
The object of capital market communications during the current year is to communicate the successful restructuring of the company and to achieve its appropriate valuation on the capital markets. We shall be devoting considerable time in 2002 to investor conferences, individual meetings and group presentations in order to present the company to the public.

### Dividend Policy

Pfeleiderer will continue to base future dividend payments on the earnings situation of the company.

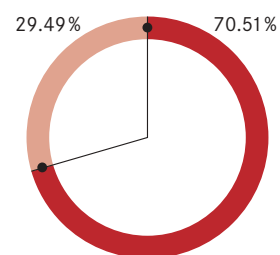
### The Pfeleiderer Share in Figures

	2001	Short Fiscal 2000
Share price as of 31.12.	euro 7.28	euro 10.00
High/Low	euro 9.00 – euro 6.55	euro 12.55 – euro 7.59
Volatility	31.51%	49.20%
Average daily turnover	12,723	19,155
Number of shares	42.685 million	42.685 million
Capital stock	euro 109,274,000	euro 109,274,000
Market capitalization as of 31.12.	euro 310.75 million	euro 426.85 million
Weighting in SDAX	3.29%	2.59%
German stock exchange number	676 474	676 470
Abbreviation	PFD	PFD
ISIN	DE0006764749	DE0006764749
Earnings per share/DVFA	euro 0.39	euro 0.34
Cash flow per share/DVFA	euro 2.68	euro 1.63



- German investors
- Other EU
- Non-EU

Based on share register as of December 31, 2001



- Pfeleiderer Unternehmensverwaltung GmbH & Co. KG
- Free Float

Based on share register as of December 31, 2001

## UPDATE AND OUTLOOK

### STRENGTHENING CORE BUSINESS. EXPANDING GROWTH SEGMENTS

Based on the analyses and prognoses of leading economics institutes and industrial associations, Pfeiderer has drawn up an internal Group plan covering a three-year period. This is the time frame within which bottom-up income statements and balance sheets will be drawn up by all Business Centers, setting out their medium-term goals for sales, revenue, capital expenditure and personnel, amongst others. Planning is decentralized and consolidated upwards via the Business Centers to the Group level. This will ensure that those with responsibility working close to their relevant markets can introduce a realistic assessment of the economic situation and the planning process.

#### Future Overall Economic Situation

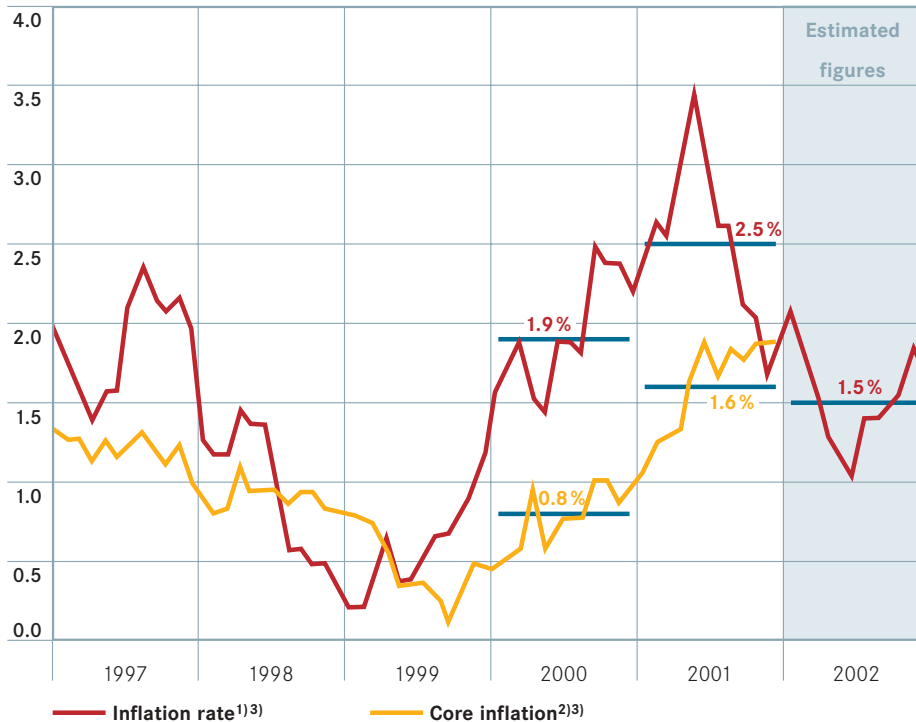
Predicting how the economy will develop is extremely complex at present, as demand and the mood of consumers and investors alike are very difficult to assess. Economic forecasts can only make conditional predictions assuming certain basic conditions. The main assumptions for further global and German economic growth are based on the absence of further major political upheavals, a constant oil price level of around 20 dollars per barrel and moderate economic policies by the EU member states.

The OECD expects very weak growth in the first half of 2002 and a slight recovery in the global economy in the second half of 2002. GDP growth in Germany is put at between one to three percent up to 2003.

The ifo Institute for Economic Research forecasts that given the above mentioned conditions, GDP in Germany will slowly pick up from the second quarter of 2002, following weak growth in the winter half-year. Acceleration of growth will set in so late that it is unlikely to have a significant effect on the annual growth rate over 2001. On an annual basis, economic institutes expect an increase in GDP of 3.0 percent for 2000, in 2001 an increase of just 0.6 percent and in 2002 growth of 0.7 percent. (Sources: OECD, ifo, HWWA, Bundesbank, Fed. Statistics Office)

## Inflation and Core Inflation in Germany

(Changes to previous year in %)



1) Cost of living index for all private households

2) Price index less seasonal goods and excluding heating oil, fuel and gas, as well as goods and services with administered prices

3) Figures: average change to previous year in %

(Source: Federal Office of Statistics, calculations and assessment by ifo Institut)

The business climate in the West German construction sector remained unchanged up to February 2002. The decline in the number of people employed will continue in all parts of Germany, according to current data.

## Future Sales and Procurement Markets

Developments in sales and procurement conditions in Pfeleiderer's individual business centers and business units are directly dependent on how the industry fares as a whole. All our business centers expect greater competition in terms of prices and general conditions. These they see as the main risk in 2002, bearing in mind initial non-quantifiable signals which suggest that the economy will remain sluggish.

In view of the difficult economic situation in 2001, only very general statements can be made about how 2002 and 2003 will develop with regard to those sectors of the economy in which we operate. What is decisive, particularly for the wood-processing industry, is when the consumer will regain confidence and transform deferred spending into real spending.

The Association of Wood-Processing Industries expects increased demand for wood during the current year. In line with this, wood and cellulose production capacity has expanded. The new regulations in Germany for biomass are also expected to produce more capacity, with demand for wood running at several million meters. As a reaction to increased demand for wood, Pfeleiderer set up Interwood GmbH on January 1, 2002 in order to bundle wood procurement for our various production sites. Own estimates show that demand for regenerative raw materials will double by 2005.

The DIW (Deutsches Institut für Wirtschaftsforschung) sees a big growth potential for wind energy in the coming years. Experts at the Institute expect that even a cautiously optimistic scenario for onshore and offshore wind power converters could result in converters producing a total of over 100 billion kilowatt hours of electricity in Germany by 2030. That would equal around one fifth of present-day consumption.

Current building permission figures indicate a further decline in the Doors and Windows market – particularly for apartment construction. However, this decline will be more moderate than in 2001. The Association of Window and Façade Manufacturers expects a volume of 14.4 – 14.7 million window units for 2002, representing a real decline of 8 – 10 percent.

### **Becoming the Leading Supplier of Wood-Based Materials in Europe**

Pfeleiderer will continue to improve its positions in international markets. We have already gained cost leadership for wood-based materials in Germany, and we intend to become the leading supplier in Europe.

We expect an increase in sales in 2002 in all areas covered by the Wood-Based Panels Business Center. As we grow, we are carefully extending our product ranges. Data we have obtained from a customer and competition analysis carried out in 2001 will enable us to cover the market better, and will result in stronger customer orientation. Within this framework, we shall be revising the product portfolio of our wood-based materials and tightening up our market image. Future investment policy is being directed at the goal of cost leadership, taking into account our central objective of long-term value orientation. In order to further strengthen and expand our leading position in the European market, the Wood-Based Panels Business Center will increase its volume of sales over the coming years through profitable earnings-oriented growth.

The Doors and Windows Business Center has already introduced further measures to increase productivity in 2002. The integration of SVEDEX® Doors will lead to even better capacity utilization at our own plants.

Over the coming months, Pfeleiderer Insulation Technology will be expanding its markets in the East and extending its leading position on these markets. Our main attention will be directed towards increasing sales by around 10 percent, with prices remaining stable in all markets. Procurement volumes for the different sites will be bundled to achieve economies of scale, thus decreasing purchasing costs in Germany. New products for customers in the industrial segment have opened up a new market independent of cyclical developments in the construction sector. We assume that demand for modern mineral wool insulation material will continue to develop positively, particularly in the East.

The Infrastructure Technology Business Center is also pursuing a targeted strategy of internationalization. Over the medium term, the foreign share of its Rail Traffic business unit will be considerably strengthened by production in the Netherlands and Spain. An important element in this is the Dutch high-speed link project HSL-Zuid, for which the Rheda 2000<sup>®</sup> solid track technology from Pfeleiderer has been selected as the basis of the rail system.

### **Market Opportunities through Global Investment in Infrastructure**

Investment activity by German Rail as it extends its rail network will be boosted by special subsidies from the government this year and in the next years from funds obtained from the auctioning of UMTS licenses. These additional funds will enable urgently needed maintenance work to be carried out on the network, in turn having a positive budgeting effect for rail track systems provided by Pfeleiderer Rail Traffic.

During fiscal 2001, the Telecommunication Business Segment profited from master agreements signed with network providers involved in expanding the GSM and UMTS networks. This will lead to 250 contracts to set up complete transmitter sites in the coming fiscal 2002.

### **Future Sales and Earnings**

Provided the global economy picks up in the second half of 2002, pulling Europe along with it, Pfeleiderer expects sales and pre-tax profits to improve over the previous year to the extent that each Business Center grows. The level of improvement will naturally depend on how far prices remain constant on different markets, as well as the need for markets to remain stable overall.

We shall also continue to improve internal value added and intend to increase gross earnings per employee. Over the medium term, a return on capital employed (ROCE) of 15 percent for the Group as a whole is being targeted.

In compliance with the rules of the German Stock Exchange, Pfeleiderer will be drawing up its financial statements in accordance with US GAAP for the first time in fiscal 2002.

**Future Corporate Financing**

We intend to increase our equity ratio over the medium term from its present approx. 19 percent to 25 percent.

In an effort to keep financing costs as low as possible, we shall continue to explore attractive ways of refinancing through the capital markets, for example by issuing corporate bonds. Bearing this in mind, an update will be prepared by the rating agency Fitch Ratings Ltd., in 2002, and we shall be considering a second rating.

**Dividend Policy**

Pfleiderer's share dividend policy will remain largely oriented to earnings and free cash flow.

**Future Organizational Structure**

The organizational structure of the Pfleiderer Group and its individual Business Centers will continue to be monitored for cost efficiency and performance. In view of a downturn in the economy, further adjustments to personnel levels in certain areas cannot be excluded. Our earnings-orientated strategy of growth for the Group remains the basis on which all such decisions are taken. In January 2002 the Board decided on the future structure of the business centers Insulation Technology and Doors and Windows. This strategy will be realized in stages beginning in 2002.

**Future Capital Spending**

Capital expenditure by Pfleiderer will remain at the same level as depreciation in future. In the Wood-Based Panels Business Center, Pfleiderer intends to expand the Rheda-Wiedenbrück site. Here, planning has already begun to increase production capacity of the particleboard plant, and to finalize the leased heat-power unit for the production of energy in Gütersloh.

In addition to replacement investment, which takes place on a cyclic basis, Pfleiderer Insulation Technology will be making improvements to increase productivity and production capacity. The completion of the new insulation production plant near Moscow is scheduled for December 2002 and will enable us to better serve the Russian market.

The Pfleiderer Infrastructure Technology Business Center will complete construction of its new concrete mast plant in California, and will be building a sleeper production plant in the Netherlands.

**Future Research and Development**

With its Wind Energy Power unit, the Pfeleiderer's Infrastructure Technology Business Center is responsible for by far the greatest amount of research activity. Pfeleiderer Wind Power intends to continue its development activities unabated, concentrating on offshore plants using its Multibrid technology. Multibrid is the world's first systems solution for wind converters at sea. Following a successful research and development phase, a prototype will be built in 2003, with series production planned to start in 2004.

**Continuing Internationalization**

In 2002, we intend to further strengthen our core business areas and expand growth segments. By investing in plants in Germany and abroad, as well as by setting up new production sites, we shall continue to push forward with internationalization and strengthen our competitive position. Irrespective of how the economy develops, we intend to continue our strategy of value orientation, and thus sustainably increase the value of the Company. We have already reached the first milestones successfully.



# FINANCIAL STATEMENTS

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<b>Assets</b>	<b>Notes</b>	<b>31.12.2001</b>	<b>31.12.2000</b>
		<b>'000 euro</b>	<b>'000 euro</b>
<b>Fixed assets</b>			
Intangible assets		70,401	89,929
Tangible assets		580,326	594,632
Financial assets		3,841	5,480
	(1)	<b>654,568</b>	<b>690,041</b>
<b>Current assets</b>			
Inventories		192,909	171,067
Receivables and other assets		274,205	286,159
Other securities		518	4,314
Checks, cash and bank balances		61,396	30,110
	(2)	<b>529,028</b>	<b>491,650</b>
<b>Prepaid expenses</b>	(3)	<b>3,234</b>	<b>3,891</b>
		<b>1,186,830</b>	<b>1,185,582</b>
<b>Equity and Liabilities</b>			
	<b>Notes</b>	<b>31.12.2001</b>	<b>31.12.2000</b>
		<b>'000 euro</b>	<b>'000 euro</b>
<b>Equity</b>			
Subscribed capital		109,274	109,274
Capital reserves		17,799	29,347
Earnings reserves		40,496	29,239
Unappropriated retained earnings of the group		15,215	18,397
Minority interests		40,114	37,145
	(4)	<b>222,898</b>	<b>223,402</b>
<b>Accruals</b>			
Accruals for pensions and similar obligations		56,275	55,247
Other accruals		105,560	121,907
	(5)	<b>161,835</b>	<b>177,154</b>
<b>Liabilities</b>			
Financial debt		565,310	573,082
Other liabilities		235,655	211,069
	(6)	<b>800,965</b>	<b>784,151</b>
<b>Deferred income</b>		<b>1,132</b>	<b>875</b>
		<b>1,186,830</b>	<b>1,185,582</b>

	Notes	1.1.–31.12.01 '000 euro	1.6.–31.12.00 '000 euro
Sales	(10)	1,427,386	830,350
Increase/decrease in finished goods, inventories and work in progress		26,467	– 4,843
Own work capitalized		5,521	3,242
<b>Total</b>		<b>1,459,374</b>	<b>828,749</b>
Other operating income	(11)	53,105	23,804
Cost of materials	(12)	– 771,061	– 433,068
Personnel expenses	(13)	– 337,866	– 192,940
Amortization and depreciation	(14)	– 88,897	– 51,715
Other operating expenses	(15)	– 226,074	– 117,537
		<b>88,581</b>	<b>57,293</b>
Results from investments and associated companies	(16)	112	– 2,038
Income from other investments and long-term loans	(17)	110	23
Other interest and similar income	(17)	7,260	2,922
Depreciation on financial assets and short-term investments		– 479	0
Interest and similar expenses	(17)	– 44,206	– 26,992
<b>Financial results</b>		<b>– 37,203</b>	<b>– 26,085</b>
<b>Results from ordinary business activities</b>		<b>51,378</b>	<b>31,208</b>
Extraordinary income	(18) (19)	0	7,060
Taxes on income	(20)	– 15,942	– 14,787
<b>Net income for the year</b>		<b>35,436</b>	<b>23,481</b>
Thereof minority interests in profits		4,476	9,447

	1.1.–31.12.01 '000 euro	1.6.–31.12.00 '000 euro
<b>EBIT</b>	<b>88,209</b>	<b>55,278</b>
Interest	– 36,831	– 24,070
Extraordinary result	0	7,059
Taxes on income	– 15,942	– 14,786
<b>Net income for the year</b>	<b>35,436</b>	<b>23,481</b>
Depreciation on assets	87,056	64,549
Changes in accruals for pensions	853	327
<b>Cash flow</b>	<b>123,345</b>	<b>88,357</b>
Decrease in accruals	– 16,744	– 14,058
Other non-cash expenses and revenues	– 2,807	2,353
Profits from disposal of fixed assets	– 1,922	– 19,467
Increase (previous year: decrease) in inventories	– 16,088	2,290
Decrease (previous year: increase) in receivables	22,110	– 24,273
Increase (previous year: decrease) in liabilities	20,047	– 29,012
Changes in other assets and liabilities	915	– 2,722
<b>Cash flow – from operating activities</b>	<b>128,856</b>	<b>3,468</b>
Disposal of tangible assets	19,700	86,875
Payments for investments in tangible assets	– 66,439	– 54,270
Disposal of intangible assets	0	506
Payments for investments in intangible assets	– 12,090	– 2,124
Disposal of financial assets	1,300	23,438
Payments for investment in financial assets	– 722	– 1,298
Payments for the acquisition of consolidated companies	– 14,756	– 1,752
Receipts from the disposal of consolidated companies	0	12,663
Payments for redemption of loans	– 2,519	– 5,148
<b>Cash flow – from investment activities</b>	<b>– 75,526</b>	<b>58,890</b>
Dividend payments by Pfeleiderer AG	– 8,537	– 3,787
Dividend payments to minority interests	– 933	– 5,889
Exchange-rate related changes in assets	– 17,085	– 55,640
<b>Cash flow – from financial activities</b>	<b>– 26,555</b>	<b>– 65,316</b>
<b>Changes in funds</b>	<b>26,775</b>	<b>– 2,958</b>
<b>Funds as of January 1</b>	<b>34,424</b>	<b>36,937</b>
Additions from initial consolidations and exchange-rate related changes in funds	716	445
<b>Funds as of December 31</b>	<b>61,915</b>	<b>34,424</b>

### Additional Information

The funds includes the balance sheet positions Cheques/Checks, cash and bank balances, as well as short-term securities held as payment equivalents.

Non-cash expenses and income are mainly due to the valuation of current assets.

A total of euro 14,756,000 was paid for the acquisition of fully consolidated companies and the acquisition of third-party holdings in companies that had already been fully consolidated.

### Development of Consolidated Equity

Fiscal year 2001	Subscribed capital	Capital reserves	Earnings reserves	Unappropriated retained earnings of the Group	Minority interests	Total
	'000 euro	'000 euro	'000 euro	'000 euro	'000 euro	'000 euro
As of January 1, 2001	109,274	29,347	29,239	18,397	37,145	223,402
Dividends of Pfeleiderer AG				- 8,537		- 8,537
Change in investment relations			316		- 574	- 258
Differences from capital consolidation		- 11,548	- 28,000			- 39,548
Distributions to minority interests					- 933	- 933
Differences from currency conversion			13,336			13,336
Net income			25,605	5,355	4,476	35,436
As of December 31, 2001	109,274	17,799	40,496	15,215	40,114	222,898

Short fiscal year 2000	Subscribed capital	Capital reserves	Earnings reserves	Unappropriated retained earnings of the Group	Minority interests	Total
	'000 euro	'000 euro	'000 euro	'000 euro	'000 euro	'000 euro
As of June 1, 2000	109,274	60,611	3,619	29,786	41,390	244,680
Dividends of Pfeleiderer AG				- 3,787		- 3,787
Change in investment relations			754		- 7,803	- 7,049
Differences from capital consolidation		- 31,264				- 31,264
Distributions to minority interests					- 5,889	- 5,889
Differences from currency conversion			3,230			3,230
Net income			21,636	- 7,602	9,447	23,481
As of December 31, 2000	109,274	29,347	29,239	18,397	37,145	223,402

## Acquisition and manufacturing costs

	1.1.2001	Currency conversion	Change in the consolidated group	Additions	Disposals	Transfers	31.12.2001
	'000 euro	'000 euro	'000 euro	'000 euro	'000 euro	'000 euro	'000 euro
<b>Intangible assets</b>							
Franchises, trademarks, patents and licences and similar rights and licences to such rights	27,571	974	0	2,623	156	4,960	35,972
Goodwill	78,084	243	0	21,247	39,548	0	60,026
Prepayments	5,056	0	0	2,787	0	- 4,025	3,818
	<b>110,711</b>	<b>1,217</b>	<b>0</b>	<b>26,657</b>	<b>39,704</b>	<b>935</b>	<b>99,816</b>
<b>Tangible assets</b>							
Land, land rights and buildings including buildings on third party land	464,022	6,587	0	4,987	900	1,859	476,555
Machinery and technical equipment	877,758	22,044	0	24,694	22,485	12,690	914,701
Other equipment, furniture and fixtures	98,109	1,172	0	8,270	5,934	8,982	110,599
Prepayments and construction in progress	47,981	139	0	29,399	13,140	- 24,466	39,913
	<b>1,487,870</b>	<b>29,942</b>	<b>0</b>	<b>67,350</b>	<b>42,459</b>	<b>- 935</b>	<b>1,541,768</b>
<b>Financial assets</b>							
Investments in affiliated companies	2,626	0	- 583	689	0	0	2,732
Loans to affiliated companies	0	0	0	12	0	0	12
Investments in associated companies	12,835	0	0	0	12,835	0	0
Investments	271	0	0	5	0	0	276
Loans to companies in which participations are held	0	0	0	0	0	0	0
Long-term securities	4	0	0	0	0	0	4
Other loans	2,691	1	0	16	1,300	0	1,408
	<b>18,427</b>	<b>1</b>	<b>- 583</b>	<b>722</b>	<b>14,135</b>	<b>0</b>	<b>4,432</b>
	<b>1,617,008</b>	<b>31,160</b>	<b>- 583</b>	<b>94,729</b>	<b>96,298</b>	<b>0</b>	<b>1,646,016</b>

## Accumulated depreciation

1.1.2001	Currency conversion	Change in the consolidated group	Additions	Disposals	Transfers	31.12.2001
'000 euro	'000 euro	'000 euro	'000 euro	'000 euro	'000 euro	'000 euro
15,483	302	0	5,253	156	0	20,882
5,299	0	0	3,234	0	0	8,533
0	0	0	0	0	0	0
<b>20,782</b>	<b>302</b>	<b>0</b>	<b>8,487</b>	<b>156</b>	<b>0</b>	<b>29,415</b>
156,484	1,815	1	13,897	604	0	171,593
652,773	12,069	0	55,265	18,663	0	701,444
82,448	842	69	7,628	5,415	441	86,013
1,533	0	0	1,300	0	- 441	2,392
<b>893,238</b>	<b>14,726</b>	<b>70</b>	<b>78,090</b>	<b>24,682</b>	<b>0</b>	<b>961,442</b>
0	0	0	479	0	0	479
0	0	0	0	0	0	0
12,835	0	0	0	12,835	0	0
71	0	0	0	0	0	71
0	0	0	0	0	0	0
0	0	0	0	0	0	0
41	0	0	0	0	0	41
<b>12,947</b>	<b>0</b>	<b>0</b>	<b>479</b>	<b>12,835</b>	<b>0</b>	<b>591</b>
<b>926,967</b>	<b>15,028</b>	<b>70</b>	<b>87,056</b>	<b>37,673</b>	<b>0</b>	<b>991,448</b>

## Net book value

31.12.2001	31.12.2000
'000 euro	'000 euro
15,090	12,088
51,493	72,785
3,818	5,056
<b>70,401</b>	<b>89,929</b>
304,962	307,538
213,257	224,985
24,586	15,661
37,521	46,448
<b>580,326</b>	<b>594,632</b>
2,253	2,626
12	0
0	0
0	0
205	200
0	0
4	4
1,367	2,650
<b>3,841</b>	<b>5,480</b>
<b>654,568</b>	<b>690,041</b>

<b>Assets</b>	<b>Notes</b>	<b>31.12.2001</b>	<b>31.12.2000</b>
		<b>'000 euro</b>	<b>'000 euro</b>
<b>Fixed assets</b>			
Intangible assets		0	11,738
Tangible assets		71	107
Financial assets		375,795	375,792
	(1)	<b>375,866</b>	<b>387,637</b>
<b>Current assets</b>			
Inventories		0	23
Receivables and other assets		111,440	287,274
Checks, cash and bank balances		52,774	38,606
	(2)	<b>164,214</b>	<b>325,903</b>
		<b>540,080</b>	<b>713,540</b>
<b>Equity and Liabilities</b>			
	<b>Notes</b>	<b>31.12.2001</b>	<b>31.12.2000</b>
		<b>'000 euro</b>	<b>'000 euro</b>
<b>Equity</b>			
Subscribed capital		109,274	109,274
Capital reserves		201,503	201,503
Earnings reserves		51,129	51,129
Unappropriated retained earnings of the group		15,215	18,397
	(4)	<b>377,121</b>	<b>380,303</b>
<b>Accruals</b>			
Accruals for pensions and similar obligations		6,152	5,611
Other accruals		16,149	16,534
	(5)	<b>22,301</b>	<b>22,145</b>
<b>Liabilities</b>			
Financial debt		64,415	66,580
Other liabilities		76,243	244,512
	(6)	<b>140,658</b>	<b>311,092</b>
		<b>540,080</b>	<b>713,540</b>

	Notes	1.1.–31.12.01 '000 euro	1.6.–31.12.00 '000 euro
Income from investments	(16)	72,266	0
Income from profit-and-loss transfer agreements		139	0
Income from the lending of long-term loans		206	120
		<b>72,611</b>	<b>120</b>
Other interest and similar income	(17)	14,058	4,477
Interest and similar expenses	(17)	– 13,656	– 4,220
<b>Holding performance</b>		<b>73,013</b>	<b>377</b>
Other operating income	(11)	24,447	33,068
Personnel expenses	(13)	– 10,435	– 5,392
Amortization and depreciation	(14)	– 15	– 1,086
Other operating expenses	(15)	– 29,740	– 34,569
<b>Results from ordinary business activities</b>		<b>57,270</b>	<b>– 7,602</b>
Extraordinary expenses	(19)	55,000	0
Taxes on income	(20)	3,085	0
<b>Net income for the year</b>		<b>5,355</b>	<b>– 7,602</b>
Profit carried forward		9,860	25,999
<b>Unappropriated retained earnings of the group</b>		<b>15,215</b>	<b>18,397</b>

## Acquisition and manufacturing costs

	1.1.2001 '000 euro	Transfers '000 euro	Additions '000 euro	Disposals '000 euro	31.12.2001 '000 euro
<b>Intangible assets</b>					
Franchises, trademarks, patents and licences and similar rights and licences to such rights	8,157	8,157	0	0	0
Prepayments	5,086	5,086	0	0	0
	<b>13,243</b>	<b>13,243</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Tangible assets</b>					
Other equipment, furniture and fixtures	488	488	86	8	78
	<b>488</b>	<b>488</b>	<b>86</b>	<b>8</b>	<b>78</b>
<b>Financial assets</b>					
Investments in affiliated companies	355,418	0	26	0	355,444
Loans to affiliated companies	20,286	0	0	0	20,286
Investments	55	0	0	0	55
Other loans	33	0	12	35	10
	<b>375,792</b>	<b>0</b>	<b>38</b>	<b>35</b>	<b>375,795</b>
	<b>389,523</b>	<b>13,731</b>	<b>124</b>	<b>43</b>	<b>375,873</b>

## Accumulated depreciation

1.1.2001 '000 euro	Transfers '000 euro	Additions '000 euro	Disposals '000 euro	31.12.2001 '000 euro
1,505	1,505	0	0	0
0	0	0	0	0
<b>1,505</b>	<b>1,505</b>	<b>0</b>	<b>0</b>	<b>0</b>
381	381	15	8	7
<b>381</b>	<b>381</b>	<b>15</b>	<b>8</b>	<b>7</b>
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>1,886</b>	<b>1,886</b>	<b>15</b>	<b>8</b>	<b>7</b>

## Net book value

31.12.2001 '000 euro	31.12.2000 '000 euro
0	6,652
0	5,086
<b>0</b>	<b>11,738</b>
71	107
<b>71</b>	<b>107</b>
355,444	355,418
20,286	20,286
55	55
10	33
<b>375,795</b>	<b>375,792</b>
<b>375,866</b>	<b>387,637</b>

**Notes**

The Annual Financial Statements of the Pfeleiderer Group and Pfeleiderer AG are shown below. Where not stated otherwise, the notes apply to both sets of statements.

**I. General information**

The Annual Financial Statements of the Pfeleiderer Group and Pfeleiderer AG have been drawn up in accordance with the requirements of the German Commercial Code (HGB) and the German Stock Corporation Act (AktG).

The Annual Financial Statements of the Pfeleiderer Group and Pfeleiderer AG are shown in thousand euros. The previous year's figures have been taken from the Annual Financial Statements of the Pfeleiderer Group and Pfeleiderer AG as of December 31, 2000. The figures in the Income Statement are not comparable to the previous year which was a short fiscal year lasting from June 1 to December 31, 2000.

The Income Statement has been drawn up using the cost of production method. All information that requires commentary in the Income Statement is included in these corporate notes, including voluntary information. For greater clarity, individual positions in the Balance Sheet and the Income Statement have been summarized and are explained in these notes.

Due to Pfeleiderer AG's holding function, the composition of the Annual Financial Statements differs from that laid down in Section 275 (2) of the German Commercial Code.

The Financial Statements of Pfeleiderer AG are consolidated into the Financial Statements of Pfeleiderer Unternehmensverwaltung GmbH, Nürnberg, and have been drawn up and audited in accordance with the laws applicable to stock corporations pursuant to the German Commercial Code. The Financial Statements have been deposited with the Commercial Register of the District Court (Amtsgericht) Nürnberg.

Pfeleiderer Unternehmensverwaltung GmbH & Co KG has a majority holding in Pfeleiderer AG.

**II. Exemption rule of Section 264 (3) and Section 264b German Commercial Code**

Companies which have applied the exemption rule are shown in the list of companies consolidated into the Group.

### III. Consolidated companies

Companies consolidated into the Group Financial Statements are listed separately.

Alongside Pfeleiderer AG, 32 companies with registered offices in Germany, and 27 companies with registered offices abroad, have been consolidated into the Group Financial Statements for the year.

Number of fully consolidated companies:

	2001	2000
Germany	33	33
Foreign	27	25
<b>Total</b>	<b>60</b>	<b>58</b>

The following affiliated companies were fully consolidated into the Group Financial Statements for the first time in fiscal 2001:

#### Acquisitions

– W+F Betonschwellen GmbH & Co. KG, Frankfurt a. M.

#### Newly founded

– Pfeleiderer Dämmstofftechnik AT GmbH, Vienna (A)

– PESA Telecom S.A., Constanti (E)

#### Others

– Pfeleiderer Izolacioni Technika Praha s.r.o., Prague (CZ)

– Pfeleiderer Technika Infrastrukturalna Polska Sp.z.o.o., Warsaw (PL)

W+F Betonschwellen GmbH & Co. KG, Frankfurt a.M., was integrated into another fully consolidated affiliate on June 1, 2001 for the first time with the effect that its initial consolidation into the Group Financial Statements does not change the number of consolidated affiliates.

Pfeleiderer Izolacioni Technika Praha s.r.o., Prague (CZ), was consolidated into the Group Financial Statements in the previous year using the equity method.

Mitteldichte Faserplatten Hallein GmbH, Hallein (A) is no longer consolidated as it has been divested. Pfeleiderer-Bausysteme Hungária Kft., Labatlan (H) is no longer consolidated due to its intended closure.

Due to their sale during the reporting period, the shares of Mitteldichte Faserplatten Hallein GmbH & Co. KG, Hallein (A) are no longer carried in the Consolidated Financial Statement under equity.

In accordance with Section 296 (2) German Commercial Code, non-operative companies or those with low levels of operation and assets, were not incorporated into the Group Financial Statements due to their insignificance in terms of the Group's assets, financial and earnings position.

The initial consolidation of affiliates into the Group Financial Statements and the consolidation of deferred costs of acquisition for shares in companies already fully consolidated resulted in differences totaling euro 11,557,000 under the book valuation method.

**Effect of changes to the number of companies consolidated:**

Changes in the number of companies consolidated affected Group assets as follows:

	euro million
<b>Assets</b>	
Tangible and intangible assets	7.3
Inventories	0.7
Accounts receivables	3.2
<b>Liabilities</b>	
Accruals	0.4
Other liabilities	15.0

Changes in the number of companies consolidated resulted in an increase in sales of euro 5.8 million.

**IV. Principles of consolidation**

The cut-off dates for the Group Financial Statements follow the cut-off date for Pfeleiderer AG. Interim financial statements have been drawn up for fully consolidated affiliates where their balance sheet cut-off dates differ from the holding company.

Capital consolidation is shown at book value by offsetting the acquisition cost of the holding against the consolidated company's share of equity capital in the Group at first date of consolidation. Capitalised differences are shown under assets or liabilities where real value exceeds book value. Remaining differences have been capitalized under goodwill and amortized over their expected useful life in accordance with the German Accounting Standards No. 4. In deviation from this principle, in fiscal 2001 goodwill totaling euro 39,548,000 was offset against reserves in accordance with Section 309 German Commercial Code without affecting the operating result. Differences falling under equity and liabilities are shown under revenue or other reserves, depending on their nature.

Equity is shown on the balance sheet using a method similar to capital consolidation. Capitalized differences shown under assets resulting from equity consolidation are shown under cost of acquisition of holdings.

Sales, expenses and income, interim results, as well as accounts receivable and liabilities, have all been eliminated between the consolidated companies.

Contingent liabilities are consolidated to the required extent.

Minority interests are determined according to the existing shareholder's capital as at balance sheet cut-off date, and are carried in the Group Financial Statements together with profit and loss components as adjustments for minority interests in compliance with Section 307 German Commercial Code.

Unappropriated retained earnings of the group is shown at the same amount as unappropriated retained earnings of the Pfeleiderer AG. Group earnings reserves include retained profits carried forward from affiliated companies before initial consolidation, exchange rate differences following later consolidation and retained earnings from affiliated companies.

No adjustments to tax accruals to cover deferred taxes arising from consolidation were necessary in the Group Financial Statements.

#### V. Currency translation

Foreign currency amounts which have not been hedged are shown at cut-off date according to the lowest-value principle for accounts receivable and highest value for accounts payable, as well as taking into account any need to revalue. Hedged foreign currency amounts are amalgamated with their hedging transaction per unit of currency and shown at hedged valuation. Exchange rate losses incurred through over-cautious hedging are covered by appropriate accruals.

Annual Financial Statements drawn up in foreign currency for consolidated foreign affiliates are translated at the average rate of exchange prevailing at cut-off date (with the exception of equity capital, which is translated at the average exchange rate at the date of initial consolidation).

Income Statements of consolidated affiliated companies have been translated for the first time in fiscal 2001 at the average exchange rate prevailing, in accordance with usual international practice. Changes in exchange rates arising from capital consolidation are adjusted with equity capital with no effect on the operating results.

The official exchange rates used for the main currencies for the Group were as follows:

Average rate as of cut-off date (1 euro =)	31.12. 2001	31.12. 2000
Great Britain (GBP)	0.6088	0.6233
Poland (PLN)	3.5068	3.8655
Russia (RUB)	26.9100	26.6000
Switzerland (CHF)	1.4805	1.5221
Slovenia (SIT)	214.2060	213.0833
Czech Republic (CZK)	31.9900	35.0400
Hungary (HUF)	245.9550	264.3405
USA (USD)	0.8820	0.9305
Ukraine (UAH)	4.7267	5.1171

## VI. Principles of accounting and valuation

The Annual Financial Statements of consolidated companies were drawn up according to uniform principles of accounting and valuation laid down by Pfeleiderer AG.

**Intangible assets** are shown at cost of acquisition, less scheduled straight-line amortization.

**Tangible assets** are carried at the lower of acquisition or production cost, less ordinary and extraordinary depreciation and investment grants received.

Buildings are depreciated using the straight-line method. Scheduled depreciation for remaining assets is performed using the declining balance method based on the useful life of the asset in question, as defined by German tax law. In determining the useful life of additions made in fiscal 2001, German companies applied the changes made to depreciation tables issued by the Federal Ministry of Finance as from January 1, 2001. Additions made in the first six months of the fiscal year to non-real estate fixed assets are depreciated at their full yearly amount, while additions recorded in the second half of the fiscal year are depreciated at half their full yearly amount of depreciation. Low-value assets are fully written off in the year of acquisition and are shown as retired. No depreciations pursuant to Section 254 German Commercial Code were made during the reporting year.

**Financial assets** are shown at the lower of cost or market value.

**Inventories** are shown at either acquisition or production cost, taking into account the principle of lowest value. Production costs include those costs directly attributable to production as well as production-related pro-rata overheads. Sufficient deductions for reduced salability have been made for stocks and inventories which are no longer fully usable. Inverse valuation has been used for some products. Based on usual international practice and in view of greater integration of external and internal accounting departments, valuation according to the LIFO method was dropped in fiscal 2001.

**Accounts receivable and other assets** are shown at nominal value. Perceptible individual risks have been sufficiently taken into account through individual adjustments, while general credit risks are provided for through a lump sum adjustment. Reasonable reserves have been set up for anticipated discounts, reductions in proceeds, and bonuses not yet accounted for.

Differences between outgoing payments and higher repayments of loans are capitalized as **discounts** under pre-paid expenses and deferred charges. The discount is written off over the term of the underlying liability.

**The adjustment item for minority interests** includes shares in equity held by third party companies and profits of subsidiaries fully consolidated into the Group.

**Accruals for pensions and similar obligations** mainly relate to German companies and are shown according to the actuarial value pursuant to Section 6a German Income Tax Act (“Einkommenssteuergesetz” EStG), and are based on an interest rate of 6 percent. The calculations are based on the actuarial tables of 1998 from Dr. Klaus Heubeck.

In calculating **tax accruals** and **other accruals**, all recognizable risks relating to extent of expected claims have been taken reasonably and sufficiently into account.

**Liabilities** are stated at repayment amount.

**Deferred income** comprises income before cut-off date, insofar as this represents income actually earned for a specific period after this date.

## VII. Balance Sheet Notes

## (1) Fixed assets

	Group		Pfleiderer AG	
	31.12.2001 '000 euro	31.12.2000 '000 euro	31.12.2001 '000 euro	31.12.2000 '000 euro
<b>Intangible assets</b>				
Franchises, trademarks, patents and licences and similar rights and licences to such rights	15,090	12,088	0	6,652
Goodwill	51,493	72,785	0	0
Prepayments	3,818	5,056	0	5,086
	<b>70,401</b>	<b>89,929</b>	<b>0</b>	<b>11,738</b>
<b>Tangible assets</b>				
Land, land rights and buildings, including buildings on third-party land	304,962	307,538	0	0
Machinery and technical equipment	213,257	224,985	0	0
Other equipment, furniture and fixtures	24,586	15,661	71	107
Prepayments and construction in progress	37,521	46,448	0	0
	<b>580,326</b>	<b>594,632</b>	<b>71</b>	<b>107</b>
<b>Financial assets</b>				
Investments in affiliated companies	2,253	2,626	355,444	355,418
Loans to affiliated companies	12	0	20,286	20,286
Investments	205	200	55	55
Long-term securities	4	4	0	0
Other loans	1,367	2,650	10	33
	<b>3,841</b>	<b>5,480</b>	<b>375,795</b>	<b>375,792</b>
	<b>654,568</b>	<b>690,041</b>	<b>375,866</b>	<b>387,637</b>

Changes in assets during fiscal 2001 are shown in the analysis of assets in the chart given at the beginning of the notes section.

**Intangible assets**

Goodwill disclosed in the consolidated Financial Statements originates from individual financial statements, as well as from the initial consolidation of companies belonging to the Group.

Goodwill from capital consolidation is either completely offset against consolidated reserves in the first year of consolidation, or amortized from fiscal 2001 over its expected useful life in concurrence with German Accounting Standard No. 4.

In the reporting year total goodwill of euro 11,557,000 originated from initial consolidation of affiliates and the consolidation of later acquisition costs.

Adjustments to goodwill against consolidated reserves having no effect on results came to euro 39,548,000. Scheduled amortization of goodwill from initial consolidation having an effect on results came to euro 1,832,000.

**Financial assets**

The holding in Mitteldichte Faserplatten Hallein GmbH & Co KG, an associated company, was sold in fiscal 2001. As the holding had already been amortized unscheduled in the previous year, no changes on the previous year occurred as a result of the disposal of this holding.

Holdings are shown in a separate list deposited with the Commercial Register of the District Court of Nürnberg.

**(2) Current assets**

	Group		Pfleiderer AG	
	31.12.2001 '000 euro	31.12.2000 '000 euro	31.12.2001 '000 euro	31.12.2000 '000 euro
<b>Inventories</b>				
Raw material and supplies	87,400	78,355	0	23
Work in progress	30,439	26,566	0	0
Finished goods and merchandise	73,564	64,447	0	0
Prepayments on inventories	4,281	1,699	0	0
Payments in advance received	- 2,775	0	0	0
	<b>192,909</b>	<b>171,067</b>	<b>0</b>	<b>23</b>
<b>Receivables and other assets</b>				
Receivables from minority shareholders	963	558	0	0
Trade accounts receivable	203,158	210,029	172	1,233
Accounts receivable from affiliated companies	18,832	15,042	93,621	259,389
Accounts receivable from companies in which participations are held	0	2,174	0	0
Other assets	51,252	58,356	17,647	26,652
	<b>274,205</b>	<b>286,159</b>	<b>111,440</b>	<b>287,274</b>
<b>Securities (other)</b>	<b>518</b>	<b>4,314</b>	<b>0</b>	<b>0</b>
<b>Checks, cash and bank balances</b>	<b>61,396</b>	<b>30,110</b>	<b>52,774</b>	<b>38,606</b>
	<b>529,028</b>	<b>491,650</b>	<b>164,214</b>	<b>325,903</b>

**Inventories**

In line with international valuation practice, and in view of the greater integration of internal and external accounting, the LiFo method was dropped in fiscal 2001. This had a positive effect on results of euro 3.2 million. During the reporting year, stockkeeping moved from fixed to unit valuation, thereby making effective use of IT-supported inventory management (effect: euro 1.9 million).

During the reporting year, prepayments were capitalized against inventories for the first time.

**Other assets**

	Group		Pfleiderer AG	
	31.12.2001 '000 euro	31.12.2000 '000 euro	31.12.2001 '000 euro	31.12.2000 '000 euro
Corporation tax and other tax credits	23,007	24,523	17,003	18,992
Investment grants and similar	2,386	0	0	0
Lendings	11,298	17,554	0	0
Other	14,561	16,279	644	7,660
	<b>51,252</b>	<b>58,356</b>	<b>17,647</b>	<b>26,652</b>

Under other assets in the Group Financial Statements, euro 6,059,000 have a remaining term of more than one year. In the case of Pfleiderer AG's Annual Financial Statements, euro 323,000 have a remaining term of more than one year.

**(3) Prepaid Expenses**

	Group		Pfleiderer AG	
	31.12.2001 '000 euro	31.12.2000 '000 euro	31.12.2001 '000 euro	31.12.2000 '000 euro
Discount	400	566	0	0
Other prepaid expenses	2,834	3,325	0	0
	<b>3,234</b>	<b>3,891</b>	<b>0</b>	<b>0</b>

#### (4) Equity capital

Changes to Group equity capital in the previous year and in fiscal 2001 are stated in the Management Report, prior to the notes.

##### Subscribed capital

Capital stock remains unchanged at euro 109,273,600 and is divided into 42,685,000 shares.

According to the resolution of the Shareholders' Meeting of July 10, 2001, subject to approval by the Supervisory Board, the Executive Board is authorized to increase capital stock until June 30, 2006 by issuing new shares against cash deposits on one or more occasions by a total of euro 51,200,000 (Authorized Capital).

Additionally, Contingent Capital totaling euro 20,480,000 may also be issued until June 30, 2006.

In connection with Pfeleiderer AG's Share Option Scheme, a further amount of Contingent Capital totaling euro 10,927,000 has been approved.

##### Capital reserves

Capital reserves in the Group Financial Statements declined, largely through the offsetting of goodwill arising from initial consolidation during the reporting year.

##### Earnings reserves

	Group		Pfleiderer AG	
	31.12.2001 '000 euro	31.12.2000 '000 euro	31.12.2001 '000 euro	31.12.2000 '000 euro
Total	40,496	29,239	51,129	51,129

Increases in earnings reserves result from amounts originating from the Group surplus on year, as well as from positive effects of currency translation; increases were counteracted by offsetting goodwill from an initial consolidation in the previous year.

##### Minority interests

The reduction in deferrals was mainly due to the acquisition of minority holding in companies which had already been fully consolidated.

**(5) Accruals**

	Group		Pfleiderer AG	
	31.12.2001 '000 euro	31.12.2000 '000 euro	31.12.2001 '000 euro	31.12.2000 '000 euro
Pension accruals	56,275	55,247	6,152	5,611
Tax accruals	12,527	16,011	9,697	9,697
Other accruals	93,033	105,896	6,452	6,837
	<b>161,835</b>	<b>177,154</b>	<b>22,301</b>	<b>22,145</b>

Accruals take into account all recognizable risks as at balance sheet cut-off date.

**Pension accruals and similar obligations**

Pension accruals and other obligations mainly comprise individual commitments and collective agreements entered into by German companies.

**Tax accruals**

Tax accruals include reserves for current income taxes such as corporation tax including German unification solidarity surcharge, municipal tax and foreign income taxes.

Euro 4,000,000 have been put aside in the Annual Financial Statement of Pfleiderer AG to cover deferred taxes.

**Other accruals**

	Group		Pfleiderer AG	
	31.12.2001 '000 euro	31.12.2000 '000 euro	31.12.2001 '000 euro	31.12.2000 '000 euro
Personnel	41,644	47,736	4,270	1,822
Production	9,068	13,460	0	0
Sales	22,710	21,409	0	0
Other	19,611	20,933	2,182	5,015
Risk provision for affiliates	0	2,358	0	0
	<b>93,033</b>	<b>105,896</b>	<b>6,452</b>	<b>6,837</b>

Accruals relating to personnel in the Group mainly cover outstanding holiday and variable payment, overtime, anniversaries and pre-retirement part-time work.

Accruals relating to production and sales cover typical operating risks such as outstanding commission and bonuses, warranty payments and maintenance, and are carried as liabilities.

Other accruals cover various individual risks and outstanding accounts payable.

Accruals set up in previous years to cover the risks involved in the Russian insulation materials plant have been dissolved as they are no longer justified.

Other accruals for Pfeleiderer AG include accruals for bonuses, compensation and for non-clarified legal matters.

#### (6) Liabilities

Group Analysis of Liabilities	Remaining term		31.12. 2001	31.12. 2000
	up to 1 year '000 euro	more than 5 years '000 euro	Total '000 euro	Total '000 euro
Loans from banks	136,706	294,265	564,035	571,405
Loans	1,275	0	1,275	1,677
<b>Financial debt</b>	<b>137,981</b>	<b>294,265</b>	<b>565,310</b>	<b>573,082</b>
Liabilities due to minority shareholders	0	0	0	1,526
Pre-payments received	0	0	0	4,492
Trade accounts payable	81,203	1	81,204	71,796
Liabilities due to affiliated companies	584	0	584	302
Liabilities due to companies in which participating rights are held	3,985	0	3,985	4,864
Other liabilities	141,277	5,162	149,882	128,089
thereof from taxes	6,996	0	6,996	19,207
thereof for social security	7,260	0	7,260	7,512
<b>Other liabilities</b>	<b>227,049</b>	<b>5,163</b>	<b>235,655</b>	<b>211,069</b>
	<b>365,030</b>	<b>299,428</b>	<b>800,965</b>	<b>784,151</b>

Liabilities to banks have been reduced through the introduction of an ABS financing program as a further financial instrument, at the same time leaving the balance sheet total almost unchanged. Please refer to the cash flow statement shown in this Report prior to these notes.

Pfleiderer AG Analysis of Liabilities	Remaining term		31. 12. 2001	31. 12. 2000
	up to 1 year '000 euro	more than 5 years '000 euro	Total '000 euro	Total '000 euro
Liabilities due to banks	64,415	0	64,415	66,580
<b>Financial debt</b>	<b>64,415</b>	<b>0</b>	<b>64,415</b>	<b>66,580</b>
Trade accounts payable	511	0	511	2,675
Liabilities to affiliated companies	71,451	0	71,451	235,331
Liabilities due to companies in which participating rights are held	3,985	0	3,985	3,897
Other liabilities	296	0	296	2,609
thereof for taxes	0	0	101	1,461
thereof for social security	41	0	41	45
<b>Other liabilities</b>	<b>76,243</b>	<b>0</b>	<b>76,243</b>	<b>244,512</b>
	<b>140,658</b>	<b>0</b>	<b>140,658</b>	<b>311,092</b>

The significant reduction in liabilities to affiliated companies is due to a reorganization in connection with which certain internal financial activities have been transferred to another consolidated company.

#### (7) Contingent liabilities

Liabilities exist to the amount of euro 0.4 million within the Group from the issue and transfer of bills of exchange.

Pfleiderer AG has assumed guarantees and issued letters of comfort totaling euro 506.1 million. Of these, euro 72.8 million relate to a joint liability incurred from the acquisition of minority holding of a company which has already been fully consolidated.

Pfleiderer AG has assumed a guarantee for interest swap transactions made by affiliated companies. The interest swaps are based on guarantees totaling to euro 145.2 million.

Liabilities from warranties came to euro 2.6 million for Pfleiderer AG.

#### (8) Other financial liabilities

Liabilities from leasing and renting by Pfleiderer AG came to euro 4.9 million (annual amount) as of cut-off date. For the Group, these totaled euro 25.4 million (annual amount).

#### (9) Derivative financial instruments

Derivative instruments were only used within the Pfleiderer Group to secure risks from currency and interest items arising from business operations, and were based on the underlying transaction. These tasks are primarily performed centrally for the whole Group by Pfleiderer AG and Pfleiderer Finance B.V..

## VIII. Information and Notes on the Income Statement

## (10) Group sales

Group sales by region	1.1.-31.12.01	1.6.-31.12.00
	'000 euro	'000 euro
Domestic	779,312	467,826
Foreign	648,074	362,524
	<b>1,427,386</b>	<b>830,350</b>

Foreign sales contributed 45.4 percent (previous year: 43.7 percent).

Group sales by business center	1.1.-31.12.01	1.6.-31.12.00
	'000 euro	'000 euro
Wood-Based Panels	751,399	449,818
Doors and Windows	149,952	106,435
Insulation Technology	197,451	111,272
Infrastructure Technology	320,140	156,610
Service	8,444	6,215
	<b>1,427,386</b>	<b>830,350</b>

## (11) Other operating income

	Group		Pfleiderer AG	
	1.1.-31.12.01	1.6.-31.12.00	1.1.-31.12.01	1.6.-31.12.00
	'000 euro	'000 euro	'000 euro	'000 euro
Administration	1,408	596	4	2
Sales	5,091	358	0	0
Income not relating to accounting period	24,669	13,244	516	86
Disposal of assets	2,526	798	0	7,256
Income from currency exchange	5,951	4,301	1,376	749
Other	13,460	4,507	22,551	24,975
	<b>53,105</b>	<b>23,804</b>	<b>24,447</b>	<b>33,068</b>

Income not relating to the accounting period results in particular from amounts obtained by dissolving accruals, as well as from the reimbursement of damages and the dissolving of individual and blanket adjustments for trade receivables.

Other amounts carried under other operating income by Pfeleiderer AG are mainly due to income generated by intra-Group transactions.

## (12) Cost of materials

	Group	
	1.1.-31.12.01 '000 euro	1.6.-31.12.00 '000 euro
Expenses for raw materials, supplies and purchased goods	702,590	397,147
Expenses for outside services	68,471	35,921
	<b>771,061</b>	<b>433,068</b>
As % of gross performance	52.8 %	52.3 %

## (13) Personnel expenses

	Group		Pfleiderer AG	
	1.1.-31.12.01 '000 euro	1.6.-31.12.00 '000 euro	1.1.-31.12.01 '000 euro	1.6.-31.12.00 '000 euro
Wages and salaries	276,274	158,198	9,141	4,391
Social security and pension expenses	61,592	34,742	1,294	1,001
thereof for pensions	5,875	3,430	916	425
	<b>337,866</b>	<b>192,940</b>	<b>10,435</b>	<b>5,392</b>
As % of gross performance	23.2 %	23.3 %		

	Group		Pfleiderer AG	
	1.1.-31.12.01	1.6.-31.12.00	1.1.-31.12.01	1.6.-31.12.00
<b>Average number of employees during the year</b>				
Wage earners	6,184	6,744	0	0
Salaried employees	2,738	2,817	37	144
Trainees	298	322	0	0
thereof part-time	164	179	2	8
	<b>9,220</b>	<b>9,883</b>	<b>37</b>	<b>144</b>

	Group		Pfleiderer AG	
	31.12.2001	31.12.2000	31.12.2001	31.12.2000
<b>Number of employees as of balance sheet cut-off date</b>				
Wage earners	6,107	6,614	0	0
Salaried employees	2,750	2,744	37	45
Trainees	328	350	0	0
thereof part-time	162	173	2	2
	<b>9,185</b>	<b>9,708</b>	<b>37</b>	<b>45</b>

#### (14) Amortization an depreciation

	Group		Pfleiderer AG	
	1.1.-31.12.01 '000 euro	1.6.-31.12.00 '000 euro	1.1.-31.12.01 '000 euro	1.6.-31.12.00 '000 euro
<b>Amortization and depreciation</b>				
on tangible and intangible fixed assets	86,577	51,715	15	1,086
on current assets	2,320	0	0	0
	<b>88,897</b>	<b>51,715</b>	<b>15</b>	<b>1,086</b>
As % of gross performance	6.1 %	6.2 %		

Depreciation by business center	Group	
	1.1.-31.12.01	1.6.-31.12.00
	'000 euro	'000 euro
Wood-Based Panels	44,725	27,280
Doors and Windows	4,354	3,432
Insulation Technology	21,808	11,929
Infrastructure Technology	10,430	5,007
Services	7,580	4,067
	<b>88,897</b>	<b>51,715</b>

Extraordinary depreciation came to euro 1,800,000 during the reporting year.

#### (15) Other operating expenses

	Group		Pfleiderer AG	
	1.1.-31.12.01	1.6.-31.12.00	1.1.-31.12.01	1.6.-31.12.00
	'000 euro	'000 euro	'000 euro	'000 euro
Maintenance	35,102	17,860	151	119
Production	15,692	8,295	0	0
Administration	73,785	35,229	10,522	9,745
Personnel	5,432	3,053	1,229	976
Sales and marketing	48,932	24,134	189	273
Other	47,131	28,966	17,649	23,456
	<b>226,074</b>	<b>117,537</b>	<b>29,740</b>	<b>34,569</b>
As % of gross performance	15.5 %	14.2%		

**(16) Income from affiliated and associated companies**

	Group		Pfleiderer AG	
	1.1.-31.12.01 '000 euro	1.6.-31.12.00 '000 euro	1.1.-31.12.01 '000 euro	1.6.-31.12.00 '000 euro
Income from affiliated companies	112	673	72,266	0
Earnings from associated companies	0	- 2,711	0	0
	<b>112</b>	<b>- 2,038</b>	<b>72,266</b>	<b>0</b>

**(17) Interest earnings**

	Group		Pfleiderer AG	
	1.1.-31.12.01 '000 euro	1.6.-31.12.00 '000 euro	1.1.-31.12.01 '000 euro	1.6.-31.12.00 '000 euro
Earnings from other securities and long-term loans	110	23	206	120
thereof from affiliated companies	0	0	206	120
Other interest and similar earnings	7,260	2,922	14,058	4,477
thereof from affiliated companies	772	385	11,613	4,255
Interest and similar expenses	44,206	26,992	13,656	4,220
thereof from affiliated companies	21	24	9,053	2,169

**(18) Extraordinary income**

Extraordinary income for the Pfeleiderer Group (euro 19,895,000) in the short fiscal year 2000 came from the divestment of the companies PANNO International S.A., Pannovoges S.A., Katz Werke GmbH and Umbach-Walkemühle Untersetzerwerke GmbH.

**(19) Extraordinary expenses**

Extraordinary expenses for the Pfeleiderer Group (euro 12,835,000) in the short fiscal year 2000 include amortization on the holding in Mitteldichte Faserplatten Hallein GmbH & Co. KG, Hallein (A).

Extraordinary expenses for the Pfeleiderer Group in the reporting year relate to an additional amount of euro 55,000,000 expended by Pfeleiderer Bauelemente GmbH & Co. KG, Neumarkt in order to offset the extraordinary amortization to the lower value of its holding in Pfeleiderer Türen GmbH & Co. KG, Neumarkt.

**(20) Taxes on income**

	Group		Pfeleiderer AG	
	1.1.-31.12.01 '000 euro	1.6.-31.12.00 '000 euro	1.1.-31.12.01 '000 euro	1.6.-31.12.00 '000 euro
<b>Current taxes on income</b>				
Domestic corporate income and solidarity surcharge	- 2,105	3,114	- 3,085	0
Domestic municipal tax	4,110	2,839	0	0
Foreign income tax	13,938	8,834	0	0
	<b>15,943</b>	<b>14,787</b>	<b>- 3,085</b>	<b>0</b>

### Segment Report

The following report shows individual annual financial data for each Pfeleiderer AG business center: Wood-Based Panels, Doors and Windows, Insulation Technology and Infrastructure Technology. Which consolidated companies belong to which business center is shown in the consolidation information provided in the notes. Pfeleiderer AG, as well as other consolidated

in euro million	Wood-Based Panels			
	2001	Short 00	99/2000	1998/99
Group sales to third parties	751.4	449.8	735.6	
Inter-Group sales	8.6	5.7	17.2	
<b>Revenue from divisions</b>	<b>760.0</b>	<b>455.5</b>	<b>752.8</b>	<b>584.9</b>
thereof domestic	384.0	221.5	388.5	373.3
thereof foreign	376.0	234.0	364.3	211.6
foreign share as %	49.5	51.4	48.4	36.2
<b>Gross performance</b>	<b>768.3</b>	<b>453.0</b>	<b>760.9</b>	<b>588.6</b>
Cost of materials	393.5	230.1	414.9	303.4
as % of gross performance	51.2	50.8	54.5	51.5
Personnel expenses	148.7	87.4	152.2	139.6
as % of gross performance	19.4	19.3	20.0	23.7
Other	115.6	57.9	97.8	78.7
as % of gross performance	15.0	12.8	12.9	13.4
Investment income	0.0	- 2.4	- 3.6	1.2
<b>EBITDA</b>	<b>110.5</b>	<b>75.2</b>	<b>92.4</b>	<b>68.1</b>
as % of sales	14.5	16.5	12.3	11.6
Amortization and depreciation on fixed assets	42.4	27.3	48.4	43.3
<b>EBIT</b>	<b>68.1</b>	<b>47.9</b>	<b>44.0</b>	<b>24.8</b>
as % of sales	9.0	10.5	5.8	4.2
Net interest expenses				
Extraordinary earnings				
Extraordinary expenses				
Results from ordinary business operations				
Taxes				
<b>Net income</b>				
<b>Capital expenditure</b>	<b>21.0</b>	<b>29.6</b>	<b>142.5</b>	<b>109.3</b>
Average number of employees	4,035	4,295	4,286	3,268
<b>Segment assets</b>	<b>438.0</b>	<b>461.1</b>	<b>543.2</b>	<b>349.8</b>
<b>ROCE in %</b>	<b>15.5</b>	<b>17.8</b>	<b>8.1</b>	<b>7.1</b>
Financial liabilities netted against liquid resources*				
Long-term equity including pension accruals				

\* Bank debts, less liquid assets adjusted for other investments

**Note:** Segment assets (working capital less financing) are calculated by adding fixed and current assets less accruals (excluding pension accruals) as well as liabilities (excluding financial liabilities)

companies, in particular those responsible for freight forwarding and financial services, are shown under Consolidation/Other, as are interdivisional consolidations. Group sales by business centers to third parties are shown as a proportion of total consolidated sales. Internal sales between consolidated members of the Group are shown for each business center. All internal Group sales were conducted at arm's length at market prices. Amortization and depreciation relates to intangible and tangible assets, as well as financial assets. Investments

in the current fiscal year are shown based on German Accounting Standard No. 2 and show payments for all assets, including companies consolidated for the first time this year, as well as holdings acquired from third parties in companies that have already been fully consolidated. Segment assets (working capital, less financing) is calculated by adding fixed and current assets, less accruals (excluding accruals for pensions) and liabilities (less financial liabilities). The ROCE of the previous year has been extrapolated to 12 months to enable comparison.

Doors and Windows				Insulation Technology				Infrastructure Technology				Consol./Other				Total				
2001	Short 00	99/2000	1998/99	2001	Short 00	99/2000	1998/99	2001	Short 00	99/2000	1998/99	2001	Short 00	99/2000	1998/99	2001	Short 00	99/2000	1998/99	
149.4	106.4	215.0		197.5	111.0	201.9		320.1	156.6	264.2										
0.0	0.0	0.0		0.3	0.1	13.6		2.8	2.5	5.8										
<b>149.4</b>	<b>106.4</b>	<b>215.0</b>	<b>216.0</b>	<b>197.8</b>	<b>111.1</b>	<b>215.4</b>	<b>176.5</b>	<b>322.9</b>	<b>159.1</b>	<b>270.0</b>	<b>234.8</b>	<b>- 2.7</b>	<b>- 1.8</b>	<b>- 15.5</b>	<b>11.9</b>	<b>1,427.4</b>	<b>830.3</b>	<b>1,437.8</b>	<b>1,224.1</b>	
141.0	99.2	199.7	202.3	75.0	49.8	120.8	122.8	185.9	102.6	168.4	150.5					779.3	467.8	850.8	854.0	
8.4	7.2	15.3	13.7	122.8	61.4	94.7	53.7	137.0	56.5	101.6	84.3					648.1	362.5	587.0	370.1	
5.6	6.8	7.1	6.3	62.1	55.2	43.9	30.4	42.4	35.5	37.6	35.9					45.4	43.7	40.8	30.2	
<b>146.6</b>	<b>104.2</b>	<b>212.9</b>	<b>215.4</b>	<b>205.3</b>	<b>109.0</b>	<b>219.3</b>	<b>178.2</b>	<b>330.6</b>	<b>156.3</b>	<b>277.6</b>	<b>236.8</b>	<b>8.6</b>	<b>6.2</b>	<b>- 15.2</b>	<b>12.0</b>	<b>1,459.4</b>	<b>828.7</b>	<b>1,455.5</b>	<b>1,230.9</b>	
81.3	55.6	114.9	110.1	86.1	46.5	100.3	77.1	160.5	70.2	122.0	101.3					771.1	433.1	776.8	626.5	
55.5	53.3	54.0	51.1	41.9	42.7	45.7	43.2	48.5	44.9	43.9	42.8					52.8	52.3	53.4	50.9	
48.3	34.5	59.9	58.6	39.9	21.5	37.6	29.7	77.1	39.6	71.1	62.7					337.9	192.9	339.4	307.3	
32.9	33.1	28.2	27.2	19.4	19.7	17.1	16.6	23.3	25.3	25.6	26.5					23.2	23.3	23.3	25.0	
21.6	13.5	28.8	30.2	41.5	28.7	64.1	48.6	48.4	20.5	41.6	33.1					175.2	93.7	168.1	149.0	
14.7	13.0	13.5	14.0	20.2	26.3	29.2	27.3	14.6	13.1	15.0	14.0					12.0	11.3	11.5	12.1	
0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.1	0.0	0.0	0.0	0.0					0.1	- 2.0	- 3.6	1.3	
<b>- 4.6</b>	<b>0.6</b>	<b>9.3</b>	<b>16.5</b>	<b>37.8</b>	<b>12.7</b>	<b>17.3</b>	<b>22.9</b>	<b>44.6</b>	<b>26.0</b>	<b>42.9</b>	<b>39.6</b>	<b>- 13.0</b>	<b>- 7.5</b>	<b>3.4</b>	<b>- 0.8</b>	<b>175.3</b>	<b>107.0</b>	<b>167.6</b>	<b>149.4</b>	
- 3.1	0.5	4.3	7.6	19.1	11.4	8.0	13.0	13.8	16.4	15.9	16.9					481.5	417.8	- 21.9	- 6.9	
4.4	3.4	6.6	9.5	21.8	11.9	21.5	13.2	10.9	5.0	8.9	9.2					7.6	4.1	7.8	1.6	
<b>- 9.0</b>	<b>- 2.8</b>	<b>2.7</b>	<b>7.0</b>	<b>16.0</b>	<b>0.8</b>	<b>- 4.2</b>	<b>9.7</b>	<b>33.7</b>	<b>21.0</b>	<b>34.0</b>	<b>30.4</b>	<b>- 20.6</b>	<b>- 11.6</b>	<b>- 4.4</b>	<b>- 2.4</b>	<b>88.2</b>	<b>55.3</b>	<b>72.1</b>	<b>69.4</b>	
- 6.0	- 2.6	1.2	3.2	8.1	0.7	- 1.9	5.5	10.4	13.2	12.6	12.9					763.0	644.6	28.4	- 19.8	
																	36.8	24.1	34.7	18.0
																	0.0	19.9	2.6	0.0
																	0.0	12.8	37.0	0.0
																	51.4	38.3	3.0	51.4
																	16.0	14.8	11.6	16.6
																	<b>35.4</b>	<b>23.5</b>	<b>- 8.6</b>	<b>34.8</b>
<b>25.5</b>	<b>5.1</b>	<b>9.4</b>	<b>17.2</b>	<b>12.7</b>	<b>11.4</b>	<b>37.3</b>	<b>82.0</b>	<b>26.7</b>	<b>6.9</b>	<b>8.6</b>	<b>24.2</b>	<b>8.1</b>	<b>6.5</b>	<b>17.4</b>	<b>4.6</b>	<b>94.0</b>	<b>59.5</b>	<b>215.2</b>	<b>237.3</b>	
1,453	1,844	1,897	1,914	1,428	1,493	1,523	1,214	2,010	1,929	2,097	2,006					294	322	312	256	
<b>- 0.2</b>	<b>22.0</b>	<b>61.3</b>	<b>63.3</b>	<b>151.9</b>	<b>145.5</b>	<b>134.3</b>	<b>169.7</b>	<b>166.6</b>	<b>148.3</b>	<b>122.5</b>	<b>122.8</b>	<b>11.1</b>	<b>30.0</b>	<b>45.3</b>	<b>19.7</b>	<b>767.4</b>	<b>806.9</b>	<b>906.6</b>	<b>725.3</b>	
-	- 21.5	4.3	11.0	10.5	1.0	- 3.1	5.7	20.2	24.3	27.8	24.7					11.5	11.7	8.0	9.6	
																	488.2	528.3	603.8	401.8
																	279.2	278.6	302.8	323.5

**IX. Other information****1. Compensation of existing and former company bodies**

Payments made to the Supervisory Board came to euro 150,000 during the fiscal year. Compensation of the Executive Board came to euro 6,090,000 in the fiscal year.

Full provision for pensions of former members of the Executive Board and their dependents has been made and stands at euro 2,406,000 as of December 31, 2001.

As part of the Pfeleiderer AG Stock Option Scheme, members of the Executive Board were granted 723,600 share options against contribution of a personal investment in the company. Apart from that, 45,885 shares are held by members of the Executive Board. Members of the Supervisory Board hold 168,933 shares.

**2. Proposed appropriation of earnings**

The Executive and Supervisory Boards propose that the unappropriated retained earnings of the group of the fiscal year from January 1, 2001 to December 31, 2001 amounting to euro 15,215,560.44 be appropriated as follows:

Payment of a dividend of euro 0.20 per share for a total of 42,685,000 dividend bearing shares.

Dividend payment	euro 8,537,000.00
Profit carried forward	euro 6,678,560.44
<b>Unappropriated retained earnings of the group</b>	<b>euro 15,215,560.44</b>

Neumarkt, March 2002

The Executive Board



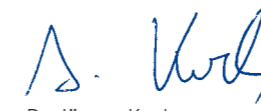
Dr. Ralf H. Bufe  
Chairman



Michael Ernst



Hans H. Overdiek



Dr. Jürgen Koch



Dr. Wolfgang Pinegger

## X. Information on the Company Bodies

### 1. Additional mandates held by members of the Supervisory Board of Pfeiderer AG

#### **Ernst-Herbert Pfeiderer**

Chairman of the Supervisory Board

Member of the following domestic control committee, comparable with a German supervisory board:

Control Committee of the Pfeiderer Unternehmensverwaltung GmbH & Co. KG, Neumarkt (Chairman)

#### **Wolfgang Rhode\***

1<sup>st</sup> Deputy Chairman of the Supervisory Board

Executive Member of the Governing Board of IG Metall

#### **Dr. Manfred Scholz**

2<sup>nd</sup> Deputy Chairman of the Supervisory Board

Managing Director, Haindl Papier GmbH, Augsburg until November 30, 2001

Member of the supervisory boards in the following companies:

ASSTEL Lebensversicherung AG, Cologne (Chairman)

Württembergische Hypothekenbank AG, Stuttgart

Drei Mohren AG, Augsburg

Gothaer Lebensversicherung a.G., Göttingen (Chairman)

Gothaer Versicherungsbank VvaG, Cologne

Parion Finanzholding AG, Cologne

Steyrermühl AG, Steyrmühl/Austria (Chairman)

Member of the following domestic control committee, comparable with a German supervisory board:

Control Committee of the Pfeiderer Unternehmensverwaltung GmbH & Co. KG, Neumarkt (Deputy Chairman)

#### **N. Erich Gerlach**

Business Consultant

Member of the following domestic control committees, comparable with a German supervisory board:

Control Committee of Pfeiderer Unternehmensverwaltung GmbH & Co. KG, Neumarkt

Control Committee of Taunus-Sparkasse, Bad Homburg/Frankfurt am Main-Höchst, until June 30, 2001

Member of the following foreign control committees, comparable with a German supervisory board:

Global Clay Products LCC, Roswell, GA/USA (Non-Executive Chairman), until December 31, 2001

#### **Gregor Haupeltshofer\***

Training supervisor, production

**Frank Kratzsch\***

Chairman, Works Council of Pfeleiderer Holzwerkstoffe GmbH & Co. KG, Business Unit Duropal

**Hans Theodor Pfeleiderer**

Member of the Executive Board of P&V Holding Aktiengesellschaft, Vienna

Member of the following domestic control committee, comparable with a German supervisory board:

Control Committee of the Pfeleiderer Unternehmensverwaltung GmbH & Co. KG, Neumarkt

**Siegfried Pirzer\***

Construction supervisor, Services

**Johann Schredl\***

District Secretary, IG Metall, Bavarian District

**Dr. Hanns-Helge Stechl**

Member of the Supervisory Board of the following company:  
MAN AG, München

Member of the following domestic control committee, comparable with a German supervisory board:

Control Committee of the Pfeleiderer Unternehmensverwaltung GmbH & Co. KG, Neumarkt

**Rainer Stracke\***

Plant Manager

**Horst Weitzmann**

Chairman of the Executive Board of Südweststahl GmbH, Kehl am Rhein

Member of Supervisory Board of the following company:

PHB Weserhütte Aktiengesellschaft, Eberach (Chairman)

BCT Technology AG, Willstätt (Chairman)

Member of the following domestic control committee, comparable with a German supervisory board:

Control Committee of the Pfeleiderer Unternehmensverwaltung GmbH & Co. KG, Neumarkt

\* Elected by the employees as representative

## 2. Mandates held by Members of the Board of Management

### Dr. Ralf H. Bufe

Chairman of the Executive Board,

Doors and Windows

Member of the following foreign control committees, comparable with a German supervisory board:

Windtec Anlagenerichtungs- und Consulting GmbH, Völkermarkt, Austria

(from September 1, 2001)

Pfleiderer Finance B.V., Deventer, Holland (from September 1, 2001)

Pfleiderer Industry Ltd., Gerards Court/Buckinghamshire, Great Britain

(from September 1, 2001)

### Michael Ernst

Member of the Executive Board

Personnel

Vereinigung der Bayerischen Wirtschaft, Munich (Member of Executive Board)

Member of the following foreign control committees, comparable with a German supervisory board:

Windtec Anlagenerichtungs- und Consulting GmbH, Völkermarkt, Austria

(from September 1, 2001)

Pfleiderer Finance B.V., Deventer, Holland (from September 1, 2001)

### Dr. Jürgen Koch

Member of the Executive Board (from December 1, 2001)

Finance

Member of the following foreign control committees, comparable with a German supervisory board:

Windtec Anlagenerichtungs- und Consulting GmbH, Völkermarkt, Austria

(from December 1, 2001)

Pfleiderer Finance B.V., Deventer, The Netherlands (from December 1, 2001)

### Hans H. Overdiek

Member of the Executive Board,(from January 1, 2001)

Wood-Based Panels

Member of the following foreign control committees, comparable with a German supervisory board:

Windtec Anlagenerichtungs- und Consulting GmbH, Völkermarkt, Austria

(from September 1, 2001)

Pfleiderer B.V., Deventer, Holland (from September 1, 2001)

Pfleiderer Industry Ltd., Gerards Court/Buckinghamshire, Great Britain

(from September 1, 2001)

**Dr. Wolfgang Pinegger**

Member of the Executive Board

Infrastructure Technology

Insulation Technology

Member of the following domestic control committees, comparable with a German supervisory board:

Control Committee of Dachser GmbH & Co. KG, Munich

Windtec Anlagenerrichtungs- und Consulting GmbH, Völkermarkt, Austria

(from September 1, 2001)

Pfleiderer B.V., Deventer, Holland (from September 1, 2001)

**Helmut Rauscher**

Member of the Executive Board (until November 30, 2001)

Finance

Member of the following domestic control committees, comparable with a German supervisory board:

Advisory Council of Palm Papierfabrik GmbH & Co., Aalen

We have issued the following unqualified opinion on the Annual and the Consolidated Financial Statements and the Management Report:

“We have audited the Annual Financial Statements, together with the bookkeeping system, the Consolidated Financial Statements and its report on the position of the Company and of the Group (Management Report) prepared by Pfeleiderer Aktiengesellschaft, Neumarkt for the business year from January 1 to December 31, 2001. The preparation of the documents in accordance with German commercial law is the responsibility of Company's management. Our responsibility is to express an opinion on the Annual Financial Statements, together with the bookkeeping system, the Consolidated Financial Statements and the Management Report based on our audit.

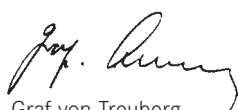
We have conducted our audit of the Annual and the Consolidated Financial Statements in accordance with Section 317 HGB (“Handelsgesetzbuch”: German Commercial Code) and the generally accepted standards for the audit of financial statements promulgated by the IDW (“Institut der Wirtschaftsprüfer in Deutschland”: Institute of Public Auditors in Germany). Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the Annual and the Consolidated Financial Statements in accordance with German principles of proper accounting and in the Management Report are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Company and the Group and evaluations of possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the books and records, the Annual and the Consolidated Financial Statements and the Management Report are examined primarily on a test basis within the framework of the audit. The audit includes assessing the Annual Financial Statements of the companies included in consolidation, the determination of the companies to be included in consolidation, the accounting and consolidation principles used and significant estimates made by Management, as well as evaluating the overall presentation of the Annual and the Consolidated Financial Statements and the Management Report. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion, the Annual and the Consolidated Financial Statements give a true and fair view of the net assets, financial position and results of operations of the Company and the Group in accordance with the German principles of proper accounting. On the whole, the Management Report provides a suitable understanding of the Company's and the Group's position and suitably presents the risks of future development.”

Stuttgart, April 16, 2002

Ernst & Young  
Deutsche Allgemeine Treuhand AG  
Wirtschaftsprüfungsgesellschaft



Graf von Treuberg  
Wirtschaftsprüfer  
Public Auditor



Th. Müller  
Wirtschaftsprüfer  
Public Auditor

<b>Multi-Year Summary</b>	<b>2001</b>	<b>Short 2000</b>	<b>2000/1999</b>	<b>1999/1998</b>	<b>1998/1997</b>	<b>1997/1996</b>
	<b>euro million</b>	<b>euro million</b>	<b>euro million</b>	<b>euro million</b>	<b>euro million</b>	<b>euro million</b>
<b>Fixed assets</b>						
Intangible assets	70,401	89,929	52,072	34,016	11,761	9,491
Tangible assets	580,326	594,632	656,819	501,460	453,953	384,414
Financial assets	3,841	5,480	42,860	43,568	32,711	41,801
<b>Current assets</b>						
Inventories net	192,909	171,067	175,842	143,015	136,310	122,700
Receivables and other assets	274,205	286,159	283,018	226,481	205,972	203,606
Cash funds and short-term securities	61,914	34,424	36,939	16,646	21,273	3,482
<b>Deferred income</b>	<b>3,234</b>	<b>3,891</b>	<b>2,348</b>	<b>2,525</b>	<b>2,586</b>	<b>2,551</b>
<b>Equity</b>	<b>222,898</b>	<b>223,402</b>	<b>244,680</b>	<b>267,446</b>	<b>337,444</b>	<b>210,225</b>
<b>Special reserves with an equity portion</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>42</b>	<b>979</b>	<b>965</b>
<b>Accruals</b>						
Accruals for pensions and similar obligations	56,275	55,247	58,154	56,009	51,978	47,766
Other accruals	105,560	121,907	137,329	82,675	80,727	67,266
<b>Liabilities</b>						
Financial debt	565,310	573,082	646,294	431,645	300,230	320,238
Other liabilities	235,655	211,069	161,394	129,226	92,566	120,704
<b>Deferred income</b>	<b>1,132</b>	<b>875</b>	<b>2,047</b>	<b>667</b>	<b>643</b>	<b>880</b>
<b>Balance sheet total</b>	<b>1,186,830</b>	<b>1,185,582</b>	<b>1,249,898</b>	<b>967,711</b>	<b>864,567</b>	<b>768,046</b>
<b>As share of balance sheet total</b>						
Fixed assets (asset intensity)	55.2 %	58.2 %	60.1 %	59.8 %	57.7 %	56.7 %
Current assets	44.6 %	41.5 %	39.7 %	39.9 %	42.1 %	42.9 %
Equity	18.8 %	18.8 %	19.6 %	27.6 %	39.0 %	27.4 %
Financial debt	47.6 %	48.3 %	51.7 %	44.6 %	34.7 %	41.7 %
<b>Ratios</b>						
Tangible fixed assets financed by equity	38.4 %	37.6 %	37.3 %	53.3 %	74.3 %	54.7 %
Fixed assets financed by equity	34.1 %	32.4 %	32.5 %	46.2 %	67.7 %	48.2 %
Fixed assets and inventories financed by equity	26.3 %	25.9 %	26.4 %	37.0 %	53.2 %	37.6 %

<b>Multi-Year Summary</b>	<b>2001</b>	<b>Short 2000</b>	<b>2000/1999</b>	<b>1999/1998</b>	<b>1998/1997</b>	<b>1997/1996</b>
	<b>euro million</b>	<b>euro million</b>	<b>euro million</b>	<b>euro million</b>	<b>euro million</b>	<b>euro million</b>
<b>Sales</b>	<b>1,427,386</b>	<b>830,350</b>	<b>1,437,800</b>	<b>1,224,060</b>	<b>1,118,041</b>	<b>1,008,529</b>
Changes in inventories/ capitalized own work	31,988	- 1,601	17,651	6,897	5,670	844
<b>Overall performance</b>	<b>1,459,374</b>	<b>828,749</b>	<b>1,455,451</b>	<b>1,230,958</b>	<b>1,123,712</b>	<b>1,009,373</b>
Cost of materials	- 771,061	- 433,068	- 776,838	- 626,557	- 575,340	- 518,822
Personnel expenses	- 337,866	- 192,940	- 339,412	- 307,295	- 281,012	- 254,948
Other expenses and earnings	- 175,289	- 93,733	- 168,103	- 149,085	- 122,744	- 105,487
Income from holdings	112	- 2,038	- 3,470	1,294	1,055	1,244
<b>EBITDA</b>	<b>175,270</b>	<b>106,970</b>	<b>167,628</b>	<b>149,316</b>	<b>145,671</b>	<b>131,360</b>
Depreciations	- 87,056	- 51,715	- 95,489	- 79,914	- 67,714	- 64,493
<b>EBIT</b>	<b>88,214</b>	<b>55,255</b>	<b>72,139</b>	<b>69,402</b>	<b>77,957</b>	<b>66,866</b>
Interest	- 36,836	- 24,047	- 34,700	- 18,016	- 17,670	- 15,260
Extraordinary income	0	7,060	- 34,450	0	0	0
<b>EBT</b>	<b>51,378</b>	<b>38,268</b>	<b>2,989</b>	<b>51,386</b>	<b>60,287</b>	<b>51,607</b>
Taxes on income	- 15,942	- 14,787	- 11,573	- 16,582	- 6,759	- 14,958
<b>Net income</b>	<b>35,436</b>	<b>23,481</b>	<b>- 8,584</b>	<b>34,804</b>	<b>53,528</b>	<b>36,648</b>
<b>Capital binding</b>						
Capital binding 1 in days	20	18*	25	32	31	34
Capital binding 2 in days	20	18*	25	32	32	34

\* annualised

<b>Multi-Year Summary</b>	<b>2001</b>	<b>Short 2000</b>	<b>2000/1999</b>	<b>1999/1998</b>	<b>1998/1997</b>	<b>1997/1996</b>
	<b>Mio. Euro</b>	<b>Mio. Euro</b>	<b>Mio. Euro</b>	<b>Mio. Euro</b>	<b>Mio. Euro</b>	<b>Mio. Euro</b>
<b>Number of employees at cut-off date</b>	9,185	9,708	10,238	8,721	8,132	7,579
<b>Average number of employees</b>	9,220	9,883	10,115	8,658	8,179	7,579
<b>Material intensity</b> (as % of overall performance)	52.8 %	52.3 %	53.4 %	50.9 %	51.2 %	51.4 %
<b>Personnel intensity</b> (as % of overall performance)	23.2 %	23.3 %	23.3 %	25.0 %	25.0 %	25.3 %
<b>Ratio EBIT to sales</b>	0.06	0.07	0.05	0.06	0.07	0.07
<b>Capital Employed</b>	767.4	806.9	906.6	725.3	633.8	479.7
<b>Operative cash flow</b>	123.3	88.4	91.2	117.9	239.8	192.6
<b>Turnover rates</b>						
<b>Turnover of inventories</b>	7.4	8.3*	8.2	8.6	8.2	8.2
<b>Turnover of trade receivables</b>	5.2	5.0*	5.1	5.4	5.4	5.0
<b>Turnover of capital employed</b>	1.9	1.8*	1.6	1.7	1.8	2.1
<b>Profitability after Taxes on Income</b>						
<b>Return on equity capital</b>	15.9 %	18.0 %*	- 3.5 %	13.0 %	15.9 %	17.4 %
<b>Return on total working capital</b>	10.0 %	10.7 %*	3.1 %	7.7 %	11.6 %	9.9 %
<b>Sales margin</b>	2.5 %	2.8 %*	- 0.6 %	2.8 %	4.8 %	3.6 %
<b>Profitability before Taxes on Income</b>						
<b>ROCE</b>	11.5 %	11.7 %*	8.0 %	9.6 %	12.3 %	13.9 %
<b>CFROCE</b>	16.1 %	18.8 %*	10.1 %	16.3 %	37.8 %	40.1 %

\* annualised

**Pfleiderer AG**

Neumarkt

**Business Center Wood-Based Panels**

Pfleiderer Holzwerkstoffe GmbH & Co. KG	Neumarkt	*)	100.00%
Pfleiderer Holzwerkstoffe Verwaltungs-GmbH	Neumarkt		100.00%
Eltec Elemente-Technik für Möbel- und Innenausbau GmbH	Arnsberg		100.00%
Fols Sp.z.o.o	Warschau (PL)		100.00%
Interwood GmbH (formerly Pfleiderer Industrie Beteiligungsgesellschaft mbH)	Regensburg		100.00%
Mitteldichte Faserplatten Hallein GmbH (until August 30, 2001)	Hallein (A)		100.00%
Pfleiderer B.V.	Deventer (NL)		100.00%
Pfleiderer Holzwerkstoffe GmbH	Peiting		100.00%
Pfleiderer Industry Ltd.	Gerrads Cross (GB)		100.00%
Pfleiderer Industrie Schweiz AG	St. Gallen (CH)		100.00%
Thermopal Dekorplatten GmbH & Co. KG	Leutkirch	*)	100.00%
Thermopal Dekorplatten Verwaltungsgesellschaft mbH	Leutkirch		100.00%
Wirus-Werke W. Ruhenstroth GmbH & Co. KG	Gütersloh	*)	100.00%
Zakłady Plyt Wiorowych Prospan S.A.	Wieruszow (PL)		48.61%
Zakłady Plyt Wiorowych S.A. w. Grajewie	Grajewo (PL)		85.65%

**Business Center Doors and Windows**

Pfleiderer Bauelemente GmbH & Co. KG	Neumarkt	*)	100.00%
Lenta-93 Épületasztalosipari Kft.	Lenti (H)		100.00%
Pfleiderer Fenster GmbH & Co. KG	Gütersloh	*)	100.00%
Pfleiderer Fenster Verwaltungs-GmbH	Gütersloh		100.00%
Pfleiderer Türen GmbH & Co. KG	Neumarkt	*)	100.00%
Pfleiderer Türen Verwaltungs-GmbH	Neumarkt		100.00%
Wirus Servicegesellschaft mbH	Gütersloh		100.00%

**Business Center Insulation Technology**

Pfleiderer Dämmstofftechnik International GmbH & Co. KG	Neumarkt	*)	100.00%
Pfleiderer Dämmstofftechnik Verwaltungs-GmbH	Neumarkt		100.00%
Isoglass N.V.	Desselgem (B)		100.00%
Mehr & Held GmbH	Wesel	*)	100.00%
OAo Pfleiderer Tschudowo	Tschudowo (RUS)		84.53%
Pfleiderer Belgium B.V.B.A.	Desselgem (B)		100.00%
Pfleiderer Dämmstofftechnik AT GmbH	Wien (A)		100.00%
Pfleiderer Dämmstofftechnik GmbH	Neumarkt		100.00%
Pfleiderer Insulation Holding GmbH	Neumarkt		100.00%
Pfleiderer Izolacioni Technika Praha s.r.o.	Prag (CZ)		100.00%
Pfleiderer Novoterm d.o.o.	Novo mesto (SLO)		100.00%
Pfleiderer SA	Rueil Malmaison (F)		100.00%
Pfleiderer Salgótarjáni Üveggyapot Rt.	Sagótarjáni (H)		100.00%
Pfleiderer Technika Izolacyjna Polska Sp.z.o.o.	Dabrowa Gornicza (PL)		100.00%

Companies not consolidated according to Section 296 (2) HGB:

OOO Pfleiderer Serpuchow	St. Petersburg (RUS)		84.53%
OÜ Pfleiderer Baltic	Tallin (EE)		84.53%
Pfleiderer Bausysteme Hungaria Kft.	Lábatlan (H)		100.00%
Pfleiderer Dämmstofftechnik Slovensko s.r.o.	Nitra (SR)		100.00%
Pfleiderer Novoterm d.o.o. Beograd	Belgrad (YUG)		100.00%
Pfleiderer Novoterm d.o.o. Zagreb	Zagreb (CRO)		100.00%
Pfleiderer Novoterm d.o.o. Sarajevo	Sarajewo (BOS)		100.00%
UDP OAo Pfleiderer Tschudowo Kiew	Kiew (RUS)		84.53%

**Business Center Infrastructure Technology**

Pfleiderer Infrastrukturtechnik GmbH & Co. KG	Neumarkt	*)	100.00%
Pfleiderer Infrastrukturtechnik Verwaltungs-GmbH	Neumarkt		100.00%
Betonschwellenwerk Coswig GmbH & Co. KG	Coswig	*)	100.00%
Betonschwellenwerk Coswig Verwaltungs-GmbH	Coswig		100.00%
MULTIBRID Entwicklungsgesellschaft mbH	Neumarkt		100.00%
Newmark International Inc.	Birmingham (USA)		100.00%
PESA Telecom S.A.	Constanti (Esp)		100.00%
Pfleiderer Consulting GmbH	Neumarkt		100.00%
Pfleiderer Energietechnik Verwaltungs-GmbH	Dinkelsbühl		100.00%
Pfleiderer España S.A.	Constanti (Esp)		100.00%
Pfleiderer Lábatlani Vasbetonipari Rt.	Lábatlan (H)		86.00%
Pfleiderer Technika Infrastrukturalna Polska Sp.z.o.o	Warschau (PL)		100.00%
Pfleiderer Wind Energy GmbH	Neumarkt		100.00%
Travipos S.A.	Constanti (Esp)		51.00%
WINDTEC Anlagenerrichtungs- und Consulting GmbH	Völkermarkt (A)		100.00%

Companies not consolidated according to Section 296 (2) HGB:

Pfleiderer Technology Hizmetleri L.S.	Istanbul (TUR)	100.00%
Travertec S.R.L.	Brasov (RUM)	100.00%
Wayss & Freytag Gesellschaft für Unternehmensbeteiligungen mbH	Frankfurt a. M.	100.00%

**Other**

Jura Belgium BVBA	Hoogstraaten (B)	100.00%
JURA-Spedition GmbH & Co. KG	Neumarkt *)	100.00%
JURA-Spedition Verwaltungs-GmbH	Neumarkt	100.00%
Pannotrans Sarl.	Rambervillers (F)	100.00%
Pfleiderer Finance B.V.	Deventer (NL)	100.00%
Pfleiderer Leasing GmbH & Co.	Neumarkt *)	100.00%
Pfleiderer Leasing USA Inc.	Wilmington (USA)	100.00%
Pfleiderer Leasing Verwaltungs-GmbH	Neumarkt	100.00%
Pfleiderer Service GmbH (formerly Pfleiderer Informatik GmbH)	Neumarkt	100.00%

Companies not consolidated according to Section 296 (2) HGB:

Jura Polska Sp.z.o.o.	Dabrowa Gornicza (PL)	100.00%
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\*) Companies opting out under Section 264 (3) HGB  
and Section 264b HGB.

## LOOKING BACK ON A SUCCESSFUL YEAR

### THE “JUGEND FORSCHT” COMPETITION

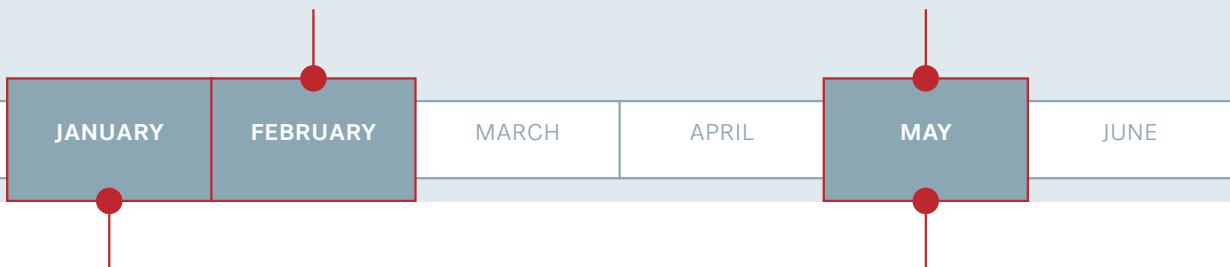
This year's regional youth research competition “Jugend forscht” held in Oberpfalz (in the NE of the German state of Bavaria) saw 97 participants and a total of 56 projects; Pfeleiderer has been sponsoring the event since 1995. Unique throughout Germany is Pfeleiderer's initiative for trainees entitled “Azubi forscht”, which involves not only industrial apprentices, but commercial trainees as well.

### ZOW 2001

International furniture industry trends from the European design metropolises are highlighted at the industry trade fair in Bad Salzflun. With its “Design Report”, Pfeleiderer AG treads new paths in interior design.

### BALANCE SHEET PRESS CONFERENCE

Dr. Ralf H. Bufe, CEO, makes reference to the reorganization: Pfeleiderer's core activities have been strengthened and two specialized business units – Telecommunication and Wind Power – have been set up. EBT increased to euro 31.2 million and net income for the year was euro 23.5 million. The figures for the first quarter indicate much healthier profitability with a higher contribution from the foreign companies.



### BAU 2001

With a booth of 650 square metres area, Pfeleiderer is represented at Europe's largest building trade exhibition, BAU 2001, held in Munich. Specialist building materials suppliers, architects and processing companies found an extensive range of advice on products, construction and markets covering the areas of wood-based products, insulation materials and doors and windows.

### NEW PLANT IN RUSSIA

With a second factory for insulation materials near Moscow, the Insulation Technology division plans to double Pfeleiderer's output in Russia. The Infrastructure Technology division aims to develop nationally and internationally, with three new production plants for the Rail Traffic and Energy business units in Bartow (USA), Brasov (Romania) and Langen near Frankfurt.

**GENERAL MEETING**

“We have maintained course and kept our promises”, were Dr. Ralf H. Bufe’s comments concerning the company’s performance at the General Meeting. Return on capital employed had risen to 11.7 percent during the short business year 2000 after 8.0 percent during 1999. After restructuring, Pfeleiderer is now on course for qualitative growth and profits.

**OPEN DAY**

“People, markets and technologies”: well over 5,000 people attended the open day at the Neumarkt site.

**TELECOMMUNI-  
CATIONS FAIR**

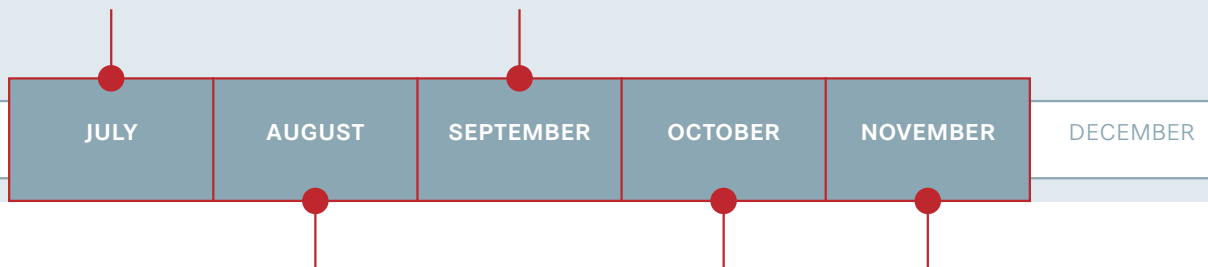
Together with 30 supply partners, the Telecommunication Business Unit documented its extensive know-how in Neumarkt. Among the guests were representatives of all the major national network operators and suppliers.

**PREMIERE**

At the sector’s leading trade fair “windtech-husum”, Pfeleiderer Wind Power presented its own wind power system designs to the public for the first time.

**OPENING**

The modernized particleboard factory at Gütersloh with a heat-power plant for energy generation is inaugurated with a ceremony and open day.

**START OF PRODUCTION**

Series production of wind power systems is launched at the Coswig plant with a festive ceremony. This is the site where turbines and plants are assembled and staff training takes place.

**TIMBER SECTOR  
CONFERENCE**

At this convention of the German specialist timber trade in Wiesbaden, the Wood-Based Panels Business Center presents its complete range of carrier materials and decorative surfaces.

**NINE-MONTH  
FIGURES FOR 2001**

Pfeleiderer AG well on the way to achieving its targets for the financial year 2001 with forecast sales of over euro 1.4 billion and EBT of around euro 50 million.

**INTERIM REPORT  
FIRST HALF YEAR 2001**

Despite a weak economy, Pfeleiderer achieved its major targets for the first six months: continued qualitative growth and a further increase in profitability. EBT almost doubled in comparison to the first quarter.

**REGISTERED STOCK**

Especially for the sake of investor relations, Pfeleiderer converts from un-registered to registered shares in a drive to communicate even more efficiently with its private and institutional investors.

**CHANGE-OVER**

After almost four decades, Helmut Rauscher, Finance Director, retires from the Pfeleiderer Group. New CFO is Dr. Jürgen Koch.

#### ■ CAPITAL EMPLOYED

The entire capital employed in the company, i.e. fixed assets plus current assets less accruals (excluding accruals for pensions), and liabilities (excluding financial liabilities).

#### ■ CARRIER MATERIALS

Wood-based materials which serve as the base for decorative surface materials (HPL, direct-coated wood materials, veneer). The preferred materials are unrefined particleboard and MDF.

#### ■ CASH FLOW

A measure used when analyzing balance sheets, companies and shares in order to assess a company's financial strength and profitability. The cash flow defines the inflow of liquid funds to a company from sales and other sources over a certain period.

#### ■ COMBINED HEAT-POWER PLANT

Also known as a co-generation plant: a decentralized plant for generating energy which Pfeleiderer uses for supplying electricity and process heat, particularly for the production of wood-based panels (Pfeleiderer's "Central Energy Unit").

#### ■ CONCRETE MASTS

Very strong masts used preferably for supporting mobile phone aerials, as well as for lighting, current conductors and aerial lines as well as high signs.

#### ■ CONTIPRESS

A twin band press for the continuous production of particleboard, MDF or laminated board.

#### ■ DBS

A direct coating system for surface finishing of wood-based panels.

#### ■ DESIGN REPORT

Report on design trends in fashion, architecture and furnishings from the European design metropolises, serving as the basis for further development of the interior design range.

#### ■ DVFA/SG METHOD

Joint recommendation of Deutsche Vereinigung für Finanzanalyse und Anlageberatung e.V. and Schmalenbach-Gesellschaft Deutsche Gesellschaft für Betriebswirtschaft (SG) on how to calculate earnings per share and cash flow per share of joint stock companies.

#### ■ EBIT

Earnings before interest and taxes.

#### ■ EBITDA

Earnings before interest, taxes, depreciation and amortization.

#### ■ EBT

Earnings before taxes.

#### ■ EEG

The German Act on Renewable Energy ("Erneuerbare-Energie-Gesetz") with which the Federal Government aims to promote the use of alternative energies. The supply of electricity to the public grid generated from wind power, solar energy or biomass is promoted by the EEG with various levels of subsidy.

#### ■ ENERGY CONSERVATION ORDER 2002 (ENEV)

In February 2002, this German act replaced the 3rd Order on Heat Insulation (Wärmeschutzverordnung, WSVO) which had been in force since 1995. Unlike the WSVO, the EnEV includes energy technology for buildings (heat generation and refrigeration).

#### ■ EPS

Earnings per share: consolidated earnings divided by the weighted number of shares.

#### ■ EVA

Economic value added: the difference between the return achieved by the company on the assets employed and the capital costs; capital employed x (ROCE - WACC).

#### ■ GLASS WOOL

Fibrous mat which is obtained from liquid-spun glass and used in the production of insulating materials. Pfeleiderer uses about 50 percent recycled glass for this.

#### ■ GRP MAST

Glass fibre-reinforced plastic mast which combines low weight with high flexural strength. Preferred use for lamp-posts, traffic light masts and flag poles or for special telecommunications solutions.

#### ■ GSM

Global System for Mobile Communication: the current worldwide standard in use for mobile phonetechnology.

#### ■ HPL

High pressure laminate: a surface for wood-based panels made of plastic.

#### ■ IN-SITU TREATMENT

Treatment of contaminated earth without necessitating removal of the material from the source area.

#### ■ ISO

International Standardization Organization: voluntary international association of national standardization committees with the aim of developing uniform standards valid worldwide. The Quality Management division pioneered it in Germany.

#### ■ KONTRAG

The law for control and transparency in the corporate sector, KonTraG, was adopted by the Bundesrat on March 27, 1998 and aims to improve corporate control.

#### ■ LONG-TERM INCENTIVE SCHEME

A motivation scheme geared to the long term to encourage staff loyalty, incorporating schemes to allow employees a share in the success of the company.

#### ■ MDF

Medium density fibreboard: consists of wood fibres impregnated with glue and subjected to heat under pressure; one particular use is for three-dimensionally constructed furniture fronts.

#### ■ ONSHORE/OFFSHORE PLANTS

Wind energy plants for sites on land (onshore) or at sea (offshore). Pfeleiderer is developing offshore plants using its Multibrid® technology.

#### ■ RENEWABLE ENERGY

Use of natural energy sources which are regenerative, making them available in unlimited supply, e.g. sun, wind, geothermal energy.

#### ■ ROCE

Return on capital employed.

#### ■ SHORT FINANCIAL YEAR

Pfeleiderer altered its financial year to coincide with the calendar year. For this reason the past financial year only lasted seven months – June 1, 2000 to December 31, 2000. A direct comparison with the figures of previous years is therefore impossible.

#### ■ SOLID TRACK

Rail track construction with load-bearing layer of asphalt or concrete and concrete sleepers laid directly in concrete bedding instead of on ballast. Giving high track stability and low maintenance, this system is preferred for high-speed links.

#### ■ STEEL MASTS

Highly versatile structures of standardized types of steel manufactured using various processes. Pfeleiderer manufactures steel masts of a solid web construction which are mainly used as supports for overhead transmission lines, street lighting, floodlights and wind power plants.

#### ■ STOCK APPRECIATION RIGHTS

The right to participate in the future appreciation of an equity's value. At Pfeleiderer AG members of management at the end of 2000 had the option to participate in the company's success through the acquisition of such rights.

#### ■ STOCK OPTIONS

Form of remuneration entailing the issue of subscription rights to members of management and employees, conferring on them the right to acquire shares in the own company provided they achieve certain goals under certain conditions.

#### ■ SURFACE-FINISHED BOARD

Wood-based panels with a decorative surface. The surface may consist of various materials, for instance plastic, manufactured from pressed and laminated decorative paper.

#### ■ THERMOHYDROLYTIC SEPARATION METHOD

A technically sophisticated process for recycling used timber by the application of moisture and heat that does not harm the environment. The goal is to split the used timber into fractions that can be recycled for their materials.

#### ■ TURNKEY SERVICE

Delivery of a complete system.

Example: Pfeleiderer not only builds the transmission mast, but also acquires the land, provides and assembles the mobile phone technology and later on maintains the station.

#### ■ UMTS

Universal Mobile Telecommunications System: a 3<sup>rd</sup> generation system of radio data transmission. 2 MBit/s data rates have been defined as the UMTS standard. These high data transfer rates open up new possibilities for users, such as e-commerce and mobile multimedia applications.

#### ■ WACC

Weighted average cost of capital payable by the company for borrowed capital and equity capital on the financial markets.

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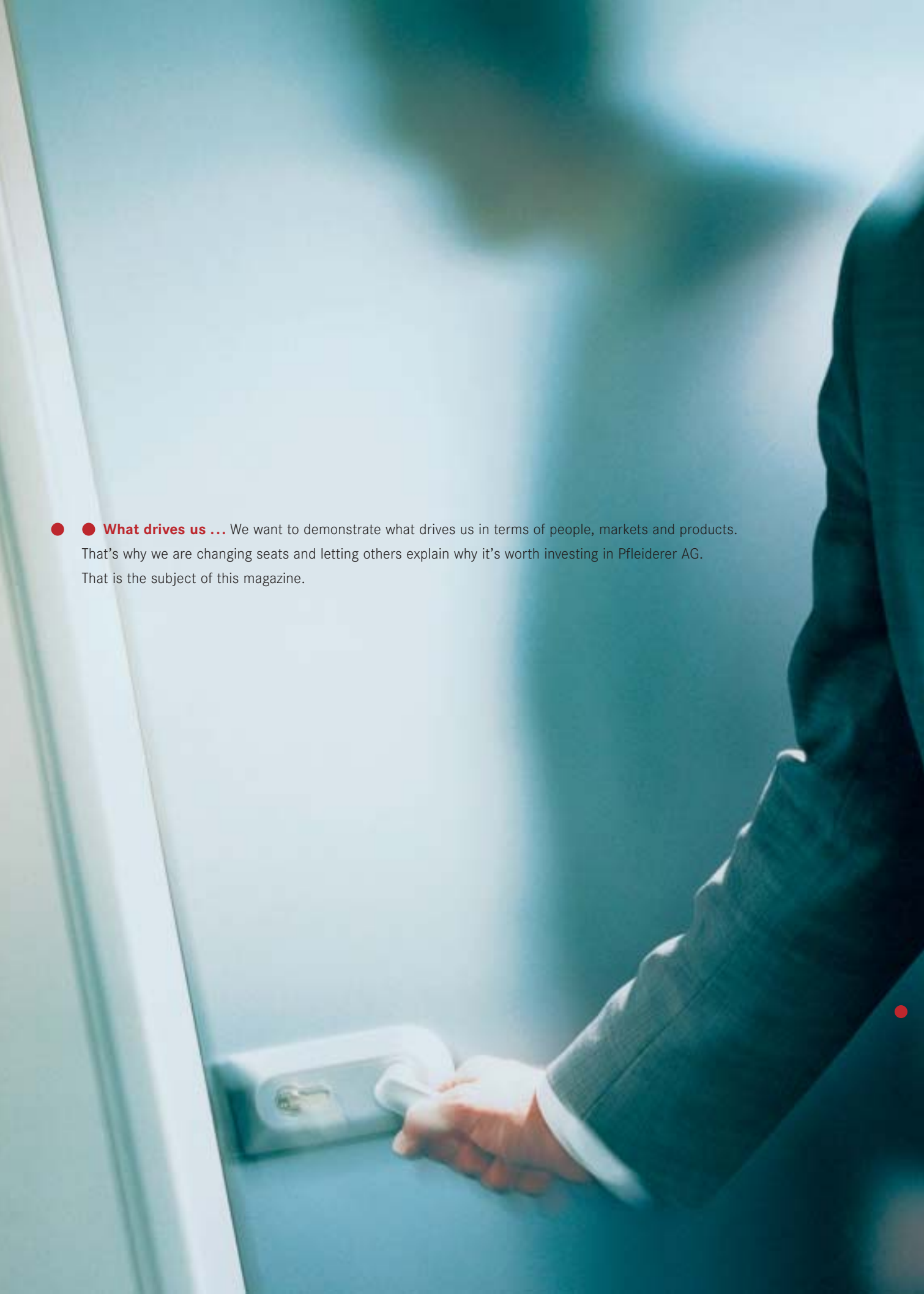
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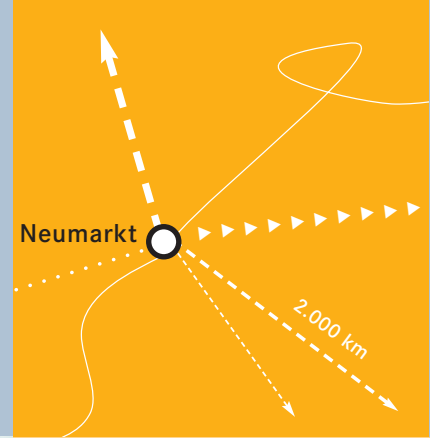
<b>JULY 2, 2002</b>	Shareholders' Meeting in Neumarkt
<b>AUGUST 30, 2002</b>	Figures for first half as per June 30, 2002
<b>NOVEMBER 29, 2002</b>	Nine-month figures as per September 30, 2002
<b>FEBRUARY 24, 2003</b>	Provisional financial statements as per December 31, 2002

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- 
- A close-up photograph of a person's hand in a dark suit jacket pulling a white door handle. The background is a bright, out-of-focus hallway with a blueish tint. The lighting is soft and directional, coming from the right, creating a sense of depth and focus on the hand and handle.
- ● **What drives us ...** We want to demonstrate what drives us in terms of people, markets and products. That's why we are changing seats and letting others explain why it's worth investing in Pfeiderer AG. That is the subject of this magazine.



## What Drives Us...

### The Relationship between Commitment to Qualitative Values and Business Performance

**PAGE 106**

Pfleiderer's CEO and the chief executive officer of SAM Sustainable Asset Management discuss whether qualitatively sustainable criteria create shareholder value in the long term.

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## Winning Markets

### A Player in Growth Markets

**PAGE 122**

The opportunities, risks and growth potential for Pfleiderer AG in the USA and in Eastern Europe.

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## Pursuing Innovation

### Into the Future on Solid Track Technology

**PAGE 112**

As a system supplier of solid track solutions, Pfleiderer AG plays a major role in the expansion of ICE sections of rail track.

### More Than Just Hot Air

**PAGE 118**

In future, huge offshore wind farms are expected to generate twice as much power as they do onshore today. As a result of its patents, Pfleiderer AG has a clear lead in this market.

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## Living Responsibility

### Ecological Power-House

**PAGE 128**

The efficiency of Pfeleiderer AG's biomass power plants is just as exciting as the profits.



### The Stuff of which Trees are Made

**PAGE 132**

How the newly established affiliate Interwood could be handling up to 50 percent of the flow of timber in Germany in future.

### New Wonder Weapon: Thermohydrolysis

**PAGE 134**

A pioneering project to process used particleboard.

### The Price Defines Ecological Reality

**PAGE 135**

How used glass is successfully being recycled to produce glass wool insulating materials.

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## Providing Impetus

### Investing in the Future

**PAGE 136**

The Business Campus programmes set up for Pfeleiderer Group employees has been awarded a prize by the Association of German Chambers of Industry and Commerce (DIHT).

### The Groundwork has been Done

**PAGE 140**

"Re-inventing" the Pfeleiderer Group. The process of structural change is being energetically pursued and experienced at all levels of the group.

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Five freelance business journalists go in search of the spirit that constitutes Pfeleiderer's driving force. This is illustrated by selecting and describing projects and aspects of the group's day-to-day business.

Many new ideas have arisen because Pfeleiderer is no longer content with existing solutions. What has emerged is technological excellence. But credibility and reputation also lead to new ideas. This magazine explains Pfeleiderer's commitment to the environment, the Group's international orientation and whether and how restructuring has had an effect ... and why it really is worth investing in Pfeleiderer AG.

**Photography:**

Uwe Aufderheide, Hans Georg Esch, Michael Wiegmann

# What Drives Us ...

When we ask Pfleiderer AG about its economic success, we are given its latest sales and profit figures. If we ask about the future potential of its business, then the focus turns to innovative products, human resources development and professional risk management. If we talk about internationalization, we learn that a new market can only be entered successfully if corporate philosophy and objectives are tailored to reflect the relevant country-specific factors and the cultural features of the country concerned. Pfleiderer's management is doing everything to lead the company towards a successful future and to increase the value of the business. This is what we mean by a totally sustainable approach.

Reto Ringger, founder and CEO of SAM Sustainable Asset Management, talks to Dr. Ralf H. Bufe about combining profit-orientation and ecological and social sustainability.

**RINGGER** Pfleiderer is an interesting company with activities ranging from the construction and furniture industries, to growth areas such as infrastructure. I can imagine that it is difficult to position such a conglomerate clearly. How are you perceived by the public?

**BUFE** We are frequently described as a supplier to the building industry, which unfortunately has a negative effect on our share price. In fact we are an international company that is a leader in many of our business segments.

**RINGGER** A leader can be defined in different ways. In the case of large-capitalized companies, SAM, for example, looks for those who are top of the class in terms of sustainability. In the case of the smaller companies, we focus on industries that make a contribution to sustainability, such as renewable energy, high-quality nutrition, and resource or energy efficiency. And this, of course, is where Pfleiderer has something to offer.

**BUFE** That's right, take our rail traffic systems for example. Here we are technological leaders worldwide, and well positioned in relation to many regional growth markets.

The field of wind power has enormous future potential, with growth rates of 15 to 20 percent per annum worldwide expected over the next few years. Or take masts in the USA: A few years ago, the Americans decided to deregulate the power generation supply, which had previously been state-run, i.e. every power supplier is now building its own grid, and as a market leader we are benefiting in particular from the rise in demand. And let's not forget our Wood-Based Panels business centre. While other large competitors are having to file for insolvency, with an ROCE of 15 percent in Europe, we are one of the most profitable suppliers in the sector.

**RINGGER** That sounds like huge growth potential. Often it is the needs of the information society for a more reliable power supply, climatic changes or technological progress that create new business segments, but with large growth potential, mind you.

**BUFE** In addition to growth in the infrastructure areas just mentioned, I can also promise technological leadership, internationality and success in profitable niche markets.



DR. RALF H. BUÙE

**Chairman of the Executive  
Board of Pfleiderer AG**

Wood-based panels and the furniture industry as our main customers do not have identical growth dynamics, but here again there is attractive profit potential that we will take advantage of through efficient structures, professional management and innovative business strategies.

**RINGGER** In spite of these outstanding prospects, the financial markets value Pfleiderer at a conglomerate mark-down.

**BUÙE** Unfortunately that's right. But a conglomerate also offers benefits. Diversification means that risk can be spread between individual segments, and this makes a company less susceptible to crises and less cyclical.

**RINGGER** As part of our analyses we try to assess the growth and market potential of the various technology and market segments. We distance ourselves from opinions about individual stocks, however, and instead recommend investors to invest on a diversified basis – so as to spread the risk.



RETO RINGGER

**Founder and CEO of SAM  
Sustainable Asset Management**

SAM is an independent asset management company with its head office in Zürich. Founded in 1995 as one of the first asset managers of sustainability investments in the world, SAM's clients currently include leading European banks, global insurance companies, pension funds and private clients. Together with Dow Jones & Company, SAM launched the first global Sustainability Index, to measure the increase in the value of companies that are leaders in their sectors from an economic, ecological and social perspective.

Using the business model of corporate sustainability, companies integrate economic, ecological and social criteria in their strategies and management. This is increasingly becoming a component in the future-oriented business model for a long-term increase in shareholder value.

**BUFE** The diversity of Pfeleiderer AG has grown historically from timber processing and can be illustrated most clearly by the following metaphor. The lower part of the tree trunk was used to make railway sleepers, the middle part to make masts and the upper part was processed to make particleboard. Later, wood was replaced by concrete as a material for making masts and sleepers. And the next stage was for Pfeleiderer to develop into a full-service system supplier. Our other activities were added as part of our acquisition strategy.

**RINGGER** What measures will increase the value of the business in the long term?

**BUFE** We want to refocus more on the strengths we have developed, to reduce our group indebtedness and to explore opportunities for investment and growth in the Wood-Based Panels and Infrastructure Technology business centers. And we want to break away from the construction sector, which is weak in Germany and is difficult in terms of competition.

**RINGGER** Companies with a stronger reputation find it easier to find qualified staff than others. The same applies to acquisitions and customer loyalty. We believe that com-

panies that are better managed than others are better able to compete. Sustainability criteria have a lot to do with management quality.

**BUFE** We are a widely diversified group, with little synergy between our products. The quality of the management and the motivation of the staff play a very decisive role. It is important that business is conducted successfully in a decentralized manner and, therefore, close to the market. Pfeleiderer AG has a holding company structure with autonomous business units. Each business unit produces its own income statement, balance sheet and is managed on the basis of ratios.

**RINGGER** What are the sustainability features of your products?

**BUFE** Our rail traffic systems are used for an environmentally friendly means of transport. We are committed to efficient use of wind power. Doors, windows and insulating materials minimize and prevent energy loss in buildings. And the production of particleboard as a whole also involves the preparation and processing of wood and waste wood in an ecological manner. We have combined heat and power installations for our large factories and this also fits in with the general ob-



jectives we have set. Our products and our production processes are also ecologically friendly.

**RINGGER** Ecological criteria seem to be an important component of your business strategy. What is the position regarding social aspects?

**BUFE** I am very proud of our human resources development, in which Pfeleiderer has a strong tradition. This aspect is also very important to us today, only with a slightly different emphasis. The environment has changed – it has become international, more demanding and much more complex. In addition, Pfeleiderer production sites are rarely located in large cities. But we need top people and we have to be resourceful in this respect. I believe that the key to success is consistently having the better people. It's a People Business.

**RINGGER** On the subject of "It's a People Business", I would like to give an example. After Brent Spar, Shell had major problems recruiting good people. And the impact of this

is actually much greater than if your sales are 20 percent for one or two years. The company was only able to recruit new staff by making a commitment to sustainability. Today Shell cannot turn back and dismiss the whole thing as a marketing gimmick. At long last, this is confirmation to me that sustainability is not a short-term trend, but a strategic orientation.

**BUFE** Credibility: This applies not only to employees, the success of the company also has to be communicated to all other stakeholders in a credible manner. Take the subject of investor relations. We are particularly concerned about our shareholders. We have introduced an EVA concept that we use to measure increases in value per business unit. We have converted our shares to registered shares, in future we will prepare our accounts in accordance with US GAAP and we are holding frequent roadshows in Germany and abroad.

**RINGGER** For how long has Pfeleiderer attached such a high priority to the capital market?

**BUFE** I made investor relations a key priority about one and a half years ago. A continuous display unit hangs in the entrance of our head office building, which shows the current share price and that we are a listed company, majority-owned by the Pfeleiderer family, but with about 30 percent being freely traded in the capital market. We have to allow ourselves to be measured against the current demands of investors and capital investors for transparency and professional management. This is not always easy, but we are determined to meet this challenge and so we are currently actively addressing the issue of corporate governance.

**RINGGER** There are studies that show that such long-term-oriented companies consistently have a superior market position. Shell wanted to find out, for example, how a company can survive in the long term and what the

**Credibility: This applies not only to employees, the success of the company also has to be communicated to all other stakeholders in a credible manner.**

**DR. RALF H. BUFE**



It is not enough to say that the employees are content, that we have social values and that our environmental performance is good, if you don't also have an increase in value.

**RETO RINGGER**

real value creators are. The result was that the decisive factor is qualitative goals rather than just financial orientation.

**BUFE** Not everything that analysts think is positive, is in fact good for long-term corporate development. We are listed on the SDAX and meet stringent disclosure requirements. But the idea of sustainability is very convincing, particularly given the background that I have painted. Many of our products and production processes have an ecological dimension. And our employee orientation is not only for show. Pfeiderer actually operates according to the sustainability concept.

**RINGGER** Why do you not communicate this more proactively? I think that this would create support for Pfeiderer on the capital market as well. Because actually the most important aspect of market success is "perception". Ecology tends to be perceived rather negatively. But if

you are able to communicate the long-term strategy well, and the economic dimension also plays an important role in this, in the end this will have a positive effect on the share price. I believe that Pfeiderer could differentiate itself in this way.

**BUFE** Can you prove your theory?

**RINGGER** A large insurance company commissioned SAM to carry out an analysis. They wanted to know how many of their shares were purchased by sustainability-oriented investors. And they were pleasantly surprised at how high the percentage was. The insurance company in question is therefore less vulnerable when its quarterly figures are poor, because the investors are buying based upon a long-term concept.

**BUFE** We have already specifically considered producing an environmental report. But with all the changes in the

last two years we have initially had to set different priorities for our reporting and corporate communications. I am very convinced about the integral approach to a sustainability concept. What concerns me, though, is that sustainability is still regarded by many as a synonym for a purely ecological approach. The relationship between business, economic and natural, ecological sustainability is not always clearly perceived.

**RINGGER** We have also found this. We actually only use the word ecology in corporate communications very sparingly. This is partly due to our compartmentalized thinking. The issue is also very complex. SAM tends to sell the sustainability concept in Europe on a qualitative basis, whereas in the USA we have to prove everything with figures. In any event, it is about more than just ecological efficiency. It is also about the creation of economic and social value.

**BUFE** Do you believe that the sustainability approach has now been accepted? Or is it only a fashion phenomenon?

**RINGGER** On the one hand it is a trend. Our company was founded in 1995. In the first three years, the issue of sustainability was only of interest to the insurance companies, because they have the greatest environmental exposure. Two years ago the issue became much more popular. SAM launched an index with Dow Jones and Credit Suisse set up a fund, that's of course when the herd instinct comes into play. But I believe that demand is actually the driving force, above all, in Europe. In other words, it is the consumers, the investors and the stakeholders who want to know how sustainable a company is. For this reason I also do not believe that it is only a short-term phenomenon.

**BUFE** For Pfeleiderer AG, sustainable business is a path that the company has always trodden, long before the issue of sustainability became a topical one and even though concepts still had not been formulated. Is such value-oriented corporate management not then intrinsically sustainable?

**RINGGER** Not at all. Because if the value system of a company is too rigidly oriented towards qualitative values, that are not economically sustainable, then you have a problem. It is not enough to say that the employees are content, that we have social values and that our environmental performance is good, if you don't also have an increase in value.

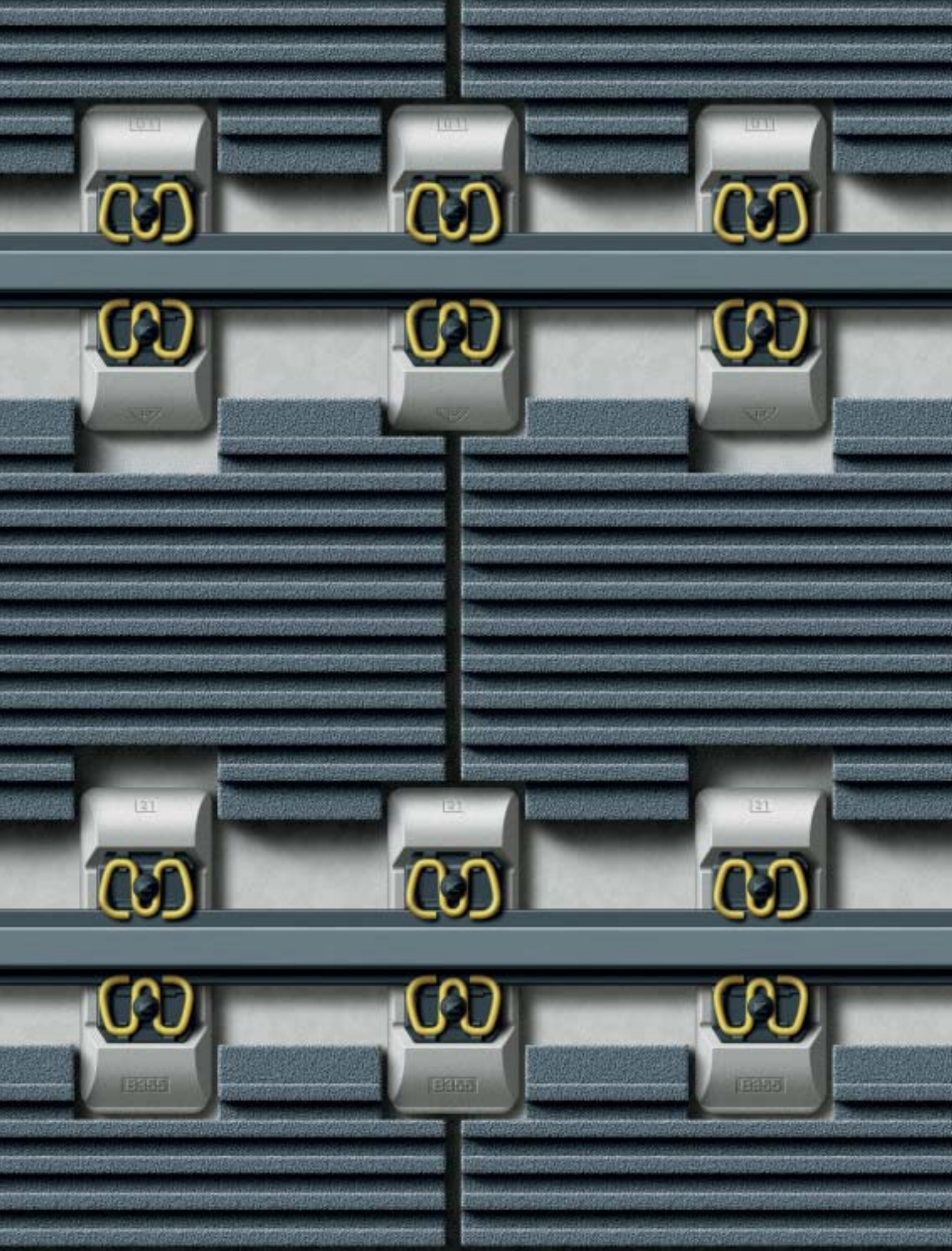
**BUFE** Our experience is that it depends on the right balance. Only if all of the dimensions are weighted in a balanced manner can profit-orientation be made compatible with ecological and social sustainability.

**RINGGER** I absolutely agree. Last year we set up a venture capital fund, which invests in smaller companies that are involved in new technology. This means that you have to make very high returns, because out of ten investments a number will file for insolvency, a number will only show moderate growth and a few will be successful. In other words, you have to make a high return to balance things out.

**BUFE** What would Pfeleiderer have to do in order to be certified by SAM as sustainable?

**RINGGER** The stock index developed with Dow Jones only includes large-capitalized companies, which then receive a rating that they can use for corporate communications, as in the case of Nokia and BMW, for example. At present there are no plans to launch an index for smaller companies. This is simply beyond SAM's capacity, but we do give interested companies the option of an assessment and a concluding benchmark report.

**BUFE** That would certainly be of interest to Pfeleiderer AG. A report documenting the change in our fundamental structure and culture, the further development of our products and services, our stakeholder value approach and our strong capital market orientation – in other words, everything that we have changed in the last few years. And we could regularly produce the evidence that we have the right driving force.



The fascination of solid track systems: Pfeleiderer sleeper and sound-absorption technology on three out of the five sections of the new high-speed ICE link from Cologne to Frankfurt sets new standards in precision, technology and logistics.

# Into the Future on Solid Track Technology

It's so smooth, more like gliding than flying: The 3<sup>rd</sup> generation of ICE rolling stock, which runs over a solid track system at speeds of 300 kph, takes just 58 minutes to travel from the centre of Cologne to the centre of Frankfurt. However, before German Chancellor Schröder and DB AG boss (CIO) Mehdorn officially open the new line in August 2002, every single of the 219 kilometres of track has to be thoroughly tested.

By: Klaus Hackert

**The date: Friday, March 1, 2002.** On the future ICE platform at Siegburg/Bonn. We are awaiting the arrival of the ICE S, the special test train operated by Deutsche Bahn AG. There's an icy wind blowing and a few drops of rain in the air. However, the arrival of the ICE 3 is virtually soundless. For Eckhardt Friebel – Testing Manager – and his 12-twelve-man crew, today is the final in the series of tests which have taken them along the entire 135 kilometres of high-speed track between Siegburg and Frankfurt. Friebel puts it plainly: "We are not looking for faults but if there are any, we'll find them." The test train consists of two ICE drive units and a central coach. The space, which in future will carry up to 415 passengers, is now packed with test equipment.

## Motorway for the ICE 3

**The track changes as soon as we leave** the platform at Siegburg. Instead of the traditional ballast bed, the high-speed train (engine performance 12,000 metric h.p.) glides over rails, track slab and twin-block reinforced concrete sleepers, which are embedded with millimetre precision in a concrete bed. As Udo Kampschulte, press officer for DB BauProjekt GmbH explains "a traditional ballast bed is not suitable for the high-speed network. Once the speed reaches 200 kph, the stone chippings that make up the ballast start to disintegrate. This reduces the elasticity of the ballast." The alternative is to use a "solid track system". A bearing layer of solid concrete replaces the traditional track bed. "The benefits are impressive," enthuses Kampschulte.

**"Increased load capacity, stable track bed,** maintenance-free for long periods and improved passenger comfort.

We aim to offer passengers maximum comfort at affordable prices and in this system we have found the optimum solution." Rail boss Hartmut Mehdorn is equally convinced: "The ICE 3, which uses a solid track system and can travel at speeds up to 300 kph, is setting new standards in speed, comfort and operating efficiency."



## “Rheda 2000®” for a High-Speed Future

The new “motorway for trains” is a development arriving from the original “Rheda” system, which owes its name to a station of the same name in Westphalia. This was the site in the early 70s of the first test track built with the new track technology. In the last ten years, industry itself has played an increasingly important role in the development of rail technology. “Pfleiderer AG, as a systems supplier has made and continues to make an important contribution,” explains Hans Bachmann, head of the Pfleiderer Business Unit Rail Track Systems. “We are good at solving problems, and in conjunction with our partners in the rail track industry, we have developed complete systems that can be tailored to meet the needs of individual sections of track.”

From its factories in Coswig (Saxony) and Neumarkt, Pfleiderer has supplied more than 180,000 special patented sleepers for the new track. The factories, which operate on a just-in-time basis, deliver the sleepers and fit them on site.

**Fitting is a precision job,** says Bachmann. “The maximum difference in track height is only 2 mm and similar tolerances apply to the track width.” Such tolerances are unusual in concrete structures, but essential if the solid track system is to play its part in delivering increased passenger comfort.

According to Winfried Mohr, in charge of technology at the BU Rail Track Systems, the new track technology has been developed with several objectives in mind. “It is designed to simplify system design and installation, maximise quality and safety and at the same time to reduce costs.” The result is “Rheda 2000®”. According to Mohr, “an important feature of this advanced form of construction is the integration



of sleeper and concrete layer into the monolithically steel-reinforced slab track. We have almost redefined the term sleeper. By using pre-cast filigree concrete we can guarantee total precision in terms of rail contact and track quality.

**By reducing the structure height we have saved on materials and costs.** In addition, we have developed standard systems engineering for track and points on all substructures such as earthworks, tunnels and bridges.” As Mohr goes on to explain, these developments in concrete technology “represent a significant improvement in the quality of the track system”.

**Horst Stuchly, President of the EBA**, Germany’s rail supervisory body, whose responsibilities include the approval procedure for the rolling stock and operating equipment, is equally enthusiastic about the performance of the various partners. He stresses “the importance attributed to safety and compliance with statutory and regulatory provisions”. For Stuchly, the construction of a solid track system was primarily a logistical challenge.

## No more spilt coffee!

**The test train speeds** past the A3 motorway at 300 kph. “It’s like being in a Daimler 500 at 200 kph, only quieter”, enthuses Kampschulte. It’s true, even where the track curves the driver’s coffee cup – to quote the rail jargon – is safe, it remains totally calm. The latest ICE rolling stock has air suspension and so driving forces are dissipated throughout the entire train with 50 percent of axles having their own drive motor. We come to the first serious uphill stretch. As Test Manager Friebel says, “this line is unique, there’s nothing quite like it anywhere else in the world. The gradients through the hills of Siebengebirge, Westerwald and Taunus can be as

## Manufacture of sleepers by Pfeleiderer – in brief

**Pfleiderer has produced railway sleepers for over 100 years.**

Originally from wood and since 1956 from concrete. To consolidate its presence on the growing international market for infrastructure equipment, the company decided to transfer more of its production to locations outside Germany. In 2001, it had a total of seven plants at home and abroad producing some 2.2 million sleepers for the rail industry, 1.3 million of them at the German plants in Neumarkt, Coswig (near Dresden), Langen (near Frankfurt) and Gernsbach (near Karlsruhe). The company also has plants in Spain (near Tarragona), Hungary (between Budapest and Győr) and Romania (near Brasov).



much as 4 percent and the narrowest curve radius is 3,350 metres. And yet the stretch is absolutely safe". Earthworks and soundproofing for walls and windows ensure that track and train comply with the strict legal limits of Germany's 16<sup>th</sup> Federal Emission Control Regulations. In addition, Pfeleiderer has manufactured and fitted

**special sound absorbers**, which dampen the noise emitted by the track and absorb the rolling noise from the super train.

Tests on the new system started in October and as Friebel explains, "we started at 160 kph and are now up to 330 kph. Although both rolling stock and track are built to cope with that speed, the normal passenger will not experience 330 kph. For safety reasons, a 10 percent margin is required along the entire line." The current tests are concentrating on the train's braking systems, in particular checking that the "communication between train and track is up to standard". In the earlier trials it was the turn of the track. "We fitted wheel sensors and tested every single inch of the new track", explains Friebel. "The sensors are so sensitive that even the most minute deviation from the specified wheel tolerance is displayed immediately on the computer screen. However, despite thousands and thousands of tests, we found no deviation from the specified tolerances."



## Excellent prospects

**We draw into Frankfurt's main station.** Friebel and his team still have five months of rigorous testing ahead of them. For Bachmann and his crew from Pfeiderer, this important project is almost at an end, but they are about to embark on new projects with Deutsche Bahn, e.g. the high-speed line from Nürnberg to Ingolstadt and Nürnberg to Leipzig. In the Netherlands, Pfeiderer acts as systems provider in an international project consortium involved in a Private Public Partnership responsible for the planning, construction, finance and 25-year maintenance of the new high-speed line from Amsterdam via Rotterdam to the Belgian border. As Bachmann proudly explains, "the basic track technology for this project is the Rheda 2000®". Pfeiderer track systems are also being tested on two sections of track for Spain's new high-speed network, a total distance of 7,000 kilometres. In addition, Korea and Taiwan have expressed very strong interest in Pfeiderer's slab track systems.

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**Klaus Hackert** is an independent journalist and author specialising in economics. He is based in Düsseldorf. He writes for the "Frankfurter Allgemeine Zeitung", "Frankfurter Rundschau" and "Welt am Sonntag" and others.



## More Than Just Hot Air

By: Ronja Wildberger

Don Quixote was confronted with a complete “cavalry” – by the end of 2001, Germany will have some 11,500 wind converters capable of generating 8,750 Megawatts. Of these, 4,000 are installed on masts supplied by Pfleiderer. Last year alone saw the erection of some 2,079 converters. “Assuming normal wind levels for the year, this means that wind power can provide almost 3.5 percent of Germany’s demand for electricity”, explains Dr. Peter Ahmels, President of the BWE, Germany’s wind energy association.

**However, Germany** is gradually running out of windy locations for its converters. Erecting them in non-windy areas would mean they were inactive for long periods and would not deliver their full potential. After all, power is only generated when the blade is actually turning. To meet the demand for new locations, operators are turning to other locations with a reliable source of wind, i.e. offshore.

**Added to this is the fact** that most suitable coastal sites are already developed, and in many cases previous generation wind converters are coming to the end of their useful life. They are being replaced by more recent designs. This means there is a sizeable market for replacement converters. “Experts call this trend re-powering”, explains Rudolf Heydecker, General Manager of Pfleiderer Wind Energy GmbH. However, there is no doubt that the biggest potential for wind converters is offshore.

## Wind Power Capacity: A Comparison

**GERMANY** 8,750 Megawatt

**SPAIN** 2,800 Megawatt

**USA** 2,500 Megawatt

**DENMARK** 2,400 Megawatt

as of end of 2001 Source: Bundesverband Windenergie

**Plans are in hand** to develop huge offshore wind farms capable of generating electricity on a grand scale. The curvature of the Earth's surface means that these new wind converters will be invisible from the shore and so will not upset tourists. Based on research conducted by site developers, offshore wind farms will be able to tap into nearly twice the amount of wind compared with that available on land, allowing them to generate much more electricity. Instead of the present output of 1.5 Megawatt, Pfleiderer and other companies are planning wind farms capable of generating 5-Megawatt. To achieve this, large numbers of wind converters will be erected at least 30 kilometres offshore and high-tension cables will ensure that they can withstand the power of the waves.

## Pioneer Work

**There are no comparable projects** elsewhere. Although the United Kingdom and Denmark have wind farms on the shoreline itself, no supplier has yet dared to stride out into deep water. The infrastructure must be extremely robust and resilient if it is to withstand the action of the waves and the harsh weather conditions. "Access to such sites is extremely difficult from autumn to spring and so work on installing and maintaining the converters is only feasible in the quieter times of the year", says Rudolf Heydecker explaining the vagaries of offshore locations. Downtime will be very expensive.

**To ensure that the effort** is worthwhile and to maximise the service life of expensive underwater cabling, wind farms must be of a certain size, i.e. they must contain large numbers of individual converters. As a general rule, the further offshore the site, the more expensive the cabling and so the greater number of converters to make the site economic. In November, planning permission was granted to a potential customer for a pilot project. The project, located on mud-flats about 45 kilometres from Borkum, will start off with twelve smallish converters. Planning approval is being sought for other wind farms in offshore locations.

**"We expect our first converter** in the 5-Megawatt class to start rotating next year," says Heydecker. However, in order to facilitate trials, it will initially be erected on the coast. "During the trials, we must have access to the site at all times." In 2000, Pfleiderer Wind Energy acquired the Austrian firm, Windtec, owners of several patents and in 2001, the Coswig plant started full-scale production of converters in the 600 Kilowatt and 1,500 Kilowatt classes. With the launch of new converters at the "Windtech 2001" trade fair, Pfleiderer is now in a position to offer a full range. In addition, the go-ahead has been given for the development of the new 5-Megawatt offshore MULTIBRID®, in which Pfleiderer is working in partnership with aerodyne, a well-known development company. Pfleiderer Wind Energy holds the patent for the MULTIBRID® technology, which gives it a clear lead in the race for the offshore market. "This technology combines high performance and low maintenance making it ideal for offshore locations."

**"Within just one generation,** wind farms – offshore and onshore – will provide 25 percent of our current energy needs, all without harm to the environment. Moreover, this figure does not take account of future improvements in energy efficiency with the result – assuming that energy efficiency projects are successful – this percentage will rise", says Jürgen Trittin, Germany's Federal Minister of the Environment.

## New Funding Models

**It is more than a race** to improve technology – the Federal Environment Ministry has ensured that it is also a race against the clock. There is a rebate of 9.1 euro cents per kWh generated by a wind converter operational before 2007. However, from 2007 this amount will be reduced to 6.2 euro cents.

**The Government estimates** that in the short term, i.e. by 2006, offshore wind farms will generate at least 500 Megawatt. In the medium term, i.e. by 2010 this figure is expected to rise to 2,000 – 3,000 Megawatt and in the long term, i.e. within the next 30 years, output could double to at least 20,000 – 25,000 Megawatt.

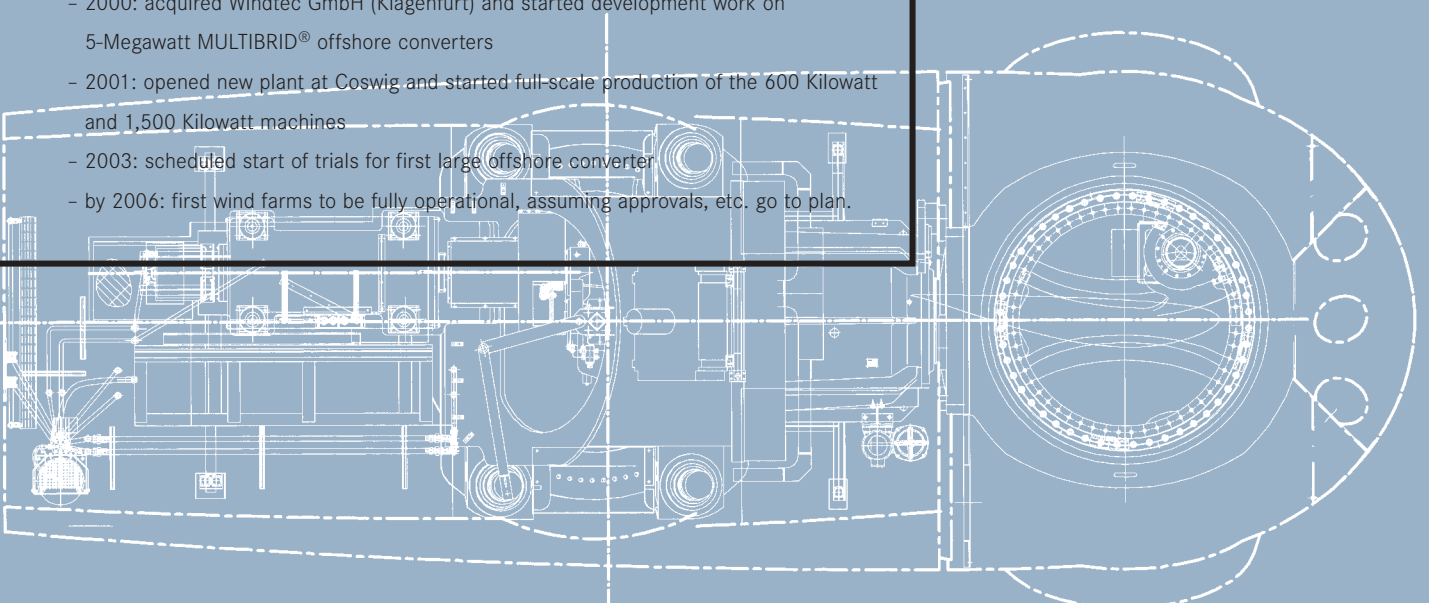
**That's not long**, bearing in mind the cost of development and the required economic conditions. "In the past, converters were often operated by traditional private investors. The farmer who earned a little extra from a single converter on one of his fields is almost a thing of the past", explains Heydecker. "Onshore wind farms have gradually increased in size and wind power is sold to investment funds in the form of anonymous holdings. Such funds have been particularly popular in Germany as a way of reducing tax bills. However, the next stage will be large con-

sortia – without them it will be impossible to assemble the start-up funding required for offshore facilities". Naturally, this means that companies have to find appropriate partners. Large concerns such as the oil multinationals, energy companies and builders of power stations have already expressed interest. Shell is even claiming that it intends to be a global leader in the offshore market by 2005.

For example, the investment required for the proposed wind farm at "Borkum Riffgrund West" is in the region of euro 2.8 billion. As Heydecker explains "amounts of this magnitude cannot, of course, come from the companies themselves. Much comes from consortia consisting of banks, oil multinationals and the energy giants". Heydecker thinks this development will benefit Pfeleiderer Wind Power. "Our company is sufficiently large to be considered as a trustworthy partner". In future, substance will be increasingly important. As a result, he is relaxed about the current process of mergers in the industry. It tends to be the smaller companies who are unwilling to play in the offshore league.

## Pfeleiderer sailing close to the wind

- since 1985: manufacture of steel and concrete masts for wind converters
- 2000: acquired Windtec GmbH (Klagenfurt) and started development work on 5-Megawatt MULTIBRID® offshore converters
- 2001: opened new plant at Coswig and started full-scale production of the 600 Kilowatt and 1,500 Kilowatt machines
- 2003: scheduled start of trials for first large offshore converter
- by 2006: first wind farms to be fully operational, assuming approvals, etc. go to plan.



## Wind Direction East-South-East

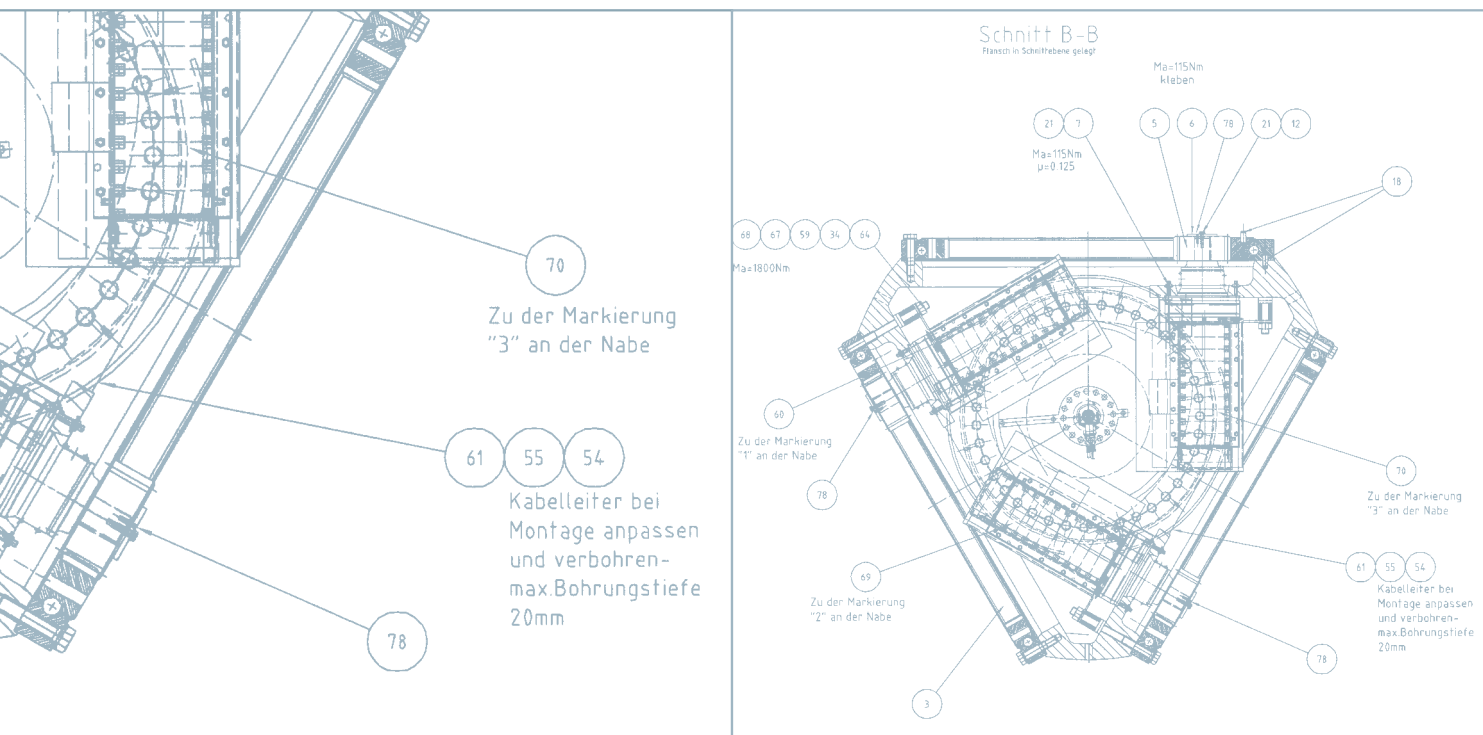
“It is clear that we have already a new, healthy industry that currently provides 35,000 jobs and this figure is growing year by year. In the long term, wind energy should be self-supporting – something that the nuclear industry has not yet achieved” claims Federal Environment Minister Trittin.

In addition to expanding into the offshore market, the German wind power industry has also set itself other targets. Its second main objective is the export of equipment and technology, which it is hoped will secure the industry’s future. Poland has always been a traditional market for Pfeleiderer and the company has also set up an office in Beijing. According to wind energy boss Heydecker, “Asia is a particularly attractive market. In the last five years, it has doubled its energy consumption, whereas demand here is stagnating. Initially we plan to export turnkey systems, but the high cost of transport and the need to create added value in the importing country means that we shall soon be developing a network of local distribution and production partners. Our plans have been geared to this development from the outset.”

Gradually, the cost of wind power and the cost of power from fossil fuels are coming closer, with the added advantage that the former does not cause environmental pollution. Both nuclear power and energy from coal have major problems, particularly in the densely populated but relatively poor regions of the world, carbon dioxide emissions and the decontamination of old sites to name just two. Heydecker cites the ease with which wind converters can be dismantled and recycled, contrasting this with the problems facing the nuclear industry. “Nuclear power is not insurable and rebuilding is not really an option.” Not to mention the whole problem of nuclear waste.

Things are looking good: on land, at sea, at home and abroad. Wind energy is a market on the verge of a major upswing.

Ronja Wildberger is an independent journalist working in Cologne. Her main areas of interest are economics and technology. She writes, amongst others, for the “Financial Times Deutschland” and various publications in the “Handelsblatt” Group.



# A Player in Growth Markets

If you want to be successful you have to know the markets. Whether in the oh so notoriously wild East, or the once so wild West. You have to have the right product and, of course, the right strategy. And enter the market at the right time. According to Pfeiderer Directors, Hans Overdiek, responsible for Wood-Based Panels, and Dr. Wolfgang Pinegger, responsible for Insulation and Infrastructure Technology, the conglomerate from the Pfalz in Bavaria has got what it takes to be a real global player: "The further we move away from Neumarkt, the more profitable our factories are." Other factors are vision, growth fantasies and precise calculation of risk. "Those who do their research thoroughly, and know the market and the culture, are able to control their risks. Nothing ventured, nothing gained. It's the same everywhere", sums up Overdiek.

Bartow/Florida

By: Klaus Hackert

## The Most Profitable Markets ...

Watts for bytes

# USA

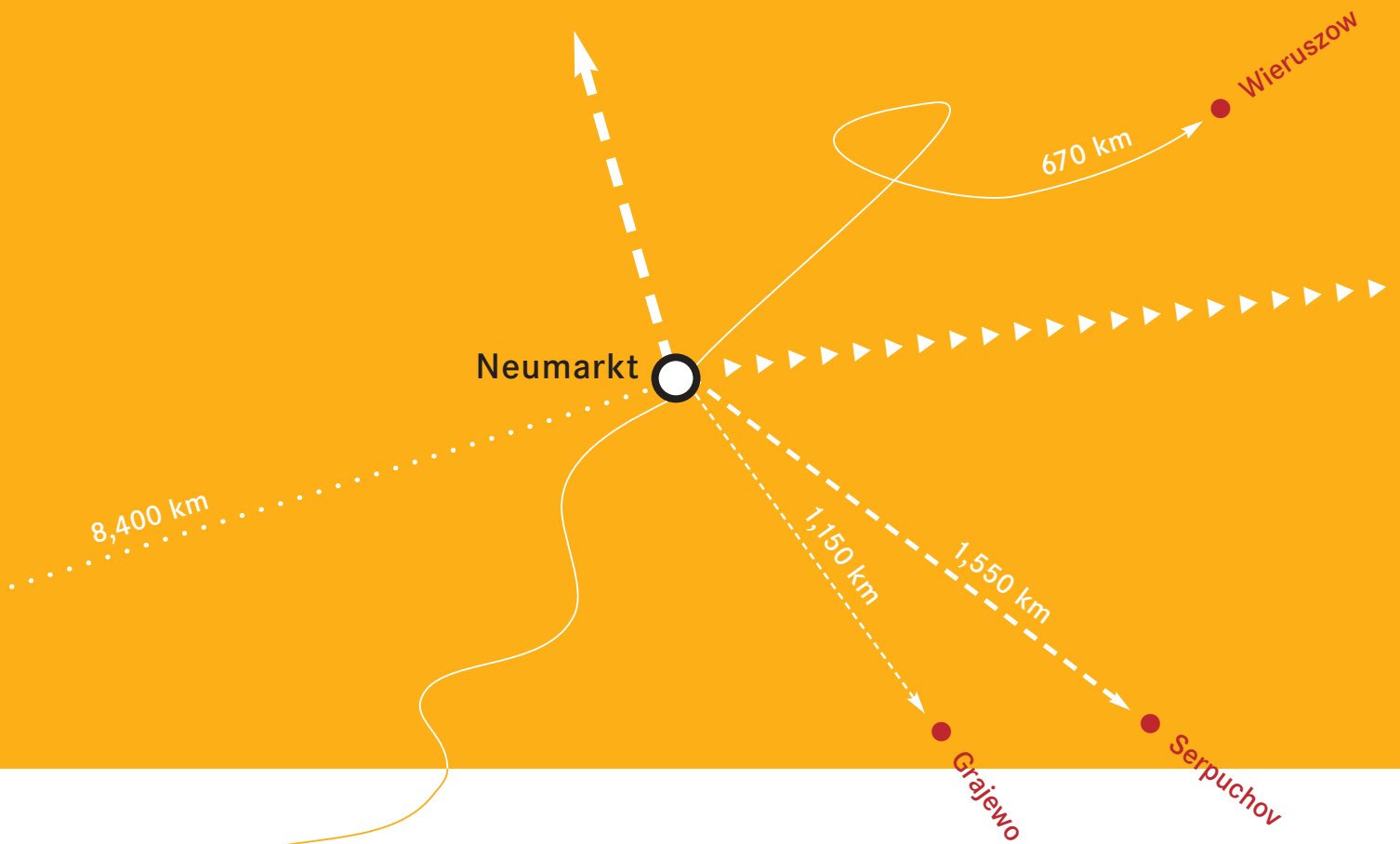
**America loves success stories**, particularly when everyone is talking about falling corporate profits and rising unemployment. In contrast to the German approach, the business magazines do not report on idle production lines, empty offices or dejected individuals who have been made redundant. Instead the tone is one of optimism.

**The demand for energy in the USA seems to be insatiable.**

"Back on the road to success", for example, is the headline in the investor magazine "Money" at the beginning of 2002. The story Newmark International is a wonderful fit here. Almost written off, the company became one of the most profitable business units of Pfeiderer AG within two years. From its head office in Birmingham, Alabama, the company operates five concrete factories, one steel factory and two factories producing GFK masts. The wholly owned Pfeiderer subsidiary now supplies over 90 percent of all concrete masts for electricity suppliers in the South East of the US. And in summer 2002 a new plant will start production in Barstow in California.

**There appears** to be no future for the traditional manufacture of electricity masts from wood, particularly in the South of the USA. "In humid states such as Florida or Alabama, wooden masts are constantly eaten away by termites and in





## Eastern Europe

### Everything for the Home

Today, nobody jokes about the "Polish economy" any more. Instead there is universal admiration for the achievements of Germany's neighbour, which has radically modernized its economy within a period of only ten years. The boom of the last few years has washed large amounts of new money across the Eastern banks of the Oder and Neiße. Higher wages have meant that after 40 years of enforced abstinence from consumption,

▶ **O** It comes as no surprise that a virtually unprecedented boom has started in the Polish construction and furniture industries. ordinary citizens have been able to fulfil a few needs that in the West are almost considered to be basic rights, such as a car, travel, and a comfortable home that they could own. It comes as no surprise that a virtually unprecedented boom has started in the Polish construction and furniture industries. And although growth in these industries has weakened a little over the last few months, the business still has considerable potential. "The people have a tremendous need to catch up", says Pfeleiderer director Hans Overdiek. The Wood-Based Panels business center, for which he is responsible, has two factories in the Polish market.

**The concept** of environmentally friendly wood-based panels seems to be gaining acceptance. Sales and profits of the two Polish factories are continuing to rise. "They are real engines for growth", enthuses Hans Overdiek.

**With responsibility** for the Polish companies as head of the Wood-Based Panels – Eastern Europe business unit, Krysztof Sedzikowski, expects even better results from possible EU membership of his home country: "It will minimize the risk. The legislation in Poland, some of which is still complicated, will be brought in line with European legislation and any political risks will be removed. EU membership will create fiscal transparency.



Texas and the flat desert regions, tornados regularly snap wooden masts like matchsticks”, says Earl Foust, CEO of Newmark International Inc. “Our concrete masts, many of which have been patented, are a reliable alternative here.” And the Americans are creative in design as well. In order to ensure that the masts blend into the landscape, masts are also supplied in palm- or pine-tree designs.

**The demand for energy** in the USA appears to be insatiable. The newly networked economy consumes more power than ever before. The US environmental authority EPA estimates that computers, printers, monitors and other products of the high-tech age consume more than 10 percent of power. And year after year more electronic equipment is being installed in offices and private homes. In Silicon Valley in the last few years, power consumption has risen three times as fast as in the rest of California, where, in turn, the hunger for energy is three times as high as in the other 49 federal states. The big shock came in 2000. The region around San Francisco was threatened by burnout, the collapse of the overburdened power grid, and Silicon Valley suffered power shortages.

## Excellent Prospects ...

„Crisis? What crisis?“

laughs Earl Foust, when you ask him about the not-quite-so-rosy position of the US economy. “We don’t have a crisis. First of all, all of our factories are in high-growth regions. And our patented products have virtually no competition.” If you consider the economic

**A further important reason for Birmingham’s boom is the deregulation of the US power supply industry.** W

outlook, many Wall Street strategists share these optimistic views. Economists at Salomon Smith Barney are forecasting growth of 4 percent by no later than the fourth quarter of 2002 and those at Merrill Lynch are even predicting growth of 5 percent and in the third quarter at that.

**A further important reason** for Birmingham’s boom is the deregulation of the US power supply industry. The reorganization has led to the building of small and medium-sized power stations. What was previously state-run supply has been privatized. Instead of particularism, the grids are now to be expanded interstate. “And this means that the companies need huge numbers of masts”, says Foust. “In addition, to date the US power grid has had no reserves. Redundant lines need to be built.”

7,800 km

Birmingham/Alabama

In the field of environmental protection, there will cease to be different interpretations of the law.” For Sedzikowski, the future focus will be on White Russia: “We want to start production here in our own factory pretty soon and therefore become an established manufacturer of wood-based panels in Russia.”

### Polish Success Story:

In Germany’s Eastern neighbour, Pfeleiderer AG has majority shareholdings in two wood-based panel factories. Together they produce more than one third of all Polish particleboard. Proudly, Pawel Wyrzykowski, head of finance for the Polish companies presents the accounts: “With sales of 200 million euros, we accounted for only 13 percent of the total group sales, but 26 percent of the profit in 2001.” 82 percent of products are supplied to the Polish construction and furniture industries, and the rest is exported to Russia, to the Baltic states, the Ukraine and White Russia. The successes are the result of stringent restructuring measures. “The aim was to achieve a significant reduction in costs, both in respect of production costs and overheads”, explains Wyrzykowski. “This enabled us to increase profit by 20 percent with just over half the staff.”

**A scene change for insulation technology:** “We have not made anywhere near as much progress with modern building insulation in Eastern Europe as we have with wood-based panels”, confirms Friedbert Knoche, director and head of the Eastern Europe business unit of this business center. After the fall of the Iron Curtain we first of all had to create awareness of modern glass wool. “Marketing has had, and has, priority”, knows Knoche. And the concept appears to be being gradually accepted. Glass wool of the Pfeleiderer brand “URSA®” is now produced in four Eastern European locations and exported to 20 countries. And in the fourth quarter of 2002 a fifth factory in Serpechov southeast of Moscow starts production.

“You have to believe in Russia”, says Friedbert Knoche, when you ask him about opportunities, risks and growth potential. Independent experts agree with him. According to Jan Triebel of the Federal Agency for External Economic Relations: “Although the Russian economy cannot repeat the growth of the year 2000, it appears to be unexpectedly robust given the weakness of the world economy at the end of 2001. Russia has largely been unaffected by the deterioration in the global economic environment that followed the terrorist attacks in the USA.” For 2001, he is expecting a growth rate of 4.8 to 5.3 percent. For 2002 the government is expecting growth of 4 percent. Triebel sees economic reform as moving in the right direction. “The long-criticized backlog of reform

► **O** **Russia has largely been unaffected by the deterioration in the global economic environment that followed the terrorist attacks.** appears to have been cleared.” For example, a land law has been passed that makes it possible to trade property rights in industrial and urban land. Bureaucratic barriers to the formation of companies have been significantly reduced and profit tax has been slashed from 35 to 24 percent.

**The German Industry Committee** for Eastern Europe is also optimistic: “After ten years of crisis, the last 18 months have brought about a substantial boom and political stabilization in Russia”, states a position paper drawn up jointly with DaimlerChrysler AG and the German Trade and Industry Association in the Russian Federation at the time of the state visit of President Putin to Germany in September 2001. And there is a third voice, that of Bank Austria’s analysts, stating: “Russia’s boom is sustainable”. The financial institution was given detailed information on the economic position in the Eastern European states. But all of the experts on the East are agreed that a continuation of rapid economic growth will not be automatic. Bank Austria states: “Russia’s fate will continue to be largely determined by fluctuations in the world oil price.”

**But the Austrians believe** that the Russian risk has reduced sharply as a result of a much improved fiscal position. There is also agreement from the other side of the Atlantic. Moody’s Investor Service has upgraded Russia’s rating by two levels from B2 to Ba3, and the analysts of Standard and Poor’s from B to B+ in December 2001. But a hint of scepticism remains: “Protection for investment is still inadequate, as are compliance with framework agreements and equal treatment with domestic investment”, criticizes the Committee for Eastern Europe. “In addition, corruption and bureaucracy continue to hamper the operation of free market forces.”

## US Success Story:

In 1999, the news from the USA received at the Neumarkt head office was still predominantly bad. Pfeleiderer seriously considered terminating its US activities, but it did not want to give up so quickly and went over the details one more time. The result was that instead of disposing of its US subsidiary, it embarked upon an upgrade programme of just under US\$ 7 million. "The result of quite simple measures has been a doubling of profit since 1999", explains Dr. Pinegger who, as director of Infrastructure Technology, is responsible for the US activities of Pfeleiderer AG. "We have worked hard, fought successfully and now occupy a niche with a great product." "All of the factories are fully utilized on the back of the strong demand," enthuses Newmark's CEO, Foust. Production will commence in California in the early summer.

Early Branch / South Carolina

## The Right Strategies ...

### The "Pfleiderer Trail" from East to West

"In the USA we are making progress step by step", explains Pinegger, who, as director of Infrastructure, is also responsible for the US subsidiary Newmark. "A type of 'crawling strategy' from East to West. A parallel strategy to that we are pursuing in the markets of Eastern Europe. We find our customers and we only

**Even junior staff have had the opportunity to speak to the boss over a plastic cup of coffee.** W

build a new factory when we have made sure that there is a market." Each factory serves a customer base covering a radius of 600 miles, and even with 300 miles of new lines a plant would be fully utilized and highly profitable. "This is also a competitive advantage relative to our competitors who have to deliver their products across a distance of several thousands of miles to their customers." The focus of Newmark's activities is distribution. "We ensure that power flows into the local grids." It is Newmark's technological leadership that the Pfeleiderer director regards as the decisive factor, however. "Our patents represent high barriers to entry for any potential competitor." In the next few years Pfeleiderer will concentrate its activities further in the South of the USA. "We are not planning to expand in the North", says Pinegger. "We will first of all realize the potential of this huge growth market."

**An important success factor** is the management culture. "There is no room here for old Prussian attitudes", smiles the Austrian Pinegger. "Everyone who tried to run a company in the USA like a German company has failed so far." He explains the fundamental difference: "Europeans, but particularly Germans, are still very hierarchy-oriented. In the USA people are first of all process and success-oriented." American staff and managers like to play the good soldier and utter a lively "Yes sir", but they are also willing to discuss every problem until they find a solution. Even the most senior bosses do not barricade themselves in their offices. Even junior staff have an opportunity to speak to the boss over a plastic cup of coffee from the coffee machine. "All of this is part of the game. Just like using the "Du" form of address in German."

Bellville / Texas



## Growth, But With Both Eyes Wide Open

Director Hans Overdiek, responsible for Wood-Based Panels is also convinced: "During the next 10 to 20 years, the East will remain the largest growth market. In addition to the enlargement of the EU, this is due in particular to the huge growth potential in Russia. It is only in the West that the commodity business is not a viable business for the group in the long term. Further internationalization in the direction of the East is therefore a must. Due to the huge demand, the furniture and construction industries represent huge future markets there. Infrastructure is a further growth business in which we are excellently positioned as a system supplier." The success strategy: "We first of all have a thorough look at the countries and markets in which we

► **O** The system is now going from strength to strength - thanks to flexible control from head office.

want to invest", explains Overdiek. "Then we buy a successful local player, a brand. In this way we minimize the market risk. The third step is then integration into the group." A similar process is followed when we set up new plants. "First of all, find a secure market, then build a production plant."

**But often the best strategy fails** when it comes to be implemented. Business success is determined above all by people. Based upon the experience of Pfeleiderer's Wood-Based Panel operations, Pawel Wyrzykowski, head of finance of the Polish company is convinced that "As an independent player we had no future". He sees tight control by the group management as the critical success factor. "We need the right mix between centralized management and local accountability. Our markets are characterized in particular by the fact that working relationships have been developed over decades. Buyers and sellers know each other very well. A sensible compromise between group and local standards with regard to terms of delivery and payment is needed. But the system is now going from strength to strength - thanks to flexible control from head office."

**This was not always the case.** Until the middle of 2000 the entire group was controlled centrally from Neumarkt. "The decision-making lines were long and a lot of resources went into processing information at head office", explains Knoche based upon his experience of the Insulating Technology business center. "This has improved significantly as a result of the new organization. Each production site is measured by profit and loss and head office receives summarized information."

**For the practical Knoche** these are "challenges that to date we have always resolved. You just have to be prepared." And he begins with his favourite subject, the opportunities and the figures that are intended to substantiate the vital importance of Eastern Europe to the commercial success of the whole group. In total, Knoche expects a growth in market volume from glass wool insulating materials, which is expected to rise from 19,746 thousand cubic metres in 1999 to 26,864 thousand in 2001 and to 34,843 in 2004. While the market share of Pfeleiderer AG was still 16.7 percent in 2001, he is forecasting a market share of 21.9 percent on sales of 7,618 thousand cubic metres in 2004. In Russia alone, market share is expected to increase by a factor of well over three between 1999 and 2004.



Power with circulation: power plants by Pfeleiderer work exclusively with sustainable raw materials, reducing the CO<sub>2</sub> burden on the atmosphere.

# Ecological Power-House

Sustainable energy sources like wood are increasingly being used for thermal power generation – the ancient power of fire leading not to hell and damnation, but to beneficial energy. Biomass power plants using Pfeleiderer know-how can also use the heat to clean contaminated material such as railway sleepers in an ecologically friendly manner. Abundant energy and heat are given off as an additional benefit. The profits are as surprising as the efficiency. Combined heat-power plants are therefore much on the minds of German power suppliers.

By: Markus Brakel

**“You can burn that!”** At the start of the 1990s there could hardly have been a more realistic assessment of the start of this project. What seemed a promising concept looked likely to fade into oblivion as soon as it encountered regulations such as TA Luft, the German Technical Regulations on Emissions, which even governs the nature of the romantic hearth at home. This, at least, is what happens in Germany. “We built a prototype biomass plant at a factory in France,” explains Dr. Axel Knörr, environmental protection officer at Pfeleiderer’s Wood-Based Panels Business Center. Regulations there allowed initial trials to take place with the combustion of railway sleepers.

**The concept** of simply burning off wood residue where it is no longer suitable for other processing would probably not have found much favour in Germany at the time. After all, even burning garden waste is strictly prohibited in the land of the garden gnome. The idea of providing one’s own energy supply in deference to environmental considerations could normally expect to meet with little understanding in the era of the nuclear power lobby. Yet the benefits of the concept were immediately apparent to the major timber processor. High electricity costs are putting pressure on the very energy-intensive processes involved, a particularly relevant factor in terms of international competition.

**“Our initial cost calculation** based on sustainable raw materials – in other words, wood for the generation of heat and power – came out well”, says Martin Rong proudly, member of the divisional managing board for wood materials responsible for Engineered Wood West. But it is not just a question of costs, for in terms of environmental protection the two biomass power plants in Neumarkt and Gütersloh set new standards.

These plants use a sophisticated form of combustion known as the “spreader-stoker method”, which ensures that dangerous pollutants such as aromatic hydrocarbons and other organic pollutants can be safely deactivated. The legally prescribed emission levels have been undercut by as much as 80 percent.

## Monitoring Emissions: Close Alliance with the Federal Environmental Agency

**That is official**, because all current measured results are continuously relayed to the communal supervisory authority by computer link. Such is the close connection between the Gütersloh power station and the environmental agency in Bielefeld. “The output we achieve is pretty impressive,” says Reinhard Mrozek, in charge of the Gütersloh power station, as he happily watches his colleagues from the TÜV inspection authority carry out one of their regular control checks at his premises. The emission data of the power station at Neumarkt are placed on the Internet and can be downloaded by all and sundry.

**Technically, Pfleiderer** is ahead of the competition thanks to its early start on developing combined heat-power plants. The two ecological power-houses in Neumarkt and Gütersloh have a functional efficiency of over 90 percent. “Optimization is actually never completed,” says Martin Rong, describing the design.

“Experts reckon on building about ten new biomass power plants over the next two years.”

“As we are currently ahead in terms of know-how, it is no wonder that energy suppliers like the market leaders E.ON or RWE are showing an interest in the solutions Pfleiderer is offering.” In the search for alternatives to nuclear power they, too, are increasingly warming to the use of sustainable energy resources.

**In fact**, they have more or less been forced into this by the current legislation. Since enactment of the new EU law on renewable energy sources, combustion of used timber for energy purposes is being promoted by the State. And the new Technical Instruction on Residential Waste, which will prohibit the depositing of organic residues in landfills from 2005 onwards, creates extra demand for ways to dispose of these materials that are compatible with the environment. The outcome is a boom – experts predict the construction of around ten new biomass power plants over the next two years.

**“What counts is what comes out at the other end,”** Helmut Kohl was once heard to say. This is exactly what astounds in the case of the Pfleiderer systems: over 13 Megawatt continuous output per hour is generated by the Siemens turbine in Gütersloh (and approx. 12 Megawatt in Neumarkt). Sufficient to meet the annual needs of a two-person household within just 20 minutes.

## Biomass Power Plant No Omnivore

**But this kind of biomass power plant** cannot use just any old fuel: “We provide our suppliers with specifications for a certain quality of wood, but slight variations in quality can be compensated for by the use of additives or certain adjustment procedures inside the boiler,” explains Dr. Knörr, environmental protection officer. By belt charging the cut-up fuel, material is introduced into the boiler for combustion

“The two ecological power-houses in Neumarkt and Gütersloh operate at over 90 percent efficiency.”



Energy produced by biomass power plants heats drum driers, at the same time driving a generator to produce electricity.



**In view of current advances, it is no wonder that energy suppliers like the market leaders E.ON and RWE are showing interest in solutions produced by Pfeiderer.**

at temperatures of 850 deg. C minimum. The heavier parts burn up on the grate, lighter ones in suspension. This guarantees an optimal combustion process, so that even the more tricky harmful substances such as notorious chlorinated hydrocarbons are rendered harmless. A clever cloth filter system traps particulates, and gaseous pollutants are bound by means of additives. Depending on the material, the energy and heat transformation process leaves total incineration residue of around 4 percent. Each year at the Neumarkt power station, for example, around 4,000 to 5,000 tons of grate and fly ash are disposed of as packing in the mining industry.

**From the legislator's viewpoint** biomass power plants are welcome in terms of the environment. This is because naturally regenerating raw materials contribute substantially less to the "greenhouse effect" compared to fossil energy sources such as mineral oil, natural gas or coal, thereby slowing down entropy.

**Pfeiderer benefits from this** in several ways: along with the natural biomass cycle comes a separate profit cycle. In the biomass power plants, railway sleepers supplied by Pfeiderer to German Rail for decades are contaminated with tar oil and other unappetizing ingredients. These can now be dealt with without causing problems – as well as making good money. There are other factors on the credit side, such as the savings in terms of the energy and fuel which previously needed to be bought in, and the extra revenue from supplying power to local utilities companies.

## “Full steam ahead!”

**In future** the calculation should prove even more profitable, as an existing facility is now being extended at Rheda-Wiedenbrück. A further power plant is also planned for Leutkirch. The future of what is a highly profitable line of business has now been charted and the motto is: “Full steam ahead!”

# The Stuff, of Which Trees are Made

By: Markus Brakel

Thermal utilization of used timber has risen steeply in attractiveness with the introduction of the EU law on renewable energies. With the new technical instruction on residential waste coming into force in 2005, it will be enhanced still further. The ban on depositing used timber at landfill sites will necessitate other kinds of utilization. As a direct result, alongside the wood-based panel and sawmilling industry, Germany's energy suppliers will embrace biomass power plant technology thanks to subsidies brought by the EU.

**Through its newly established affiliate** Interwood GmbH, Pfeleiderer AG intends to bring this new market into economic circulation. The aim is to unite collectors, processors and users of timber in a cooperative for the supply of the Central European market. "Interwood New Ecology 2002" could organize up to 50 percent of the flows of used timber in Germany in future.

"**You need to carve your life** out of the wood available to you." – When the great German writer Theodor Storm said this, he must have had something else in mind other than supplying the wood-processing – or even the energy – industries with raw materials. For them, timber's constant availability is of vital importance, because particleboard mills just like modern biomass power plants have one thing in common: they depend on a continuous supply of wood. The stuff of which trees are made obviously no longer comes fresh from the forests, but is increasingly being supplied from used timber resources. In the wood-processing industry, around a sixth of the annual volume required can be provided from old crates, pallets and timber used in packaging. Up to the year 2004, demand here alone will rise by a quarter to 3 million tons per year. For thermal processing requirements it should then climb suddenly from 1.2 million tons in 2001 to 3.5 million tons.

Interwood GmbH intends to manage the national distribution of this desirable "inherited burden".

## The EU and the "Normative Power of Current Practice"

**It may well be legitimate** to dispute the philosophy and purpose behind the EU in its current form, but not the facts to which it gives rise. Purely by chance, "the normative power of current practice" happens to represent a "categorical imperative" in the life philosophy of Hans-Jörg Wechselberger, general manager of Interwood GmbH. Interwood was established on January 1, 2002 as a 100 percent subsidiary of Pfeleiderer Holzwerkstoffe GmbH & Co. KG. Mr Wechselberger probably seldom saw this imperative more perfectly practised than in the form of the new law: "There is unlikely to be another instance where you are promised a guaranteed sales price for the next 20 years."



The “**product**” is energy obtained by thermal means from high-output biomass power plants which are able to operate at low emissions with used timber. Recently such plants have even used “dirty” material such as chemically impregnated field fences or old railway sleepers. And the “normative power” of the state subsidy fixed by the EU shows real effect. It has brought big-name energy producers such as E.ON and RWE into the arena, who are not prepared to let this non-risk business slip through their fingers. It is also a fact that Interwood has already paved the way for long term cooperation agreements with these interested parties.

## Environment Benefits

**For cost reasons alone**, used timber is a prime fuel for burning. A glance at this market in Germany shows that there is hardly likely to be any change in total volume between 2001 and 2004. According to insider estimates, it will grow from 8 to 8.1 million tons. About 4.4 million tons of this were sorted and processed in 2001. Nevertheless, from 2004 onwards, it is likely that this figure will shoot up to around 7.3 million tons. This will be of great benefit to the environment, for instead of the past 3.6 million tons of raw material which end up in landfill sites or incinerator plants each year, only 800,000 tons will do so in 2004. But environmentally conscious citizens may well break out in smiles as: “A large portion of the CO<sub>2</sub> reduction prescribed in the Rio Protocol could be implemented via biomass power plants,” according to the boss of Interwood GmbH.

## Interwood Established Recycling System

**Interwood** will be establishing a recycling system by 2005. At the same time it will be making selected partners the offer to join the circle. This scheme has been called “Interwood New Ecology 2002” and has already been secured by appropriate declarations of intent. It is a registered cooperative, which on a voluntary basis will build up a fixed network to mobilize, process and utilize used timber in Central Europe. The basis for this will be provided through seven central processing yards which will all be constructed identically by the cooperation partner AR Recycling, and operated by regional partners.

**On the map** the sites of existing and planned biomass power plants almost cover the entire Republic. Neighbouring countries as well, such as the Netherlands in the West or Poland in the East, could easily be linked to this network as future clientele. By 2005, a total of 18 such energy centres could be in existence. E.ON for example is planning construction in Landesbergen near Hanover, and Zolling near Munich, as well as in Hamburg-Stapelfeld. RWE will be building a plant in Berlin through its subsidiary Harpen AG and is planning further construction, including some in Bergkamen. A biomass power plant with a continuous output capacity of around 20 Megawatt per hour costs around euro 50 million to build. A central processing site with six to ten hectares of paved area, sheds, breaking and sorting facilities and further mechanical equipment, will swallow around a further euro 10 million.

**One important task** of the new cooperative will be to compensate the seasonal differences in supplies to the market, for example when there are surpluses or shortages. The success of Interwood New Ecology 2002 alone will decide whether the liberal investment was worthwhile. The funds invested will only break even if the power plants operate smoothly.

Yet behind even this objective there looms the normative power of current practice ...



Recycling Particleboard



# New Wonder Weapon: Thermohydrolysis

By: Markus Brakel

Thermohydrolytic separation is not easy to say. It almost sounds like a new wonder weapon – in fact, it is one, although not designed for aggressive use.

**The term really stands** for a pioneering research project for the processing of used particleboard which Pfeleiderer is currently developing for practical use at its site in Rheda, with assistance from the Federal Ministry of Education and Research (BMBF).

**Thermohydrolysis** will enable all particleboard produced on a resin basis (over 90 percent of the particleboard on the market) to be recycled. The digestion method involves a closed system using water vapour at temperatures between 120 and 180 deg. C enabling the particles to be recycled as usable material.

**Thanks to** the continuous process technology that Pfeleiderer has developed, energy consumption has been reduced substantially by comparison with existing processes. After digestion, the heat contained in the particulate material re-enters the production process without loss of temperature to produce new board. Whilst the revitalised particles are freed of all contaminants such as metal adhesions or coatings, adhering remains of the old glue can be reactivated and in turn may then contribute to reducing costs by reducing consumption of fresh resin.

**The research project**, which is being supported by the BMBF in a special project known as “Integrated Environmental Protection in the Timber Sector”, also provides an exemplary option for waste utilization under TASI 2005 (Technical Instruction on Residential Waste). According to Pfeleiderer’s calculations, it could even be profitable at capacities of about 20,000 tons per year and site.



Glass Recycling



# The Price Defines Ecological Reality

A **happy coincidence** of economy and respect for the environment must be close to Frank Panten's heart in his role as the environmental management officer for Insulation Technology at Pfeleiderer, and environmental officer at the Wesel plant. "In the production processes at our plant, economy and ecology complement each other," Frank Panten reports gladly. The production of glass wool insulation material is largely free of waste water and residues since the materials mainly circulate in a closed system. Where it is not possible to recycle the raw materials inside the plant, it is still preferable to have them recycled by third parties. Recycling in any case plays a major role right from the selection of raw materials.

**Up to 58 percent used glass** is added to the process when melting the glass. This saves resources, energy and raw materials. The melt energy of used glass is much lower than that of the raw materials such as silica sand or soda from which glass is manufactured. Solid glass is placed in the tank along with these raw materials and melts at about 1,400 deg. C. The resultant energy savings are around 15 percent.

**This affects** the manufacturing costs of the eight production sites which have a total capacity of around 500 tons per day. However, not every kind of glass is suitable: in order to safeguard product quality and to comply with environmental standards, only selected pure fractions of sheet glass are used (from the window or car industry, for example). Areas for ecological optimization of glass recycling are constantly being sought because experience has shown there to be positive economic effects in the long term as well.


"Prices should reflect ecological reality, not legislation." This claim by the physicist Ernst Ulrich von Weizsäcker, President of the Institute for Climate, Environment and Energy of Wuppertal, is gaining ever more meaning in what is a mostly raw economic reality. Consider the example of glass recycling in the production of insulating materials made from glass wool.



# Investing in the Future

By: Hans Heuser

At first sight, the atmosphere seems informal and relaxed. On the wall is a flip chart and a notice board, still empty at this stage. Nine participants are sitting at tables arranged in a U-shape, listening attentively to Michael Ernst. The member of the board responsible for personnel in the Pfeleiderer Group always finds the right words, even when it comes to finding an introduction to the participants in a seminar with the ambitious title “Leading and motivating staff”.





**After a short time**, Ernst steps to one side and hands over to Manfred Fett. The Director of the Institute for Integrated Training in Parsdorf is chairing the seminar. As an external trainer, he is actually not a member of Pfeleiderer's staff. But then again he is. After all, as a trainer he has already made a major contribution to preparing the material that he will communicate to participants in such seminars. When the trainer finally takes over, it is clear that several participants have realized that the seminar has started in earnest and some participants are asking themselves: "What can I, what am I allowed, to say or to ask? After all, they are all colleagues with whom I work closely on a daily basis." A certain amount of nervousness at the start is usual during such events.

**That's why** an experienced trainer like Manfred Fett is essential. As a start up, he has prepared a small task just to relax everyone. He passes a DIN A4 page to each member of the group. On the page are nine dots arranged in a square and nothing else. The task to be completed is written on the paper: "Connect up the nine dots with four lines." And with this the participants are already immersed in their seminar.

**This seminar** is part of a series of such courses that Pfeleiderer has been running for its management and staff since last year as part of its newly created "Business Campus". The scheme has been very well received: "Within just a very short period, the Business Campus has become a major facility for everyone at Pfeleiderer", explains Andreas Steiner, Head of Group Human Resources Development. At first the name Business Campus sounds like a specially built, permanent meeting place. The opposite is true: "Basically, the Business Campus has only existed on a virtual basis to date", says Steiner. The concept is part of an extensive package of measures decided upon by corporate management during the restructuring of the Group.

**Steiner explains the basic idea** of the Business Campus as follows: "For the Pfeleiderer Group to be successful, management and staff have to be competent in their respective areas of responsibility." Naturally, the key aim is to structure the programmes and courses of the Business Campus so that management and staff have the best possible opportunity to maintain and expand their ability to perform



their respective tasks. But the focus is not only on the present. “Through this facility we want to support our staff in promoting continued growth and the sustained further development of our business”, adds Michael Ernst.

**A guiding principle** of the Business Campus is the dovetailing of corporate strategy and staff competences. The “Leadership Programme”, described as the “expansion and consolidation of management competences”, is one of the courses offered within this framework. Its goal is to enable management executives to acquire the skills they need in order to successfully organize and lead their business units or centers.

**Other subjects covered** in this programme include “Staff leadership and cooperation”. The new employee assessment system also allows many participants to really learn to develop their staff according to their responsibilities and abilities.

**The “General Management”** course is concerned above all with knowledge – business management knowledge that Pfeleiderer’s employees need in order to perform their tasks successfully. The seminar programmes are run by internal specialist speakers, experienced external trainers and recognized lecturers from academic institutions.

**The objective is for heads of business**, corporate and service units to learn to run their areas of responsibility as though they were their own businesses. Not only because a large part of compensation, which is often variable, is profit-related. Andreas Steiner explains the concept: “The success of our business as a whole is the sum of excellent business performance in each individual area.” In the case of each business center, he and the directors will be actively supported in this regard by an executive from the Human Resources Department specializing in matters relating to that particular business center.

**In the General Management programme** of seminars and courses, the strategic principles of the business are combined with up-to-date business management knowledge. This way, training of management personnel in business management helps to optimize operational management of the individual areas of responsibility – in other words, it helps to achieve maximum benefit with minimal input.

“In this process, the aim is for the Business Campus to bring together our management and staff from different areas of Pfeleiderer AG under what is, for the moment, a virtual roof”, explains Andreas Steiner. “We want to ensure efficient knowledge management on diverse platforms, and in future we will be taking it beyond the limitations of current business operations.”



**It requires a large amount** of vision not to lose oneself in the present and to tackle the future at an early stage. The main goal is to achieve management and specialist personnel of above-average ability for a comparatively small production site, which is what Neumarkt is. And then to retain top performers by showing them the opportunities for further development.

**“At an early stage”** are key words in all this. They are also clearly reflected in the objectives that the creators of the Business Campus have set for themselves. By the middle of 2003, 20 percent of all training events should be run by trainers from the group’s own ranks. By this time, the facility will also be known to all relevant colleges and universities – and above all to potentials in these institutions. And from 2005, it is planned that all management subjects will be offered in at least one foreign language.

**Pfleiderer goes even further** in its commitment to the potential human resources of tomorrow. The intention is that contact should be made with these people at the earliest possible stage. For example, the Group regularly backs regional partnerships such as the nationally-run “Jugend forscht” (“Young Researcher”) competition in Germany. The “Junior Consulting Programme”, which started many years ago, has already become a permanent fixture. Its aim is to prepare talented graduates for a future career in the Group. Andreas Steiner describes it as a combination of project learning, and the development of a new services culture. On this programme, young graduates work as service providers in an internal market on topical projects for their “customers”, the project managers.

**External observers** have also recognized Pfleiderer’s achievements in this direction. As recently as 2000, the scheme was awarded the Initiative Prize for Training and Further Training by the German Association of Commercial Chambers in recognition for its outstanding achievements in advanced vocational training.

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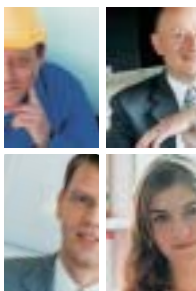
**Hans Heuser** has been writing about the subject of investment for seven years, including for journals such as “Wertpapier” and “Telebörse”, but also for the online service “FAZ.NET” and the specialist journal “FONDS professionell”.





The Groundwork Has Been Done





Peter Stigler, Foreman, concrete mast production

Richard Ziegler, Head of Infrastructure Technology Business Unit

Franz Weidinger, Head of Finishing, Plant, Neumarkt

Simone Graser, Trainee, commercial sector

By: Hans Heuser

“Pfleiderer’s investment profile is shifting from being almost a pure building materials supplier to an enterprise concerned with infrastructure technology. In the medium term, this should lead to an expansion of key valuation figures attributed to Pfleiderer by the market.” These are the findings of an extensive equity analysis made by Dresdner Kleinwort Wasserstein, part of the Dresdner Bank Group, conducted in the middle of last year.

The study by Dresdner Bank is not an isolated instance. All analysts’ assessments published during the past few months, whether at major banks or small, independent institutions, see the company as being on the right path. This was confirmed most recently by the well-known Frankfurt analysts Independent Research, which advised investors to be overweighted in the share. Financial professionals welcome one central issue in particular, which they repeatedly encounter during their work: “reinvention”. This may be construed as the “redefinition” of the entire Group. Even though Pfleiderer is still attributed to the “Construction material and components” sector by many on the stock market – probably for ease of allocation – researchers have recognized that Pfleiderer has consciously initiated a process of structural change and so has started to experience changes at all levels of the company.



“We use the latest technologies in our production department. Nobody is better.”



“Our strength lies in our motivated employees and our customers benefit from this.”



„Pfleiderer’s success is not a product of chance. It comes out of quality and performance.”



“I feel at ease in a company where I can bring my ideas to fruition.”

**The question that now arises is:** How should one actually imbue a term like “reinvention” with life, making it more tangible, so to speak? This can only really be possible if one peers into a company like Pfeleiderer and draws comparisons. “Then we quickly realize that the company nowadays looks very different from some two years ago, when this reorientation process actually started”, explains Heinz Üpping, managing director of Incon Gesellschaft für Personal- und Organisations-Consulting. Heinz Üpping understands what he is saying, because as a trainer and consultant he has gone through some important stations of this process.

**What Mr Üpping means** is really the new management structure with which the company is now functioning. For about one-and-a-half years the group has been operating within its four major divisions with 17 business units. These units are endowed throughout with all the business-specific functions such as Sales, Marketing, Engineering, etc. whilst central facilities such as IT or marketing and PR, and naturally group accounting, are still established as the so-called corporate or service units at the company’s head office in Neumarkt.

### The new direction started two years ago

“**In a group such as Pfeleiderer** which trades internationally, it was simply necessary to introduce the right structures”, Dr. Ralf Bufe, CEO at Pfeleiderer AG recalls. “An important aspect is that these individual areas also carry responsibility for the operating result.”

## Responsibility Needs Motivation

**In the issue of responsibility**, Dr. Bufe is bringing up an important feature which marks the new management structure in general. The fact is that new group structures cannot be successfully implemented using single areas of responsibility – rather it requires the involvement of all players. All levels of the company’s management, and right down to the individual employee, need to be involved in the process.

### “Putting an end to sparring” at Pfeleiderer

**However, this only functions** if it is possible to motivate those involved. Leaders responsible for this process at Pfeleiderer place great value on maintaining a good relationship between the company’s management and its employee representatives. Only by involving all staff, whether on the commercial or industrial side, has it been possible to instigate the process of “reinvention” at all.

“**One important step** in this connection has been to introduce a variable system of pay”, explains Anke Giesen, who heads Management Staff Administration, Management Systems and Pay Systems at Pfeleiderer. “Now that the system has been set up for the upper management levels, it is to be applied during 2002 across the entire range of staff whose pay is not part of a regular pay scale.” This involves defining a certain target annual income for each employee, consisting of a fixed amount and a variable bonus, the bonus in turn comprising a performance-related component and a qualitatively defined component. This latter component involves agreeing on three individual goals in a direct meeting between the employee and his or her supervisor, against which the employee’s performance is measured at the end of the year. On a five-point scale ranging from “missed goal” to “goal exceeded easily”, employee and manager then determine at an end-of-year meeting how high the actual bonus is to be. Again, this is not a rigid, strictly prescribed arrangement. Maybe, for example, an employee’s targets may have to be adjusted or modified in the course of a year. “In Pfeleiderer’s own terminology this is called ‘putting an end to the sparring’.”

**Pfeleiderer in any case** treats dialogue as an important instrument to convey goals and strategies. Whether it is the annual employee review meeting or the bi-monthly management staff meeting. Regular monitoring across the various management levels of the company ensures the continuous exchange of information throughout the company. The aim is to recognize and solve problems before they have had an effect.

**In such events** one thing is crucial – abandoning traditional ways of thinking and seeking new stimuli in order to advance the company. It is often felt a good idea to use external consultants for such events in order to avoid the corporate “blindfold”. Consultants often have analytical tools and organizational know-how which cannot be generated within the company itself.

## Forecast equals result

### Credibility as a Success Factor

**Motivation** via involvement in corporate success – this is the idea behind the “Long-Term Incentive Scheme” – a scheme which provides various opportunities to invest in the company, for example, the share option programme launched at the end of 2001. “Even during the initial stage of this scheme it was clear that we were on the right path”, explains Anke Giesen. “Around 80 percent of management approached at that time took advantage of the option to invest in the company.”

**Part of re-defining** a group like Pfeleiderer also calls for abandoning unprofitable business segments. The decision-makers at Neumarkt have already shown that they mean business here. Ultimately, it always centres round one issue: credibility for the outside world. Here, too, much more has been achieved than was expected at the start of the restructuring phase. Which takes us back to the analysts. They like it when practical results actually bear out predictions made by management.

**The real aim is clear:** the company has emerged strengthened during an economically difficult period, even though this has called for measures not popular with everyone. However, those with responsibility for the Pfeleiderer Group clearly intend to come out of the other side of the economic slowdown the winners. The groundword has been prepared, externally as well as internally.



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