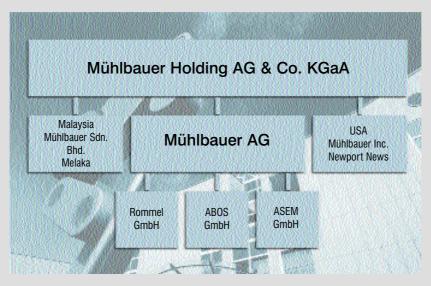






#### **ANNUAL REPORT 2000**

# BOARDS



#### MANAGEMENT BOARD



Josef Mühlbauer CEO



Hubert Forster CFO



Ulrich Schwab

CMO

#### SUPERVISORY BOARD

Herbert Geißler Senior Civil Servant, Chairman
Peter Drexel Dipl.-Ing., Member of the Board of Directors at Siemens AG
Wolfgang Brückl Head of Worldwide Service

The following details refer to the group. The separate report for the Mühlbauer Holding AG & Co. KGaA can be obtained from the company.

The English translation is for the convenience of the reader only.

The original German version is the legally binding text.

## SUMMARY OF SELECTED FINANCIAL DATA (US-GAAP) MÜHLBAUER HOLDING AG & CO. KGAA AND SUBSIDIARIES

#### **BUSINESS FIGURES**

DUSINESS FIGURES		2000	1999	1998
Taken from Consolidated Statements of Income		2000	1777	1770
Sales by applications	TEUR	110,322	71,026	53,910
Smart Identification	TEUR	48,552	34,984	23,226
Semiconductor Related Products	TEUR	42,427	22,159	17,880
Board Handling	TEUR	8,616	5,421	7,336
Precision Parts & Systems	TEUR	10,981	8,597	5,203
Other	TEUR	-254	-135	265
Sales by regions	TEUR	110,322	71,026	53,910
Other Europe	TEUR	41,482	23,559	11,992
Germany	TEUR	33,545	27,244	25,098
Asia	TEUR	25,016	13,356	8,242
North America	TEUR	6,478	5,598	4,126
South America	TEUR	2,592	1,324	1,362
Africa	TEUR	1,410	53	2,807
Australia	TEUR	53	27	18
Other	TEUR	-254	-135	265
Taken from Consolidated Balance Sheets				
Total assets and liabilities	TEUR	144,935	128,791	125,480
Total current assets	TEUR	93,293	85,849	81,201
Total financial assets	TEUR	10,762	9,819	13,100
Total fixed assets	TEUR	38,871	31,903	29,837
Total intangible assets	TEUR	2,009	1,220	1,342
Total current liabilities	TEUR	27,344	20,665	24,746
Total long-term liabilities	TEUR	13,275	13,297	13,593
Total shareholders' equity	TEUR	104,316	94,829	87,141
Fixed assets				
Capital expenditures	TEUR	14,137	7,825	11,627
Depreciation and amortization	TEUR	6,216	5,443	5,133
Taken from Consolidated Statements of Cashflows				
Cash provided by (used for) operating activities	TEUR	15,307	-6,037	-949
Cash used for investing activities	TEUR	-4,701	-751	-37,412
Cash provided by (used for) financing activities	TEUR	-8,558	-6,335	52,402
Net increase (decrease) in cash and cash equivalents	1) TEUR	2,048	-13,123	14,041
Human resources				
Number of Employees (average)	Number	1,206	898	756
Skilled worker	Number	542	392	345
Executives	Number	403	296	250
Trainees and part-timers	Number	261	210	161
Mühlbauer Holding AG & Co, KGaA				
Total stock capital <sup>2)</sup>	TEUR	18,805	18,786	18,765
· · · · · · · · · · · · · · · · · · ·	d shares	14,692	14,677	14,660
Dividend	EUR	4) 0.35	0.30	0.23
Stock price (year-end close)	EUR	84.00	41.00	33.52
Market capitalization (year-end close) 3)	TEUR	1,234,107	601,752	491,403

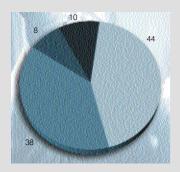
<sup>1)</sup> Less effect of foreign exchange rate changes on cash and cash equivalents

<sup>&</sup>lt;sup>2)</sup> Common stock and fixed capital contribution of the general partner

<sup>3)</sup> Obtained on total stock capital

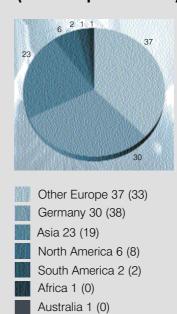
<sup>4)</sup> Subject to the consent of the general meeting

#### 2000 sales by applications in % (1999 in parenthesis)



- Smart Identification 44 (49)
- Semiconductor Related Products 38 (31)
- Board Handling 8 (8)
- Precision Parts & Systems 10 (12)

#### 2000 sales by region in % (1999 in parenthesis)



#### **Key figures (US-GAAP)**

		2000	1999	1998
Taken from Consolidated Statements of Income				
Sales	TEUR	110,322	71,026	53,910
Gross margin	TEUR	44,660	31,965	22,508
of sales	%	40.5	45.0	41.8
EBITDA <sup>1)</sup>	TEUR	30,210	20,627	15,925
of sales	%	27.4	29.0	29.5
EBIT <sup>2)</sup>	TEUR	23,994	15,184	10,792
of sales	%	21.7	21.4	20.0
EBT 3)	TEUR	25,080	17,493	10,727
of sales	%	22.7	24.6	19.9
Net earnings	TEUR	17,697	13,824	8,533
of sales	%	16.0	19.5	15.8
Total personal costs	TEUR	39,236	27,984	23,116
Earnings per share	EUR	1.02	0.68	0.36
Return on equity (before tax)	%	24.0	18.4	12.3
Return on capital employed 4)	%	21.9	16.9	15.2
Taken from Consolidated Balance Sheets				
Working capital 5)	TEUR	68,442	56,541	39,844
Working capital intensity 6)	%	62.0	79.6	73.9
Capital employed 7)	TEUR	109,322	89,664	71,023
Net dept	TEUR	-3,493	-7,937	4,483
Equity ratio	%	72.0	73.6	69.4
Taken from Consolidated Statements of Cash Flows				
Free Cashflow	TEUR	102	-8,954	-8,475
of sales	%	0,1	-12.6	-15.7

- Earnings before interest, tax, depreciation and amortization
   Earnings before interest and tax
- 3) Earnings before tax
- <sup>4)</sup> ROCE = EBIT/Capital Employed
- Working capital = Trade receivables + Inventories + Prepaid expenses + Other current assets

   Trade liabilities prepayments received Other current liabilities
- $^{\hbox{\tiny 6)}} \ \ \hbox{Working capital intensity} = \hbox{Working capital/Sales}$
- $^{7)}$  Capital employed = Working capital + Total Fixed assets

#### ANNUAL REPORT

Preface

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# PREFACE

## Dear Shareholders, Employees, Customers and Friends,

Mühlbauer 2000 – these two words signify an exciting and dynamic business year. A year of change and a year of setting new courses. A year in which our company underwent diverse transformations. A year that gave us a drastic lead as an independent supplier of turnkey solutions in the areas of Smart Cards and Smart Labels. We have set a new sales record of 110 million Euro. And we have exceeded our own predictions, which we had already boosted twice. As if that were not enough: despite the above-average investments in the areas of personnel and technology, we achieved earnings before taxes of 25.1 million Euro.

To ensure that the name Mühlbauer continues to stand for reliability, innovation and competence in the future, we have set important milestones for our company: acquisition of the Card Scan technology, expansion of capacities at the Roding and Stollberg plants, a new research and development center in Dresden – in this way we have enhanced the product portfolio and maintained strategic leadership of the market and the technology.

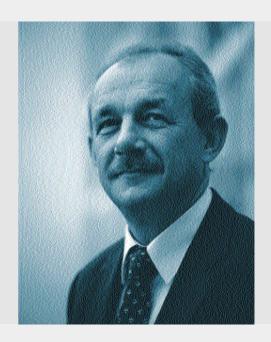
We want to further develop our leading position in the attractive expansion markets in which we are active. The fo-

undation for this has been laid; the goals are clear. We are striving to continuously increase the corporate value in the interest of shareholders and employees. And we want to convince our customers with products and services that are distinguished by high quality and innovative solutions, so that we can set new standards.

Think ahead and act with foresight – these are the keys to our corporate philosophy. Research and development play a central role in this philosophy. 190 engineers and technicians in Roding, Dresden and Oberhaching take care that technological innovation and the Mühlbauer company name are mentioned in the same breath.

With extensive efforts in the area of research and development, reliable production and precision and a world-wide service network, Mühlbauer will continue its course of success in the current business year. The development of new systems for Smart Label production is in full swing – we want to create the world-wide standard! The future has just begun for many applications in the area of Smart Identification. Today we are already providing the production systems for System-on-card, for Multimedia and Smartmedia cards and for LEDs.

Branches on four continents guarantee versatility and speed in fulfilling the customer's special needs. An office



in South Africa to be opened this year will extend our geographical reach.

Our endeavors are not self-serving. We are rated according to the expectations that have been placed on us since going public. Our promise of doubling sales from 1997 to the year 2000 has been kept. During this time sales have increased from a little over 49.5 million Euro to 110 million Euro. You see, you can count on us!

We have also set ambitious goals for the new business year. In addition to continued increases in sales and earnings we want to continue enhancing the innovative capacity of the group. For us that means: promoting technical know-how, raising the already high quality consciousness, augmenting employee enthusiasm for new technologies and services. Without the tremendous commitment and motivation of our team, many things would not have been possible. We want to implement this huge potential for ideas, experience and creativity in the form of new products and processes, as well as new market opportunities. Investments in the future - we will also supplement this goal by gaining even more young, enthusiastic and qualified personnel for our group. Because we are on our way to becoming the supplier per se for Smart Card and Smart Label technology.

Reliable – innovative – competent. With this corporate triad we want to win the confidence of customers and investors. All of us – from trainees to the executive board – will do everything we can to justify this confidence of the shareholders with our joint success. For this confidence in our company I thank you sincerely in behalf of the executive board and all employees. Our sustained joint efforts will ensure that investing in Mühlbauer shares will continue to be worthwhile in the future.

Roding, February 2001

Yours sincerely

CEO of the Mühlbauer AG

fores ble s land

## THE SHARE

Financial Calendar					
2001					
27 March	Balance sheet press conference in Munich				
27 March	Analyst conference in Munich				
28 March	DVFA IT forum at the CeBIT in Hannover				
15 May	Quarterly report I/2001				
7 June	Annual general meeting in Roding				
9 June	Open house				
14 August	Quarterly report II/2001				
13 November	Quarterly report III/2001				
2002					
March	Financial report 2001				

Capital Market Relevant Statistics <sup>1)</sup>						
		2000	1999			
Market price						
High	EUR	105.90	50.00			
Low	EUR	38.75	26.00			
Year-end	EUR	84.00	41.00			
Number of shares						
- basic	Thousand shares	3,867	3,874			
- fully diluted	Thousand shares	4,269	3,891			
Market capitalization <sup>2)</sup>						
High	TEUR 1	,555,857	733,844			
Low	TEUR		381,599			
Year-end	TEUR 1	1,234,107	601,752			
Earnings per share						
Basic / fully diluted	EUR	1.02	0.68			
Dividends <sup>3)</sup>	EUR	0.35	0.30			
Dividend payout /						
net income available to common shar	eholders <sup>3)</sup> %	34.30	44.30			
Dividend payout incl. tax credit /						
net income available to common shar	eholders <sup>3)</sup> %	49.00	63.63			

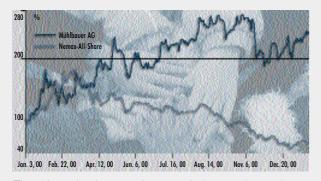
- 1) all figures ex split
- $2) \ \ \text{Total number of common shares and capital share of personally liable shareholder} \\$
- 3) Proposal of annual general meeting

The Mühlbauer share underwent a very positive development in the year 2000: during the course of the year it increased from 38.75 EUR to 84.00 EUR, an improvement of 117 percent. The closing quotation on the Frankfurt exchange of 105.90 EUR on 31 October is a new all time high. For the standing of the share on the New Market, a direct comparison with the development of the Nemax-All-Share-Index is certainly of significance: in the year 2000 the index receded 41 percent (due to a continuous decline since spring).

Mühlbauer has been an outperformer on the New Market since 10 April 2000. Even if the year-end quotation for the share was detrimentally affected by the overall decline, this changed nothing in the obvious outperformance. We have benefited from the confidence of the shareholders, for which we would like to express our sincere appreciation. More and more investors put their money on values that are distinguished by a fundamental continuity and quality, reliability and discipline.



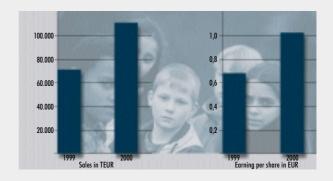
Mühlbauer knows: The world belongs to them!



There has also been an increase in interest by analysts: national and international investment houses examined our share in over 20 studies and reports in the year 2000.

By going public on the New Market we face the challenges of the capital market: comprehensive information and transparency are required – and we have worked on this. We will develop our investor relations department in the future. We continue to follow the shareholder value concept, to intensify our communication with the capital market, and to maintain our presence locally, on road shows and at trade fairs around the world.

With persistence and determination we perceive our responsibility of increasing the corporate value and the attractiveness of the Mühlbauer share for private and insti-



tutional investors. We will continue in the future to do everything to win the confidence of our investors.

Investor Relations (Reiner Kolloch)

Tel.: +49-9461-952653, Fax: +49-9461-952118

eMail: investor-relation@muehlbauer.de

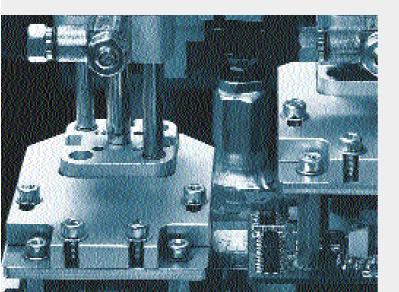
# SMART IDENTIFICATION

We have bundled all activities concerning chip cards and Smart Labels in the product area of Smart Identification. "Identification" – this is the recognition and management of objects, data and – with a considerably higher need for security – also people. Mühlbauer systems manufacture the cards, the card body and the



accompanying chip module. Mühlbauer systems "personalize" the cards. This is done electronically with data that

is loaded onto the chip on the card. And that takes place by other methods – for example, by printing, engraving or embossing the card. The mass product becomes an individual companion.



#### Smart Identification...

...encompasses all processes that are needed for manufacturing a chip card: the module production, the card production, the personalization (= programming of the module; printing, engraving or embossing the card) and packing the finished card. The systems for the manufacture of Smart Labels (= TAGs) are also included in this product area.

Daily routine: cards manage data. Chips store information. In other types of cards, processors perform "calculations". And data "leave" the card again. Through a variety of reading systems. Or transmitted via an antenna in the card. Or quite mechanically in a credit card receipt. Or simply from card to eye – by the photo of the cardholder on the card. Error-free card production with Mühlbauer systems also make these processes reliable.

Information handling on the card undergoes three processes: input – management – output. These tasks outline a range of applications that is virtually unlimited. Mühlbauer is the ideal partner for the production of every imaginable (and unimaginable) application. We stand for the complete solution – the fundamental development work, the perfect manufacture of the systems, the fast, comprehensive and thorough service. Around the world. Our know-how has made us the global leader. We will expand this position.

#### MÜHLBAUER MACHINES MAKE SMART I ABEI S

# High-volume production

#### Smart Labels...

...for package services, carriers, wholesalers and retailers, libraries, on brand-name articles, in cars, on doors and barriers, on flight luggage, on the toll-road, at the lift station, at the gas station, on packages.

Smart Labels... With Mühlbauer systems.

Logistics is when everything arrives at the store on time. Smart Labels help here.

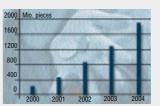
The capacity of the new Mühlbauer system for the manufacture of Smart Labels has nearly quadrupled. This means that we, and our customers, have made a step forward. Smart Labels, also known as TAGs, are becoming more common on the market.

They are increasingly replacing the zebra pattern of barcodes. The advantage of Smart Labels over the conventional barcode is the fast, precise acquisition of data across distances. This enables one-hundred percent identification. There are no scanning errors. The time is past in which a bar code had to be pushed across the scanning field.



A Smart Label can consist, for example, of two layers of paper, special glue, an extremely thin microchip and an antenna. The intelligent label,

thin and flexible, can send and receive data. The data transfer is incredibly fast, and the capacities of micro-



Expected sales of Smart Labels Source: Philips Semiconductor

chips continue to expand.

The challenge is the end price. Our developers have worked so hard to

combine reasonably priced chips, antennas and foils – all at an extremely high speed. The resulting eight-track system is unique in terms of capacity, precision and reliability.

The diversity of forms for Smart Labels is as unlimited as their applications. The Smart Label can be concealed in a button, making brand-name clothing theft-proof and forgery-proof. Everything having to do with logistics is predestined for the use of Smart Labels. New applications are being added almost daily. Mühlbauer produces automatic systems for every label type. We set standards!

#### MÜHLBAUER MACHINES MAKE CARDS WITH THEIR OWN SYSTEM

# Intelligence and security - a card that is also a system

#### System-on-Card...

...describes brand-new card applications. A microprocessor in the module controls the display, keyboard or fingerprint sensor – on the card. Multifunctional cards for the newest applications are the result. For example, high-security memory for code material.

System-on-card...
With Mühlbauer systems.

What are the functions of a Smart Card? Keyboard? Data display? A scanning field for fingerprints? Our customers have already developed such prototypes. And Mühlbauer is building the production systems for them. System-on-card is the magic word. The future for these applications has only just begun.

Smart Cards will soon support more and more functions. The key to this development is increasingly powerful microprocessors in the card module. Microprocessors that not only store and manage data, but also actively calculate.



At present, a money card provides no information on its current status. A card with a display does. Keys allow the user to access the data stored on the card. And a fingerprint sensor is a simple way to identify the card-holder. Security is constantly becoming more important. Basically, no computer is invulnerable. Viruses and data theft are the greatest hindrances in the development of e-commerce and other sensitive applications. System-on-card is the alternative. A PC with a card slot is no longer a vision. Access keys, codes or signatures can be stored securely in the chip card module. And the fingerprint sensor makes sure that the card is used only by the authorized cardholder.

The card with its own system – easy to transport, versatile, secure and convenient. For Mühlbauer this is a new sphere of activity with tremendous opportunities. And: an indication of the enormous potential still to be discovered in the chip card and its corresponding markets.

#### MÜHLBAUER MACHINES MAKE SMARTMEDIA AND MULTIMEDIA CARDS

# "Take away" data memory

## Smartmedia and Multimedia Cards...

...for telephone numbers, electronic books, audio data, photos, data transfer and mobile computers, mobile phones, pagers, electronic entertainment, games.

Multimedia cards... Smartmedia cards... With Mühlbauer systems.



Data - anywhere, anytime. With the multimedia card.

A Multimedia card or a Smartmedia card can do whatever its chip can do. The capacity of the memory modules continues to increase. 32 megabytes now fit onto a memory module the size of a thumbnail on a multimedia card. Before the end of the year 2001 it is supposed to be 64 and 128 megabytes. Ten years ago this was just the capacity of a hard disk on a respectable personal computer.

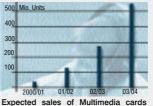
The strengths of the SmartMedia and multimedia cards: they are small and practical and above all: the cards require no mechanical drive in order to be read. (In this respect they are clearly superior to hard disks or CD-ROM



drives). What today already fits on the chip of a multimedia card is almost inconceivable: 640,000 mobile phone numbers, for example. Or 15,000 pages of books, 5000 pa-

ges in PDF format, ten hours of radio broadcasts, almost an hour of CD-quality music or 80 high-resolution

photos.



Expected sales of Multimedia cards Source: Strategies Unlimited Applications for the multimedia card abound in the area of mobile PCs, telecommunication

equipment, electronic books, digital cameras, electronic entertainment and games. The Internet capability of mobile phones, for example, has drastically increased the demand for multimedia cards. They are the ideal data storage medium in WAP or UMTS mobile phones.

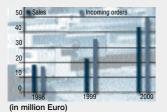
Also, the number of imaginable applications for the multimedia card in an information and communication society is almost mind-boggling. What today sounds like music of the future can be a billion-dollar market tomorrow. Especially Mühlbauer will profit from this development.

# SEMICONDUCTOR RELATED PRODUCTS

## Semiconductor Related Products...

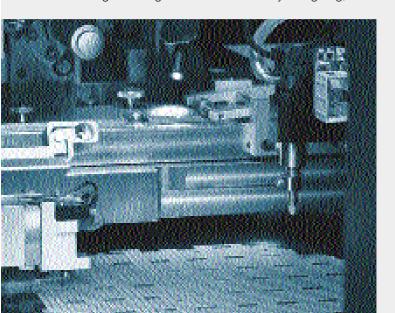
...for the areas of assembly & packaging, testing & packing and carrier tape forming equipment. Mühlbauer systems cover the entire process chain of semiconductor backend automation: sorting, die bonding, encapsulation, testing and packing.

The product area of semiconductor related products is the technological supplier for Mühlbauer. Our core competen-



ce in the areas of bonding and encapsulation has developed from this area, and is stimulated by it, leading into other product

areas. Semiconductor related products make use of niches that are not subject to the extreme fluctuations of the general semiconductor market. The motor of the IC module production, for example, is the chip card market. The market for light-emitting diodes is stimulated by the lighting, auto-



mobile and communication industries. And the fast die sorter – the newest highlight of this product area – is oriented on the new trends on the semiconductor market. "Wafer level packaging" and "flip chip" technology are key concepts for developments that will replace the conventional backend technology step by step. Chips with "contact bumps" are flipped 180 degrees after removal from the wafer. The "bumps" face downward, and the chip can be placed on the carrier and electrically connected without wiring. Mühlbauer developed a suitable sorter for this process.

Not only that: the Mühlbauer sorting system is the fastest of its kind in existence. And a prime example for synergism: our fast die bonder was the force behind the sorter development. The "flip chip" technology has already placed the Smart Label production systems in the "pole position". And the optimal carrier tapes for the sorter are currently being developed by our carrier tape forming equipment product area – meanwhile the market leader for free marketable deep-drawn parts.

#### MÜHLBAUER MACHINES MAKE I EDS

# Light without shadow...

## Light-Emitting Diodes...

...in the dashboard, in the brake lights of a car, on stadium displays, behind a mobile phone display, in traffic control systems, traffic lights, on large advertising signs, in pocket flashlights, illuminated surfaces of light designers, in thousands of electronic appliances...

Light-emitting diodes... With Mühlbauer systems.

The new star in the luminous sky is rising and shining brighter than ever before. The market predictions for LEDs have been confirmed. Color LEDs are a billion-dollar product and a household term; it is impossible to imagine the world of technology and industry without them. The white LED – a stroke of genius from last year – has met with enthusiastic acceptance by the market. Mühlbauer is there.

As hardly any other system manufacturer, Mühlbauer is the ideal partner when it comes to illuminating LEDs. The "heart" of the LED is a chip – and is therefore predestined to be processed on Mühlbauer machines. Especially our competence in the process areas of die bonding and encapsulation is



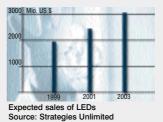
being invested in the joint development with market leaders in the semiconductor and lighting industry.

The priority of the year 2000 was clearly on encapsulati-



We cannot touch the stars in the sky. But almost.

on technology. We have achieved our goals: doubling of the items per time unit and an extreme increase in precision. For 2001 our attention is focused on the continued development of die bonding. A leading manufacturer characterized the evolutionary leap from the light bulb to the LED as follows: "We are in the first or second year of a ten-year process." A process that, according to observers of the market, can be compared with the crossover from the tube to the transistor. Because the LED is clearly superior to the conventional light



bulb: twelve times the life expectancy with three-anda-half times the efficiency.

Many LEDs bundled together become luminous

bodies or surfaces. And the newest innovative leap in the manufacture of white LEDs continues to stimulate the market. The demand for white LEDs is supposed to continue sharply until the year 2003, according to market analysts. The future is bright – and Mühlbauer wants to take advantage of that...

# BOARD HANDLING

2000 – a year of superlatives in the product area of board handling. 59 percent more sales and 45 percent more orders were recorded by the group subsidiary Rommel GmbH. In Ehingen they are calling it "the very best year in the history of Rommel." And the signs of growth continue. "Traceability" is the magic word that has filled the order books for the product area of board handling. "Traceability" refers to the absolute identification of products in the manufacturing process – an elementary contribution to quality assurance especially for sensitive electronic com-

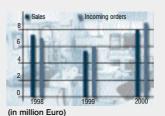
ponents. Each component and each printed circuit board

# The state of the s

#### Board Handling...

... is the Mühlbauer product area for loading and unloading stations, magazine buffer systems, turning and flipping stations, conveyor belts and in-line labeling stations for printed circuit boards. Today, two years after the takeover by Mühlbauer, Rommel GmbH in Ehingen by Ulm is an integral constituent of the group.

must be one hundred percent identifiable at each point in the production process. This is one domain of the Rommel labeling and marking stations. Labels made of plastic and paper, laser engraving or inkjet printing – Rom-



mel systems make printed circuit boards unique.
"Traceability" as a complete solution also includes scanning devices

and the corresponding software. Rommel was able to present a world-wide innovation in the form of a special scan station last year.

Rommel also makes use of new potentials for development in classic board handling. The trend away from the rigid panel toward flexible foils poses a new challenge for transport systems. Rommel is responding to this challenge and will present an entire series of new developments this year, in addition to conventional systems – on the way to new superlatives!

#### VERSATILE, RELIABLE, PRECISE

# PARTS & SYSTEMS

#### Parts & Systems...

...for air and space technology, the automobile industry, medical technology, racing cars, the semiconductor industry – and of course for all Mühlbauer systems



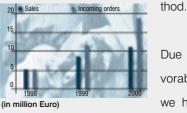
One tool, two hands, one head – only the dimensions are getting bigger.

In 2000, the rapid development of the year 1999 in the product area Parts & Systems continued. This is due in part to the successes of the other Mühlbauer divisions. Systems of the two production areas Smart Identification and Semiconductor Related Products have an internal production quota of about 90 percent. In addition, more and more external customers are placing their trust in our production of precision parts.

Meanwhile the trend toward increasingly complex systems continues. We are perfecting entire machine systems internally: for example, pneumatic cutting equipment for SMD automated assembly machines or entire

hospital beds for the medical sector. In Roding we are building complete components for lithotripters and purification systems for silicon wafers. And in the Saxon town of

Stollberg we began mass production of complex precision parts for the high-end fiber optics sector. Our production begins with the raw material and ends with the system – fast, versatile, and with top quality. That is our me-



Due to the extremely favorable order situation, we have already exhau-

sted in the year 2000 the investment program of 5 million Euro which was planned up until 2001. In Stollberg, another 3,000 square meters of production area went into operation. 3.6 million Euro have already been invested in machines. The number of employees increased by 22 percent. All this is a step toward more versatility, even higher quality and even shorter delivery times. The outstanding annual result and the very positive order value have motivated us to invest another 2 million Euro in the product area of Parts & Systems in 2001 – the historic basis of Mühlbauer and one of its strategic factors of success.

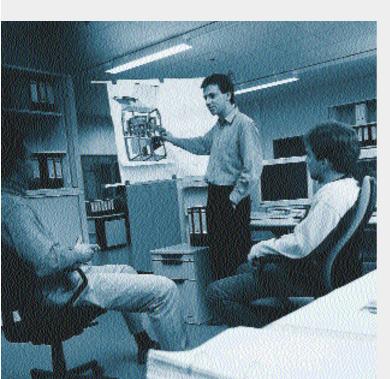
# Research & Development

## Research & Development...

...with 190 engineers and technicians on 6000 square meters in the development sites in Roding, Dresden and Oberhaching by Munich.

In the year 2000 we significantly expanded our capacities in the area of Research & Development: 190 natural scientists, engineers and technicians stand for technological innovation at the Mühlbauer development sites in Roding, Dresden and Oberhaching. That is an increase of more than 25 percent in this area alone. Our success in the year 2000 again confirms the standard that Mühlbauer has set for itself in the area of development. New systems must be ready for installa-

tion before the market begins to show interest in the products that are manufactured with the systems. Therefore we put innovations on the production line. And the trend that has become apparent in the past few years continues. Our development work contributes more and more to the design of the end product used by our customers to successfully compete on the market.



In addition to expanding our capacities in the area of research, the number and intensity of our partnerships has also increased. This applies especially to the cooperation with our customers. We are assuming more and more responsibility for development in bilateral projects. A clear example for this is last year's successes in the Smart Label technology. Here we have impressively continued to expand our control of the market. Through intensive development work we were able to significantly expand this product area in the year 2000. The unique production volume of Mühlbauer sy-



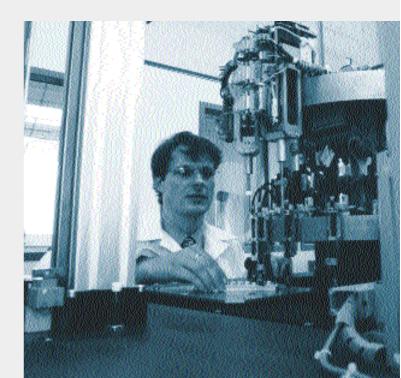
Curiosity, thirst for knowledge, impatience – it's a good thing they are endless!

stems world-wide contributes to establishing the Smart Label as a product of the future on the global markets.

The number and intensity of partnerships with developers at home and abroad also increased in the year 2000. We are working with well-known research institutions in southern and eastern Germany, often as part of state development projects. For example, Mühlbauer is part of a European association for developing processes for the processing of thinned silicon. Consequently we have expanded the topic of "mechatronics". In this area, too, Mühlbauer is contributing its competence to joint research with the topic "module interconnected devices". This technology integrates functional elements directly in the cases of electronic devices.

A further highlight of the Mühlbauer research work of the past year was the systematic development of the "micro dispensal" technology for applying conductive paste to a substrate. And the Mühlbauer researchers have also made great progress in the processing of micro-optical elements such as micro-lenses for light-emitting diodes.

At Mühlbauer we know: the key to our special position on the international markets is our tremendous base of competence. We will continue to do everything we can to expand this base.



# SERVICE WORLD-WIDE

#### Service...

...around the world and around the clock. Mühlbauer maintains service offices on every continent: in France, the USA, Mexico, Brazil, Australia, Malaysia, China and Taiwan. And soon in South Africa.

Our service knows no limits. Neither national boundaries nor limits in capacity. We see the exceptional strength of the Mühlbauer service department as our obligation to the customer. This begins with an essential contribution to quality assurance: no machine, no system leaves our plants without the approval of the service department. Only machines of the highest quality find their way to the customers. The service personnel undergo a series of additional training measures in order to prepare for their duties. These duties include the maintenance and repair

of systems on the customer's premises and also fast delivery of replacements parts. Last year we increased the number of service employees by 60 percent. These reinforcements help us to respond to the increasing demand of our customers for customized long-term maintenance contracts.

A newly founded group called "Training" within the service area plans and coordinates training measures for Mühlbauer employees and for customers. The customer training – which is divided into the levels of intensity "basic", "enhanced" and "special training" – takes place either on the premises of Mühlbauer or the customer, as desired.

Mühlbauer employees are not only "troubleshooters". They can also reinforce the local production team of our customers and help them to adapt personnel capacities to the order situation. "Production assistance" is a strategic factor in personnel planning. At Mühlbauer, service also means speed. The capacity and availability of our hot-



We have a common goal!

line was significantly improved in the year 2000. We guarantee that we will send the perfect person to solve the problem within 24 hours, wherever help is needed.

Our internationality helps us here. In many parts of the world, service technicians are already present – in France and in the USA, for example, and in Australia, Malaysia, China and Taiwan. At the end of the year 2000 we opened further service offices in Chihuahua (Mexico) and Sao Paulo (Brazil). And our offices in South Africa and Shanghai will begin work in 2001.

This extensive service offering is an integral part of our idea of "customer relations". The customer is at the center of all our thought and action. He is the sole focus of our concept of the "turnkey solution" – a triad that goes far beyond the delivery of machines and systems:

 joint development with the customer on the levels application/process/machine,

- the perfect manufacture of the production system in our plant and
- fast and reliable service world-wide.



# Employees

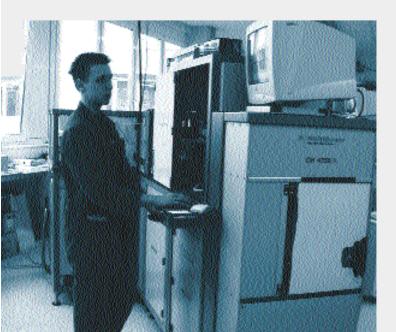
#### Employees...

...are Mühlbauer's human capital and therefore our most important resource. We know that our success is determined by the performance and competence of all employees. The board of management of Mühlbauer AG thanks each and every employee for their commitment during the past year!

We children of the high-tech era believe in our power of innovation, we believe in our creativity, and we are doing what others only thought about. In this way, we make the company's success.

That is why our employees are highly motivated and loyal. And that is why Mühlbauer is willing to do a lot for them:

Among the most successful and compelling methods are the profit-sharing programs. By issuing employee shares



we make the co-workers into co-entrepreneurs within the company. The first program of this type last year promoted the corporate thinking and actions of our employees. Participation was overwhelming. In the current year we will therefore offer an additional program. This gives our employees the exclusive opportunity to directly participate in the company's success.

Hand in hand with the progressive shareholding interest of the employees we are intensifying the internal, goal-oriented communication. Company meetings and employee consultations supported by questionnaires promote "two-way communication", the agreement to goals in a dialogue between employees and managers. For this purpose we have modified the content and design of our employee newsletter.

A further contribution to the motivation of our employees is the gratification system as part of the company suggestion program. In the year 2001 we will make the bonus



My colleague, my partner - unlimited

program even more attractive in order to optimize this source of constant innovation. Our employees know and appreciate the principle of "give and take". This applies both to the recognition of individual performance and to long-term career planning.

Mühlbauer is active in markets that are constantly changing. Together with the markets, the world of work also changes. Our world of work requires dynamism, ambition and enthusiasm of the employees. We convey these virtues in every form of training, both internal and external. Basic and advanced training and seminars for the managerial staff promote - in addition to specialized knowledge - initiative, responsibility and versatility. Our employees extended their qualifications in 496 training measures last year.

Milestones of our strategy of qualification are the early assignment of responsibility and the development of personnel in our own training variations. For example, we are part of the "mechatronics" network. Together with other industrial companies, universities and institutions for career education we are conveying the foundations of a new career type.



We know: It takes material rewards to motivate employees. But the ideal rewards are at least as important. Our employees

are aware that they are working on technologies that today are hardly yet conceivable, that they are working on the future then – for themselves, as well. Maybe that is why they are among the best in the world in this area.

The board of management thanks them for their commitment and their performance. The dedication of our employees is the basis of our success. A success in which all of them have a personal share.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

#### ECONOMIC SITUATION AND TRADE DEVELOPMENT

Global economy on normalization course in 2001

A decline in activity on the global economy is expected for the year 2001. The World Economic Institute in Kiel predicts an increase in the world-wide gross domestic product (GDP) of 3.7 percent after 4.8 percent in the year 2000. This conceals the expectation of a soft landing in the USA with a growth of 2.6 percent (after 5.1 percent), but also a general downturn in all areas of the world. In this alignment of the American development with other parts of the world the German Institute sees no signs of an impending recession, but rather a normalization.

In Japan, predictions assume a steady growth in the year 2001 (GDP plus 1.8 percent) as compared with 2000. For Europe a decline to 2.6 is expected for the year 2001 after approximately 3.3 percent in the year 2000. Germany will also be within this span.

With strategic foresight Mühlbauer has concentrated on the expansion markets of chip cards (Smart Cards), LEDs (light-emitting diodes) and semiconductors. The group has gained global control of the technology and the market for turnkey production systems for the Smart Card and Smart Label industry, while in the area of semiconductor systems (highly automated assembly and handling systems) the concentration on core competences in selected markets is in the forefront.

Important synergisms between the production technology in the backend sector and the IC module production in the area of card automation have come into being. The continuous transfer of know-how, also through interdisciplinary teams, between the business areas of card automation, precision parts and semiconductor-related equipment ensures high standards of quality.

The internationalization of the sales sector, an internationally oriented

marketing concept and a world-wide service network have supported the strategic corporate goal of expanding the market position as leading system supplier for the Smart Card and Smart Label industry. With the expansion of the research and development facilities at the Roding, Dresden and Munich-Oberhaching plants, the company is meeting the growing demands and increasing applications of the market while maintaining short product cycles.

### RESEARCH AND DEVELOPMENT

Epoch-making technologies and innovative products

Mühlbauer consistently implements its strategy of providing total solutions. Innovations for increasing productivity and efficiency are at the focus of our activities in the area of research and development. With turnkey solutions that are geared toward the demands of the market we are ensuring the sustainability of our customers.

#### MANAGEMENT'S DISCUSSION AND ANALYSIS

In the year 2000 we invested 9.9 million EUR (previous year: 6.1 million EUR) for research and development. The R&D quota therefore corresponds to 9 % (previous year 8.6 %) of total sales. Some 200 employees in research and development form a close-knit knowledge base. We supplement our own competence in cooperation with universities, research institutes and industrial partners.

The results of research and development led to numerous new, innovative products in the year 2000 that are outstanding in terms of productivity and efficiency. We will continue to expand our market penetration with the products described below. They are an example of how research and development can contribute to implementation of the strategic goals of the Mühlbauer Group:

A special highlight was our successful realization of the project Smart-Card Personalisation 5600. This system displays numerous convincing

personalization capabilities: chip coding, magnetic strip personalization, laser engraving, inkjet printing, thermotransfer, embossing and contactless chip coding. The versatile modular design of this machine allows our customers to select a system configuration that corresponds to their very special wishes and requirements. The SCP 5600 also fulfills the demand for speed with a production of up to 3000 cards per hour. Personalization is inevitably linked to the question of security. The system also has an answer to this problem. It was developed according to the principle of the "open platform". The customer decides himself whether to use our coding hardware and software or to integrate his own. If he opts for our coding system, the customer can create the coding processes himself; in case of an integrated customer system, the data handling is in the hands of our customers. With our personalization system SCP 5600 we responded early on to the market demands for security, speed and versatility.

The number of card applications is growing constantly. Smartmedia and multimedia cards are among the innovations on the card market. Here, too, Mühlbauer is currently the only company world-wide to offer a fully automatic Smart Card Implanting System 8700 for the manufacture of multimedia / smartmedia cards. The capacity of this card application is tremendous: up to 2000 cards per hour. This figure supports the company's jump in development and again demonstrates that we are a partner to our customers for standard card applications, but also for innovative new developments.

Smart Label - the intelligent label - is becoming a household term. The diverse areas of application, especially in everyday life, demonstrate the enormous potential for the future. This means that high quantities are required. With the development of a High-Speed Label Line we have faced the challenges of the market. This versatile multi-track line achieves a capaci-

#### MANAGEMENT'S DISCUSSION AND ANALYSIS

ty of up to 10,000 units per hour. We live in times that are characterized by speed. Mühlbauer has set standards here and will not be satisfied with second place in the future, either.

#### **SALES**

Group sales increased by 56 % to more than 110 million EUR

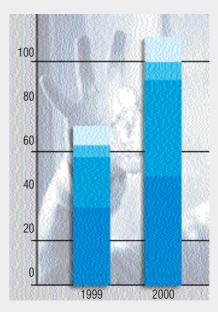
Our sales development in the year under review was extremely positive. With approximately 110 million EUR the Mühlbauer Group was able to increase the value of the previous year by 56 % (previous year: about 71 million EUR) and thus to exceed the original sales goal of 85 million EUR by 30 %.

Especially due to the continuing demand for turnkey solutions for every imaginable Smart Card application, we achieved total sales of 49 million EUR in the area of "Smart Identification", exceeding last year's level (35 million EUR) by 39 percent. We were particularly successful in the area of "Semiconductor Related Products", where sales increased by 91 % to 42 million EUR (previous year: 22 million EUR). A sharp increase of 59 % to 9 million EUR (previous year: 5 million EUR) was reported for the area of "Board Handling". The area of "Parts and Systems" increased its sales by

28 % to 11 million EUR (previous year: 9 million EUR).

Starting at a high level, the demand increased with double-digit growth rates. The distribution of sales to the individual regions results in the following scenario: With 67.9 % or, in absolute terms, 75 million EUR (previous year: 71.3 % or 50.8 million EUR) the largest share of sales was achieved in Europe. Asia with 25 million EUR (previous year: 13.4 million EUR) or in re-

Sales development by product sectors in mill. EUR (change from prev. year in %):

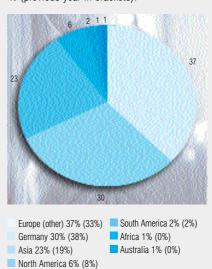


Parts & Systems 11 (+27.7%)

- Board Handling 8.6 (+58.9%)
- Semiconductor Related Products 42.4 (+91%)
- Smart Identification 48.6 (+39%)

lative terms 22.6 % (previous year: 18.8 %) of sales, North America with 6.5 million EUR (previous year: 5.6

Sales by regions 2000 % (previous year in brackets):



million EUR) or 5.9 % (previous year: 7.9 %), South America with 2.6 million EUR (previous year: 1.3 million EUR) or 2.3 % (previous year: 1.9 %) und Africa with 1.4 million EUR (previous year: 0.05 million EUR) or 1.3 % (previous year: 0.1 %) follow. In Europe, Germany with 33.6 million EUR (previous year: 27.2 million EUR) was the country with the most sales.

#### SHARP INCREASE IN NEW ORDERS

Order boom brings plus of 48 %

The business of the Mühlbauer Group continued to grow strongly. Significant impulses for new orders were provided by our fortified market position due to consistent expansion of our sales, product and service strategy.

Incoming orders of 136.3 million EUR for the company significantly exceeded last year's value (92.2 million EUR) - by 48 percent. The decisive factors in the increase in new orders were the implementation of our strategy and numerous sales efforts: Mühlbauer's position as a supplier of turnkey solutions for every imaginable application of smart cards as well as innovative production solutions for the manufacture of LEDs, Smart Labels and multimedia cards, the development of our own sales companies and the expansion of our product and service program.

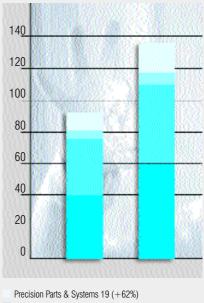
The increase was consistently in the double-digit figures. New orders of 59.7 million EUR (previous year: 39.5 million EUR) in the core area of "Smart Identification", in which the production lines for Smart Cards and Smart Labels are bundled, mean an increase in orders of 51.3 % (pre-

vious year: 45.6 %), which is out of proportion in comparison with the market growth. In the area of "Semiconductor Related Products" an order volume of 49.1 million EUR (previous year: 35.1 million EUR), or an increase of 39.9 percent (previous year: 104.6 percent) was reported. The consistent expansion of the handling systems in the area of "Board Handling" led to an extraordinary increase in demand. With an order value of 8.8 million EUR the business volume increased sharply in comparison with the previous year (6.1 million EUR) by 45.1 percent (previous year: -13.6 percent). Also the area of "Precision Parts and Systems" was able, due to its consistent strategic implementation - competence from raw material through to the finished product - to report an increase of 61.7 percent (previous year: 124 percent) with 18.7 million EUR in the reporting year, despite last year's high level (11.5 million EUR).

With an order value of 56.4 million EUR we have an extremely favorable basis for business developments in the current business year. This order value represents an increase of 84.4 percent in comparison with the previous year (30.6 million EUR). Therefore, our average order range has reached a duration of about 6 months,

which means continued job security already at the beginning of the business year.

Incoming orders in million EUR (change from previous year in %):



- Board Handling 8 (+45%)
- Semiconductor Related Products 49 (+40%)
- Smart Identification 60 (+51%)

#### **PURCHASING**

World-wide coordination

Purchasing at the best conditions world-wide is an important contribution to our corporate success. Through systematic coordination of purchasing within the Mühlbauer Group we were able to achieve significant price reductions. The consistent expansion of our supplier base brought a further improvement in the quality of the supplied parts.

The Mühlbauer Group purchased goods at a value of 39.3 million EUR world-wide in the year 2000. The purchasing volume, increased by 107 percent in comparison with the previous year (19 million EUR) is primarily the result of the increased sales volume.

The efficiency of our suppliers is the basis of our success in purchasing. Therefore, as part of our supplier management we made further improvements to the supplier evaluation system in the reporting year. This system makes it possible to comprehensively measure and rate the range of services of the suppliers and to make improvements through target and quality assurance agreements. As a direct result of our supplier evaluation we have selected preferred suppliers with whom we work together closely and whom we consider for each bid. This focus makes our purchasing even faster and more efficient.

#### **INVESTMENTS**

Expansion for world-wide growth

In the business year 2000, investments amounted to 14.1 million EUR (previous year: 7.8 million EUR). This corresponds to 12.8 percent (previous year: 11 percent) of the group sales. These figures reflect primarily the additional expansion (18,000 sq. m.) of the existing production facilities at the Roding plant. This expansion takes place in connection with further intensification of research and development activities. The first of three buildings was already occupied in December 2000. The remaining buildings will be completed on schedule in March 2001. The total planned volume for this investment measure is approximately 10 million EUR.

Investments in TEUR:

16,000

12,000

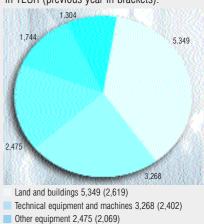
8,000

4,000

0 1999 2000

A significant share of the investments was also used for the expansion of our production facilities at the Stollberg plant. We improved our production processes there by expanding the existing production buildings by 3000 sq. m. in addition to expansion of the production capacities in the area of machining.

Breakdown of investments 2000 in TEUR (previous year in brackets):



- Buildings and equipment
- in process 1,744 (318)
- Intangible assets 1,304 (417)

Investments in global information and communication technology and IT strategies are becoming increasingly important for the control and networking of our corporate group; these made up 8.7 percent of our investment budget. The introduction of SAP is of particular significance in this respect. In order to customize our sales and service activities even more and to make internal processes even more efficient, the introduc-

tion of a CRM system is planned for the current year. The budget allocated for this is approximately 0.4 million EUR.

#### **EMPLOYEES**

285 new jobs created

The decisive factor for a company's success is its innovative energy. And the key to this is the creativity and performance readiness of its employees as well as their enthusiasm about their work. They are the ones who mobilize innovations with their ideas and who contribute to the economic and reliable production of a company. That is why we foster employee knowledge and commitment, international cooperation and the expansion of an organization that operates on a supra-divisional and supra-regional level.

All employees contribute to and participate in creating the corporate value. Employees receive annual bonuses based on the return on sales and therefore profit directly in the success of the company. Through our employee profit-sharing program initiated in the preceding business year, employees of the traditional German plants had the opportunity for the first time to purchase up to ten employee shares at an attractive

price. The majority of employees entitled to draw shares took advantage of this offer, demonstrating their loyalty to our organization. Planned employee profit-sharing programs for the future will give all employees the opportunity to continue sharing in the success of the company and its future growth.

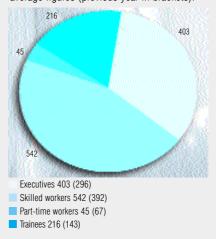
The elements of the performanceand result-oriented remuneration were further expanded in the year 2000. By issuing stock options, we have linked the interests of our managerial staff with those of our shareholders. The revised profit-sharing program is connected with the creation of corporate value in addition to achieving personal and economic objectives.

We are convinced that qualification is a decisive competitive factor. That is why we have offered our employees a wide variety of training programs since the spring of 2000, in order to provide them with special qualifications. In this way we ensure that innovative ideas are implemented directly to the customer's advantage.

At the end of the business year, the Mühlbauer group employed 1279 employees – 285 more than in the

previous year (994). This organic jump in growth was caused primarily by the extremely positive business developments in all divisions and the advance to future-oriented market segments. 1236 (previous year: 959) are employed in Germany, an additional 4 (previous year: 6) at plants in the rest of Europe and 5 in North (previous year: 4) and South America and 34 (previous year: 25) in the Asian Pacific area. Personnel costs increased from 28 million EUR in the previous year by 40 percent to 39.2 million EUR in the reporting year. After adjusting for the additional liquidity-neutral expenses by applying APB 25 to the stock option program, the increase in personnel costs was 31.8 percent.

Personnel breakdown 2000 according to average figures (previous year in brackets):



We thank the entire staff for their commitment and performance. Our goals are challenging; the fact that we achieve them, we owe to our employees.

#### **PROFIT SITUATION, BALANCE AND FINANCES**

Continuous rise in earning power earnings before taxes increased by 43.3 percent to 25.1 million EUR

Mühlbauer was able to further improve its earning power in the year 2000. Earnings before taxes increased again as compared with last year (17.5 million EUR) by 43.3 percent to 25.1 million EUR. After adjusting for the special influences from the stock option program, earnings before taxes increased by 56.4 percent to 27.4 million EUR. The pretax profit margin of 22.7 percent (adjusted: 24.8 percent) in the reporting year are proof of the continuous high profitability of the Mühlbauer Group. Last year's figure was 24.6 percent. With 7.4 million EUR in tax expenses, the tax quota of the Mühlbauer Group was 29.4 percent, after 21 percent in the previous year. The group annual net income reported in the statements of income is 17.7 million EUR and therefore 28 percent above the corresponding value from the previous year (13.8 million EUR).

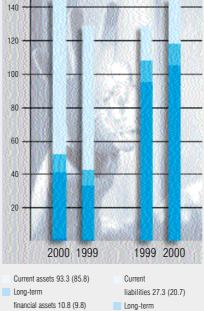
The financial result achieved in the reporting year was 1.1 million EUR, which is a decrease of 52.2 percent compared with last year's high level (2.3 million EUR) due to a slowdown of the capital markets since the spring of 2000.

Due to the continuing positive result development, we will recommend to the annual general meeting on 7 June 2001 that a dividend of 0.35 EUR (previous year: 0.30 EUR) be declared for the business year 2000. With dividend-qualified capital of 4.96 million EUR, the disbursement sum is approximately 1.4 million EUR.

The continuous growth of the Mühlbauer Group is reflected in the balance sum: it increased by 12.5 percent to 144.9 million EUR (previous year: 128.8 million EUR). On the credit side, the trade receivables and inventories grew due to the increased volume of transactions. After increases of 45.7 percent and 15.6 percent these two items make up a total of 77.1 million EUR (previous year: 61.2 million EUR) and therefore 53.2 percent (previous year: 47.5 percent) of our total credits. Due to the significant increase in capital expenditures in the reporting year, the fixed assets increased by 21.8 percent to 38.9 million EUR (previous year: 31.9 million EUR).

On the debit side, the stockholders' equity increased sharply, reaching 104.3 million EUR (previous year: 94.8 million EUR) on 31 December 2000. In addition to the consolidated net income, the sharp rise in compensating items from the profit-sharing program as compared with last year and positive effects of the currency exchange are visible here. In view of the increased balance sum, the equity ratio decreased from 73.6 to 72 percent. The current liabilities in

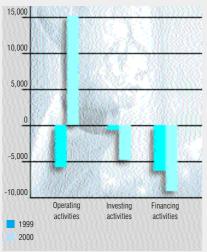




Fixed assets 38.9 (31.9) Intangible assets 2.0 (1.2) liabilities 13.3 (13.3)

Stockholders' equity 104.3 (94.8) the group underwent an overall increase of 32.3 percent to 27.3 million EUR (previous year: 20.7 million EUR). Half of this apportions to trade payables and other accruals. The long-term liabilities were reduced to the amount of 1.3 million EUR as well as the increase in investment grants re-

Cashflow in TEUR:



ceived to the amount of 1.1 million EUR versus the previous year (13.3 million EUR) have only slightly changed.

The cashflow from the operating activities increased in the reporting year by 354 percent, reaching +15.3 million EUR (previous year: -6 million EUR). The significantly better financial result is essentially due to the result of the exceedingly positive development.

The outflow from investing activities increased as compared with last year (7.5 million EUR) by 6.6 million EUR to 14.1 million EUR, essentially due to the expansion of the facilities at the Roding and Stollberg plants as well as other investments in fixed and intangible assets. The outflow was compensated for the amount of 9.2 million EUR (previous year: 6.5 million EUR), being set off by the sale/purchase of securities (available-for-sale).

The financing activities led to an outflow of 8.6 million EUR (previous year: 6.3 million EUR). 2.3 million EUR (previous year: 0.7 million EUR) were used for the repayment of financial debts. We purchased shares for 0.5 million EUR (previous year: 0,8 million EUR). The issuance of shares by exercising options brought an inflow of 0.4 million EUR. A total of 6.6 million EUR (previous year: 4.8 million EUR) was declared as dividends.

Altogether, the statements of cashflows display the high financial power of the Mühlbauer Group. We were able to cover the resources needed for the high capital expenditures from self-contributed funds.

#### RISKS OF FUTURE DEVELOPMENT

Consistent evaluation, auditing and control

We see the management of our risks as a continuous managerial responsibility. Our strategy is to take advantage of opportunities in competition and to treat the risks involved in a proactive and responsible manner.

In dealing with known risks, we rely on the existing managerial instruments, which we continue to develop: logical delegation of authority, setting a clear sphere of action and use of existing information and controlling processes. The starting point is a systematic and complete risk assessment in the corporate areas that is conducted as a result of the strategic planning of all units. All essential risks are identified and evaluated here. The responsible members of management work out suitable countermeasures for the recognized risks. The responsible persons follow closely the development of the risks by means of periodic reports.

Among the risks of the future development that were identified in this year's planning round, the following require special emphasis:

Market and economic risks. In some markets we see the risk of reduced

sales due to general economic conditions. In case of a regressive business trend our customers tend to postpone the acquisition of new machines. We practice intensive market observation and have prepared to take countermeasures in case of negative economic conditions.

Production risks. Bottleneck machines or suppliers can endanger prompt delivery in case of shortages. Possible causes of shortage have been examined in detail and measures have been defined to further reduce the extent of possible damages and the probability of occurrence. Development risks. Due to the fast technological development in the markets in which the company is active, there are risks of not being able to develop new products quickly enough or of producing off-market products. The company is facing these risks by maintaining close cooperation with leading customers and especially with leading research institutes. This enables the recognition of both long-term trends and short-term changes in demand, which can be included in the planning of activities.

In view of our financial stability, our diversification of product strategy to include various, essentially independent industries and the proximity to our customers, we are well-equipped for dealing with future risks.

#### **STRATEGY**

Expanding the position as leader and profitable growth

Our strategy has not changed in the least: We want to maintain and expand our core competence and world-wide market leadership in the Smart Card and Smart Label industry. We are not yet where we want to be. But the year 2000 has brought us a bit closer to our goal.

We know that technologies alone are no longer sufficient for success. When we speak of complete solutions today, we mean competence in terms of the quality and reliability of our products and services - from the wafer all the way to the packaged card. That is why we aligned the company early on as a provider of solutions and have consistently pursued this course. Because this is the only way we can provide customized solutions for every need - all from one hand. Mühlbauer is therefore the ideal partner for successfully meeting the constantly growing demands of the market.

Through our own intensive developments and acquisitions, the company today has integrated all steps for the production of Smart Cards. With innovative technologies Mühlbauer is also opening up sectors that are growing strong in order to meet the challenges of the future. We are glad to accept these challenges. Because Mühlbauer can always build on its most important factor for success: on committed and highly qualified employees.

#### **FUTURE PROSPECTS**

We keep growing

With the integration of the CardScan technology in December 2000, the area of Smart Identification created the basis for further corporate success. Due to the continuing demand for turnkey solutions for every imaginable application for chip cards and the continued positive growth rates predicted by experts in this area, we expect a further increase of new orders and sales in the double-digit percent range for the current business year. Our prediction is also based on Mühlbauer's current positive position in the Smart Label industry. Experts expect a world market demand in this area of about 2 billion Smart Labels by the year 2004. Our great challenge consists in standardizing this rapidly growing market with future-oriented technologies and to exhaust the com-

#### MANAGEMENT'S DISCUSSION AND ANALYSIS

petitive advantages by means of a global sales strategy.

Research and development is the basis for further growth in attractive markets with high potential. Therefore, we are planning further intensification in this area in the next two years. The R&D quota should reach an average of 9 to 10 percent of sales over the years. For investments we have allocated about 15 million EUR for the next two years.

With the introduction of modern identification number systems and fixed variable salary components for the management team dependent on the

success of the group, we will continue in the future to consistently meet the responsibility to our shareholders - which we accepted when we went public on the "Neuer Markt" - of profitoriented corporate management with a view to maintaining shareholder value.

#### **DISCLAIMER**

This financial report contains information projected into the future that is based on the assumptions and estimations of the Mühlbauer corporate management. Although we assume that the expectations of these predic-

tions for the future are realistic, we cannot guarantee that these predictions will prove to be correct. The assumptions may conceal risks and uncertainties that could lead to a significant discrepancy between the actual results and the predictions. The factors that can cause such discrepancies include: changes in the economic and commercial situation, deviations in exchange rates and interest, the introduction of competitive products, lack of acceptance of new products or services and changes in the corporate strategy. An update of the predictions by Mühlbauer is neither planned nor does Mühlbauer assume the responsibility for such an update.

# REPORT OF THE SUPERVISORY BOARD

The supervisory board kept informed of the company's business and important individual transactions by means of periodic reports from the executive board and in four board meetings; the supervisory board is convinced that the management conducts business according to regulations. The subjects of discussion in particular were the profit situation and financial situation of the company, the structure and optimization of the individual business divisions, here especially of sales, and personnel matters.

The supervisory board discussed the profit and financial situation of the company with the auditor in a balance audit.

The accounting, the annual financial statements for the business year 2000 and the management's discussions and analysis were audited by Price Waterhouse Coopers, an auditing company in Munich, who were selected to perform the audit. The unqualified audit certificate was granted in accordance with § 322 German commercial code. After its own review, the supervisory board positively acknowledged the audit result and the recommendation of the executive board for the utilization of the retained earnings, raising no objections. The supervisory board therefore gives its recommendation to the annual general meeting for approval of the annual financial

statements of Mühlbauer Holding AG & Co. KGaA as at December 31., 2000 in the submitted version.

The supervisory board expresses its appreciation and recognition to the executive board and the staff for their performance in the preceding business year.

Roding, March 2001

The Chairman

Herbert Geißler

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# CONSOLIDATED STATEMENTS OF INCOME (US-GAAP) FROM JAN. 1, 2000 TO DEC. 31, 2000 OF MÜHLBAUER HOLDING AG & CO. KGAA, RODING

		Notes	Jan. 0 TEUR	1- Dec. 31, 00 %	Jan. 01- Dec. 31, 99 TEUR	%
1.	Sales	(23)	110,322	100.0	71,026	100.0
2.	Cost of sales		65,662	59.5	39,061	55.0
3.	Gross margin		44,660	40.5	31,965	45.0
4. a) b)	Operating expenses Selling, general and administrative Research and development		14,697 9,854	13.3 9.0	13,093 6,092	18.4 8.6
<b>5</b> .	Operating income		20,109	18.2	12,780	18.0
6. a) b) c)	Other income and expenses Interest income Interest expenses Other income		5,623 4,537 3,885	5.1 4.1 3.5	3,792 1,483 2,404	5.3 2.1 3.4
<b>7.</b> 8.	Income before income taxes Income taxes	(13)	25,080 7,383	22.7 6.7	17,493 3,669	24.6 5.1
9.	Net earnings		17,697	16.0	13,824	19.5
Earnin	gs per common share in EUR					
basic fully d				1.02 1.02		0.68 0.68
Weigh	ted average of common shares					
basic fully d	iluted			3,867,345 4,269,170		3,873,800 3,891,257

The accompanying notes are an integral part of these Consolidated Financial Statements.

# CONSOLIDATED BALANCE SHEETS AS AT DEC. 31, 2000 OF MÜHLBAUER HOLDING AG & CO. KGAA

	Notes	Dec. 31, 00 TEUR	Dec. 31, 99 TEUR
ASSETS			
Current assets Cash and cash equivalents Securities Trade receivables Inventories Deferred tax assets Prepaid expenses Other current assets	(4) (5) (6) (13)	3,618 6,609 30,868 46,253 529 126 5,290 <b>93,293</b>	1,451 17,449 21,179 40,028 0 215 5,527 85,849
Investment and long-term financial assets Securities	(4)	10,762 <b>10,762</b>	9,819 <b>9,819</b>
Fixed assets Land Buildings, net Technical and other equipment, net Buildings and equipment in process	(8) (8) (8)	1,333 24,378 11,416 1,744 <b>38,871</b>	1,328 20,183 10,389 3 31,903
Intangible assets Goodwill Software and licenses	(9) (9)	548 1,461 <b>2,009</b> 144,935	643 577 1,220 128,791
LIABILITIES AND STOCKHOLDERS' EQUITY  Current liabilities			
Short-term debt Debt maturing within one year Trade payables Downpayments received on orders Shoreholders loans	(10)	959 1,042 6,781 2,976 53	1,683 1,302 5,040 2,119 52
Other current liabilities Accruals for income taxes Deferred tax liabilities Other accruals	(12) (13) (13) (14)	4,338 5,326 323 5,546 <b>27,344</b>	3,249 2,618 1,409 3,193 <b>20,665</b>
Convertible bonds Long-term debt Investment grants received Deferred tax liabilities Postretirement and postemployment benefit liabilities	(15) (16) (13) (17)	49 5,057 6,020 1,868 281 13,275	71 6,351 4,922 1,712 241 <b>13,297</b>
Stockholders' equity  Common stock (par value EUR 1.28; 4,000,000 common shares authorized; 3,878,585 common shares issued and outstanding as at Dec. 31, 2000) Fixed capital contributions	(19) (19)	4,965 66	4,935 66
Additional paid-in capital Retained earnings Other comprehensive income	(19) (20)	61,018 38,468 -201 104,316 144,935	58,203 32,077 -452 94,829 128,791

CONSOLIDATED STATEMENTS OF CASHFLOWS (US-GAAP) OF MÜHLBAUER HOLDING AG & CO. KGAA

A T THE	Jan. 01. to Dec. 31, 00 TEUR	Jan. 01. to Dec. 31, 99 TEUR
Operating activities 1. Consolidated net income	17,697	13,824
Adjustments to reconcile consolidated net income to net cash (used in) provided by operating activities, net of effects from acquisitions of businesses:	·	
Expenses from the employee profit-sharing program     Tax adjustment general partner	+2,284 -4,487	+311 +0
4. +/- Depreciations/appreciations to -fixed assets -goodwill -software and licenses	+5,718 +78 +420	+4,904 +81 +458
<ul> <li>5/+ Gains/losses from the sale of objects from the assets</li> <li>6 Currency differences from the transition of assets</li> <li>7/+ Realized net gains/losses from securities and long-term financial assets</li> </ul>	-8 -18 +166	-78 -33 -377
8/+ Unrealized gains/losses from securities (trading papers) 9 Purchase in securities (trading papers) 10. + Sales of securities (trading papers) 11/+ Increase/decrease of trade receivables	-429 -20,627 +22,149 -10,302	-916 -7,858 +4,791 -14,519
<ul> <li>12. +/- Increase/decrease of value adjustments for trade receivables</li> <li>13/+ Increase/decrease of inventories</li> <li>14/+ Increase/decrease of deferred tax assets</li> </ul>	+613 -6,225 -529	+451 -953 +0
<ul> <li>15/+ Increase/decrease of prepaid expenses</li> <li>16/+ Increase/decrease of other current assets</li> <li>17. +/- Increase/decrease of trade payables</li> <li>18. +/- Increase/decrease of downpayments received on orders</li> </ul>	+89 -238 +1,741 +857	-20 -2,434 -409 +1,196
<ul> <li>19. +/- Increase/decrease of other liabilities</li> <li>20. +/- Increase/decrease of accruals for income taxes</li> <li>21. +/- Increase/decrease of deferred tax liabilities</li> </ul>	+1,089 +2,708 -930	-10 -4,769 -1,056
22. +/- Increase/decrease of other accruals 23. +/- Increase/decrease of investment grants received 24. +/- Increase/decrease of pension liabilities 25. = Cash provided by (used for) operating activities	+2,353 +1,097 +41 +15,307	+734 +587 +58
	T 13,307	-6,037
Investing activities  26. + Payments received from disposals of objects of the assets  27 Purchase in fixed assets  28 Purchase in software and licenses  29 Purchase in securities (available-for-sale papers)  30. + Sales of securities (available-for-sale papers)	+191 -12,833 -1,304 -3,683 +12,928	+175 -7,035 -417 -9,377 +15,903
31. = Cash used for investing activities	-4,701	-751
Financing activities  32 Repayments of long-term debt  33. +/- Increase/decrease of short-term debt  34. +/- Increase/decrease of shareholder loans  35 Exercise of convertible bonds	-1,294 -984 +1 -19	-1,302 +602 -2 +0
36 Collection of convertible bonds 37. + Proceeds from issuance of common stock 38 Purchase of own shares	-4 +365 -538	-5 +0 -779
39. + Sales of own shares 40 Dividends paid 41. = Cash used for financing activities 42. +/- Effect of difference from currency exchange rate changes	+487 -6,572 -8,558 +119	+0 -4,849 -6,335 +0
43. = Net increase (decrease) in cash and cash equivalents (Total of lines 42, 41, 31 and 25)  44. + Cash and cash equivalents on January, 1.	+2,167 +1,451	-13,123 +14,574
45. = Cash and cash equivalents on December, 31.	+3,618	+1,451
Additional cashflow information: Tax paid Interest paid	6,524 665	5,779 655

### Non-cash transactions:

In 2000 unrealized gains and losses from available-for-sale securities are shown under Other Comprehensive Income.

Recorded fictitious tax rebate claims of the general partner till now with an amount of TEUR 4,487 were settled success neutrally with the shares of profits of the general partner increased arithmetically in same level in the year of report.

The accompanying notes are an integral part of these Consolidated Financial Statements.

# CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS EQUITY (US-GAAP) OF MÜHLBAUER HOLDING AG & CO. KGAA

Other comprehensive income (loss)

				· ·	Additional		Cumulative A		
	Notes	Number of	Common	Fixed	paid-in	Retained	translation	sale 	T. 1
		shares	Stock TEUR	capital TEUR	capital TEUR	earnings TEUR	adjustment TEUR	securities TEUR	Total TEUR
			IEUK	IEUK	IEUK	IEUK	IEUK	IEUK	IEUK
Balance Jan. 1, 1999		3,880,000	4,960	51	58,440	23,323	0	367	87,141
Consolidated net income		-	-	_	-	13,824	-	-	13,824
Other comprehensive income (loss)	(20)	-	-	-	-	, -	-	(819)	(819)
Total comprehensive income	` '	-	-	-	-	13,824	0	(819)	13,005
Deferred compensation	(18)	-	-	-	311	-	-	-	311
Purchase of common stock	(19), (22)	(24,800)	(32)	-	(541)	(206)	-	-	(779)
Re-capitalization		-	7	15	(7)	(15)	-	-	0
Dividends		-	-	-	-	(4,849)	-	-	(4,849)
Balance Dec. 31, 1999		3,855,200	4,935	66	58,203	32,077	0	(452)	94,829
Consolidated net income		-	-	-	-	17,697	-	-	17,697
Other comprehensive income (loss)	(20)	-	-	-	-	-	118	133	251
Total comprehensive income		-	-	-	-	17,697	118	133	17,948
Deferred compensation	(18)	-	-	-	2,284	-	-	-	2,284
Issuance of common stock	(18)	14,880	19	-	346	-	-	-	365
Purchase of common stock	(19), (22)	(7,000)	(9)	-	(153)	(376)	-	-	(538)
Disposal of common stock	(19), (22)	15,505	20		338	129	-	-	487
Dividends	, ,, , ,	-	-	-	-	(6,572)	-	-	(6,572)
Tax adjustment related						, ,			( , ,
to the general partner	(19)	_	_	_	_	(4,487)	_	_	(4,487)
Balance Dec. 31, 2000	(17)	3,878,585	4,965	66	61,018	38,468	118	(319)	104,316
Dalanco Doc. 01, 2000		0,07 0,505	1,703	00	01,010	55,100	110	(317)	101,010

The accompanying notes are an integral part of these Consolidated Financial Statements.

# CONSOLIDATED FIXED ASSETS SCHEDULE (US-GAAP) OF MÜHLBAUER HOLDING AG & CO. KGAA

Acquisition or Manufacturing costs

		Acquisiii	ion or Manutacturing cost	7	
	Balance at Jan. 1, 00 TEUR	Currency change TEUR	Additions TEUR	<b>Disposals</b> TEUR	Balance at Dec. 31, 00 TEUR
I. Intangible assets					
1. Other intangible assets	2,754	0	1,304	0	4,058
2. Goodwill	804	0	0	17	787
Intangible assets	3,558	0	1,304	17	4,845
II. Property, plant and equipment					
Land, leasehold improvements and     buildings including buildings					
on land owned by others	28,249	0	5,349	0	33,598
2. Technical equipment and machinery	24,694	0	3,268	93	27,869
Other equipment, factory and office equipment	11,739	19	(U) 2,475	601	13,632
Advanced payments relating to plant     and equipment and construction in progress	3	0	1,744	(U) 3	1,744
Property, plant and equipment	64,685	19	12,836	697	76,843
III. Investments and long-term financial assets					
1. Securities	10,402	0	3,683	2,943	11,142
Investments and long-term financial assets	10,402	0	3,683	2,943	11,142
Total	78,645	19	17,823	3,657	92,830

The accompanying notes are an integral part of these Consolidated Financial Statements.

Depreciations/Amortization

Book value

Balance at Jan. 1, 00 TEUR	Currency change TEUR	Additions TEUR	<b>Disposals</b> TEUR	Balance at Dec. 31, 00 TEUR	Balance at Dec. 31, 00 TEUR	Balance at Dec. 31, 99 TEUR
2,177	0	420	0	2,597	1,461	577
161	0	78	0	239	548	643
2,338	0	498	0	2,836	2,009	1,220
6,738	0	1,149	0	7,887	25,711	21,511
18,362	0	2,441	49	20,754	7,115	6,332
7,682	1	2,128	480	9,331	4,301	4,057
0	0	0	0	0	1,744	3
32,782	1	5,718	529	37,972	38,871	31,903
583	0	8	211	380	10,762	9,819
583	0	8	211	380	10,762	9,819
35,703	1	6,224	740	41,188	51,642	42,942
05,700	1	0,227	7 10	71,100	31,072	74,774

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

# (1) THE COMPANY

Mühlbauer Holding AG & Co. Kommanditgesellschaft auf Aktien, Roding, Germany ("Mühlbauer" or "company") is an enterprise with international operations in the development, production and marketing of systems and turn-key solutions for the manufacture of

• Smart Cards - chip cards, contactless cards, dual-interface cards, smartmedia/multimedia cards;

- Smart Labels the intelligent label for the contactless transfer of data;
- Semiconductor components from the backend semiconductor sector, e.g. light-emitting diodes.

Additional business divisions include printed circuit board handling and precision parts manufacturing. In addition, Mühlbauer develops systems for the manufacture of carrier tapes for the electronics industry and also manufactures these carrier tapes. Production is concentrated in the Roding and Stollberg plants in Germany. In addition, Mühlbauer has access to a network of globally operating sales and service offices in France, China, Taiwan, Australia, Mexico and Brazil, as well as independent sales and service companies in the USA and Malaysia. The company also maintains sales representatives in various countries.

# (2) BASIS OF PRESENTATION

The company has been listed since July 10, 1998 on the "Geregelter Markt" of the Frankfurt Stock Exchange and on the "Neuer Markt" of the Deutsche Börse AG.

The accompanying consolidated financial statements were drawn up in compliance with the U.S. American Accounting Principles (US-GAAP).

Accordingly, the company, as a listed company in accordance with § 292a HGB (German Commercial Code) is exempt from issuing a consolidated financial statements in accordance with the regulations of the German Commercial Code and German Corporation Law. Additional information not required by US-GAAP was included in the notes in order to fulfill the stock requirements for exemption in accordance with § 292a HGB. The manage-

ment's discussion and analysis were issued according to the regulations of § 290, Par. 1 ff HGB.

All numerical figures in the consolidated financial statements are represented in thousand Euro (TEUR), unless explicitly stated otherwise.

The consolidated companies comprised as of December 31, 2000 the following 4 domestic and 2 foreign subsidiary companies:

Dor	mestic companies:	
Müł	hlbauer Aktiengesellschaft	
Inte	erest	100 %
ABC	OS Automation, Bildverarbeitung, Optische Systeme GmbH	
_	erest	100 %
ASE	EM Präzisions-Automaten GmbH	
	erest	100 %
	mmel GmbH	
_	erest erest	100 %
	eign companies:	
	hlbauer Inc., Newport News, Virginia	
_	erest	100 %
	hlbauer Sdn. Bhd., Melaka, Malaysia	1000/
Inte	erest	100 %

Additional information on the companies can be found in the annex to the company's annual financial statements registered with the commercial registration office of the city of Regensburg, register no. HRB 7036.

### (3) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### **BASIS OF CONSOLIDATION**

The consolidated financial statements include, in addition to Mühlbauer, all subsidiaries in which Mühlbauer exercises direct or indirect control based on a majority of voting rights. Companies in which Mühlbauer has no control, but is capable of exerting considerable influence on the business operations of these companies (generally a 20 - 50 % ownership interest) are accounted for under the equity me-

thod of according.

All material intercompany transactions and balances have been eliminated.

#### FOREIGN CURRENCY TRANSLATI-ON

Annual financial statements of foreign subsidiary companies with a functional currency other than the Euro are converted in accordance with the Statement of Financial Accounting Standards (SFAS) No. 52 "Foreign Currency Translation". According to this, the assets and liabilities of foreign subsidiaries, with the exception of stockholder's equity, which is converted at historic rates, are converted at the rate on the balance-sheet date, the profit and loss analysis at average rates. Differences arising as a result of the translation are shown as separate component in the stockholders' equity.

The exchange rates for the translation are as follows:

		rate on balance-sheet date mean average			
		Dec. 31, 2000	Dec. 31, 2000	2000	1999
		·	·		
Currency:		EUR	EUR	EUR	EUR
Malaysia	100 MYR	28.2813	26.2467	29.3178	24.6828
USA	1 USD	1.0747	0.9954	1.0825	0.9383

Purchases and sales in foreign currencies are translated at the valid rate on the day of the transaction and foreign currency profits and losses are shown as affecting the result under the other operational earnings or expenses.

#### **SALES RECOGNITION**

Sales are shown after delivery of the goods or completion of the service, less buyer premiums and rebates. A delivery is deemed fulfilled when risks and opportunities connected with the property are transferred to the buyer. This regularly takes place upon pre-acceptance by the buyer.

#### **ADVERTISING COSTS**

Advertising costs are shown as a current expense, amounting to 774 TEUR (1999: 907 TEUR) for the reporting period. Accordingly, no amounts in connection with advertising measures were capitalized.

# RESEARCH AND DEVELOPMENT COSTS

Research and development costs are shown as expenses as they incurred.

#### **EARNINGS PER SHARE**

SFAS No. 128 "Earnings per Share" is applied in calculating the earnings per share, whereby all shares are taken into account by rights of conversion into stockholders' equity. There are two categories for the earnings per share that must be indicated in case of diluted shares. In case of "basic earnings per share", a dilution is not applied; the conso-

lidated net earnings are divided by the weighted average of the issued shares. The category "diluted earnings per share" includes, in addition to the weighted average of the issued shares, diluted shares that originate as a result of convertible bonds, for example.

The transition of the weighted average of issued shares to calculate the "Basic Earnings per Share" to the weighted average of issued shares to calculate the "Diluted Earnings per Share" are calculated as follows:

	2000	1999
	pieces	pieces
Weighted average of the shares to calculate the "Basic Earnings per Share" 3,86.	7,345	3,873,800
Dilutive effect of convertible debenture stock	1,825	17,457
Dilutive effect from the conversion of a complimentary share into share capital	0,000	0
Weighted average of the shares to calculate the "Diluted Earnings per Share" 4,269	9,170	3,891,257

#### **CASH AND CASH EQUIVALENTS**

Current credit balances at financial institutions, cash on hand and capital that can be liquidized on short notice (3 months) are considered as cash and cash equivalents

#### TRADE RECEIVABLES

Trade receivables are assessed at the nominal amount. Foreseeable risks are taken into account by means of a suitable adjustment.

#### **INVENTORIES**

Inventories are assessed at the price of acquisition and manufacture or at the lower market value. Raw material, auxiliary material and operating materials are assessed at the floating average price. Finished and unfinished products, including order-specific development work, are assessed according to the principle of unit valuation. Direct material and production costs as well as attributable material and production overhead costs are capitalized under standard utilization.

#### **SECURITIES**

Securities are assessed according to "specific identification" in accordance with SFAS No. 115 "Accounting for Certain Investments in Debt and Equity Securities" at their trading or market price on the balance-sheet date. Unrealized gains and losses for securities that were purchased for short-term reselling ("trading papers") are shown as affecting the result. Unrealized gains and losses for securities that are neither clearly intended to remain permanently in the company's assets nor purchased with the intention of short-term reselling ("available-for-sale" securities) are not shown as affecting the result, but instead they are

shown under other comprehensive income, taking into account deferred taxes.

#### **FIXED ASSETS**

Fixed assets are assessed at the cost of purchase or manufacture, less cumulative depreciations. The scheduled depreciations take place linearly over a customary service life, depending on the category, as follows:

Buildings	10 - 25 years
Technical equipment	
and machines	5 - 10 years
Other equipment, fixtures	
and office equipment	3 - 10 years

Repair and maintenance expenses are debited directly to the profit and loss analysis. Considerable investments for renovation and expansion are capitalized if they increase the service life of an asset. In case of disposals, the corresponding historic costs of acquisition and cumulative depreciations are calculated and the difference between this sum and the sales proceeds entered as profit or loss under the other operational earnings or expenses.

The acquisition and manufacturing costs of long-term construction measures also include outside capital costs, if a direct allocation in the manufacturing period is possible. These costs are depreciated by means of the normal expected service life of the corresponding asset.

#### **INTANGIBLE ASSETS**

Acquired intangible assets are assessed at the cost of acquisition and depreciated linearly over their expected service life of 3 years. Goodwill represent the difference between the cost of acquisition from acquired companies and the market value of the acquired assets and assumed debts and are

depreciated linearly over a period of 10 years.

# VALUE PRESERVATION OF LONG-TERM ASSETS

Intangible and other long-term assets are examined for their lower real value ("impairment test") if facts or changes in circumstances indicate that the respective book values are no longer valid. A depreciation is to be considered if the sum of all future non-discounted cash flows from the use of the asset is not sufficient to cover the corresponding book value. The book value of the respective asset is depreciated at the market value that is determined in general based on the discounted future cash flows. Impairment tests conducted in the above manner resulted in no additional need for depreciation in the current or in the preceding business year.

# PENSION AND POSTRETIREMENT BENEFITS

The assessment of pension liabilities is based on pension appraisals using the "projected unit credit method" in accordance with SFAS No. 87 "Employers' Accounting for Pensions".

#### **INCOME TAX**

The company applies SFAS No. 109 "Accounting for Income Taxes". According to the liabilities method, deferred tax deferred charges and liabilities for deferred taxes are formed for the expected taxes resulting from the differences of assets and liabilities between the consolidated book values and the tax values. In this process, the tax rates and tax regulations that are valid at the time of the cancellation of these differences based on the valid laws apply. Positive deferred taxes are examined for their future feasibility and, if necessary, depreciated accordingly.

With effect from the period of assessment 2001, the allowance method applied since 1977 is being replaced by a classical corporate tax system with definitive taxation.

According to the heretofore applied apportionment method, distributed profits are subject to a corporate tax of 30 % for the distributing company, while retained profits are taxed at a rate of 40 % in the end. When using the apportionment method, the shareholder receives a tax credit on the distributed profits for the amount of the corporate tax, i.e. the corporate tax paid by the company is credited to the shareholder's personal tax obligation, so that the profits distributed by the corporation to the shareholder are taxed in the end only to the shareholder at his personal income tax rate.

The corporate tax apportionment method is replaced with effect from 2001 by a definitive taxation of corporate entities at a rate of 25 %. As opposed to former law, a differentiation now is no longer made with respect to the taxation of retained and distributed profits. This means a significant tax break for corporate entities already at the time of origination of profits (as compared with the previous corporate tax rate of 40 %)

#### **INVESTMENT GRANTS RECEIVED**

Investment grants granted by individual Lands of the Federal Republic of Germany and the European Union from public funds for the pro-

motion of certain planned investments are first carried as liabilities and written back periodically according to the depreciation of assets acquired or manufactured in connection with the investment grants. The public grants for the research and development of innovative products and processes are shown as affecting the result parallel to the related costs arising in the corresponding period.

The general partner is solely subject to the trade tax. The taxation of his share in profits within the limits of the corporation tax and solidarity surcharge takes place in the personal sphere of the general partner by applying individual tax rates applicable to him.

#### **USE OF ESTIMATES**

In the framework of the consolidated financial statements, estimates and assumptions must be made to a certain degree that affect the balanced assets and obligations, the indication of contingent liabilities on the balance-sheet date and the reporting of earnings and expenses during the reporting period. The actual figures may deviate from these estimates.

#### **RECENT PRONOUNCEMENTS**

SFAS No. 133 "Accounting for Derivative Instruments and Hedging Activities" was published in June 1998. SFAS No. 133 regulates the accounting for derivative instruments, which also include certain derivative instruments embedded in other contracts or hedging activities. In June 1999, SFAS No. 137 "Accounting for Derivative Instru-

ments and Hedging Activities - Deferral of the Effective Date of FASB Statement No. 133" was published, which prescribes January 2001 as the last date for applying SFAS 133 for the company. In June 2000, SFAS No. 138 "Accounting for Certain Derivative Instruments and Certain Hedging Activities" was published, which is a supplement to SFAS No. 133. The management has examined the consequences of SFAS No. 133 and expects that the first application of SFAS No. 133 beginning January 1, 2001 will have no significant effects on the financial situation and profit situation of the company.

## (4) SECURITIES AND LONG-TERM FINANCIAL ASSETS

The acquisition costs and market values of the executionary titles and securities with equity interest are composed as follows:

				Dec. 31, 2000			D	ec. 31, 1999
	Acquisition	ı	ınrealized		Acquisition		unrealized	
	costs	gain	loss	Market value	costs	gain		Market value
	TEUR	TEUR	TEUR	TEUR	TEUR	TEUR	TEUR	TEUR
Available-for-Sale								
Debt instrument from federation and federal states	11,142	42	422	10,762	10,402	0	583	9,819
Debt instrument from public limited companies	785	0	18	767	11,028	3	9	11,022
Total	11,927	42	440	11,529	21,430	3	592	20,841
Trading								
Shares	7,013	446	1,617	5,842	5,618	860	51	6,427
Total	7,013	446	1,617	5,842	5,618	860	51	6,427
	18,940	488	2,057	17,371	27,048	863	643	27,268

The following table shows the acquisition costs and market price of the assets portfolio present at the end of the year after the contractual remaining life:

	Dec. 31, 2000		D	ec. 31, 1999
	Acquisition costs	Market value	Acquisition costs	Market value
	TEUR	TEUR	TEUR	TEUR
Available-for-sale securities due				
within one year	1,299	1,268	10,243	10,246
between 2 and 5 years	5,388	5,178	5,369	5,177
between 6 and 10 years	3,241	3,139	5,100	4,727
after 10 years	1,999	1,944	718	691
	11,927	11,529	21,430	20,841

Among the "trading" securities, there are no securities that have a life of more than one year. The revenue from the sale of available-for-sale securities amounts to 12,928 TEUR (1999: 15,903 TEUR). The resul-

ting losses for the year reported (gains in the prior year) amount to 166 TEUR (1999: +243 TEUR). From the sale of "trading" securities 22,149 TEUR (1999: 4,791 TEUR) were attained in the year reported.

The resulting gains amount to 3,946 TEUR (1999: 893 TEUR) and the resulting losses 1,035 TEUR (1999: 242 TEUR).

## (5) TRADE RECEIVABLES

	Dec. 31, 2000 TEUR	1999 Teur
Gross value of receivables from goods and services	32,758	22,456
minus value adjustments	1,890	1,277
	30,868	21,179

The overall trade receivable amount have a remaining life of less than one year.

# (6) INVENTORIES

	Dec. 31,	
	2000	1999
	TEUR	TEUR
Raw, auxiliary and operating materials including pre-payments on stocks	5,458	5,251
Unfinished products	32,646	29,646
Finished products	8,149	5,131
	46,253	40,028

# (7) OTHER CURRENT ASSETS

	Dec. 31,	
	2000	1999
	TEUR	TEUR
Claim of investment premiums	430	510
Claim of investment and technology subsidies	1,214	1,431
Interest demands	279	500
Tax demands	3,034	2,864
Pre-Payments	91	105
Other	242	117
	5,290	5,527

# (8) FIXED ASSETS

	Dec. 31, 2000 TEUR	1999 Teur
Acquisition costs	1201	TEOR
Land	1,333	1,328
Buildings	32,265	26,921
Other facilities, plant and office equipment	41,501	36,409
Buildings and equipment in progress	1,744	3
	76,843	64,661
Accumulated depreciations of the previous years	32,254	27,915
Depreciations of the business year	5,718	4,843
	38,871	31,903

# (9) INTANGIBLE ASSETS

	Dec. 31,	
	2000	1999
	TEUR	TEUR
EDP Software (derivative)	3,182	2,754
Sales licenses	876	0
Goodwill	787	804
	4,845	3,558
Accumulated depreciations of the previous years	2,338	1,799
Depreciations of the business year	498	539
	2,009	1,220

## (10) SHORT-TERM DEBT

As of December 31, 2000 and 1999, the exhaustible credit volume of the company, based on stipulated credit limits with various banks, amounted to 38,956 TEUR and 37,566 TEUR respectively. The

credits are unsecured, and as of December 31, 2000, equipped with an effective interest rate of between 5.475 % and 7 %. The overall outstanding accounts for outside capital amounted to 959 TEUR and

1,683 TEUR as of December 31, 2000 and 1999.

Interest payments occur monthly or quarterly according to the agreements made with several banks.

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# (11) DEBT MATURING WITHIN ONE YEAR

The debt maturing within one year are due as follows:

	2001	2000
	TEUR	TEUR
1. quarter	21	34
2. quarter	500	626
3. quarter	21	30
4. quarter	500	612
	1,042	1,302

Interest payments are made in accordance with agreements with various banks either on a monthly, quarterly, or semi-annual basis.

# (12) OTHER CURRENT LIABILITIES

The balance sheet item is divided as follows:

	Dec. 31,	
	2000	1999
	TEUR	TEUR
Salaries and wages	1,850	1,161
Income tax on salaries and wages	719	508
Social security contributions	1,176	934
Wealth creation	41	30
Commission charges	70	127
Grants	101	0
Taxes	185	0
Other Other	196	489
	4,338	3,249

## (13) INCOME TAX

The expenses for income taxes were as follows:

	Dec. 31,
	2000
	TEUR
German corporation tax	5,936
German solidarity surtax	441
German trade tax	3,802
Foreign income tax	202
Current taxes	10,381
Deferred tax earnings	-3,455
Other tax expenditure	457
Total	7,383
from it	
Germany	7,163
Foreign countries	220

The following table shows a transition calculation from the expected to the actual tax expense. For the calculation of the expected tax expense, the effective corporation income tax rate of 42.2 % for the business year 2000 is multiplied by the result after trade income tax.

		Dec. 31, 2000
	2000	in
	TEUR	%
Earnings before tax (EBT)	25,080	100.0
Trade tax expenditure	3,567	14.2
Earnings after trade tax	21,513	85.8
Expected corporation tax expenditure (incl. Solidarity surtax)	9,078	36.2
Production of tax on dividends	-194	-0.8
Discrepancies in taxation in foreign countries	-81	-0.3
Disallowable depreciation on goodwill	33	0.1
Tax-free yields	-219	-0.9
Non tax-deductible expenses	1,033	4.1
Creditable taxes	-719	-2.9
Other	85	0.4
Effect of tax reform in Germany in 2001	-285	-1.1
Other changes in value adjustments on deferred taxes	-2,129	-8.5
Tax expenditure before tax reduction on profits of the general partner	10,169	40.5
Amount of tax relief on the profit of the general partner	-2,786	-11.1
Declared tax expenditure	7,383	29.4

The tax relief amount on the profit share of the general partner (gp) results from the fact that the corporation income tax and the solidarity supplement on the profit share of the gp are not to be shown in the company. These taxes are to be attributed directly to the personal sphere of the gp, and - independently of the tax rates valid for the company - are taxed individually within that sphere. The percentage of tax expense before tax reduction from the profit share of the gp (40.5 %) thus corresponds to the effective tax quota which is to be applied to the profit components that are attributable to limited shareholders.

The company draws up a balance sheet for deferred taxes in accordance with SFAS No. 109 "Accoun-

ting for Income Taxes". For this, the differences stemming from various valuations in the consolidated balance sheets and in tax valuations are taken into account through the estimation of deferred tax assets and liabilities, such that a reliable identification of asset values and liabilities of the company can be achieved. Similarly, future reductions in tax expenses due to the carrying forward of tax-related losses can be taken into account.

For the calculation of deferred taxes to be taken into account, the decisive local tax rate in each foreign country was taken into consideration. Deferred taxes to be considered for Germany were calculated with tax rates of

• 13.90 % for trade tax

• 42.20 % for corporation income tax and related solidarity supplement (5.50 %).

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The tax abatement effect due to the new taxation for corporate entities valid as of 2001 with a definitive taxation of 25 % amounts to 285 TEUR. Losses carried forward are treated as tax reductions, and flow into the calculation of deferred taxes. These losses carried (1,705 TEUR) - subject to a change in law - may be carried forward without limit

The favorable and unfavorable deferred taxes are calculated from accounting differences in the following balance sheet items:

	Dec. 31,
	2000
	TEUR
Securities	399
Investment grants received	1,824
Pension	29
Net operating loss carryforwards	1,705
	3,957
Total deferred tax assets	1,028
Securities	1,500
Property, plant and equipment	9,201
Other	125
	10,826
Total deferred tax liabilities	2,690
Net amount deferred taxes	1,662

The creation of a value adjustment for deferred taxes has not occurred by the qualifying date.

The delimitation items for deferred taxes are derived as follows:

The demination for determed taxes are defined as follows:	
	Dec.31,
	2000
	TEUR
Short-term deferred tax liabilities	323
Short-term deferred tax assets	529
	-206
Long-term deferred tax liabilities	1,868
Long-term deferred tax assets	0
	1,662

# (14) OTHER ACCRUALS

The other accruals are derived as follows:

	Dec. 31,	
	2000	1999
	TEUR	TEUR
Liabilities in personell and social areas	3,391	2,308
Guarantee provision	777	671
Commission charges	309	62
Outside services	268	106
Provision of payments yet to produce	232	0
Other Other	569	46
	5,546	3,193

# (15) LONG-TERM DEBT

The long-term debt are composed of the following:

	Dec. 31, 2000 TEUR	1999 TEUR
Loan from the Bayerische Landesanstalt für Aufbaufinanzierung	ILOK	TEOR
Fixed value 1,027 TEUR, maturity period until 30.12.2000, half-yearly repayment of 57 TEUR each time		
on 30.06. and 30.12., interest rate 3.5 % (secure until 30.12.2000)	0	114
Loan from the Kreditanstalt für Wiederaufbau	· ·	
Fixed value 772 TEUR, maturity period until 30.12.2003, half-yearly repayment of 55 TEUR each time on		
30.06. and 31.12., interest rate 5.75 % (secure until 30.12.2003), extraordinary redemption payment on 28.11.2000	0	362
Loan from Sparkasse Ehingen		
Fixed value 256 TEUR, annuity repayment with monthly due performance rate of 5,1 TEUR		
Interest rate 7 % (secure until 30.08.2000)	0	39
Loan from Sparkasse Ehingen		
Fixed value 10 TEUR, annuity repayment with monthly due performance rate of 0,2 TEUR		
Interest rate 6.45 % (secure until 29.02.2001)	0	3
Syndicate loan from the Schmidt Bank KGaA (5,113 TEUR) and the Landesanstalt		
für Aufbaufinanzierung (2,556 TEUR), fixed value 7,669 TEUR, maturity period until 30.06.2006, half-yearly		
repayment of 480 TEUR each time on 30.06. and 30.12.,		
Interest rate varies according to tranches		
1. Part payment 2,556 TEUR, interest 5.71 % (secure until 30.06.2006)		
2. Part payment 2,556 TEUR, interest 5.74 % (secure until 30.06.2006)		
3. Part payment 2,557 TEUR, interest 5.76 % (secure until 30.06.2006)	5,273	6,232
Loan from Sparkasse Ehingen		
Fixed value 614 TEUR, annuity repayment with monthly due performance rate of 5,1 TEUR		
Interest rate 7 % (secure until 30.04.2006)	574	594
Loan from Sparkasse Ehingen		
Fixed value 179 TEUR, annuity repayment with monthly due performance rate of 0,1 TEUR	1.7	171
Interest rate 5.85 % (secure until 19.02.2002)	167	171
Loan from Sparkasse Ehingen		
Fixed value 256 TEUR, annuity repayment with monthly due performance rate of 5 TEUR	0.5	100
Interest rate 6.20 % (secure until 30.04.2002)	85	138
Loan	<b>6,099</b>	7,653
Minus debt maturing within one year	1,042	1,302
Long-term debt	5,057	6,351

Long-term debt toward credit institutes are due as shown in the following table:

	Dec. 31, 2000
	TEUR
2001 (short-term)	1,042
2002	1,017
2003	989
2004	991
2005	994
afterwards	1,066
	6,099

The total amount of secured debt as of December 31, 2000 and 1999 amounts to 6,099 TEUR (5,273 arrears of correspondence and 826 uncertificated land charges) and 7,497 TEUR (6,594 arrears of correspondence and 903 uncertificated land charges). Of

these, 1,042 TEUR (1999: 1,260 TEUR) make up the short-term debt maturing within one year.

### (16) INVESTMENT GRANTS RECEIVED

	2000	1999
	TEUR	TEUR
Position at the beginning of business year	4,922	4,336
Investment grants received in business year	2,138	1,202
	7,060	5,538
Depreciation of business year analogue to corresponding property	1,040	616
Position at the end of business year	6,020	4,922

## (17) POSTRETIREMENT AND POSTEMPLOYMENT BENEFIT LIABILITIES

The company has engaged in pension liability obligations toward members of the management board. The pension commitments encompass claims on retirement, disablement, and survivors' pensions, designed, on the one hand, as firm commitments and, on the other hand, depending

on annual salary. The pension obligations are covered within the context of the respective employer's pension liability insurance policies (special pension assets or plan assets).

Assessment of the pension obligations and the expenses necessary to

cover these obligations is done according to SFAS No. 87 "Employers' Accounting for Pensions" in accordance with the "Projected Unit Credit" method. In future, expected salary raises and other increases shall be taken into account in this assessment.

Benefit obligations for the business year are divided into the following components:

	TEUR
Service cost	61
Interest cost	20
Expected return on plan assets	0
Transition Asset	-1
	80

The following table shows the change in expectancy cash value, with relation to the projected assessment basis in the event of a pension case (Projected Benefit Obligation or PBO), the change in the pension special assets (Plan Assets), the Funded Status, as well as the pension reserves:

	IEUK
Projected benefit obligation (PBO) as of Jan. 1, 2000	339
Service cost	61
Interest cost	20
Actuarial gains	-14
Projected benefit obligation (PBO) as of Dec. 31, 2000	406
Fair value of plan assets as of Jan. 1, 2000	122
Expenses for the projected benefit obligation (Plan Assets)	-2
Benefits paid	42
Fair value of plan Assets as of Dec. 31, 2000	162
Funded status of the plan	244
Actuarial gains	14
Transition asset	23
Benefit liability on Dec. 31, 2000	281

The following assumptions were made for the calculation of the projected benefit obligation:

Interest rate:	6 %
Salary trend:	3 %
Pension trend:	2 %

## (18) STOCK COMPENSATION PLANS

In a decision made at the shareholders' meeting on June 25, 1998, company management was authorized, upon agreement of the supervisory board, to introduce a management participation program in the form of the issue of convertible bonds. For this, the share capital was increased in a limited fashion (Limited Capital I) by 153 TEUR for the issue of up to 120,000 shares in stock issued to the owner. By decision of the shareholders' meeting on May 4, 2000, the earmarking of the Limited Capital I was changed by the amount of 84 TEUR (corresponding to 66,000 shares in stock issued to the owner), such that the Limited Capital I no longer served in the granting of exchange rights to owners of convertible bonds, but rather to serve the use of subscription rights which can be issued in the form of naked options to members of the management, executive management, and employees in key functions. Due to the change purpose, a Limited Capital II resulted. The previous Limited Capital II was renamed Limited Capital III.

#### Convertible bonds program

The limited capital increase (Limited Capital I), which serves to protect exchange rights of owners, shall only be implemented insofar as the owners of expended convertible bonds make use of their conversion right.

The convertible bonds were offered for sale to management employees and those possessing key positions in the Mühlbauer Group. Subscription rights of the shareholders of the company have been excluded from this action. On July 10, 1998, 1,490 interest-free convertible bonds with a total face value of 71 TEUR and having a term until July 4, 2003 were issued.

Each convertible bond with a face value of 51.13 EUR entitles the ow-

ner to an exchange for 40 shares in stock ("stock options") of the Mühlbauer Holding AG & Co. KGaA. The conversion right may be asserted 2 years after issue of the bond at the earliest (i.e. on July 10, 2000 at the earliest, up to 30 %, on July 10, 2001, up to 60 %, on July 10, 2002, up to 100 %), and has the prerequisites the development of the stock market course of Mühlbauer stocks exceeds the development of the "Neuer Markt", and that pretax profit margin lies over 15 %. The shares, newly issued due to conversions, take part in profit starting from the beginning of each business year by being sold through the assertion of exchange rights.

The following table reflects the development of the number of stock option rights granted in the course of the business years 2000 and 1999:

	2000	1,,,,
	pieces	pieces
Jan. 1	55,600	59,600
Granting of new options	0	0
Conversion	-14,880	0
Decline of description rights	-2,800	-4,000
Expiration of conversion period	0	0
Dec. 31	37,920	55,600

The conversion price of the individual stock options corresponds to the sales price per share in stock (24.54 EUR), which was achieved within the IPO.

As of the qualifying date, the prerequisites for asserting conversion rights have been met for 15,840 stock options.

The company shows their obligations from stock option plans in the balance sheet according to APB 25 "Accounting for Stock Issued to Employees" and additionally publishes the supplementary information required by SFAS No. 123 "Accoun-

ting for Stock-Based Compensation". In the business year, an effective allocation to the share-oriented delimitation item (capital reserve) in the amount of 2,284 TEUR was undertaken for this plan. In the previous year, an expense of 311 TEUR was recorded.

The weighted average market value of the convertible bonds issued in 1998 amounted to 11.50 EUR at

the time of allocation, using the option assessment model of Black Scholes. The following assumptions were used as a basis: volatility factor 67 %, projected distribution factor 0 %, risk-free interest rate 4.1 %, projected life 3 years.

If the expenses of the convertible bonds had been determined according to the method in SFAS No. 123, based on the current value at the time of granting, the following changes would have resulted in the corporate annual financial statements:

		2000	1999
Net income			
As reported	TEUR	17,697	13,824
pro forma	TEUR	19,804	14,013
Earnings per share			
Basic			
As reported	EUR	1.02	0.68
pro forma	EUR	1.17	0.73
Diluted			
As reported	EUR	1.02	0.68
pro forma	EUR	1.16	0.73

#### **Option Program**

Due to the change in purpose of the Limited Capital I to Limited Capital II in the amount of 84 TEUR stipulated in the shareholders' meeting on May 4, 2000, the company management has been authorized, in agreement with the supervisory board, to issue to members of management, executive management, and employees in key positions subscription rights for up to 66,000 shares in stock issued to the owner in the form of naked options. The new ordinary shares participate in profit by being issued as a result of the assertion of subscription rights.

The subscription price corresponds to the average spot rate of the share of the company on the Frankfurt stock exchange on the last five trading days before the start of the issue period. The subscription rights can be asserted up to 30 % after a waiting period of 2 years has passed, up to 60 % after a waiting period of 3 years, and up to 100 % after a waiting period of 4 years.

Subscription rights can only be asserted by authorized persons if the pretax profit margin amounts to 15 %, or if the value increase of the share between granting of subscription rights and the last stock market day before the day of assertion corresponds to at least the value increase of the NEMAX All Share Index during the same period. Company management has been authorized to determine further individual goals of success within the option contract. Subscription rights not as-

serted shall expire upon termination of the employment relationship of the owner of subscription rights or after a period of 6 years after granting of such rights.

In the report year, no subscription rights were granted from this program.

## (19) SHARE CAPITAL AND FIXED CAPITAL OF THE GENERAL PARTNER

#### Number of issued shares

The number of no par value shares issued on December 31, 2000 by Mühlbauer Holding AG & Co. KGaA amounted to 3,894,880 (previous year: 3,880,000), divided into 3,894,879 non registered shares (previous year: 3,879,999) and 1 registered share. The owner of each registered share reserves the right to dispatch one-third of all supervisory board members to the supervisory board. The dispatch right

does not exist insofar and as long as the owner of the stock allowing dispatch rights is the general partner, his general partner, or one of the members of the board of directors. Each number of share represents a share of the share capital in the amount of EUR 1.28, allows one voting voice in the shareholders' meeting, and is fully entitled to dividends. Dividends can only be distributed from the distributable earnings in accordance with the commercial annual financial state-

ments of Mühlbauer Holding AG & Co. KGaA. The shares of the general partner are excluded from execution of the voting right insofar as voting concerns matters having to do with him or his control.

# Fixed contribution of the general partner

The general partner (gp) joined the company on May 5, 1998 with a capital contribution ("general partner contribution" or "Capital Share B"), not contributed to the share capital, in the amount of 13,820 TEUR. The contribution of the general partner was made by contributing all shares in Mühlbauer GmbH that were converted on May 6, 1998 to Mühlbauer AG.

Contribution of company shares, according to US-GAAP, represent a so-called "common control transaction" (business transaction between companies under a single management), and, in accordance with APB 16, was entered in the balance sheet with the book value of the shares. At the time of contribution, this amount was 51 TEUR.

The shareholders' meeting, with the agreement of the general partner, may stipulate the conversion of Capital Share B to share capital. The conversion is done via a capital increase. The face value of the capital increase corresponds to the face value of the capital concerned of the general partner. Insofar as approved capital is available, the capital increase is to be performed for the conversion of general partner capital into stock from the available capital. If this is legally prohibited or if the approved capital is not sufficient, the shareholders' meeting reserves the right to create the prerequisites for conversion by means of a capital increase. The subscription right of limited shareholders may be excluded for this procedure.

In the event of a complete conversion of Capital Share B, the increase of the share capital exceeds the book value of the fixed contribution by TEUR 13,754.

In the event that his capital share is fully converted to share capital, the general partner shall cease being the general partner upon validity of the capital increase.

Conversion of Capital Share B (general partner contribution) into share capital

The shareholders' meeting on May 4, 2000 stipulated the conversion of 486 TEUR of Capital Share B into share capital. The conversion was performed under partial utilization of approved capital. The 380,000 ordinary shares created by the capital increase were subscribed by the general partner. The new shares participate from earnings as of the beginning of the respective business year by being issued after assertion of the conversion right. Entry into the commercial register has not yet taken place.

Accounts of the general partner

The following accounts are maintained for the general partner:

- an interest-free Capital Account I, into which Capital Share B, in the current amount of 13,820 TEUR, is booked,
- an interest-free Capital Account Il as a (capital) reserve account, into which additional money to be paid for the contribution of the capital share is booked, and which currently shows no balance,
- an interest-free Capital Account Ill as (profit) reserve account, in which the profit shares due to the general partner but which he cannot yet withdraw, and which currently shows no balance,
- an interest-free account for losses carried forward, in which the loss shares of the general partner are booked, and which currently shows no balance, and
- a clearing account, as an active account, in which the accessible profit shares, withdrawals, job compensation, interest and other payment transactions between the company and the general partner are booked. The balance as of the

qualifying date amounted to 6,302 TEUR (previous year: 5,414 TEUR). Insofar as is legally permitted, the general partner may withdraw funds from the clearing account during the current business year without the accrual of interest in any case in which payment is required for personal taxes related to him or his partners in connection with his participation. Otherwise, debit and credit interest rates are to be applied to the clearing account at an annual rate of 2 % above the respective base interest rate of the authorative central bank.

#### Company-owned shares

The further development of the company-owned stock portfolio is indicated below:

		TEUR
	As of Dec. 31, 1999	24,800
-	Sale as a so-called employee shares within the meaning of § 19a EstG (Income Tax Act) to	,
	employees of the Mühlbauer group	5,505
-	Sale of shares via the stock exchange	10,000
+	Acquisition of own shares for the operation of a further employee shares program planned for spring 2001	7,000
	As of Dec. 31, 2000	16,295

#### Limited capital

Under consideration of the reallocation of a portion of the limited capital as a result of the shareholders' meeting on May 4, 2000, and the conversion performed in the report year of 14,880 no par value shares (see 18), the share capital has been increased in a limited fashion by up to 50 TEUR through the issue of up to 39,120 shares issued to the owner (Limited Capital I). The limited capital increase serves to protect exchange rights of owners of convertible bonds, for whose issue the general partner was authorized in the decision of the shareholders' meeting of June 25, 1998. The limited capital increase is only to be performed to the extent in which the owners of the convertible bonds make use of their conversion rights. The new shares participate from earnings as of the beginning of the business year in which they are created through the assertion of conversion rights.

The share capital is further increased in a limited fashion by up to 84 TEUR through the issue of up to 66,000 shares in stock issued to the owner (Limited Capital II). The limited capital increase in this amo-

unt serves the use of subscription rights in the form of naked options, for whose issue the general partner was authorized in the decision of the shareholders' meeting on May 4, 2000. The limited capital increase is only to be performed to such an extent as the authorized persons make use of their subscription rights. The new ordinary shares participate in the profit as of the start of the business year in which they are created through the assertion of subscription rights.

Furthermore, the share capital is increased in a limited fashion to up to 1,997 TEUR, divided into up to 1,560,000 shares in stock issued to the owner. The limited capital increase is to be performed only to the extent that the general partner requests the conversion of Capital Share B into share capital. The new shares participate in the profit as of the start of the business year in which they are issued through the assertion of conversion rights.

#### **Authorized capital**

The general partner, upon agreement of the supervisory board, is authorized to increase the share capital by June 30, 2003 through the

issue of new shares issued to the owner in return for cash contribution once or several times, but by a maximum of 2,301 TEUR. The general partner, upon agreement of the supervisory board, may exclude the subscription rights of shareholders up to a face value of a total of 460 TEUR, in order to issue the new shares at an issue price which is not significantly less than the market price, and he may exclude the subscription rights of shareholders in order to free up the shares for conversion into general partner capital. Through the conversion of a portion of Capital Share B to share capital, stipulated at the shareholders' meeting on May 4, 2000, 486 TEUR were utilized. Up to the end of the report year, the authorized capital amounts to 1,815 TEUR.

The share ownership of the share capital is indicated below:

Name		Dec. 31, 2000		Dec. 31, 1999
	TEUR	%	TEUR	%
Mühlbauer Holding AG & Co. Verwaltungs KG	1,174	23.54	1,177	23.71
Free float	3,791	76.04	3,758	75.65
	4,965	99.58	4,935	99.36
Own shares	20	0.42	32	0.64
	4,985	100.00	4,967	100.00

#### Additional paid-in capital

The additional paid-in capital concern the premium from the capital increase, entered in the commercial register on July 8, 1998, on the occasion of the entry of the company into the stock market, the capital increase concerns new shares for which a premium was also created (Greenshoe option), minus the costs for entry onto the stock market. The capital increase performed in the business year of 1999, in connection with the adaptation to the Euro in accordance with Item 6 of the shareholders' decision of May 6, 1999 was booked to the debit of the additional paid-in capital.

The development of the additional paid-in capital is indicated below:

		TEUR
	Premium for the 2,680,000 individual share certificates at	
	23.26 EUR ("ex Splitt") newly issued for the purposes of going public.	62,347
-	Cost of going public	-3,907
-	Withdrawal from the share premiun account to	
	the adjustment of the share capital to the EURO	-7
-	Premium on 16,295 own shares held as of Dec. 31, 2000	-355
+	Premium on the 14,880 newly emerging shares by	
	executing the conversion privilege in 2000	346
+	deferred compensation (Reserve fund for the expenses accrued in connection with the convertible bonds program	
	in accordance with APB, no. 25)	2,594
	As of Dec. 31, 2000	61,018

#### **Dividend distribution**

The general partner participates in the assets of the company, including the silent reserves, and participates in the profit and loss of the company, as well as in liquidation revenue to such an extent in which the ratio of his capital share corresponds to the share capital.

The calculation of the profit and loss shares of the general partner is based on the result determined in the individual financial statements of Mühlbauer Holding AG & Co. KGaA in accordance with commercial principles:

	AU & CO. KUDA
	TEUR
Year's result (annual surplus/-annual deficit prior to proportion of profit or loss of general partner)	8,502
+ Corporation tax credit, in sofar as it is not already recorded as profit	0
+ Corporation tax expenditure (including on the corporation tax credit)	73
+ Expenditure on other taxes and duties only concerning share	0
Assessment basis	8,575
Proportion of profit or loss subject to the proportion of general partner on the total capital (at the moment 73.49 %)	6,302

The profit share due to the general partner - insofar as a loss is carried over - is initially to be utilized to balance out the loss carried forward. In other respects, the profit shares of the general partner are deposited into Capital Account III, if and insofar as the profit due to the limited partners is allocated in the profit reserves. The retained profit amounts thus to be allocated to Capital Account III are to be assessed such that they are proportional to the ratio of the capital share of the general partner to the share capital. Insofar as the profit share of the general partner is not to be used to balance out the account for losses carried forward or for endowment of Capital Account III, it shall be deposited into the clearing account. The above applies respectively if the amounts are taken from the profit reserves.

The general partner receives compensation for all expenses accruing in connection with company management.

Recorded fictitious tax rebate claims of the general partner till now with an amount of TEUR 4,487 were settled success neutrally with the shares of profits of the general partner increased arithmetically in same level in the year of report.

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## (20) OTHER COMPREHENSIVE INCOME

The components of the Other Comprehensive Income appear as follows:

		2000			1999	
	Before	Tax		Before	Tax	
	taxes	effect	net	taxes	effect	net
	TEUR	TEUR	TEUR	TEUR	TEUR	TEUR
Difference from currency translation	118	-	118	0	-	0
Unrealized gains/losses from the market						
assessment of securities:						
Change in the unrealized gains /(-) Losses	-565	113	-452	-661	154	-507
Realized (-)gains/losses	166	-33	133	72	-17	55
Unrealized gains/losses	-399	80	-319	-589	137	-452
Total Other Comprehensive Income	-280	80	-201	-589	137	-452

## (21) FINANCIAL INSTRUMENTS

	book value TEUR	Dec. 31, 2000 Market value TEUR	book value TEUR	Dec. 31, 1999 Market value TEUR
Assets				
Cash and cash equivalents	3,618	3,618	1,451	1,451
Securities (current)	6,609	6,609	17,449	17,449
Trade receivables	30,868	30,868	21,179	21,179
Other current assets	5,290	5,290	5,527	5,527
Securities (long-term)	10,762	10,762	9,819	9,819
Liabilities				
Short-term debt	959	959	1,683	1,683
Debt maturing within one year	1,042	1,042	1,302	1,302
Convertible bonds	49	2,255	71	915
Long-term debt	5,057	5,057	6,351	6,351

In the case of cash and cash equivalents and short-term debt, the book value corresponds to the market value on the qualifying date. The trade receivables reported are exclusively short-term. Thus, their book values closely resemble their market value. The debt maturing within one year have conventional

interest rates. The market value of the convertible bonds issued by the company is regularly determined by the intrinsic value (year-ending stock price less sale price per share). Up to December 31, 2000, the convertible bonds issued at that time were valued at 49 TEUR (previous year: 71 TEUR). Under consi-

deration of the intrinsic value on December 31, 2000, the market value of bonds amounts to 2,255 TEUR (previous year: 915 TEUR).

# (22) PURCHASE OF OWN SHARES

The general partner was authorized at the shareholders' meeting on May 6, 1999 to repurchase up to 10 percent of own shares up to October 31, 2000. The purchase price per share may not exceed the highest determined course on the Frankfurt stock exchange on the day of purchase. It may lie at a maximum of 25 percent under that amount.

Through a shareholders' meeting decision on May 4, 2000, the general partner has been authorized to purchase shares of up to 10 percent of the share capital of the company as a representative of the

company for a period of 18 months beginning on the day in which the decision was made. The purchase price per share may not exceed the highest determined course on the Frankfurt stock exchange on the day of purchase. It may lie at a maximum of 25 percent under that amount. In the event of a public offer of sale, the offered and paid purchase price per share may lie up to 10 percent above the highest course on the third stock market day before publication of the offer of sale. The general partner has been authorized to redeem the shares purchased as a result of the authorization without a further shareholders' meeting decision. Based on this authorization, the purchase of own shares and/or redemption of own shares can also be done in portions.

In the year 1999, the company made use of the authorization issued on May 6, 1999, and purchased a total of 24,800 shares from the market. Of these, the company still owned 9,295 shares, or 0.24 percent of the share capital, as of December 31, 2000. The assessment of own shares is done according to the par value method.

## (23) SEGMENT REPORT

The company develops, produces and sells products in the area of the semiconductor and chip card industries. Chief customers are the smart card and semiconductor industries. Due to the high density of integration of the individual business areas contributing to implementing synergy effects reporting is performed in accordance with SFAS No. 131 "Disclosures about Segments of an Enterprise and Related

Information". As of December 2000 details additionally required by SFAS No. 131 appeared as follows:

Applications	2000	1999
Could off o	TEUR	TEUR
Smart Identification Semiconductor Related Products	48,552	34,984
	42,427 8,616	22,159 5,421
Board Handling Precision Parts & Systems	10,981	8,597
Tiecisioni Tulis & Systems	110,576	71,161
Detraction of revenue	-254	-135
Deliacion di revenue	110,322	71,026
	110,022	71,020
Geographic information	2000	1999
	TEUR	TEUR
Rest of Europe	41,482	23,559
Germany	33,545	27,244
Asia	25,016	13,356
North America	6,478	5,598
South America	2,592	1,324
Africa	1,410	53
Australia	53	27
	110,576	71,161
Detraction of revenue	-254	-135
	110,322	71,026
	0000	1000
Book value of fixed and tangible assets	2000	1999
	TEUR	TEUR
Germany	40,678	32,885
Asia	146 52	129
Rest of Europe North America	52 4	86 23
Norm America Sum	40,880	33,123
Juli	40,000	33,123

## (24) SIGNIFICANT TYPES OF COSTS

The cost of materials and personnel contained in the profit and loss account of the company, divided according to the cost of sales-format, is composed of the following:

	2000 Teur	1999 Teur
Material expenditure		
Expenditures for raw, auxiliary and operational materials and for goods purchased	37,517	16,801
Expenditures for purchased services	1,796	1,616
Personal expenditure		
Salaries and wages	33,089	23,423
Social duties and expenditures for pension and for support	6,147	4,561
from it for pensions	111	103

As of December 31, 2000, the company has introduced a new cost account system. The system conversion allowed a better alloca-

tion, compared to the previous year, of individual components of personnel costs within the context of the cost of sales-format to production, sales and general administration costs.

## (25) INCOME TAXES

Income taxes include aperiodic income to the amount of 2,129 TEUR and aperiodic expenses to the amount of 457 TEUR.

# (26) COMMITMENTS AND CONTINGENCIES

Commitments and contingencies	2000 Teur	1999 Teur
Obligations from investment plans	5,956	858
Obligations from purchase and service contracts	6,602	4,175
Obligations from leases	262	262

# (27) NUMBER OF EMPLOYEES

On an annual average, the following were employed in the concern:

	2000	1999
	number	number
Skilled workers	542	392
Executives	403	296
	945	688
Trainees and part-times	261	210
	1,206	898

# (28) SIGNIFICANT DIFFERENCES BETWEEN GERMAN TRADE LAWS AND US-GAAP

The corporate annual financial statement was drawn up in accordance with US accounting regulations (US-GAAP), which, in various aspects, differ from German accounting laws. The significant differences between the US-GAAP and German laws which are of special relevance to the company are summarized below.

#### **Fixed Assets:**

Depreciations based on tax regulations in the individual financial statements of the companies belonging to the consolidation group, especially special depreciations in accordance with §3 of the Zone Edge Incentive Law (ZRFG) and §4 of the Development Areas Law (FGG), are not permissible according to US-GAAP.

#### **Securities:**

The assessment of the securities of current assets is done under consideration of the strict lowest value principle (§253 III Commercial Code). The assessment is determined above by the acquisition costs and on bottom by the market price. Unrealized gains only become effective upon the sale of the security. In principle according to HGB securities of the financial assets are assetized with the acquisition costs. Depreciation of a lower attached fixed value (e.g. low market price) is urgent at probably constant reduction in value and optionally possible at not constant reduction in value.

According to US- GAAP securities were assessed with their market price on the day of the financial statement qualifying date. Unrealized gains and losses are treated effectively in the case of trading securities.

Unrealized gains and temporary unrealized losses are treated as neutral in the case of available-forsale securities, and are allocated to a special item in stockholders' equity (Other comprehensive income).

#### **Accruals:**

In contrast to HGB according to US-GAAP an accrual can only be created if it represents a liability to a third party (outer obligation commandment). According to US-GAAP provisions should not be created.

#### **Pension liabilities:**

According to US-GAAP, pension obligations stemming from performance-oriented, defined benefit plans are calculated according to the accumulation procedure (Projected Unit Credit method). For this, the cash value of pension obligations required as reserves is increased from year to year by the cash value of the additionally earned claim of employees (accumulation procedure). The basis for the calculation for these annual pension costs is the cash value of the earned pension expectancy, under consideration of future wage and salary adjustments (PBO) and a discounting factor corresponding to the capital market interest of highqualitative fixed-interest securities. The PBO thus does not correspond to the amount required to be reser-

In the individual financial statements drawn up according to German accounting laws of the companies belonging to the consolidation group, the liabilities for pension obligations towards employees existing on the day of the statement report, were determined using the tax-related partial value procedure, in accordance with §253 I pl. 2 of the Commercial Code. Adjustments for future wage and salary increases are not considered within the framework of this procedure. The obligations are set completely

as a liability according to insurance-related assessment with regard to retirement age, life expectancy and other factors, using a fixed annual interest rate, conventionally of 6 %.

#### "Comprehensive Income":

According to US-GAAP, comprehensive income encompasses the concern's annual surplus, unrealized gains and losses from market assessment of securities (available-for-sale securities) and difference from currency translation. The consolidated annual net income is indicated within stockholders' equity under the retained earnings. Unrealized gains and losses from available-for-sale securities and the difference from currency translation are indicated under the item "Other Comprehensive Income".

#### **Deferred taxes:**

According to German principles, favorable deferred taxation items stemming from a tax-related loss carried forward are not estimated. Estimation is only allowed for favorable deferred taxation items stemming from the assessment differences between commercial and tax-related regulations. For unfavorable deferred taxation, a liability is to be established.

According to US-GAAP, deferred taxes are detected using the liability method. To this, basically deferred taxes are imposed on differences between book values of the balance sheet and the tax-balance sheet. Favorable deferred taxes are reported on the balance sheet if realization appears to be probable. The computing of deferred tax assets should be followed by value assessment. Should the occasion arise a partial or complete value adjustment of the item is necessary.

As distinct from HGB, deferred taxes resulting from losses carried forward need not be taken into account on the balance sheet.

The assessment of deferred taxes must be realized with the tax rate expected at the time of temporary differences. Amounts resulting from tax rate modifications will be taken into account when the law becomes effective.

#### **Stock Option Plans:**

According to US-GAAP for stock option plans, the subscription rights granted are assessed in the consolidated financial statements according to APB 25 "Accounting for Stock Issued to Employees", and a corresponding liability is established during the waiting period. According to the Commercial Code, plans are not shown in the balance sheet.

#### **Translation of Foreign Currency:**

According to US-GAAP, accounts receivable and liabilities in foreign currencies are translated using the exchange rate valid on the balance sheet qualifying date. Unrealized gains and losses are treated as effective. According to German principles, the lowest value principle applies to foreign currency receivables, and the highest value principle to foreign currency liabilities. This means that only unrealized losses are shown in the balance sheet.

#### **Ownshares:**

Company-owned shares of which the company is in possession are openly deducted directly from stockholders' equity, according to US-GAAP. The German accounting regulations provide for categorizing own shares in the balance sheet under the securities of current assets.

# Consolidated Profit and Loss Account:

According to US-GAAP, the profit and loss account is to be drawn up according to the cost of sales-format

## (29) RELATED PARTY TRANSACTIONS

The companies Mühlbauer Aktiengesellschaft, ASEM Präzisions-Automaten GmbH and ABOS Automation, Bildverarbeitung, Optische Systeme GmbH rent office space from Mr. Josef Mühlbauer, who is the solely authorized representative of the board of directors of Mühlbauer Beteiligungs AG. The Mühlbauer Beteiligungs AG is the general partner of Mühlbauer Holding AG & Co. Verwaltungs KG, which, in turn, is thegeneral partner of Mühlbauer Holding AG & Co. KGaA. The rental relations-

hip is unlimited, and can be terminated by any party without observing a deadline through regular termination procedure in accordance with German law. The rental parts amounted to 275 TEUR and 279 TEUR in the years 2000 and 1999, respectively.

Mühlbauer Aktiengesellschaft, in order to secure sufficient credit for ASEM Präzisions-Automaten GmbH, has issued a letter of support for sufficient credit in the amount of over 1,000 TEUR.

The total earnings of the board of directors of Mühlbauer Aktienge-sellschaft for the business years 2000 and 1999 amount to 968 TEUR and 563 TEUR, respectively. The board of directors of this company, as of the qualifying date of December 31, 2000, had 1,570 shares (previous year: 2,456). The supervisory board received for its services to Mühlbauer Aktiengesell-schaft 6 TEUR for the business year 2000 (prior year: 7 TEUR).

# (30) MANAGEMENT BOARD AND REPRESENTATION OF THE COMPANY

The executive management and representation of the company is the responsibility of the general partner, Mühlbauer Holding AG & Co. Verwaltungs KG, Roding. It, in turn, is represented by the board of directors of its general partner, Mühlbauer Beteiligungs AG, Roding.

#### **SUPERVISORY BOARD**

Assessor Herbert Geißler

Chairman

Dipl.-Ing. (FH) Peter Drexel

Vice Chairman

Wolfgang Brückl

Concern mandates:

Mühlbauer Aktiengesellschaft

(Chair)

Concern mandates:

Mühlbauer Aktiengesellschaft

(Vice Chair)

Concern mandates:

Mühlbauer Aktiengesellschaft

Other mandates:

Supervisory board:

Mühlbauer Beteiligungs AG

(Chair)

Other mandates:

Supervisory board: Mühlbauer Beteiligungs AG

(Vice Chair)

**Earnings:** 4 TEUR

**Earnings:** 3 TEUR

Earnings:

none

## (31) STOCK PORTFOLIO OF THE MANAGEMENT AND SUPERVISORY BOARD

Mühlbauer Holding AG & Co. Verwaltungs KG held 916,852 shares (previous year: 919,998) as of December 31, 2000.

The supervisory board held 4,266 shares (previous year: 900) as of December 31, 2000.

# INDEPENDENT AUDITOR'S REPORT

We have audited the accompanying consolidated balance sheet of Mühlbauer Holding AG & Co. KGaA and subsidiaries as of December 31, 2000, and the related consolidated statement of income. statement of changes in equity and cash flows as well as notes for the years then ended. These consolidated financial statements prepared in accordance with United States Generally Accepted Accounting Principles are the responsibility of the general partner. Our responsibility is to express an opinion on these consolidated financial statements based on our audit.

We conducted our audit of the consolidated financial statements in accordance with German auditing regulations for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer in Deutschland (IDW). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. The

audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. The audit also includes assessing the accounting principles used and significant estimates made by the general partner, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provide a reasonable basis for our opinion.

In our opinion, based on our audit the consolidated financial statements referred to above present fairly, in all material respect, the net assets and financial position of Mühlbauer Holding AG & Co. KGaA as of December 31, 2000, and of its result of operations and its cash flow for the year then ended in conformity with United States Generally Accepted Accounting Principles.

Our audit, which according to German auditing regulations also extends to the structured presentation of additional disclosures with regard to the Group's position requi-

red by Article 36 of the 7th EU Directive prepared by the general partner for the business year from January 1 to December 31, 2000, has not led to any reservations. In our opinion, on the whole the structured presentation of additional disclosures provides a suitable understanding of the Group's position and suitably presents the risks of future development. In addition, we confirm that the consolidated financial statements and the structured presentation of additional disclosures with regard to the Group's position for the business year from January 1 to December 31, 2000 satisfy the conditions required for the Company's exemption from its duty to prepare consolidated financial statements and the group management report in accordance with German accounting law.

Munich, March 15, 2001

PWC Deutsche Revision Aktiengesellschaft Wirtschaftsprüfungsgesellschaft

(Eiber) Auditor (Hartmann) Auditor



Assembly and packaging of semiconductors
Technology of producing semiconductor components by attaching dice on to flexible carrier material
Contact balls, situated on a chip. The chip can be placed on the carrier and electrically connected without wiring.
Packaging strap especially for transporting electronic components
Sinking a bed into a chipcard before placing the module
Attaching and/or wiring dice on to carrier material such as circuit boards
See Bare die on flex
Cards in which the transfer of energy and/or data is carried out by means of electromagnetic fields
Cards in which credit limits are not paid in advance. Payment is carried out after receipt of goods or services.
Positioning a small silicon chip on carrier material
Silicon crystal with a single semiconductor-type microcontroler
Semiconductor products, like transistors or diodes, which are run at low voltage
Type of card uniting the functions of contact and contactless card technologies
Attaching dice on to carrier material using an adhesive process (epoxy process)
Process of turning dice 180 degrees either for further processing or attaching on to carrier material
Chipcards with a special normed size for use in mobile telephones. The "Global System for Mobile
Communications (GSM)" is an international, terrestrial mobile telephone system.
Embedding a chip in a plastic card
Attaching a heat-activated adhesive film on to the reverse side of a module
Card with magnetic strip which acts as carrier of data
New technological principle combining elements comming from mechanics, computer sciences, and electronics. Mechatronics have positive influences on modularity, planning and developing of machines and systems – and also on relevant job outlines.
Carrier material for a die with prepared contact elements
Printed circuit board or printed card with inserted semi-conductor components
Transport system for printed circuit boards
Process of allocating data to a card by entering personal data on to a chip, magnetic strip or card surface
Pressing out a small chipcard from a normal-sized card for use in mobile telephones
Semiconductor products, like transistors or diodes, which are run at high voltage
Loading on the operating system on a chip
Space-saving technology in printed board component insertions
Chipcard, a plastic card with a chip module
Contactless identification system
Card application used particulary in digital cameras or as a means of storing music
Protection for the chip and its wire tie by applying a sealing compound on the reverse side of the chip
New card-application with additional funktions like display, keyboard or fingerprint sensor
See Smart Labels
Testing, labelling and packing semi-conductors for further processing
Ready-to-use, total solutions
International standard for data transfer between mobile phones
Very thin semiconductor disc or plate made of silicon from which many separate chips can be produced. The wafers are sliced, thereby defining the so-called dice.

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