

Annual Report  
2003/04

## CONSOLIDATED KEY FIGURES

		HGB		IFRS		03/04
		99/00	00/01	01/02	02/03	
Copper price LME settlement (average)	US\$/t	1,787	1,684	1,525	1,653	2,607
<b>Results</b>						
Revenues	€ m	1,897	2,010	1,842	1,816	2,481
EBT	€ m	69	57	31	3	47
EBIT	€ m	74	65	42	16	58
EBITDA	€ m	107	111	98	79	129
Net income	€ m	41	42	20	3	25
Gross cash flow	€ m	78	86	97	64	118
<b>Balance sheet</b>						
Total assets	€ m	691	709	955	914	990
Non-current assets	€ m	237	259	464	437	396
Capital expenditure	€ m	79	69	47	26	28
Depreciation and amortisation	€ m	33	47	56	63	70
Equity	€ m	250	271	392	386	405
<b>NA shares</b>						
Market capitalisation at fiscal year-end	€ m	378	396	353	291	432
Earnings per share	€	1.20	1.26	0.63	0.10	0.76
Dividend per share	€	0.75	0.75	0.65	-	0.65
<b>Human resources</b>						
Number of employees (average)		3,154	3,195	3,374	3,458	3,206
Personnel expenses	€ m	150	168	178	192	180
<b>Production</b>						
Cathodes*	1,000 t	503	540	554	530	522
Continuous cast wire rod*	1,000 t	382	347	285	342	399
Continuous cast shapes	1,000 t	197	204	203	193	257
Pre-rolled strip	1,000 t	-	-	149**	138	122
Strips	1,000 t	-	-	59**	52	63
Shaped wires	1,000 t	-	-	12**	12	13
Gold	t	20	23	28	25	21
Silver	t	483	680	727	831	759

\* Including Hüttenwerke Kayser (HK) and HK's share of Deutsche Giessdraht since 1 January 2000

\*\* since fiscal year 2001/02; rounded up to twelve months

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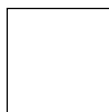


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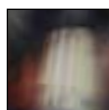
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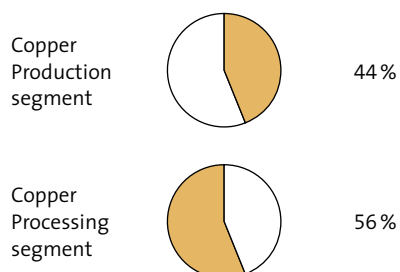
The NA Group is the largest integrated copper producer in Europe and as well the largest copper recycler worldwide. It produces about 800,000 tonnes of copper and copper products annually and with about 3,200 employees is one of the leading copper producers worldwide. The core business is the production of copper cathodes from copper concentrates, copper scrap and recycling materials. These are then processed into continuous cast wire rod and shapes, rolled products and copper alloys. Precious metals are likewise an important product sector. Further specialty products produced and marketed by the NA Group are all the major natural by-elements from copper production. These are processed, for example, into sulphuric acid and iron silicate stone. Our customers include companies in the copper semis industry, the electrical engineering, electronics and chemical industries as well as suppliers of the construction and automotive industries. The NA Group is oriented to long-term growth and increasing corporate value: our strategy focuses on strengthening the existing business and the utilisation of growth options in copper processing. NA is a member of the Deutsche Börse's Prime Standard segment and is listed in the MDAX.

You will find further information on Norddeutsche Affinerie in the internet at <http://www.na-ag.com>.

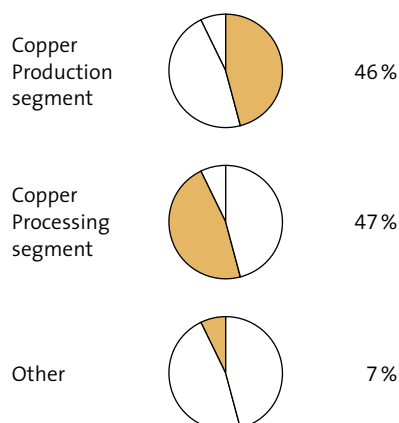
Mines and secondary markets	Copper Production	Copper Processing	Processors and end users
	<ul style="list-style-type: none"> <li>• NA Business Unit Marketing Metallurgy               <ul style="list-style-type: none"> <li>– RETORTE 100%</li> <li>– PEUTE BAUSTOFF 100%</li> </ul> </li> <li>• NA Business Unit Marketing Recycling               <ul style="list-style-type: none"> <li>– CABLO 100%</li> </ul> </li> <li>• Production sector Primary Copper Production</li> <li>• Production sector Secondary Copper Production/ Precious Metals</li> </ul>	<ul style="list-style-type: none"> <li>• NA Business Unit Copper Products               <ul style="list-style-type: none"> <li>– Deutsche Giessdraht 60%</li> </ul> </li> <li>• Prymetall 100%</li> <li>• Schwermetall Halbzeugwerk 50%</li> </ul>	

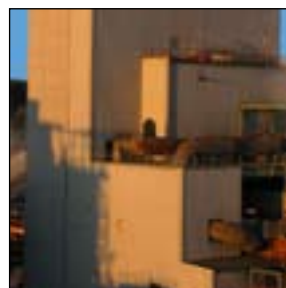
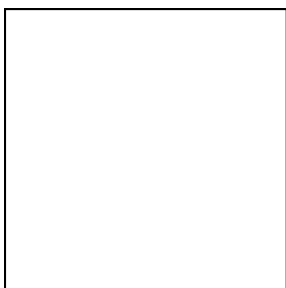
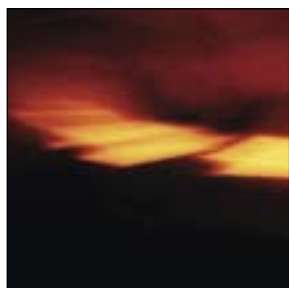
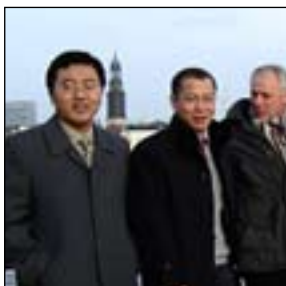
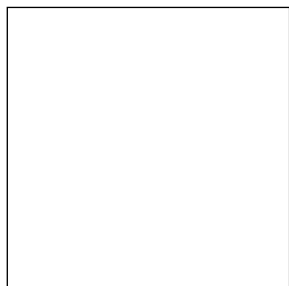
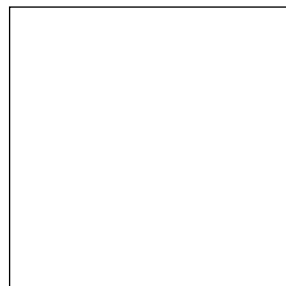
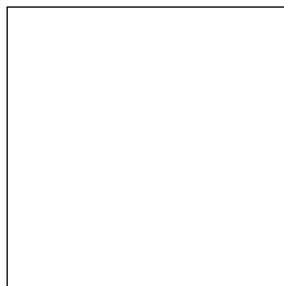
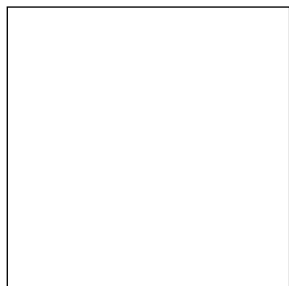
The NA Group is positioned in all sectors along the value added chain of copper. It is divided into the production segments of Copper Production and Copper Processing. In the Copper Production segment we process copper concentrates and recycling materials into high-purity copper in the form of marketable cathodes. In the Copper Processing segment we use these cathodes for the production of high-grade copper products.

**Total revenues by segments  
in fiscal year 2003/04 (IFRS)**



**Earnings by segments (EBIT)  
in fiscal year 2003/04 (IFRS)**





### From top to bottom.

The construction measures taken to enhance the performance of the concentrate processing facilities in the primary smelter result in a scheduled production stoppage during the 1st quarter of fiscal year 2003/04.

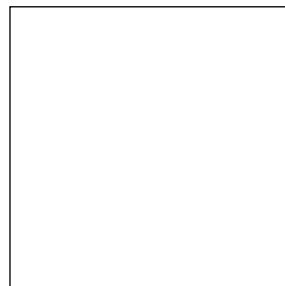
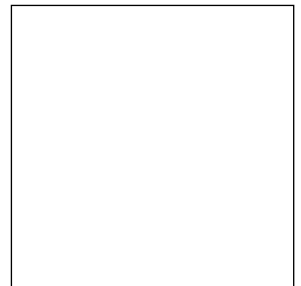
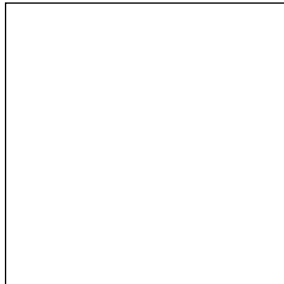
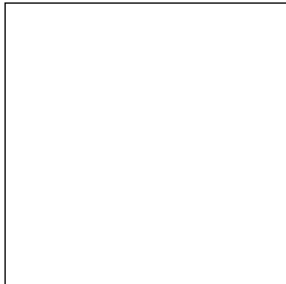
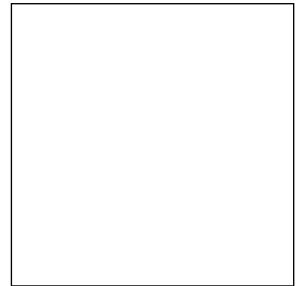
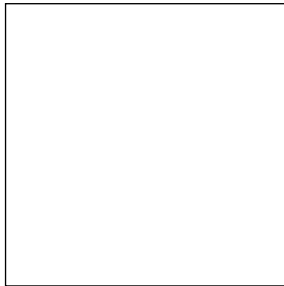
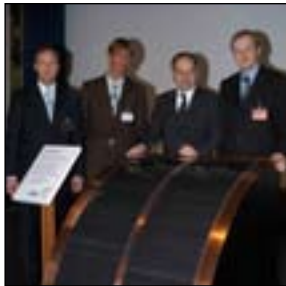
On 9 December 2003 NA presents its environmental protection record at the Environmental Protection Forum in the Alte Schlosserei.

From January 2004 onwards, five Chinese engineers complete their six month NA training course as part of the cooperation between Yunnan Copper and NA.

At the beginning of February 2004, NA signs a voluntary environmental agreement with the Hamburg Authorities for the Environment and Health Issues on the further reduction of emissions.

At the end of March/beginning of April 2004, NA presents its products at the Wire & Tube Fair in Düsseldorf.

On 1 March 2004 a Group reorganisation takes effect. Hüttenwerke Kayser AG is amalgamated with NA.



At the beginning of March 2004, NA presents its CIS solar cells at a symposium. The solar cells are presented in Chile and Brazil in April.

On 24 March 2004 the Annual General Meeting is held at which some 2,300 shareholders are briefed on fiscal year 2002/03.

On 21 June 2004 the first concentrate delivery from the new Sossego mine in Brazil reaches the Port of Hamburg.

In summer 2004 NA again organises its "Dialogue with the shareholders" on two separate days.

On 28 June 2004 NA's special tankship ENA 2 collides with the container ship Pudong Senator in Hamburg's harbour, while loaded with sulphuric acid. Despite every endeavour to prevent it, a large part of the load leaks into the River Elbe.

At the beginning of August 2004 NA welcomes 42 new apprentices in Hamburg. Further apprenticeships are offered at the Lünen and Stolberg sites.



### **Dear shareholders, business partners and friends of NA,**

NA really cannot complain about the frequently criticised media. "Insatiable demand from Far East causes copper price to rally. Climate for Norddeutsche Affinerie brightens considerably", was the headline in the *Börsenzeitung* on 17 December after publication of our unaudited results. The *Frankfurter Allgemeine* wrote: "NA profits from copper shortage." Dow Jones-VWD announced: "NA expects positive trend in 2004/05." Boerse.ARD.de explained: "Europe's largest copper producer has benefited from high copper prices and its own economy drive." While BILD quite simply told us that: "Affi copper brings in cash again."

This echo of NA's last fiscal year should in no way be taken for granted, particularly since the 1st quarter still looked relatively poor. Because there is always cause for criticism in every enterprise, and NA is no exception. But open, trustworthy communication with shareholders, analysts, the media and employees pays off. NA is a company of good standing. We notice this, not only during NA's roadshows in Germany/Europe, but increasingly in North America where investment companies have included NA shares in their portfolios.

The analysts must look at NA critically. That is their job. And also why we try to keep NA's business and policies as transparent as possible. The close ties between NA and its shareholders are also important. We are therefore continuing the "dialogue with the shareholders" and also have a stand at events like the open day at the Hamburg Stock Exchange. Because the open day is also part of how we market our shares.

The importance of a well-functioning flow of information between NA, shareholders, analysts and the media was illustrated in the summer months. NA was treated fairly after the collision involving its acid tankship. The general public realised that we were keeping them up-to-date on developments to the best of our knowledge.

The example shows that NA must be constantly alert to ensure that all information relevant to the share price is properly understood. Otherwise there is the danger that the NA share price will be lumped together with the fluctuations in raw material prices. Naturally, NA benefited indirectly that in 2004 the copper price rose to an 15 year high, since high prices ensure that sufficient copper concentrates are available, new mines are launched on the market and disused capacities resume production. A high copper price also stands for high copper demand – to the benefit of NA's product sector.

NA is also required to find an answer to the worldwide hunger for raw materials, especially to the huge demand from China. One of the entrepreneurial measures being taken is the expansion of the recycling capacities for copper and non-ferrous metals. In so doing, NA is making an acknowledged contribution to saving metal resources. After all, one tonne of copper can be extracted from 14 tonnes of old electrical equipment. Each TV set contains several hundred metres of copper wire and a car with modern electronics up to 100 kg of copper.



**Dr Werner Marnette**

began his career at NA in 1978. He became a member of the Executive Board in 1990 and was appointed Chief Executive Officer in 1994. Since 2001 he has been the Chairman of the BDI Energy Committee and Chairman of the Hamburg Federation of Industry. In 2002 he was elected Vice President of the Hamburg Chamber of Commerce.



Today, 40% of the annual copper input at NA originates from copper scrap, alloy scrap and copper-bearing secondary raw materials.

Nevertheless, the closed-loop material economy, which is also highly praised by the German government, still presents serious risks since up-and-coming developed countries such as China and India buy up recycling materials, also in the EU, with massive state support. The EU Commission in Brussels must therefore not delay in developing a long-term strategy to safeguard raw materials and protect the European recycling business. Otherwise the scrap from high tech countries will disappear into countries with low tech recycling – with adverse consequences for the environment.

Europeans are accused of moaning so much that they miss their chances. At NA we are not like that: we do the opposite. The Executive Board examines every possibility to use growth options or to secure sales. This includes the acquisitions in Stolberg and our new activities in England for NA's forward integration.

In view of the rapid globalisation of trade, tendencies towards the consolidation of our copper industry are also foreseeable. A good equity ratio and strong cash flow provide NA with a sound basis to respond flexibly to possible opportunities and challenges in the market. Such growth opportunities can open up at short notice, not only in North America and Europe, but also in Asia. The traditional markets were frequently run down last year in public debate. However, the statistics on copper usage show that remarkable growth can certainly be expected on both sides of the Atlantic.

Fashionable visions, with which spiralling share prices are achieved, are not NA's thing. NA shares are a stock with attractive yields. This must also be ensured long-term for the future. We also see this as a responsibility for securing the workplaces at NA.



Dr Werner Marnette



**Dr Bernd Langner**

has worked for NA since 1982 and became a full member of the Executive Board on 1 January 2003. He is responsible for the Copper Processing segment. He has been the Managing Director of our subsidiary, Prymetall in Stolberg, since January 2002.



**Dr Toralf Haag**

has been a member of NA's Executive Board since January 2002 when he became the company's Chief Financial Officer.



**Dr Michael Landau**

has been employed at Norddeutsche Affinerie since 1981. In March 1998 he was appointed a deputy member of the Executive Board and has been a full member since 1999. He is responsible for the Copper Production segment.

### **REPORT ISSUED BY THE EXECUTIVE BOARD AND SUPERVISORY BOARD ON THE COMPANY'S CORPORATE GOVERNANCE**

Norddeutsche Affinerie AG (NA) has committed itself to responsible, transparent corporate management, oriented to increasing enterprise value. It follows the recommendations of the German Corporate Governance Code and complies with them with three well-founded exceptions, which are detailed in the Declaration of Conformity.

The Company also complies as far as possible with the Code's voluntary proposals. Only the possibility of following the Annual General Meeting simultaneously via the internet is not yet being offered and the success-related remuneration of the Supervisory Board members does not include any components related to the long-term success of the Company; in particular the Supervisory Board members do not participate in the company's stock option plan. The Code's principles have been implemented not only throughout the company but also the Group companies by amendments and additions to the respective Advisory Boards' directives and instructions for the respective management.

### **ANNUAL GENERAL MEETING**

To assist shareholders in exercising their voting rights and in preparing for the AGM, the relevant reports and documents will be made available at the website of Norddeutsche Affinerie AG (<http://www.na-ag.com>) and sent to shareholders on request. Inasmuch as shareholders are unable to exercise their voting rights themselves, they will have the possibility of appointing a Company employee to exercise their voting rights in accordance with instructions; this representative will also be reachable during the AGM.

### **COOPERATION BETWEEN THE EXECUTIVE BOARD AND THE SUPERVISORY BOARD**

The Executive Board and Supervisory Board work together closely to the benefit of the Company. The Executive Board keeps the Supervisory Board regularly, promptly and comprehensively informed about all issues pursuant to the Company's planning, business development, risk situation and risk management. Deviations from the plans and targets are discussed in depth. The Company's strategic orientation is agreed with the Supervisory Board. As regards business of fundamental importance, the Supervisory Board has specified the provisions requiring Supervisory Board approval.

The Company has a Supervisory Board pursuant to the Law on Co-determination. Representatives of the shareholders and the employees prepare the Supervisory Board's meetings separately with members of the Executive Board.

No former members of the Company's Executive Board are on the Supervisory Board.

The Company has taken out a D&O insurance policy for the Executive Board and the Supervisory Board as well as for the Management of the subsidiaries with suitable deductibles.

## REMUNERATION OF THE EXECUTIVE BOARD AND SUPERVISORY BOARD

The total remuneration of the Executive Board members is made up of fixed and variable components. The variable components include one-time as well as annually payable components linked to business performance and components with long-term incentive effect containing risks. Stock options serve as variable remuneration components with long-term incentive effect and risk elements. Stock options are related to demanding relevant comparison parameters.

Since 1998 the Executive Board and senior staff of the NA Group have participated in a stock option plan. It is divided into five tranches and is funded by issuing new shares. Fixed interest bearing convertible bonds were issued, which entitle the holder to buy new shares if NA shares outperform the CDAX over a period of three years. The then payable purchase price, which is less than the prevailing NA share price, is determined by the performance coefficient. The reference share price at which the share options could be exercised last year was set at € 8,88 the day after the Annual General Meeting. The NA share price had outperformed the CDAX during the reference period by 14 %. The conversion period ran from 26 March to 15 April 2004. During this time the NA share price fluctuated between € 9.70 (1 April 2004) and € 10.53 (15 April 2004) with the result that the share options were at a good price during the entire period when they could be exercised.

The principles of the remuneration system as well as the concrete organisation of the current share option plan are given at the company's website.

The Chairman of the Supervisory Board informed the Annual General Meeting on 24 March 2004 about the principles of the remuneration system and its changes. The Supervisory Board discussed the structure of the Executive Board's remuneration system and examined it at its meeting on 22 September 2004. On 8 December 2004 the Supervisory Board approved a new incentive programme for the Executive Board in the form of a virtual stock option plan as part of capital market-oriented remuneration.

Apart from fixed remuneration the Supervisory Board members receive performance-related remuneration depending on the dividend distributed to the shareholders. The exercising of the chair and deputy chair positions in the Supervisory Board as well as the chair and membership in committees must also be considered.

## COMMITTEES

The Supervisory Board has formed a Personnel Committee consisting of six of its members with equal representation. In fiscal year 2003/04 the Committee's main concern was the reappointment of Executive Board members as well as the structure and level of compensation for the Executive Board.

The Supervisory Board has an Audit Committee consisting of four of its members with equal representation. The Chairman of the Supervisory Board is a member of the Committee, but not its Chairman.

The Audit Committee has concerned itself in particular with the financial statements of NA AG and the consolidated financial statements, aspects of the accountancy system and risk management, the required independence of the auditor, the awarding of the audit assignment, setting the focus of the audit and the agreement on fees.

The Committee Chairmen report regularly to the Supervisory Board on the respective Committee's work.

## EXAMINATION OF EFFICACY

On the basis of a questionnaire prepared by the Supervisory Board Chairman, the Supervisory Board has examined the efficacy of its activities and at its meeting on 22 September 2004 held without the Executive Board debated and decided on possibilities for optimising this.

## TRANSPARENCY

The requirement to present all target groups with the same information in both the German and English languages is attributed great importance in our corporate communication. Private investors can keep up-to-date on current developments in the Group via the internet. NA's ad-hoc announcements are disclosed to the shareholders via the company's website.

In accordance with Section 15 a of the German Securities Trade Act (WpHG) the members of the Executive and Supervisory Boards must report the acquisition and sale of company shares. In the last fiscal year the company was advised about the acquisition and sale of shares under the stock option plan by members of the Executive Board. Details are given in the notes to the financial statements.

## REPORTING AND AUDIT OF THE FINANCIAL STATEMENTS

The consolidated financial statements of NA AG and its subsidiaries as well as the interim reports are prepared pursuant to International Financial Reporting Standards in accordance with the current stipulations of the International Accounting Standards Board.

At the Annual General Meeting 2003 KPMG Deutsche Treuhand-Gesellschaft Aktiengesellschaft Wirtschaftsprüfungsgesellschaft, Berlin und Frankfurt am Main, was elected as the auditor for fiscal year 2003/04.

Before submitting a proposal for the election of the auditors of the financial statements, the Audit Committee demanded a declaration from the auditors about any relationship between the auditors and their senior staff on the one hand and the Company and the members of its executive bodies on the other hand that could cast doubt on the auditors' independence. Furthermore, the auditors were also obligated to advise if such circumstances should arise during the audit and need to be removed without delay.

## DECLARATION OF CONFORMITY IN ACCORDANCE WITH SECTION 161 COMPANIES ACT

The Executive and Supervisory Boards of Norddeutsche Affinerie AG declare that the recommendations of the Government Commission on the German Corporate Governance Code published by the Federal Ministry of Justice in the official part of the electronic Federal Bulletin on 26 November 2002 in the version dated 21 May 2003, as published on 4 July 2003, have been or are being applied with the following exceptions:

- The Company's fiscal year ends on 30 September of each year. By adhering to the 90 day period, publication of the consolidated financial statements would take place during the public holiday period at the end of the calendar year and would receive insufficient attention (e.g. through the annual press conference and analysts' conference). Publication will therefore continue to take place within 120 days from the end of the fiscal year (deviation from Code, section 7.1.2 sentence 2). The interim reports are publicly accessible within 45 days of the end of the respective period under view, as recommended in Code, section 7.1.2.
- The Company will initially not show the individual remuneration of members of the Executive and Supervisory Boards in the notes to the consolidated financial statements (deviation from Code, section 4.2.4, sentence 2, and section 5.4.5, para. 3, sentence 2). In the view of the Company's Executive Board and Supervisory Board, individualised details of the remuneration received by the Executive Board and Supervisory Board at Norddeutsche Affinerie AG would have no significant additional information value over the total amounts given in the notes to the consolidated financial statements. Further developments will, however, be observed.

Hamburg, 26 January 2005

The Executive Board

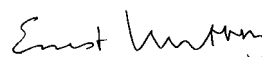


Dr Werner Marnette  
(Chairman)



Dr Michael Landau  
(Member of the Executive Board)

The Supervisory Board



Dr Ernst J. Wortberg  
(Chairman)

On the last day of the fiscal year NA shares closed at an annual high of €12.93. That corresponds to 40% growth.



The dividend recommendation for fiscal year 2003/04 continues NA's shareholder-friendly dividend policy of past years.



"I have invested in NA shares because they have substance. After all, NA is a leading copper producer and copper is needed everywhere." Eckhard Schneider, Reception, Hamburg Headquarters





# 12.93



The recovery on the European stock markets that started in 2003 continued throughout 2004. While the performances of DAX and MDAX showed disparate trends in the first half of 2004, they became more comparable in the second half. Overall, this can be seen as a good sign for the state of the German equity market. In fiscal year 2003/04 the NA share price increased significantly.

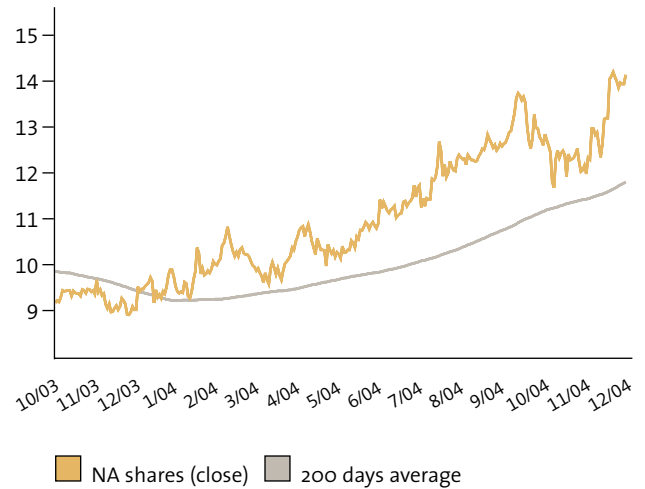
#### NA SHARES ACHIEVE 40 % INCREASE IN VALUE

After falling to a low of € 8.58 in August 2003, the NA share price firmed at € 9.20 at the beginning of the fiscal year. Following the publication of the unaudited financial statements on 17 December 2003, NA shares were quoted at € 9.48 and closed at the end of December 2003 in Frankfurt at € 9.40.

On 23 February 2004 the announcement was made about the full integration of Hüttenwerke Kayser in NA and the amalgamation which was effective retroactively to 1 October 2003. Subsequently, the NA share price stabilised at about € 10. Even in the brief weak phase of the stock market following the terrorist attack in Madrid on 11 March 2004, NA shares still remained an attractive investment. The positive interim reports on the results of the second and third quarters have supported the share price effectively. It was particularly appreciated when the Executive Board offered prospects that a dividend would be paid again. In August 2004 NA's market capitalisation was once again more than € 400 million.

#### NA shares on an uptrend

in €



The NA share price showed an upward trend during the whole fiscal year. After opening at € 9.20, it was quoted at € 12.93 on 30 September 2004, the last day of the fiscal year, thus achieving an annual high. This rise corresponds to 40 % growth.

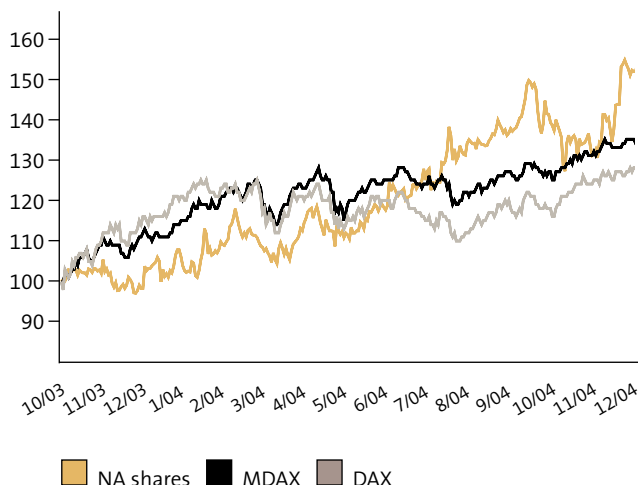
The organised roadshows have contributed to this positive performance. Members of the Executive Board and Investor Relations sector gave presentations on NA to financial analysts and asset managers during a total of 13 trips to New York, Chicago, Boston, London, Edinburgh, Zurich, Paris, Vienna, Copenhagen and Frankfurt am Main.

The German share indices DAX and MDAX performed differently over fiscal year 2003/04. The DAX recorded an overall rise of 17 % from 3,330 to 3,893 points, the MDAX recovered from 3,986 to close at 5,014 points, a rise of 26 %. A direct comparison shows that NA shares performed significantly better than both the DAX and MDAX.

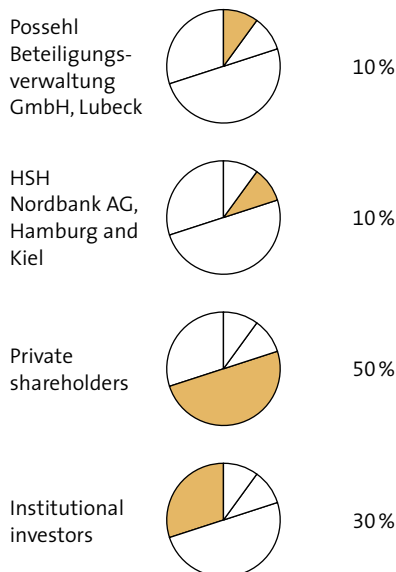
The introduction of call and put warrants on NA shares by Dresdner Bank on 14 September 2004 created a financial instrument which can generate additional possibilities with regard to hedging and liquidity aspects.

## NA shares compared with the MDAX and DAX

in %



## Shareholder structure since February 2004



## FREE FLOAT OF NA SHARES INCREASED TO 80 %

At the beginning of February 2004, the Allianz/Dresdner Bank Group reduced their holding of NA shares from about 8% to well under 5% with the result that the free float increased to 80%. We welcome this step since the free float is a major criterion for the position of a stock in the share indices of Deutsche Börse, the German stock exchange. The wider distribution of NA share ownership has further consolidated NA's position in the MDAX.

Apart from the large proportion of private German shareholders, some 30% of NA shares are held by institutional investors. For years, 10% of the shares have been held by our main shareholders, Possehl Beteiligungsverwaltung GmbH in Lübeck and HSH Nordbank AG in Hamburg and Kiel.

A film was shown summarising the most important topics of the past year. The Chief Executive Officer, Dr Werner Marnette, then reported on the measures NA has taken to improve productivity and competitiveness in all Group subsidiaries and sectors. He mentioned that NA had been able to generate a positive result, even when the recession had reached its trough, and closed by stating that the signs were good for an uptrend in business at NA.

The subsequent shareholders' questions concentrated on the non-distribution of a dividend. The Executive Board commented in detail.

## ANNUAL GENERAL MEETING AGAIN WELL ATTENDED

NA's sixth public Annual General Meeting was held at the Hamburg Congress Centre (CCH) on 24 March 2004. About 2,300 shareholders came to represent their interests personally.

## SUCCESSFUL RESUMPTION OF DIVIDEND PAYMENTS

After having not paid a dividend for fiscal year 2002/03, we worked intensively in all Group sectors to ensure that the company would again be in a position to distribute one. We know from our shareholders that NA shares are generally regarded as high dividend stock. Our aim was therefore to return to our shareholder-friendly dividend policy of past years.

We have succeeded in doing this. The Executive Board and Supervisory Board will recommend the payment of a dividend in the amount of € 0.65 at the Annual General Meeting on 31 March 2005. This equates to a payout ratio of 76%. The dividend yield amounts to 5% in relation to the closing share price of the fiscal year.



## INCREASED COMMUNICATION WITH THE CAPITAL MARKET

The aim of our Investor Relations work over the last fiscal year was also to maintain an open, timely and transparent dialogue with all capital market participants.

To achieve this, we have once again improved the Investor Relations section at our internet website.

NA attributes great importance to maintaining close contact with its shareholders. The interest in our open days continues to be considerable.

Our annual press conference was held in Hamburg on 30 January 2004, followed by the analysts' conference in Frankfurt a.M. Both events attracted considerable interest and were well attended. With 45 analysts present, we were able to record the best turnout since the IPO in 1998.

Our institutional investors and potential shareholders are domiciled in all the major financial centres in Europe, the U.S.A. and Canada. The institutional investor sector showed great interest in NA shares during the whole of the fiscal year. We have thus arranged conference calls, particularly after the publication of our interim reports, and organised more roadshows

to ensure that the capital market is advised about the current situation and future measures to be taken. In addition, the frequent visits from investors with tours of the main plants of our copper production operations in Hamburg reflected the rising interest in NA.



The performance of NA shares was likewise positively assessed by most analysts. In their published research studies they mostly recommended to buy. It was especially encouraging that Deutsche Bank resumed coverage on 12 August 2004 with a "buy" recommendation.

## DIALOGUE WITH THE SHAREHOLDERS WELL-RECEIVED

Intensive communication was also maintained with non-institutional shareholders. In summer 2004 NA again held – meanwhile for the sixth year in succession – its series of "Dialogue with the shareholders". The shareholders' interest was by no means diminished after we had tightened up the organisation of these events and concentrated on two visiting days. On the contrary, it remained considerable. About 500 private shareholders came to their NA and were briefed in depth about the meanwhile substantially improved economic situation. The Executive Board and senior staff were available to answer all the shareholders' questions after an extensive tour of the works.

Key figures of NA shares		99/00	00/01	01/02	02/03	03/04
Closing price in Frankfurt as at fiscal year-end	in €	11.80	12.25	10.80	8.82	12.93
Year high (close)	in €	12.45	15.00	15.50	11.97	12.93
Year low (close)	in €	9.50	10.50	10.50	8.40	8.94
Market capitalisation as at fiscal year-end	in € m	378	396	353	291	432
Number of shares in 1,000 units	in 1,000 Units	32,000	32,353	32,703	33,044	33,409.2
Dividends or recommended dividend	in €	0.75	0.75	0.65	–	0.65
Payout ratio	in %	74	61	68	–	76
Earnings per share *	in €	1.20	1.26	0.63	0.10	0.76
Price/earnings ratio as at fiscal year-end		9.8	9.8	17.2	89.8	17.1

\* since fiscal year 2001/02 in accordance with IFRS

Security Identification No.	676650
International Securities Identification Number (ISIN)	DE 0006766504
Stock market segment	MDAX
Stock exchanges	Frankfurt, Hamburg
Issue price	€ 12.78
Average daily trading volume	45,000 shares in Xetra trading 76,000 shares at all German stock exchanges

#### Stock market codes

Deutsche Börse	NDA
Reuters	NAFG
Bloomberg	NDA GR

#### ANALYST COVERAGE 2004

BW Bank  
Bankhaus Lampe  
Berenberg Bank  
Cazenove  
DZ Bank  
Deutsche Bank  
HSBC Trinkaus & Burkhardt  
Independent Research  
Macquarie  
Norddeutsche Landesbank  
RBC Capital Markets  
Steubing AG  
M.M. Warburg  
Vereins- und Westbank

#### FINANCIAL CALENDAR 2005

31 January 2005 Interim report on 1st quarter 2004/05  
31 January 2005 Annual Press Conference  
31 January 2005 Analysts Conference  
31 March 2005 Annual General Meeting  
1 April 2005 Dividend payment  
10 May 2005 Interim report on 2nd quarter 2004/05  
16 August 2005 Interim report on 3rd quarter 2004/05  
29 October 2005 Open Day at the Hamburg Stock Exchange  
20 December 2005 Unaudited financial statements 2004/05

**In fiscal year 2003/04 the copper market received decisive impulses from the strong global economic trend. Supported by other positive market factors, this resulted in a fundamentally secure, favourable market environment for copper. The copper price rose significantly and reached historical highs.**

#### **ECONOMIC OUTLINE CONDITIONS**

The upswing in the global economy continued in the calendar year 2004 and spread throughout the globe. This was attributable to strong economic growth in some industrial countries, the rapid economic development of threshold countries – particularly of China – strongly expanding world trade and sound financial markets. The International Monetary Fund (IMF) estimates that the global economy has grown by 5% in 2004. This is the most substantial rise for almost three decades.

##### **Strong growth in North America and East Asia**

In the main industrialised countries, such as the U.S.A. and Japan, a slight decline in economic dynamics was recorded over the course of the year. In the U.S.A. macroeconomic production in the second quarter of 2004 totalling 3.3% could not maintain the strong growth of 4.5% achieved in the first quarter due to the only moderate increase in domestic consumption.

Expectations for the whole year were around 4.5%. In Japan as well, the expansion rate slowed down after a good start. Growth of some 4% is, however, considered realistic for the whole year.

China again made a significant contribution to global economic growth, even when the restrictions on granting loans implemented in the course of the year to cool down the ebullient economy took effect. In the second half-year economic growth weakened slightly from 9.5% to 8.3%. Nevertheless, average growth for the year still amounted to a remarkable 9%.

##### **Moderate recovery in Europe**

In Euroland the hesitant incipient recovery in the second half of 2003 has gathered momentum since the beginning of 2004. Supported by only restrained impulses from the domestic economy, the trend here was largely dependent on the export trade which slowed down rather in the third quarter of 2004. The European Central Bank expects a growth rate of some 2% for 2004. In the extended European union (EU 25), the NA Group's main market, economic performance increased by 2.4%.

##### **Weak domestic demand slows down the German upswing**

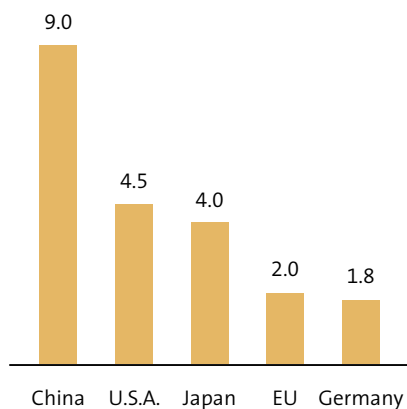
Germany profited from the positive trend in the global economy. Growth in developed countries and the strong expansion of global trade provided German industry with an export boom. At the same time, however, domestic demand remained subdued. The flourishing export business did not succeed in igniting either business investment or consumption. By the end of the summer, export dynamics had declined somewhat. Nevertheless, thanks to an increase in exports of more than 10%, Germany generated overall economic growth of 1.8%.

##### **Strong impact of raw material boom and trend in exchange rates**

Although geopolitical developments could not seriously disturb the global upswing, it was, however, curtailed by the surge in raw material prices. The sharp increase in crude oil prices slowed down the growth rate of the global economy in the second half-year. Demand for crude oil and coke rose sharply, above all in the growth centres of China and the U.S.A., on account of the global economic upswing. Overall, however, the global economy appeared to be in a stable condition.

## Overall economic forecast

Economic growth 2004 (GDP) in %



Source: IMF, Diverse

In 2004 the currency markets were impacted by significant fluctuations in the exchange rates. This particularly applied to the ratio of Euro:US\$. After starting the fiscal year at 1.17, the Euro rose in January initially to rates of around US\$ 1.29. The rate then eased down until spring to under US\$ 1.20. At the end of the fiscal year the Euro was quoted at US\$ 1.23.

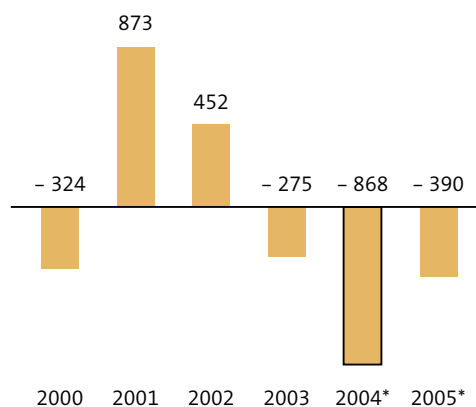
## TRENDS IN THE INDUSTRY

### Global copper consumption exceeds output

A real raw material boom developed in 2004, after raw materials had not played a major role on the financial and capital markets in the '90s. In addition to crude oil, sharp price increases were recorded, in particular for industrial metals, with copper first and foremost.

## Global copper balance

in thousand tonnes



Source: Brook Hunt, September 2004

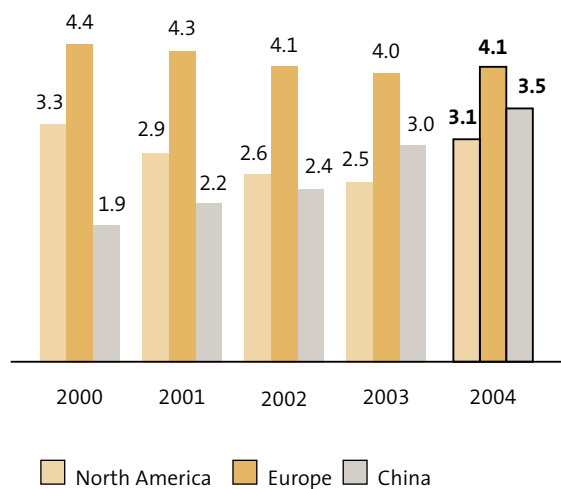
\* Forecast

This development was triggered off by the severe imbalance between supply and demand. On the copper market a growing cathode output met with spiralling demand. This resulted in a global market deficit which will reach 900,000 tonnes in 2004. In 2001 and 2002 the copper market still featured a surplus which was not superseded by a slight deficit until 2003.

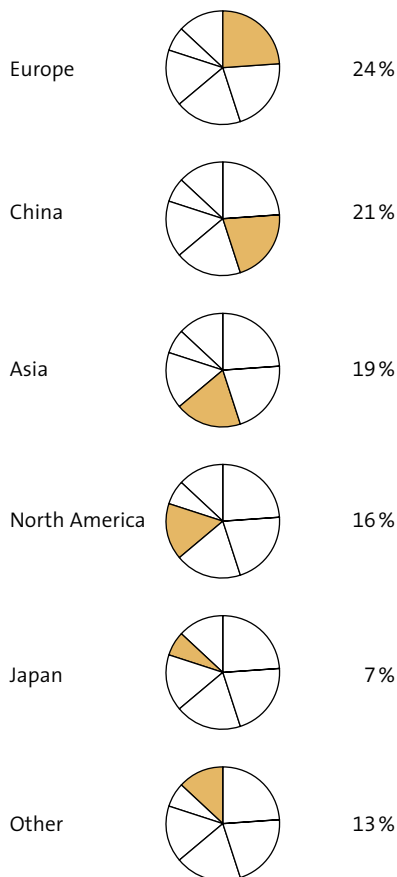
In the past the international mining industry had only invested to a limited extent in new projects and had closed down mining capacities. In addition, production losses arose as a result of business disruptions. From 2000 to 2003 global output from copper mining stagnated at some 13.5 million tonnes. Global cathode production also stayed almost unchanged in 2002 and 2003 at 15.1 million tonnes and only had a 6% increase in 2004 to 16.1 million tonnes due to rising demand.

**Global copper demand in the main markets**

in million tonnes

**China's copper demand rises to 21 % of global demand**

In this phase the copper market was overrun by rapidly increasing demand. In 2004 as a whole, it reached 16.6 million tonnes and thus exceeded the previous year by 6.8%. Demand grew in almost all the regional markets; the central growth region for copper, however, remained China. The measures taken mid 2004 to slow down the economy did little to change this. On the basis of a powerful rise in industrial output that reached 17.1% in the first eight months of the year, Chinese copper demand continued to increase strongly, accelerated by the expansion of energy generation and distribution that was given priority by the state. After copper demand in China had risen by almost 20% in 2003, it increased once again in 2004 by a further 13.5%. With an annual copper demand of 3.5 million tonnes, the country meanwhile has a share of some 21% of global demand and has consequently pushed North America, into third place, where copper demand rose in 2004 by 7% to 3.01 million tonnes. Europe with a copper demand of 4.1 million tonnes was still the leading sales market; however, demand increased here by only 1.6%.

**Global copper demand by regions 2004**

Source: Brook Hunt, September 2004

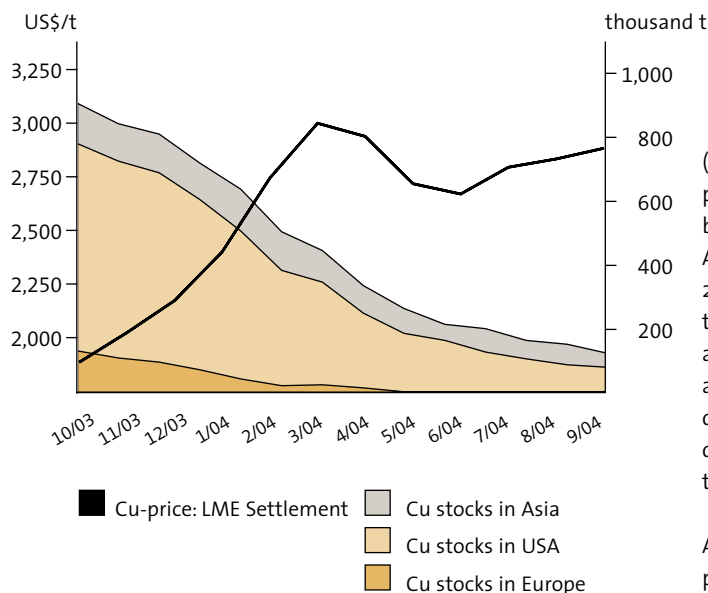
**Significantly declining inventories at the metal exchanges aggravate the shortage**

In 2004 the copper stocks in the warehouses of the London Metal Exchange (LME), the New York Commodity Exchange (COMEX) and the Shanghai Futures Exchange (SHFE) also did not provide the copper processing industry with a sufficient alternative source of supplies. The warehouse stocks were in great demand and dropped 84% from 936,000 tonnes to 151,000 tonnes of cathodes in the fiscal year. Regionally, the stocks were concentrated in North America and Asia. Most European LME warehouses had no available copper for potential buyers for almost the whole year.



## Copper prices and stocks on the metal exchanges

(LME, COMEX + SHFE)



(backwardation). At the beginning of March 2004 the copper price jumped to over US\$ 3,000 per tonne, accompanied by extended backwardation to more than US\$ 100 per tonne. After a summer intermezzo, with prices mostly between US\$ 2,700 and 2,900 per tonne, a level of more than US\$ 3,000 per tonne was again reached in September 2004. The copper price amounted to US\$ 2,607 per tonne (€ 1,653 per tonne) on average during the fiscal year. Year-on-year it rose by 58% in U.S. dollars. In Euro the copper quotation rose by only about 40% due to the further weakening of the U.S. dollar compared with the European currency.

A new cycle is developing in the performance of the copper price as a result of its basic strength.

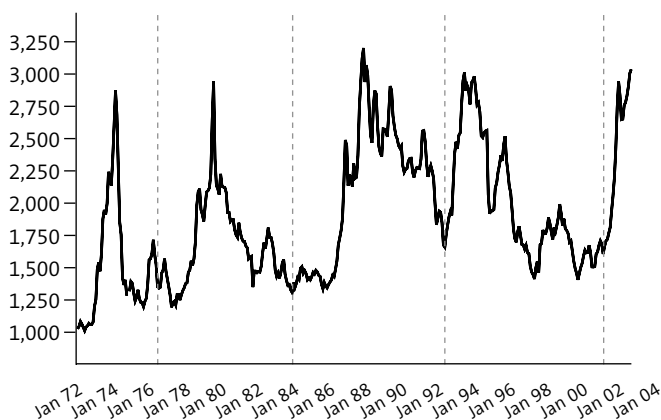
Hedge, raw material and investment funds were encouraged to transact substantial amounts due to the basic strength of the copper market and the resultant price prospects. Major pension funds – by tradition rather conservative investors – invested in industrial metals.

### Copper price reaches highs not seen in years and thus shows the beginning of a new price cycle

In the fiscal year copper prices rose by 75% from US\$ 1,791 per tonne (Settlement) on 1 October 2003 to US\$ 3,140 per tonne on 30 September 2004, a 15 year high. The dynamics of the price rise was already apparent in the first quarter of the fiscal year after LME cash quotations had already exceeded the US\$ 2,000 mark at the end of September 2003. The timing of the price structure caused surcharges on cash transactions

### Copper price cycles since 1972

in US\$/t – 3 month quotations



Business development in the NA Group reflected the positive trend on the raw material and product markets. Availability of copper scrap materials improved with rising metal prices so that NA was kept well supplied and could secure significantly higher refining charges. Supplies on the copper concentrate market increased considerably within a very short period. This led to higher treatment and refining charges in the international spot business and for long-term agreements. There was also an overall positive trend on the product markets. Earnings before interest and taxes (EBIT) increased to € 58 million (€ 16 million in the previous year) while net earnings reached € 25 million (€ 3 million in the previous year). With strong unit sales and substantially rising metal prices, Group revenues rose to € 2,481 million (€ 1,816 million in the previous year).

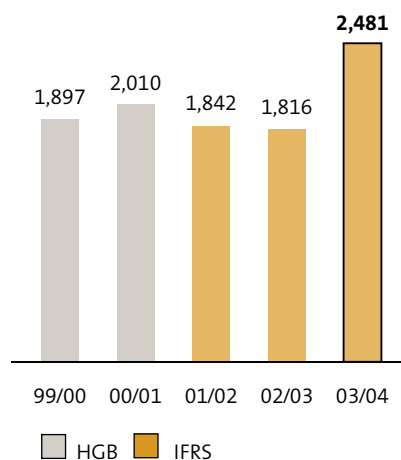
The sharp rise in copper prices in fiscal year 2003/04 presented the mines and metal traders with a strong incentive for increasing copper raw material supplies.

#### INCREASE IN COPPER SCRAP SUPPLIES MAKES DECISIVE CONTRIBUTION TO IMPROVED EARNINGS IN THE RECYCLING SECTOR

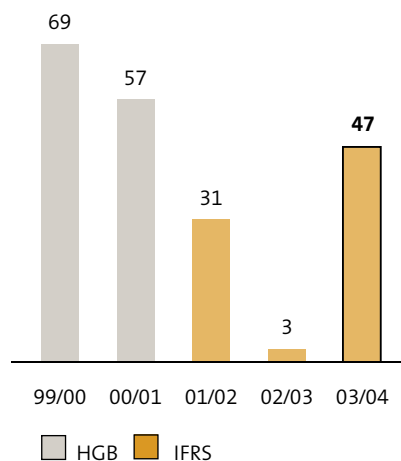
The supply of copper scrap improved from the beginning of 2004 onwards. This was largely attributable to the increased readiness to sell in the international metal trade. Stocks were reduced or totally phased out. At the same time the pressure of competition from China declined somewhat temporarily. In the first quarter of the fiscal year the picture had been quite different: China, supported by trade-distorting subsidies, dominated the demand side of the international copper markets with an insatiable hunger that resulted in large quantities of electric

#### Consolidated revenues

in € million



#### Consolidated earnings before taxes (EBT) in € million



motors, cable scrap, copper scrap and alloy scrap being shipped from each continent to China. At the beginning of 2004, the massive imports did, however, lead to problems in logistics. In addition, the steps to reduce economic dynamics caused the behaviour of the Chinese on the market to slow down at times. From January 2004 onwards, this improved the market situation for the European copper scrap buyers as well. The NA Group actively used the market trend, which was accompanied by noticeably higher refining charges, to optimise its basic supply and to utilise its recycling capacities in Lünen and Hamburg.

In the Lünen recycling centre the treatment of recycling materials from production processes of the copper-processing industries and product returns from automotive, electrical engineering and electronic industries was substantially accelerated, in particular for electric and electronic scrap. The throughput of the Kayser Recycling System (KRS), one of the most modern and high-performing recycling facilities for complex metallic raw materials worldwide, continued to rise long-term.

Overall, the increase in supplies made a decisive contribution to the significant improvement in earnings in NA's recycling sector. Even the declining availability of copper scrap from summer 2004 onwards could not alter this.

#### **INCREASED SUPPLY ON THE CONCENTRATE MARKET RESULTS IN HIGHER TREATMENT AND REFINING CHARGES**

The supply of copper concentrates, the main raw material for the copper production operations in Hamburg, improved considerably from summer 2004 onwards.

This had been preceded by a severe shortage resulting from production cutbacks and downtimes at major mining enterprises. Consequently, there were supply shortages at copper smelters worldwide. Treatment and refining charges fell to very low levels. In this difficult time NA could, however, ensure sufficient supplies of copper concentrates throughout due to its long-term contracts and, last but not least, to its wide spread of suppliers and long-standing business relations. In fiscal year 2003/04 NA's list of suppliers was increased by the start of concentrate deliveries to Hamburg from the new Brazilian Sossego Mine.

The high copper prices on the concentrate market triggered off the sharp rise in supplies in the second half-year. Mining enterprises reac-



"As a state-of-the-art recycling plant for secondary copper raw materials, the KRS has proved its worth." Stefan Schmidt, Production Manager in Lünen

tivated disused capacities and increased production. Projects to open up new mine deposits were now spurred on. In parallel, demand from the Asian region eased off. Within a few months the supply situation on the concentrate market improved significantly and resulted in a substantial rise in treatment and refining charges (TC/RCs). However, on a yearly average, the TC/RCs for long-term supply agreements were still slightly less than in the previous year.

#### **POSITIONING IN THE PRODUCT MARKETS**

The product markets also showed very positive trends for NA while business dynamics in the individual product sectors differed.

In 2004 the German electrical engineering and electronics industries could look back on a good first six months, which were boosted by the significant increase in demand. Turnover in these industries grew by some 6% during this time. This development was reflected in the demand for wire rod. Out-

put and despatch of the quantities produced in Hamburg and Emmerich were at a high level. Even the usual decline in demand in the summer was less pronounced this time. Demand came, above all, from the installation and data cable sectors.



"NA is a reliable partner to the copper mines worldwide in its capacity as a service provider in the concentrate market." Thomas Hölandt, Gen. Manager BU Marketing Metallurgy



"A simple idea for improvement resulted in a significant increase in the concentrate throughput."  
Dr Andreas Specht,  
Production Superintendent,  
Primary Smelter

In 2004 the German copper semi-finished product (semis) industry recorded strong growth as regards the order intake for standard makes, which was in the double-digit range for both domestic and overseas sales. In the first half of 2004, there was a 9.1% increase in the German output of semis in copper and copper alloys. This resulted in a surge in demand for NA's continuous cast shapes, from which strips, sheets, tubes and profiles are produced, with particularly strong demand coming from the electrical engineering and electronics, air conditioning, heating piping and conduit sectors. The continuous casting plants in Hamburg ran to full capacity throughout the fiscal year.

In contrast, pre-rolled strip and finished strip, which follow the continuous cast products in the value added chain of copper, had considerably more difficulty in distancing themselves from the unsatisfactory trend of the previous year. Pre-rolled strip produced at Schwermetall suffered from the considerable decline in demand for coin strip and from changes in the customer structure. However, finished strip from Prymetall was in demand with the result that near capacity production highs were achieved, even in the summer months. The business received new impulses, in particular, from producers of connectors.

#### MEASURES DECISIVELY IMPLEMENTED TO IMPROVE EARNINGS

Regardless of the positive business trend in our raw material and product markets; we continued with the implementation of the projects started the previous year to improve performance and reduce costs and made significant progress. More than 80% of the developed measures have been realised mak-

ing a positive impact on earnings. Our international position as regards costs and competitiveness could thus be improved still further.

The individual projects combined in the Group under the heading NA-Lean refer to the respective Group and sector production sites.

The dyNAmic plus project focuses on the production site in Hamburg and is – judged by its potential – the most far-reaching improvement programme in the Group. The processing capacity for copper concentrates was increased at the beginning of the fiscal year by 15% with the result that, despite the necessary production stoppage, a throughput of more than one million tonnes of copper concentrates was reached. At the same time, the cost position was significantly improved by enhancing performance. The remaining measures will be realised by the year 2006.

A substantial contribution to improving earnings was achieved by the Group's service sectors, such as logistics, material procurement, information technology (IT), the design office, maintenance and the analytical laboratories. They have been combined and optimised throughout the Group.

The HK dyNAmic project, which targeted the recycling site in Lünen, as well as the Euro-Copper project for Prymetall and Top Plus for Schwermetall in Stolberg were brought to a successful conclusion in the last fiscal year. As a result, earnings in the respective sectors and companies have significantly improved. At Schwermetall, however, the positive trend did not take effect fully since capacity utilisation failed to meet expectations.

#### NA'S STRATEGIC ORIENTATION

In the world of copper, NA stands for customer focus, market and technological know how, increase in enterprise value and the highest environmental standards. These attributes will also in future determine the ideals of NA's strategic orientation and shape the foundation for our actions.

NA's sound and well structured balance sheet provides the financial basis for our activities. It is supported by a very good cash flow that we will continue generating from our business activities in copper production and processing.

As a result, NA is in good standing on the financial markets and has sufficient scope for investment to increase enterprise value and growth in the world of copper.

NA's capital expenditure is directed into well-defined cost-effective projects and extensive steps towards internal and external growth in copper production and processing.

NA is an enterprise that is holding up well in the current difficult economic environment in Europe and has shown its ability to achieve continuous improvement.

An annual production capacity of 550,000 tonnes of copper cathodes of the highest quality and more than 800,000 tonnes of copper products has made NA into the largest integrated copper producer on the European continent.

NA's own supply of copper cathodes gives the Group an excellent competitive advantage in the production of copper products, particularly in the current market situation in which copper is in extremely short supply. This opens up excellent opportunities for further external growth steps.

In copper production, NA provides services for the German and international raw material and recycling markets. This role is strengthened largely by continuous performance enhancement and improvements in the cost position. Top priority is given to the focused development of the raw material markets as well as the expansion and continual modernisation of our processing capacities. This ensures our international competitiveness and is NA's active answer to the increasing concentration in the free concentrate market, to the structural changes in the recycling markets and the requirements of sustainable development.



Hamburg – China's gate to the EU: Mayor Ole von Beust received the NA trainees from Yunnan at the City Hall.

In copper processing, NA provides services for the various stages along the value added chain. Customer service and product quality are attributed great significance and ensure international competitiveness. As a strategic target, NA is pursuing a larger corporate alliance through the implementation of international expansion projects. In so doing, NA can build on the very good platform of its cast and rolled products.

Europe and North America are NA's traditional markets and still offer significant growth potential. This, above all, applies to copper demand in Eastern Europe.

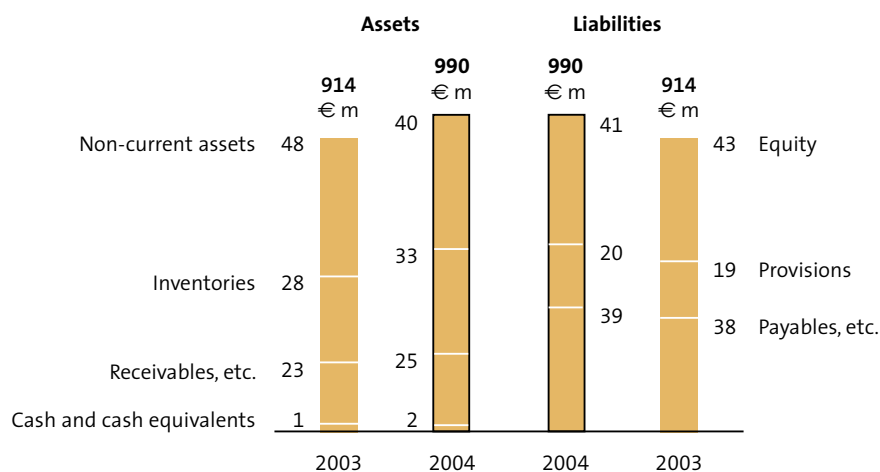
Economic development in Asia is, however, much more dynamic than in Europe and North America. We are pursuing the internationalisation of our business activities, especially in Asia, as part of our growth strategy. Because Asia and China, in particular, have the highest growth for copper.

China will probably stay the dominating factor in the copper market for years to come due to the huge domestic market. The market and competitive situation are being studied and options for NA to launch on to the market identified through the co-operation with a major Chinese copper producer, during visits to China, external investigations and a variety of customer contacts

In future, we will strengthen our presence along the value added chain of copper and develop the Group further as an integrated copper producer.

**Consolidated balance sheet structure**

in accordance with IFRS as at 30 September in % of total assets

**FINANCIAL POSITION AND PROFITABILITY**

For fiscal year 2003/04 the NA Group is reporting as in the previous year in accordance with International Financial Reporting Standards (IFRS).

**Balance sheet structure**

Total assets were up year-on-year by €76 million to €990 million. This was due to increased inventories, the value of which rose due to the higher quantities and metal prices (30 September 2004: €326 million). Trade accounts receivable likewise increased due to higher unit sales and metal prices. The rise was partly compensated by the sale of receivables without recourse in the amount of about €48 million as part of a factoring agreement. In total, receivables were up €22 million to €162 million. Since capital expenditure was primarily limited to maintenance of the plant, non-current assets decreased by €41 million and at €396 million account for 40% of total assets.

The financing structure of the equity and liabilities continued to be very solid. Equity increased, in particular as a result of improved earnings, by €18 million to €405 million. At 41%, the equity ratio including minority interest remained at a high level (30 September 2003: 43%). Non-current assets are fully covered by equity.

Despite the increased financing requirements of the working capital due to the higher metal prices, financial liabilities were down year-on-year due to the very good operating cash flow. As at 30 September 2004, net financial liabilities amounted to €154 million (30 September 2003: €164 million). Gearing, i.e. the ratio of net financial liabilities to equity, decreased to 38% from 42% in the previous year.

Key Group financial ratios		
in %	30.09.2003	30.09.2004
Gearing = net financial liabilities/equity	42.1	37.6
Net financial liabilities/equity	2.1	1.2
EBITDA interest coverage = EBITDA/net interest expense	6.1	11.0

The other key Group financial ratios, net financial liabilities/EBITDA and EBITDA/net interest expense, improved significantly compared with the previous year. With a value of 1.2, the ratio of the net financial liabilities to EBITDA is well balanced. With a factor of 11, net interest expense is also very well covered by EBITDA.

Overall, the balance sheet continues to have a very stable and balanced structure.

### Earnings and cash flow

With again a good operating performance, the continued Group-wide performance enhancement programme and more friendly market and economic conditions, earnings before taxes rose significantly by € 44 million to € 47 million. Earnings before interest and taxes (EBIT) were generated in the amount of € 58 million (€ 16 million in the previous year). With capital employed totalling € 608 million at the level of the previous year, the return on capital employed (ROCE) increased to 9.6% (2.6% in the previous year).

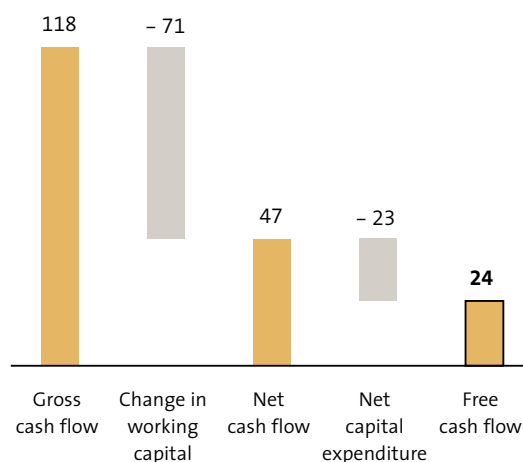
Return on capital employed in € thousand	30.09.2003	30.09.2004
Equity	386,485	<b>404,810</b>
Minority interest	4,051	<b>4,323</b>
Provisions for pensions	48,155	<b>49,797</b>
Financial liabilities	175,390	<b>169,662</b>
Less cash and cash equivalents	(11,008)	<b>(15,824)</b>
Capital employed as at balance sheet date	603,073	<b>612,768</b>
<b>Average capital employed</b>	619,104	<b>607,921</b>
Result from ordinary activities	3,345	<b>46,651</b>
Net interest	12,893	<b>11,716</b>
<b>Earnings before interest and taxes (EBIT)</b>	16,238	<b>58,367</b>
<b>Return on capital employed (ROCE)</b>	2.6 %	<b>9.6 %</b>

The return on capital employed (ROCE) is an important analytical tool for understanding performance in the NA Group. It shows the profitability of the invested capital and is calculated as follows:

$$\text{ROCE} = \frac{\text{Earnings before interest and taxes}}{\text{Capital employed}}$$

### Cash flow 2004

in € million



Earnings before interest, taxes, depreciation and amortisation (EBITDA) also increased substantially from € 79 million in the previous year to € 129 million. Gross cash flow amounted to € 118 million. A cash inflow from operating activities (net cash flow) of € 47 million resulted after taking changes in the working capital into account. Investing activities of € 28 million were funded from this. After deduction of net capital expenditure, the free cash flow for the fiscal year 2003/04 amounted to € 23 million.

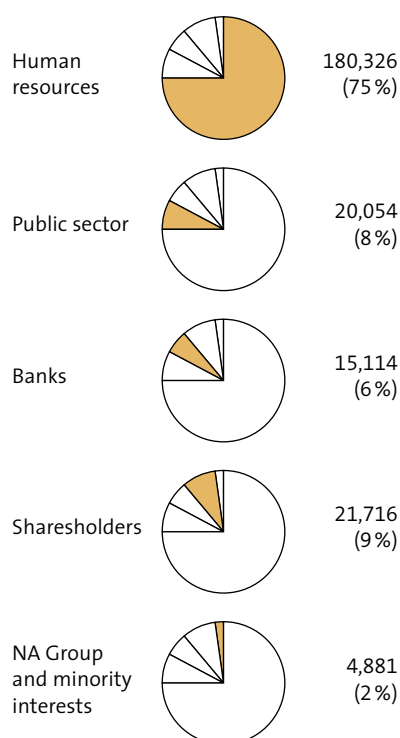
Value added statement	2003/2004	
Origin	in € thousand	in %
Group economic performance	<b>2,521,076</b>	<b>100</b>
Less services	<b>(2,208,531)</b>	<b>(88)</b>
Gross value added	<b>312,545</b>	<b>12</b>
Less depreciation and amortisation	<b>(70,454)</b>	<b>(3)</b>
Net value added	<b>242,091</b>	<b>9</b>

The value added statement shows the NA Group's economic performance in the fiscal year after deduction of all materials and services, and depreciation and amortisation. The NA Group's value added for fiscal year 2003/04 amounted to € 242 million (€ 212 million in the previous year).



**Use of value added in the NA Group**

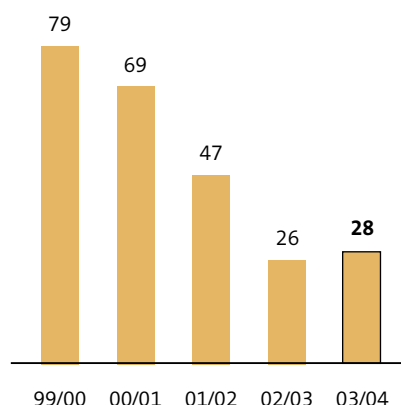
in € thousand

**Net value added: 242,091**

The value added statement shows that the largest proportion of the value added, i.e. € 180 million or 75 %, was used for personnel expenses, followed by the public sector and the banks together with 14 %, so that € 27 million or 11 % of value added remained for the shareholders, other shareholders and to strengthen the business internally.

**Capital expenditure in the NA Group**

in € million

**CAPITAL EXPENDITURE**

Capital expenditure in the Group was increased from € 26 million in fiscal year 2002/03 to € 28 million in 2003/04. In the Copper Production Segment it amounted to € 20.5 million and in the Copper Processing Segment to € 7.4 million, and mainly concerned replacement and rationalisation measures within the framework of our dyNAmic and dyNAmic Plus improvement programmes at NA AG and the Euro-Copper programme at Prymetall.

The main investment projects included the expansion of the waste heat boiler, as a result of which the processing capacity of the flash smelter for copper concentrates could be increased to 1.15 million tonnes p.a. Further projects were the optimisation of the precious metal processing facilities and measures taken to improve the environment in the secondary smelter sector. Due to its exemplary nature, the environmental project to avoid fugitive emissions was subsidised by the Federal Ministry of the Environment to the extent of € 1.5 million.

After 80% of the shares in Spiess-Urania Chemicals GmbH had already been transferred to Mitsui & Co., Ltd., Tokyo, effective 1 October 2002, Mitsui took over the remaining 20 % effective 1 October 2004. This completed the streamlining of the financial assets portfolio.

**The implementation of the performance enhancement programmes in the fiscal year were accompanied by a reduction in the workforce in the Group with the result that personnel costs declined. Apprenticeships and vocational training continued to be attributed great importance. The provision of staff training as well as performance and success-related remuneration systems containing individual and collective components creates the prerequisites for commitment and generating ideas.**

To support the NA strategy, the NA Group was reorganised effective 1 March 2004 at the same time as HK was amalgamated with NA. The target was to reduce the cost base throughout the Group, strengthen operating and support units as well as to combine cross-section, administrative and service functions into effective units.

### DECLINING WORKFORCE DUE TO IMPLEMENTATION OF PERFORMANCE ENHANCEMENT PROGRAMMES

The number of employees in the Group decreased to 3,185 (3,386 in the previous year) as at the balance sheet date. This reduction was, above all, the result of personnel adjustments at NA AG in Hamburg and Lünen as well as at Prymetall.

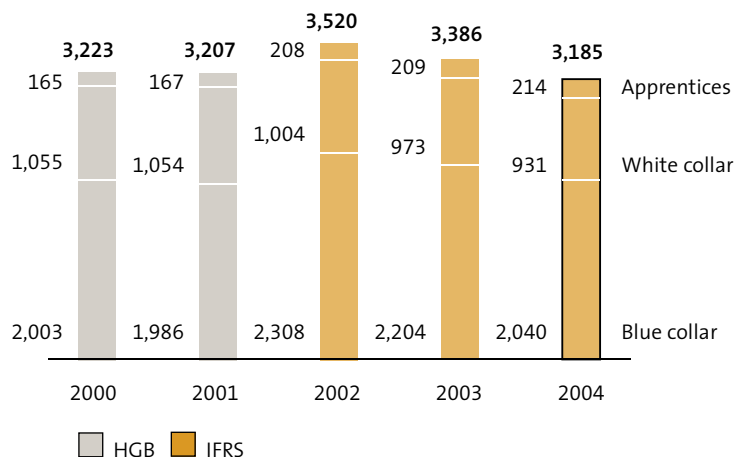
At the end of the fiscal year there were 2,456 employees at NA AG, of which 2,000 (2,048 in the previous year) were located in Hamburg and 456 (566 in the previous year) in Lünen. The staff reductions noticeably eased personnel expenses.

Nearly two thirds of the Group's workforce are blue collar workers. About a quarter of white collar employees are college graduates; 13% are foremen in the production and maintenance sectors.

In the next few years, personnel will decline further due to optimisation measures being gradually implemented throughout the Group. The Hamburg site is also affected by this, where the plan is to cut some 200 jobs calculated from 30 September 2002 when the workforce numbered 2,053. A reconciliation of interests and social compensation plan covering this has meanwhile been agreed with the Works Council. Much of the personnel reductions has been achieved as part of normal staff fluctuations. Socially acceptable settlements have been agreed for employees whose employment must be terminated. They include outplacement programmes which have already been successfully implemented in the chemical industry. In these programmes the employees concerned are offered professional support in finding new jobs.

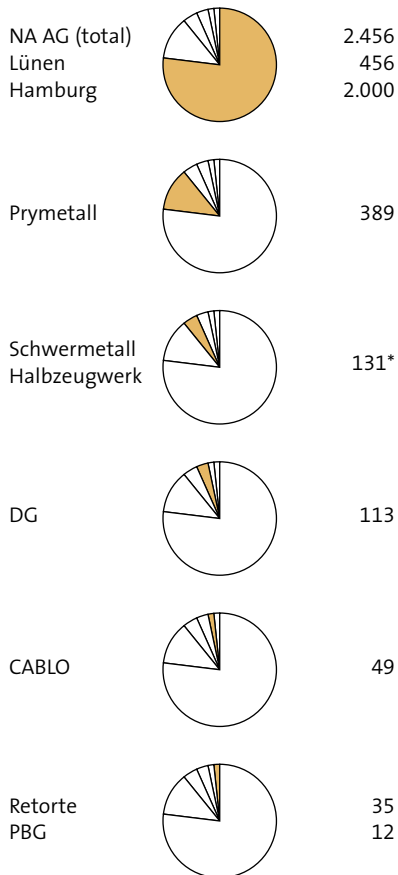
### Employees in the NA Group

Number as at 30 September



**Personnel in the NA Group**

as at 30 September 2004



\* = 50 % of the employees at  
Schwermetall Halbzeugwerk

**COMMITMENT TO VOCATIONAL TRAINING OF YOUNG PEOPLE RESULTS IN HIGH PERCENTAGE OF TRAINEES AND APPRENTICES IN THE GROUP**

Despite the necessary staff cuts we have still fulfilled our commitment to provide an extensive training programme for young people and have maintained the high percentage of apprenticeships. In the year under review a total of 214 apprentices received training in 15 trades and professions. This corresponds to a percentage of some 6.7 % Group-wide. At NA AG in Hamburg alone, 40 youngsters again started their training in August 2004. With a total of 150 apprentices making up about 7.5 % of the workforce, NA AG in Hamburg has one of the most extensive training programmes in the North German chemical industry.



"The training we get at NA is super. We have the choice of apprenticeships in 15 different trades and professions."  
Melanie Paul, apprentice

At a ceremony on 3 December 2003 in the Hamburg Chamber of Commerce, NA AG was commended as an excellent training centre as a result of the company's outstanding performance in the dual (college/practical) training system.

Measures to improve qualifications are attributed particular importance, especially against a background of reduced staffing levels. Job-related technical training was intensified as part of the systematic development of human resources. The popularity of the offer is reflected, for instance in the high number of 1,353 participants in Hamburg, including employees from all levels. On this basis, it was mostly possible to fill managerial positions with company staff.

**SUCCESSFUL MANAGEMENT OF IDEAS MADE SIGNIFICANT CONTRIBUTION TO IMPROVING PRODUCTIVITY AND PROFITABILITY**

Highly qualified employees are the best source of ideas. For NA this is an important starting point for continuous improvement in productivity and cost-efficiency. In the last fiscal year, the employees at NA AG alone submitted a total of 1,000 suggestions for improvements, of which 722 have been realised so far enabling calculable savings of about € 232,000 to be made. A Group-wide campaign is planned in the calendar year 2005 in order to motivate even more employees to participate in the company suggestion scheme.

**GOOD PERFORMANCE BY NA STAFF IS REWARDED**

Performance and success-related remuneration, as introduced at NA AG in fiscal year 2000/01, is an elementary component of the payment scheme. Motivated and dedicated employees make an essential contribution to the success and value of the company. Accordingly, the performance of the individual employee is connected to the performance of the team, the

department or the production sector. The employee's performance (individual performance) and team performance (collective performance) complement each other and contribute decisively to the company's success, the third component. These three parameters form the basis of our remuneration system.

#### **FOURTH TRANCHE OF THE STOCK OPTION PLAN IS ALSO SUCCESSFULLY COMPLETED**

The lifetime of the fourth tranche of the NA Stock Option Plan issued in 2001 ended in spring 2004. Since NA shares had outperformed the CDAX, the participants could exercise their stock options and acquired a total of 365,200 shares in the period from 26 March – 15 April 2004. The fifth and last tranche of the stock option plan introduced in 1998 again entitles senior staff and the Executive Board to convertible bonds in the amount of € 1,037,312. On maturity in spring 2005, these can be exchanged for 405,200 NA shares in accordance with the bond conditions.

#### **USE OF EARLY RETIREMENT SCHEME PROVIDES IMPORTANT INSTRUMENT FOR REDUCING PERSONNEL**

In fiscal year 2003/04 an average of 94 employees of NA AG in Hamburg took advantage of the early retirement scheme. The block model was mainly used in which the lifetime of the early retirement scheme is divided into two phases of equal length: an active phase when the employee works full-time and a passive phase without employment. On average 53 employees were in the active phase with 41 in the passive phase. At fiscal year-end 197 employees in the NA Group were participating in the early retirement scheme, i.e. 6 % of the workforce.

#### **MEASURES TAKEN TO IMPROVE OCCUPATIONAL SAFETY STILL SUCCESSFUL**

In fiscal year 2003/04 accident frequency increased slightly at NA AG. There were eleven notifiable accidents per one million hours worked. This quota corresponds to the average in the Employers' Liability Insurance Association of the chemical industry.

Generally the measures implemented in recent years to improve occupational safety have had a positive effect. These include, in particular, measures relating to workplace behaviour, such as the holding of behaviour-oriented safety inspections. The aim of these inspections is to enable senior staff to examine the behaviour of employees in those production works and workshops that do not come under their area of responsibility. As a result further weak points can be identified and measures taken to avoid accidents.

#### **CONGRATULATIONS TO 100 EMPLOYEES ON THEIR ANNIVERSARIES FOR THEIR LOYALTY AND DEDICATION**

In the fiscal year 13 employees celebrated their 40th anniversary and 87 their 25th anniversary. Our thanks go to all of them for their loyalty and dedication.

#### **THANKS FROM THE EXECUTIVE BOARD**

Success is never a matter of course. It would be unthinkable without the employees' untiring contribution, hard work and great commitment. We would therefore at this point like to thank our employees at all levels for their support and the employees' representatives for their constructive and trusting co-operation in the last fiscal year.

**The Research and Development (R&E) sector makes a contribution throughout the Group to enhancing performance in the production plants, to improving quality in all corporate sectors and ensuring the environmental compatibility of our production processes. Work also continues on the development of new copper products and the further development of existing projects. Accordingly, all the R&D projects have a part in increasing earnings in the NA Group.**

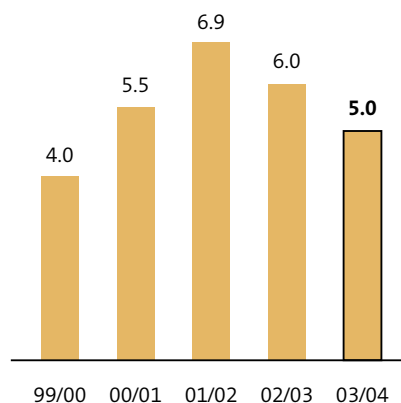
The R&D sector has a staff of 23. In Lünen and Stolberg a further three employees work on R&D projects in close collaboration with the Hamburg headquarters. Strategic R&D projects are coordinated in Hamburg for the Group as a whole. Expenditure on development work in the fiscal year totalled € 5 million.

#### **CONCENTRATION ON DEVELOPMENTS FOR COPPER PRODUCTION AND RECYCLING**

In the last fiscal year the R&D sectors in Hamburg and Lünen concentrated on metallurgical and technical projects. These increase NA's capacity and flexibility in the processing of complex raw materials and recycling materials. The aim is to strengthen the leading position of the Group as a service provider in the raw material and recycling markets. An environmentally friendly process for the recycling of electronic scrap in the KRS has been developed in Lünen. More than 5,000 tonnes of electronic scrap has already been treated there.

#### **R & D expenditure**

in € million



In Hamburg R&D concentrated on reducing the impurities in the material cycles. As a result, the cleaning of copper electrolyte from disturbing bismuth impurities was successfully tested on a pilot scale. This could improve the future performance of the copper tankhouse and facilitate the processing of new types of copper concentrates.

The focus was also on optimising NA's material cycles. This targeted the linking of technical strengths at the Hamburg and Lünen production sites even more closely together in order to convert more of the by-metals, such as nickel, in copper concentrates and secondary raw materials into high-grade products.

#### **PROGRESS IN QUALITY IMPROVEMENT AND NEW COPPER PRODUCT DEVELOPMENT**

R&D activities in the copper product sector focused on the quality improvement of strip and the new development of special products. Both cases are of utmost importance in securing NA's leading position in the copper market.

At Prymetall in Stolberg we succeeded once again in significantly increasing the quality of tin-coated strips by technically optimising the tinning plant. These strips are the basis for cable connectors in the automotive industry. The new improved quality is much appreciated by our customers. The production volume has already significantly increased.

#### **JOINT ENVIRONMENT PROJECT WITH YUNNAN COPPER**

Wastewater treatment possibilities at the Yunnan production site were examined in depth as part of the co-operation between NA and Yunnan Copper. We then worked out concepts together with the Chinese engineers to implement NA's technology in China. This would set new benchmarks there.

#### **FLEXIBLE CIS SOLAR CELLS OFFER EXCELLENT GROWTH OPPORTUNITIES**

The development of flexible CIS solar cells (Cu = copper, In = indium, Se = selenium) in the laboratory has been brought to a successful conclusion. Their light efficiency reached a peak of about 11%. As a result NA solar cells are occupying a leading position in thin film solar cell technology.

In the spring the technical results and a solar module (laboratory prototype) were presented to a professional audience in Hamburg. The participants in the solar symposium acknowledged that NA had worked well and rated the solar cells' potential as being considerable. The next step is the conversion of the NA solar know-how into a marketable product. To this end, NA intends to continue the targeted development of the product over the next three years together with a strong partner from the marketing sector.

Two project presentations in Santiago de Chile and Sao Paulo have demonstrated that NA solar cells can in future produce electricity competitively. In regions with a great deal of sunshine and without an available infrastructure of electricity networks, solar cells present a very good possibility for producing electricity for houses, schools or radio signals and measuring devices. NA thus regards these regions as the market of the future, which will also be developed without public support programmes.



„With the development of CIS solar cells we have managed the break-through in solar cell technology. We must now press on with the ->

-> product development and marketing with a strong partner.“  
Dr Adalbert Lossin,  
Head of R&D

**NA has a leadership position in industrial environmental protection. In its production processes the Group is focused on environmentally friendly technology. Emissions are prevented, or reduced to a minimum by secondary measures if this is not possible. Energy is always used economically. Recycling, i.e. the closing of product cycles and saving of resources, is one of NA's core sectors.**

#### FUGITIVE EMISSIONS SIGNIFICANTLY REDUCED

A key project in the fiscal year was the further reduction of fugitive emissions at the secondary smelter in Hamburg, where our own and external metal-bearing intermediates and recycling materials are treated. The products of the secondary smelter include crude copper, lead bullion and precious metal bearing intermediates from which NA recovers gold, silver and platinum group metals.



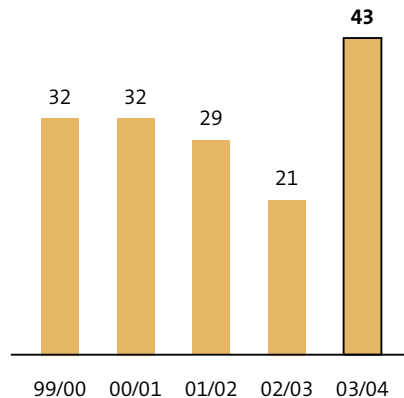
"We have improved the environmental situation thanks to the extensive investment in the secondary smelter". Harry Priess, Senior Foreman Secondary Smelter



With capital expenditure of some € 6 million, a so-called "house in house" concept has been realised for the converter and holding furnace, whereby additional hoods almost fully enclose the existing units. A hall has been built in the connected storage area and the casting area there fitted with a suction

#### Capital expenditure on environmental protection at NA AG

in % of total capex



and filter system. Everywhere where fugitive emissions arise due to the casting and recasting of molten materials, they can now be completely collected and cleaned. As a result of this investment project, we have achieved a substantial reduction in emissions at the secondary smelter and a further improvement in the ambient air quality in NA's vicinity.

Each cubic metre of off-gas, which must be sucked off and cleaned, requires energy and thus increases operating costs.

The concept implemented in the secondary smelter features comparably low energy consumption. As a result, the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety has subsidised the project to reduce emissions in the secondary smelter due to its exemplary character to the extent of € 1.5 million.

New measures to protect the environment are being planned. They were elaborated in an agreement with the Hamburg environmental authorities in February 2004 and revealed to the general public. As an example, fugitive emissions from the anode casting machine and the anode furnaces in the primary smelter will be reduced in the near future. These firm voluntary agreements promote environmental protection without state registration and enable NA to plan ahead.



NA's performance in environmental protection was confirmed again in June 2004 by the renewed certification of the Environment Management System in accordance with EMAS and ISO 14001.

#### **ENA 2 AVERAGE: QUESTION OF GUILT AS YET NOT CLARIFIED**

On 28 June 2004 the "ENA 2", an acid tankship owned by NA, collided in the Hamburg harbour with the container freighter "Pudong Senator" and capsized after reaching the wharf in the Petroleum Harbour. The question of guilt has still not been clarified.



"Not only the general public, but also our sulphuric acid customers followed NA's activities in the ENA2 crisis at every turn. ->

The lighter had been chartered out to an external shipping company that was responsible for the transportation of the acid. After the tankship capsized, more than 900 tonnes of sulphuric acid leaked out and caused localised fish mortality in the harbour basin. After three days, the sulphuric acid had been completely neutralised due to the buffer effect of the Elbe water in the harbour basin. The accident has had very little impact in the Elbe tidal current, as confirmed in the continuous readings taken by the Hamburg environment authorities. Although the transportation of the acid was not NA's direct responsibility, we naturally gave the salvage company and the authorities all the support we could, by providing technical devices and our specific know-how on sulphuric acid. The deep involvement of Corporation Communications, the provision of NA specialists and the trusting cooperation between the NA employees concerned with authorities and media had the result that the general public was kept up-to-date on all developments.

-> Today they say that it was exemplary crisis management."  
Claudia Limmer,  
Marketing sulphuric acid sales and chemical products



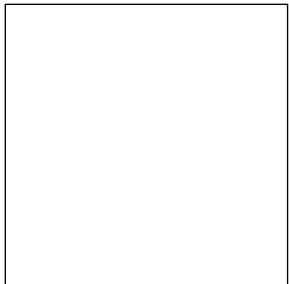
## Continuous cast shapes



“Our Hamburg plants for copper products were fully utilised in fiscal year 2003/04. The order intake was very good. We could hardly produce the wire rod and shapes →

→ fast enough to keep up with the demand.”  
Manfred Porten, Head of Production, Rod Plant

Output and sales of our copper products have reached all-time highs. Last fiscal year we produced about 800,000 tonnes of copper and copper products.





800,000

**Mining and  
recycling markets**

**Copper Production**

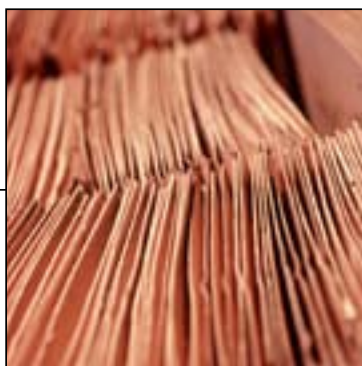
**Copper Processing**



60%

Concentrate markets

NA sources its raw materials for copper production all over the world: these include not only copper concentrates, but also metal scrap and various types of recycling materials.



Cathodes



40%

Recycling markets

The copper cathode is the product of the copper tank-house and also the basis for many high-grade NA copper products.

NA is well placed in the growing copper market with its main products: wire rod, shapes, pre-rolled strip, shaped wires and strips.



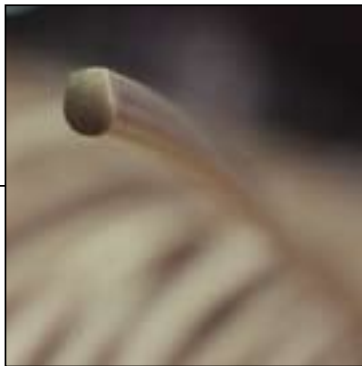
Shapes

## Processors and end users

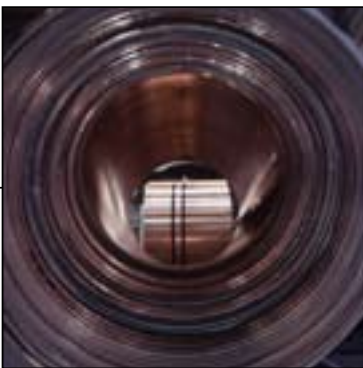


Wire rod

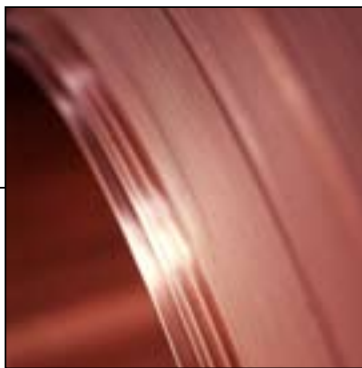
NA offers its customers products, which are tailor-made to their individual requirements and applications.



Shaped wires



Pre-rolled strip



Strips

**The Copper Production Segment produces copper cathodes, precious metals, tin composite, lead, sulphuric acid as well as other metal and chemical products from a variety of raw materials and recycling materials.**

**The Copper Production Segment consists of**

- **the commercial business unit Marketing Metallurgy with the subsidiaries**
  - Peute Baustoff GmbH, Hamburg, as an important supplier of iron silicate stone and granules
  - Retorte Ulrich Scharrer GmbH, Röthenbach, as the largest producer of selenium products worldwide,
- **the commercial business unit Marketing Recycling with the subsidiaries**
  - CABLO Metall-Recycling & Handel GmbH, Fehrbellin, as the leading company specialised in the recycling of cable scrap in Germany,
- **the production sectors of primary copper production of NA AG**
- **the production sector of secondary copper production/precious metals of NA AG**

The business unit Marketing Metallurgy covers the procurement of copper concentrates, smelter intermediates and precious metal bearing raw materials just as the sale of precious metals, lead, sulphuric acid, iron silicate stone and other products. The subsidiaries Peute Baustoff and Retorte are part of this unit.

Copper Production Segment		
in € million	02/03	03/04
Revenues	1,231	<b>1,572</b>
EBT	(3.0)	<b>22.4</b>
EBIT	4.5	<b>27.1</b>
Capital expenditure	18.2	<b>20.5</b>
Depreciation and amortisation	44.3	<b>43.1</b>
Number of employees (as at 30 September)	2,339	<b>2,056</b>

The business unit Marketing Recycling comprises all the Group's recycling activities. Apart from the traditional raw materials of copper scrap, alloy scrap and production residues, the unit focuses on the procurement of electronic scrap and a wide range of other recycling materials. We offer companies specific recycling solutions as part of our industrial business. In addition, co-products like copper sulphate and nickel sulphate, tin composite and zinc oxide are also sold.

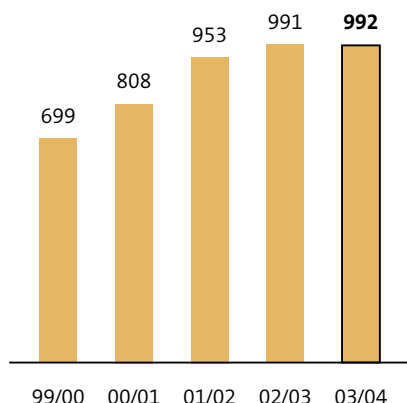
CABLO Metall-Recycling & Handel GmbH and die E.R.N. Elektro-Recycling NORD GmbH complement the services we offer in the recycling sector thanks to their specific activities and special know how.

The business unit Primary Copper Production consists of the primary smelter, the copper tankhouse, acid plants and sampling, all located in Hamburg.

The business unit Secondary Copper Production/Precious Metals comprises the secondary smelter including the lead refinery and precious metal production facilities in Hamburg as well as Hüttenwerke Kayser (HK) in Lünen. Hüttenwerke Kayser AG was amalgamated into NA AG and now forms the Group's recycling centre.

## Sulphuric acid output

in thousand tonnes



### FISCAL YEAR 2003/04 IN REVIEW

In the Copper Production Segment fiscal year 2003/04 was influenced by a positive market trend as well as significantly enhanced performance and cost optimisations at the Hamburg and Lünen production sites. Competitiveness was therefore further improved.

In fiscal year 2003/04 NA produced a total of 522,000 tonnes of top quality copper cathodes. They are mainly used as a basis for the production of copper products in the Group.

The Copper Production Segment generated revenues of € 1,572 million, pre-tax earnings amounted to € 22.4 million (€ – 3 million in the previous year).

As at the balance sheet date the Segment had a total of 2,056 employees (2,239 in the previous year).

### MARKETING METALLURGY

#### Concentrate market recovers well

In the first few months of the fiscal year, the market for copper concentrates showed a considerable supply deficit with extremely low treatment and refining charges (TC/RCs). However, the market staged a vigorous recovery in the second half of 2004. Within a short time, the TC/RCs on the spot market improved significantly and also rose substantially for long-term agreements.

NA was well supplied with copper concentrates throughout the year. The strategic orientation of our raw material procurement towards mainly long-term supply agreements was particularly beneficial. We want to continue with this policy in future. We are therefore in close contact with the operators of new mining projects in order to conclude further long-term agreements.

#### Positive market trend for sulphuric acid

At 992,000 tonnes, our production of sulphuric acid slightly exceeded the record output of the previous year (991,000 tonnes). At the same time, the market for sulphuric acid showed a very positive trend. High demand, above all in Asia, ensured that prices picked up, rising not only for spot business but also in our important long-term sector.

### MARKETING RECYCLING

#### Improved availability of copper scrap

With sharply rising copper prices from the beginning of the year, the situation on the copper scrap market was characterised by much improved material availability. Supplies increased, largely due to the improved price and economic trend, while competition from China eased a little. However, the distortions in competition emanating from China, India, Russia and the Ukraine still persist. From the second quarter of the fiscal year onwards our recycling capacities were fully utilised again with year-on-year substantially improved refining charges.

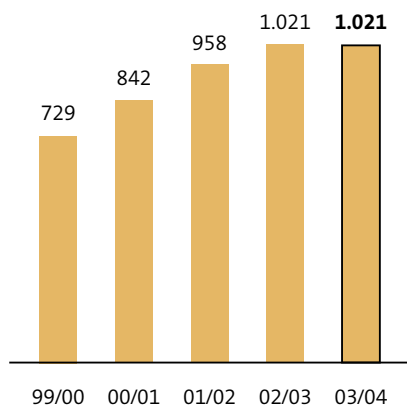
#### Procurement of recycling materials enhanced

The supply of recycling materials was good throughout the year. In particular, the input of materials from industrial collection points as well as the end-of-life sector was strengthened. These include materials from end-of-life vehicles and from the electrical and electronic scrap sector. The law on Waste Electrical and Electronic Equipment (WEEE), which will regulate the closed-loop materials economy in the electrical and electronic scrap sector, results in an increased supply of materials from this sector. These materials include printed circuit boards and fractions from electrical and electronic appliances, in particular

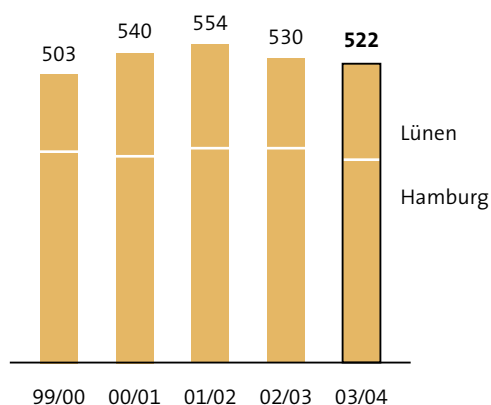


**Concentrate throughput**

in thousand tonnes

**Cathode output**

in thousand tonnes



from private use. We are increasing our technical possibilities for treating such materials by implementing various technical measures in our Kayser Recycling System (KRS) in Lünen.

**PRIMARY COPPER PRODUCTION**

In the business unit Primary Copper Production in Hamburg, a production stoppage for expansion and maintenance work was effected in October 2003 in the primary smelter (RWO) and connected double absorption contact acid plant. Apart from a variety of optimisation steps and repair work, the focus was on targeted measures to enhance performance in the waste heat boiler sector. As a result, the concentrate processing capacity of the connected flash smelter could be increased to some 1.15 million tonnes of concentrates per annum. The waste heat boiler cools the process off-gases from the flash smelter, the RWO's main plant, and produces steam from the extracted heat. In the following months we were able to utilise the additional melting capacity so that, despite the scheduled stoppage and the initially difficult market environment, the concentrate throughput at 1.02 million tonnes was again at the previous year's level.

The stoppage in the concentrate processing facilities did, however, result in an undersupply of copper anodes and thus to an underproduction of some 19,000 tonnes of cathodes. Accordingly, with an output totalling 354,000 tonnes, our production of copper cathodes in the copper tankhouse of the primary smelter in Hamburg was slightly down on the previous year (373,000 tonnes).

**SECONDARY COPPER PRODUCTION/PRECIOUS METALS****Secondary smelter/precious metals, Hamburg**

Sufficient raw material supplies were assured for the secondary smelter throughout the year. At the beginning of August the electric furnace was disconnected for scheduled repair work.

Our lead refinery was well utilised. Our main customers for our lead products were the battery and cable industries as well as the plant construction industry.

Due to a changed raw material mix in the primary and secondary copper production sectors, there was a temporary decline in the silver and gold content, which is used for the production of precious metals. Silver output at 759 tonnes was down on the previous year (831 tonnes). At 21 tonnes, gold output was also less than in the previous year (25 tonnes).

**Hüttenwerke Kayser (HK), Lünen**

The HK production site has the most modern and high-performing smelter for recycling copper in the world.

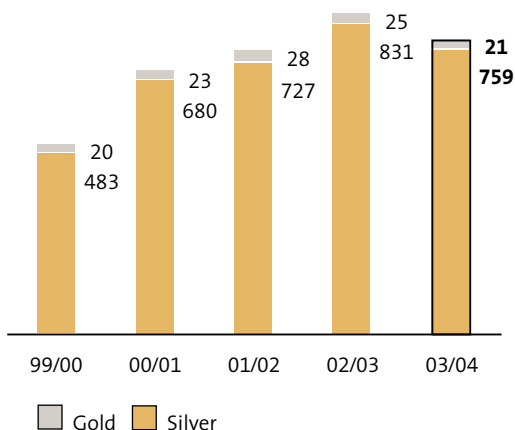
The input of so-called "modern recycling materials" not only from the electric and electronics sector and end-of-life vehicle recycling, but also from the chemical industry, was successfully increased.

The KRS's processing capacity was significantly enhanced due to plant optimisation. As a result, we could increase the throughput in the KRS year-on-year by about 40% and were thus able to utilise the good availability of recycling materials to the full.



## Gold and silver output

in tonnes



The improved copper scrap supply combined with the enhanced performance in the Lünen anode smelter resulted in an increase in anode output. Together with the anode supply from the primary smelter in Hamburg, this enabled the tankhouse in Lünen to be utilised to full capacity in the second quarter.

The output of copper cathodes amounted to 168,000 tonnes, thus an improvement over the previous year's figure (157,000 tonnes).

### PEUTE BAUSTOFF GMBH (PBG), HAMBURG

From the output of iron silicate, PBG produces hydraulic construction stone and mineral substances in the form of stones and granules and markets the stone for applications in hydraulic engineering, road construction and civil engineering and as an additive for cement. Iron silicate granules are sold as an abrasive and are used for applications in mechanical surface treatment.

With sales of 681,000 tonnes, PBG succeeded in marketing 3% more iron silicate products than in the previous year (523,000 tonnes) despite the decline in public spending on hydraulic engineering. The increase is attributable, in particular, to the rise in sales of mineral premixes.



Ideal construction material for levees, dykes and river embankments: on Amrum the dunes are secured with iron silicate stone from PBG.

Currently work is continuing on identifying new applications as well as the expansion of individual sales outlets in order to optimise the marketing of the production quantities.

PBG had 12 employees on 30 September 2004.

### RETORTE ULRICH SCHARRER GMBH (RETORTE), RÖTHENBACH

Retorte is active in the production of high-grade selenium chemicals, selenium metal and doped high-purity selenium and, as a specialist and global market leader in the selenium sector, offers all the main selenium products for the most varied applications. The products are used in industrial sectors, such as the photocopying industry, digital X-ray technology, the pigment and glass industry as well as the animal feed and food processing industry.

Crude selenium is the main raw material for Retorte. In addition to NA as its main supplier, the company procures crude selenium from copper smelters all over the world.

The fiscal year was impacted by rising prices for selenium metal as a result of significantly increased demand, especially from China.

In fiscal year 2003/04 Retorte produced a total of 600 tonnes of products (590 tonnes in the previous year). About 70% of the turnover was achieved in the export trade. In addition, about 800 tonnes of selenium premixes were produced at Retorte's associated company, JoSeCo GmbH, for the animal feed industry.

Retorte expects the strong demand to continue for selenium products and, as a result, to achieve future growth, in particular in the development of the marketing of selenium-bearing premixes for the animal feed industry.

On 30 September 2004 Retorte had 35 employees.

The main suppliers of the starting materials are cable producing and processing industries, such as cable works, system suppliers for the automotive industry, energy supply companies and telecommunications suppliers. CABLO offers these industries tolling agreements through NA covering the processing and return of the metals recovered in the form of wire rod, and thus closes the material cycle.



CABLO extracts high-grade copper from cable scrap and cable production waste using environmentally-friendly recycling processes.

In fiscal year 2003/04 a total of 20,500 tonnes of cable was dismantled. CABLO is therefore the largest cable dismantler in the German speaking region.

A new business line currently being established is the production and distribution of special copper products for the foundry, electroplating and rotogravure industries.

From 2005 onwards, the production capacity for plastic products will be almost doubled, while at the same time improving the quality as a result of the use of state-of-the-art plastic injection moulding technology.

#### **CABLO METALL-RECYCLING & HANDEL GMBH (CABLO), FEHRBELLIN**

CABLO is engaged in the dismantling of cable production waste and cable scrap in order to recycle the metal and plastic contents.

At both CABLO production sites in Fehrbellin/Brandenburg and Strass/Bavaria, copper, aluminium and lead are recovered from the starting materials using modern and environmentally friendly processes. As a certified specialised waste management company, CABLO fulfils the highest technical and statutory environmental requirements. The procurement, distribution and administration activities were relocated from Hamburg to the production site in Fehrbellin during the fiscal year.

From 2005 onwards, the production capacity for plastic products will be almost doubled, while at the same time improving the quality as a result of the use of state-of-the-art plastic injection moulding technology.

On 30 September 2004 there were 49 employees at CABLO.

**In the Copper Processing Segment all the activities of the NA Group are combined that concern the processing of copper cathodes into copper products:**

**The Copper Processing Segment consists of**

- **NA AG's business unit Copper Products with the plants for the production of continuous cast wire rod and shapes**
  - Deutsche Giessdraht GmbH (DG) in Emmerich as a producer of wire rod with a 60% interest
- **Prymetall GmbH & Co. KG (Prymetall) in Stolberg as a producer of strips, profiles and wires made of copper and copper alloys**
- **Schwermetall Halbzeugwerk GmbH & Co. KG (Schwermetall Halbzeugwerk) in Stolberg as a producer of pre-rolled strip for copper and copper alloys**

In contrast to most other copper producers, NA processes the copper cathodes produced in the Copper Production Segment into high-grade copper products. NA thus has not only a strong market position in the raw material markets, but also in the European sales markets.

NA's copper products are represented in all the product lines of industrial applications for copper.

With its production works and facilities NA has a leading position in all the market sectors of industrial copper processing:

- NA is the global leader in the production of continuous cast shapes from pure copper and pre-rolled strip from copper and copper alloys.
- In Europe NA is one of the top three for the production of wire rod and ranked four for the production of strips from copper and copper alloys. NA is the leader in Europe for the production of shaped wires from brass.

Copper Processing Segment		
in € million	02/03	03/04
Revenues	1,351	<b>1,967</b>
EBT	5.8	<b>20.3</b>
EBIT	10.9	<b>27.2</b>
Capital expenditure	8.0	<b>7.4</b>
Depreciation and amortisation	17.9	<b>27.1</b>
Number of employees (as at 30 September)	1,147	<b>1,129</b>

In fiscal year 2003/04 we further enhanced our competitive position in the European markets. Thus, revenues in the Copper Processing Segment rose significantly to € 1,967 and significantly higher pre-tax profit was generated of € 20.3 million (€ 5.8 million in the previous year).

All the product sectors made profit contributions. The business unit Copper Products again made the greatest contribution to earnings. Prymetall managed the turnaround and generated a positive operating result. However, in acquiring E.I.P. Metals Ltd. effective 1 January 2005, a one-time expense of € 3.75 million arose as a result of the provisional write-off of receivables against E.I.P. In addition, Schwermetall Halbzeug also succeeded in making up for the previous year's still negative result.

In order to account for the changed outline conditions, mainly in Prymetall's U.S. dominated export business, goodwill in the amount of € 10 million was amortised in the fiscal year despite the successful turnaround.

The cost cutting programmes performed last year and the measures taken to enhance sales have made a major contribution to increase the Segment's earnings. They will also be decisively implemented and continued in the current fiscal year.

One of the main strengths of the NA Group is the integration of copper production and copper processing. This results in significant advantages over many competitors:

- Short routes for transporting the cathodes to the processing facilities results in fast availability, lower costs and maximum flexibility.
- Thanks to the excellent and consistent quality of our cathodes, our copper products are predestined for use in applications which demand the highest standards of reforming properties, softening reaction and electrical and thermal conductivity.
- Our customers are assured of reliability in delivery due to the secure and long-term supply of raw materials.

The cathode output in Hamburg and Lünen forms the basis of copper processing in the NA Group. Due to the positive trend in copper product sales in recent years, we buy additional cathodes under long-term agreements. High-grade scrap is also used as a feed material at Schwermetall Halbzeugwerk and Prymetall.

On 30 September 2004 the Copper Processing Segment had 1,129 employees (1,147 in fiscal year 2002/03).

#### **Wire rod**

Continuous cast wire rod makes up the largest share of the first stage of the processing of copper cathodes worldwide. Some 60% of the global output of copper cathodes is processed into oxygen-bearing wire rod which, almost without exception, has a diameter of 8 mm. Our high-purity wire rod, NA-Rod, is used by our customers as the starting material for the production of cable and wires.

To round off the product range, we produce oxygen-free and also low-alloyed wire rod in our Hamburg Top Cast plant for special applications which are marketed under the brand name NA TOP-ROD.

#### **Shapes**

After wire rod, continuous cast shapes represent NA's second main product sector. Under the brand name NA-CAST, the business unit Copper Products produces cakes for the production of strips and foils as well as billets for processing into tubes, bars and profiles.

At Schwermetall Halbzeugwerk, cakes are cast in copper alloys, such as brass, which are then processed further in the company's own facilities into pre-rolled strip.

Prymetall produces billets, which are processed into shaped wires in its own plant.

#### **Strips in copper and copper alloys**

In a hot rolling and cold rolling processes, Schwermetall Halbzeugwerk produces pre-rolled strip from the copper cakes procured from NA Hamburg and the copper alloy cakes it casts itself. This strip is then processed into end products at Prymetall, the co-partner Wieland-Werke AG (Wieland-Werke) and third parties by means of rolling, annealing and slitting. Schwermetall Halbzeugwerk is the largest producer of pre-rolled strip from copper and copper alloys in the world.

Prymetall procures all its pre-rolled strip from Schwermetall Halbzeugwerk and produces strips from copper and copper alloys by rolling, annealing and slitting. Prymetall's strips are used in the electrical engineering and electronics industries, but also in the construction industry and other industries. With a market share of more than 20%, Prymetall is the fourth largest producer in Europe. The NA Group has direct access to the end customer market via Prymetall and can therefore recognise early on potential for the development of new products in copper and copper alloys.

### Shaped wires

At Prymetall brass billets are processed into shaped and round wires by extrusion and subsequent drawing. These products are mainly used for applications in the electrical engineering and electronics industries. Prymetall has a market share of 25 % in the shaped wire product sector.

## BUSINESS UNIT COPPER PRODUCTS

The product groups of continuous cast wire rod and shapes are produced, developed further and marketed in NA's business unit Copper Products. In addition, the share of the wire rod output at DG in Emmerich is also sold. The unit's business plans follow a strategic orientation that targets the expansion of copper activities in the NA Group.

This year new production records were achieved for the copper products. With a total output of some 565,000 tonnes of wire rod and shapes, NA is a leading processor of copper cathodes into high-grade pure copper products worldwide.

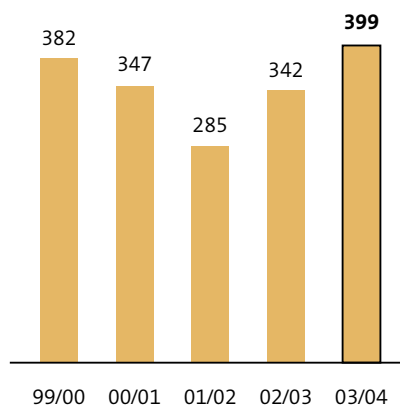
This business unit's success is the result of several major factors in the NA copper strategy.

After the relatively weak economic trend in the first quarter of the fiscal year, there was a noticeable improvement at the beginning of the calendar year for both the cable and wire sectors as well as strips for applications in electrical engineering and electronics. As a leading producer, we were able to participate in this more strongly than some of our competitors.

The main reasons for the successful business trend over the year as regards wire rod were our reliability in delivery and high product quality. In a year in which the European warehouses of the London Metal Exchange had almost no cathode stocks, NA could generally always fulfil long-standing customers' requirements for additional quantities from our own stocks. Some competitors were unable to provide such reliability in delivery at all times.

### Wire rod output (Group)

in thousand tonnes



The strategy to extend our service leadership to all our product sectors has proven to be very successful.

The use of NA's e-business portal, copper-online, has significantly increased. In view of the rising, and at the same time strongly fluctuating copper prices, it was increasingly important for our customers that price risks were hedged. NA offered them this possibility via copper-online.

The technical and commercial service offer – such as joint technical tests and development work with our customers and extensive advice on all technical questions concerning copper – was also appreciated by our customers.

Overall, in fiscal year 2003/04, the strategy of long-term sustained orientation to copper as our core business has proved particularly successful.

The business unit Copper Products had 345 employees as at 30 September 2004.

### NA Rod (wire rod)

Following the substantial rise in output to 247,000 tonnes of wire rod in fiscal year 2002/03 compared with the previous year, a new production record was set at 282,000 tonnes in 2003/04. This includes about 7,000 tonnes of TOP ROD. NA's share of the wire rod output of Deutsche Giessdraht at 117,000 tonnes was also an all-time high.

In total, 399,000 tonnes of wire rod were produced in the NA Group during the fiscal year, almost 15% up on the previous year. NA could thus enhance its market position. In addition, it has a sales base that meanwhile stretches beyond the borders of Central Europe.

Year-on-year demand for wire rod was stronger in all the relevant industries. However, the European market is impacted by significant over-capacities. Further cost cutting measures are therefore essential. After having improved productivity last year, further technical measures were implemented in the casting sector this year to increase the production possibilities of the Hamburg rod plant

Apart from wire rod, we also produce our specialty product TOP ROD in another plant in Hamburg. With an output of about 7,000 tonnes, production was again slightly up on the previous year.

#### Deutsche Giessdraht GmbH (DG), Emmerich

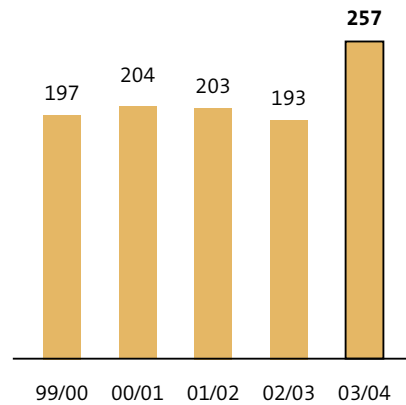
With a 60% share NA holds the majority interest in DG. The other 40% is held by Codelco, the largest copper producer in the world.

At DG wire rod is produced from copper cathodes supplied by the shareholders in a similar rod plant to that in Hamburg. Product marketing is performed by the shareholders in proportion to their respective holdings.

Reliability is especially important for wind power plants. The stators in Enercon's wind turbines contain large quantities of copper. (photo: ENERCON GmbH)



#### Continuous cast shape output in thousand tonnes



In fiscal year 2003/04 DG again increased production by some 15% to more than 200,000 tonnes. As a major step towards higher productivity, the plant's casting wheel was enlarged in summer 2004 resulting in a roughly 10% rise in throughput.

On 30 September 2004 DG had 113 employees.

#### NA Cast/Roll (continuous cast shapes and pre-rolled strip)

The output of shapes rose even more sharply than for wire rod. In the fiscal year it was up 35% to 257,000 tonnes. In total, all the product segments in the casting sector improved significantly: billets for the production of tubes and profiles, oxygen-free copper for the production of cable strip for the telecommunications industry and cakes in pure copper grades for the production of materials for the electrical engineering and electronics industries.

Large quantities of the cakes produced are processed at Schwermetall Halbzeugwerk, in which NA holds a 50% stake. Prymetall produces copper strips from a significant part of the output of pre-rolled strip.

After a weak first quarter in the fiscal year, production in the following three quarters showed a considerable uptrend. In some months the comparable figures for the previous year were exceeded by more than 50 %. The high production output was only possible due to a significant increase in productivity and considerable flexibility and dedication on the part of the workforce. In the continuous casting sector we also succeeded in substantially cutting costs further by several measures taken.

After strong demand for wire rod and shapes in early summer, demand has stabilised at an increased level. The first quarter of the new fiscal year is usually affected by Christmas stoppages and reduced levels of stocks at many of our customers. However, for the fiscal year as a whole we are again expecting production to be high.

#### **PRYMETALL GMBH & CO. KG (PRYMETALL), STOLBERG**

While the other sectors of the Copper Processing Segment produce mostly starting materials for the semis industry, Prymetall has provided NA with important direct access to the end customer market. By working closely together within the Segment, market trends at Prymetall's customers can be directly observed, in particular in the strip sector but also as regards brass wires and profiles. The combination with NA permits trends on the markets to be used to develop new products.

The harmonious architecture of the roof on a house in north Hamburg shows the possibilities of copper.



Prymetall produces strip products in copper and copper alloys from the pre-rolled strip supplied by Schwermetall Halbzeugwerk for almost all sectors of the industry. The most important customer industries are the electrical engineering and electronics, telecommunications, automotive, consumer goods and the construction industry. In the wire production sector, the billets made from various brass alloys in the company's own foundry are processed into round and shaped wires. These are used, for instance as wrap connections, mainly in the electrical engineering industry but increasingly also in the electronics industry.

With an output of about 73,000 tonnes, Prymetall's production was about 15 % up on the previous fiscal year (64,000 tonnes). This was mostly achieved in the strip sector, where production rose from 52,000 tonnes to some 61,000 tonnes. The output of wire increased from 12,100 tonnes to 12,500 tonnes.

With a market share of more than 20 % Prymetall is the fourth largest rolled material producer in Europe. Due to its market share of some 25 % for brass wires and profiles, the company is one of the three joint market leaders in this segment.



The difference between the first quarter and the remaining three quarters was even more pronounced than in NA's other product sectors. While the first quarter – due as well to major restructuring steps as part of the cost cutting programme Top Plus – still

fitted in the poor overall picture of the previous year, the order intake and production picked up significantly from the end of 2003 onwards.

The reason for this was the general economic recovery and Prymetall's clearly improved market position with its enhanced marketing activities. The service offer was expanded overall. Today Prymetall's customers are increasingly classing it as their main or second supplier.

Apart from targeted marketing activities, cost reductions and increased productivity are the most important factors for Prymetall's success due to the competition worldwide.

Last year we made further progress in all areas:

- The potential for cutting costs resulting from the Euro-Copper project has been almost completely realised. This also included a significant reduction in the workforce.
- Production scrap was minimised.
- Energy consumption, in particular in the wire sector, substantially declined as a result of targeted investments.

Improvements were also achieved in marketing activities:

- Prymetall is now one of the first semis producers to be certified in accordance with the demanding standards of the automotive industry (TS 16949).
- The first step in the production of strip from wire rod has been successfully concluded.
- The co-operation with slitting centres has been significantly enhanced. As a result, it is much easier to fulfil customers' wishes for small amounts.

In contrast to the other sectors of the Copper Processing Segment, the order intake at Prymetall has weakened in the last few months. We are, however, assuming that – as was the case last year – order receipts will pick up again at the beginning of the new calendar year.

As part of our strategy to intensify the co-operation with slitting centres and to secure our market share in the United Kingdom, Prymetall is acquiring the English company, E.I.P., effective 1 January 2005, the market leader in the UK with which we have previously worked closely together.

Prymetall had 389 employees on 30 September 2004.

#### **SCHWERMETALL HALBZEUGWERK GMBH & CO KG, STOLBERG**

NA via Prymetall holds 50% of the shares in Schwermetall Halbzeugwerk. The other 50% is held by Wieland-Werke. Schwermetall Halbzeugwerk produces pre-rolled strip for the copper semis industry. The most important customers are the shareholders Prymetall and Wieland-Werke. In addition, however, significant quantities are sold to third parties.

Schwermetall Halbzeugwerk is the largest hot rolling mill in the world with a capacity of more than 300,000 tonnes p.a. By processing pure copper billets weighing up to 25 tonnes supplied by NA or alloyed copper billets from its own foundry, the company is able to produce very large rings in pre-rolled strip which can be cost-effectively and efficiently processed by the customers.

In contrast to all the other production sectors in the Copper Processing Segment, Schwermetall Halbzeugwerk recorded a drop in sales. The capacities could not be fully utilised despite the economic uptrend.



While sales to Prymetall were substantially increased, there was a decline in business with third parties. There were several reasons for this:

- At the end of last year major economic difficulties at some customers forced them to discontinue production or significantly reduce the quantities ordered.
- In the last few years the coin business was a main source of sales. This again significantly declined last year due to the low global demand and economic difficulties experienced by major customers.
- Schwermetall Halbzeugwerk's export business was more difficult due to the weak U.S. dollar despite high productivity.

Decisive measures were taken to tackle these structural difficulties in sales:

- The cost cutting project started last year is currently being implemented. The resultant cost savings will make a significant difference in the new fiscal year.
- Risk management was substantially improved in close collaboration with NA and Wieland-Werke.
- In collaboration with Wieland-Werke, all the sectors not directly concerned with production, such as metal management, material procurement and finances are being optimised.
- The acquisition of new customers is being accelerated, especially in the strongly growing regions in Eastern Europe and Asia.

The order intake has not substantially improved since the end of the fiscal year. Nevertheless, the first positive signs in the form of additional orders are coming from Eastern Europe and the coin industry.

At Schwermetall Halbzeugwerk there were 262 employees as per 30 September 2004. The NA Group consolidates 50 % in its number of personnel.

Schwermetall Halbzeugwerk produces pre-rolled strip for the copper semis industry and is an important supplier of Prymetall.



**The Central Services sector was created as part of the reorganisation of the NA Group effective 1 April 2004. It has not only a supporting function but should also make a significant contribution to earnings. The aim is to optimise interfaces by the integration of Group-wide services, avoid duplication of effort and cut costs. Central Services has 850 employees divided up into seven sub-sectors.**

## MATERIAL PROCUREMENT

In fiscal year 2003/04 the procurement for the Lünen works was integrated in the central Material Procurement. As a result, performance could be significantly enhanced despite requiring less personnel. In the year under review 48,000 orders were processed with a purchasing volume of € 154.5 million.

A major task of Material Procurement is the procurement of energy at competitive prices. It is very difficult to cover NA's energy requirements due to the dominance of the four main suppliers on the German energy market. According to the Monopoly Commission (15 surveys dated 7 July 2004), the sharp rise in energy prices is due to the lack of any real competition.

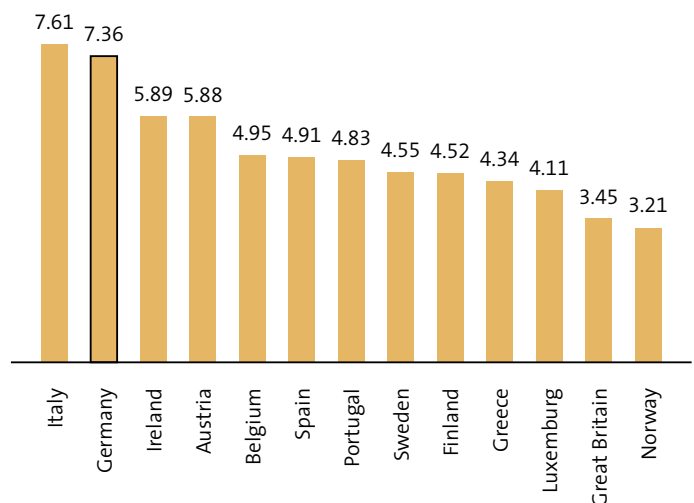
The price reductions after the liberalisation of the German energy market in 1998 have been eaten up by additional state levies and drastic price increases made by all the suppliers. The price used by all the energy suppliers as a reference on the Leipzig Energy Exchange (EEX) for deliveries in 2004 increased by 42 % between January 2002 and December 2003. According to the energy suppliers, the increase is due to rising raw material costs although there has been no serious price changes for either brown coal or nuclear fuel, which together make up more than 50 % of the German power supply.

The procurement of price-effective energy from abroad is also hampered because the capacity of the transmission points in German inland is too low to allow significant imports of electricity.

Nevertheless, in order to counter the energy price trend in Germany, we have been able to conclude a new energy supply agreement for the Hamburg site with the Belgium energy supplier, Electrabel.

## Comparison of industrial energy prices in the EU

in cts/kWh; 10MW x 7,000 h/a, Status 1 July 2004



\* Source: Eurostat, Energie 07/2004

Further problems of the energy market are to be found in the growing list of levies imposed by the state due to the subsidies for renewable energy wind, sun, water, CHP (combined heat and power) and the ecotax. Since its introduction, the burden under the Renewable Energy Sources Act has risen by more than 300%. NA was only able to use the hardship clause for energy-intensive enterprises laid down under the Renewable Energy Sources Act after a hard campaign of persuasion.

The electricity prices for the Lünen and Stolberg sites were likewise secured. This also applies to Deutsche Giessdraht and CABLO. However, it is not possible in Germany to operate a joint procurement process for electricity for the whole NA Group due to the behaviour of the four resident energy suppliers.

The gas market also shows no indication of well-functioning competition. Due to the currently applicable transaction-driven network access model, it is only possible to change supplier at considerable expense. In addition, Germany is one of the countries with the highest network user fees when compared with other European countries.

"It is still impossible to procure electricity cost-effectively for all of NA's production sites together. →

→ The reason is the lack of competition on the energy market."  
Ulf Gehrckens, Head of Central Services



In view of the global raw material boom and persistent raw material purchases from China, NA must also put its material procurement on a more international footing. Thus, for instance, steel pipes were procured from Italy and pig iron ingots delivered from Russia.

## NA LOGISTICS

As part of a reorganisation, the despatch department, magazine and transport department were combined in the NA Logistics sector, process control was introduced, parts of Hüttenwerke Kayser were integrated, data systems to control inventories in the magazines in Hamburg and Lünen were integrated and an automatic document filing system set up.

Despite the reduction in personnel, annual highs could be achieved for the tonnages moved at the Hamburg site (4,800,000 tonnes) as well as an increase in the crane handling operations to 1,420,000 tonnes/p.a.

The construction of a pipe conveyor for the largely automated transport of currently 1.25 million tonnes of copper concentrates from the vessel in the Hamburg harbour to a new storage facility in NA's works was projected. The project's realisation is dependent on the harbour design conceived by the Hamburg Authorities for Economic Affairs. At present, concentrate deliveries still have to be transhipped several times and transported on barges through the harbour to NA.

## MAINTENANCE/PROCESS TECHNOLOGY

The task of NA's Maintenance is to repair and maintain all production plants from process and cost-optimisation aspects, both proactively and on request. In addition, this sector makes an active contribution to optimising processes in all production works. The savings potential of more than € 5 million p.a. represents a significant part of NA's cost cutting programme.

## DESIGN OFFICE

Altogether, about 90 investment projects involving capital expenditure of € 13,5 million were planned and implemented by the Design Office which performs the engineering and design of new plants. In fiscal year 2003/04 these included projects such as the construction of the new silver electrolysis, the reduction of emissions in the secondary smelter and the design and reconstruction of the material preparation in Lünen

With the new silver electrolysis, which was commissioned in January, NA has a modern electrolysis process for the production of high purity silver. The project to reduce emissions in the secondary smelter included the development of innovative hoods in the converter hall, the installation of special swirl hoods, a suction device in the lead casting centre and the construction of a roof over the ladle reverts.

## ANALYTICAL LABORATORIES

The analytical laboratory sector combines all inorganic analytical activities on raw materials, intermediates and end products. As a result of the high capacity utilisation in the business unit Copper Products and the increased procurement on the raw material and recycling markets, the number of analytical determinations in the last fiscal year exceeded one million for the first time. In addition, we perform laboratory services for external customers.

## ENERGY MANAGEMENT

Energy management originated in the Energy Management Department.

NA's energy saving programme, which was completed in 2002, resulted in a reduction in specific energy consumption of more than 20 % annually. A new programme has now been started that we hope will achieve a further 10 % reduction in specific energy consumption in the next few years. The reduction in natural gas consumption of 15,000,000 m<sup>3</sup>/p.a. and potable water consumption of 300,000 m<sup>3</sup>/p.a. achieved in recent years should be improved further.



"2003/04, for the first time more than 1,000,000 analytical determinations were performed in our labs." Maria Mihailova, chemical-technical assistant

**Entrepreneurial activity always means a willingness to take risks. The corporate risks in the NA Group are diverse and represent varying risk potential. The most important individual risks are permanently observed and their impact on NA AG and the subsidiaries systematically analysed.**

**The aim is to recognise risks at an early stage, assess them correctly and limit them to a great extent.**

Risk management concerns all corporate sectors. It is part of the Group-wide planning process that takes in not only procurement, sales and production planning, but also human resources, investment and financial budgets. These plans and budgets which extend over several years are updated each year and monitored monthly. The strategic plan is examined each year with a view to its implementation and, if necessary, adapted to the changing corporate targets.

We differentiate between risks in core processes – such as procurement, production and sales – and risk in support processes. These include transactions on the exchanges, finance, environmental protection and health care, human resources, legal matters and the IT sector.

The risks are categorised by the respective sectors as regards cause, frequency and the possible loss potential as well as evaluated qualitatively to the greatest possible extent and – as far as possible – quantitatively. Adjustments and additions are made regularly.

NA and its active subsidiaries have documented the hazards in risk management in a form that is available for inspection. The development of significant risks at the subsidiaries is followed centrally as part of integrated risk management.

Risk management in the NA organisation is regarded as a company management task under the direct authority of the Chief Financial Officer.

### MACROECONOMIC RISKS

Risks resulting from the macro-economic trend could arise in particular due to changes in political or economic factors. On the raw material procurement side, due to the wide geographic spread of its suppliers, NA is well positioned to minimise political risks in the countries of origin of the copper raw materials. As to sales of our copper products in the core markets, Germany and Western Europe, the general economic trend has an impact on business. International developments on the markets relevant for NA as well as the performance of exchange rates and their impact are monitored constantly. NA has further enhanced its position in its core business, copper, including the non-ferrous metals connected with copper production. NA held up well – also in a weak economic environment – and succeeded in countering risks caused by the economic trend. Apart from persistent distortions in competition on our raw material markets, there is medium-term and long-term risk potential in the availability of electricity at competitive prices in the industrial location of Germany. NA is taking a very active part in the public debate on this topic.

### INDUSTRY-SPECIFIC RISKS

Copper is a base material with numerous possible applications in almost all sectors of modern life. Thanks to the high quality standards of our copper products and our ability to supply special qualities, NA is confident about meeting rising quality demands, even in special sectors. For the foreseeable future we do not see any substitution products that could significantly affect our business. There will probably be new applications for copper in other sectors. We expect copper demand in Europe to continue increasing in the next ten years, which will assist the utilisation of our metal production and processing plants as well as sales of our copper products.

## RISKS FROM BUSINESS ACTIVITIES

### Raw material procurement

Our supply of copper concentrates, the most important raw material for our copper production sector, is largely secured by long-term supply agreements with major mines. These basic agreements have lifetimes of between five and fourteen years. The treatment and refining charges, which are relevant for our earnings, are renegotiated in intervals of one to two years and represent a stabilising component for our business due to their long-term character. We procure copper scrap and other recycling materials on the more volatile secondary markets. The modern Kayser Recycling System (KRS), at our Lünen site contributes to strengthening NA Recycling on account of increased processing possibilities and wider range of secondary raw materials. The NA Group optimises its material flow and thus improves earnings from the processing of raw materials. This is also a contribution to minimising risks.

The production plants for continuous cast wire rod and shapes are mainly supplied with copper cathodes produced in the NA Group. In the event of a possible shortfall in the cathode output in Hamburg and Lünen, we have the alternative of purchasing cathodes on the market.

### Production

Our core facilities operate without interruption around the clock, others as required in a five or six-day week. Maintaining the plants' high availability is an important corporate target. It is constantly monitored by our own specialists and within the framework of co-operation agreements with external specialised companies. In the event of disruptions, which could have a major impact, measures are taken in accordance with our alarm and emergency guidelines. Exercises are conducted to ensure the correct reaction in case of an emergency and test alarms. In addition, there is comprehensive fire insurance and cover for business interruption and loss of profits resulting from fire for all the production plants in the NA Group.

### Sales

Sales of our copper products, which depending on turnover form the focal point of our sales activities, are performed directly and indirectly in different industries and are supported by close ties to our customers. The strategy of forward integration has opened up new markets for the NA Group. By concluding long-term agreements with various major customers we have assured a basic sales level for our main products.

Our products are well received by our customers. They exceed the demands of the valid norms and standards for continuous cast wire rod and shapes. Our Quality Management System's certification in accordance with DIN EN 9001:2000 was reaffirmed in the last fiscal year.

### Research and development

The close link between development, production, technology and our customers and suppliers forms the basis for the further development of products, stock flows and production technology. In this way our plants become more efficient and product quality improves further.

Another important sector is the development of new products with the focus on copper materials. Significant results are achieved here in close collaboration with customers. In all cases we orient our aims, schedules and development budgets to the respective project in order to monitor them optimally and keep risks low.

## RISKS ARISING FROM FINANCIAL TRANSACTIONS

The NA Group is the largest copper producer in Europe. Other products besides copper are produced in our production processes, e.g. precious metals. In our international business we are confronted with risks arising from the trend in the exchange rates as well as from metal trading and foreign exchange transactions. Using various financial instruments, we perform daily hedging to limit the risks arising from metal price fluctuations, foreign exchange and changes in interest rates. We have agreements with banks regarding the utilisation of short-term and long-term credit lines. Liquidity risks are reduced in advance by Group-wide liquidity planning. The funding of maintenance and expansion projects is assured.

A management circle including the Executive Board meets regularly and observes developments on the metal markets, the price situation as well as NA's liquidity position by means of differentiated information instruments and set limits.

In the notes to the financial statements under Section 24 we have detailed the open nominal volume of our derivative financial contracts and the market value of all open contracts.

At present we cannot detect any significant risks in the metal trading sector or in our currency and liquidity management.

#### **RISKS IN RECEIVABLES**

Various measures are taken to avoid loss of income from bad debts. The credit rating of our trading partners when business is planned is always checked, assessed and, if necessary, secured by business credit reports from banks and industry. Instruments customary on the market, such as letters of credit, security or bank guarantees are used in daily business. Internal credit limits, credit insurance, non-recourse forfaiting and direct contact with our trading partners complement the various instruments. The contractor risk is limited by stringent internal Group-wide liability management.

#### **LEGAL RISKS**

There are no pending or threatened legal proceedings, arbitration proceedings, proceedings before the Patent Court or claims for damages, which have a significant impact on the economic situation of the NA Group.

Adequate provisions have been made for legal risks.

#### **OTHER RISKS AND IT RISKS**

Environmental protection and health protection are important corporate targets. The adherence to laws, directives and requirements is imperative for the continued existence of the Group. We achieve these targets by constantly improving environmental protection and occupational safety as well as having health screening performed by the company's own physician. Monitoring is performed by readings taken in internal and external inspections as well as audits.

In the IT sector and communication technology sector we are covered for possible breakdowns in our operating computer systems by precautions taken by our service data processing centre. Modern firewall technology protects the Group network from undesirable outside influences. The current software is continually being adapted to fulfil the economic and legal demands placed on it.

#### **OVERALL RISK**

The overall evaluation of the NA Group's risk situation reveals that, as a result of the last fiscal year and the implementation of the scheduled projects, there are no risks jeopardising the continued existence of the enterprise. The current annual report shows that the NA Group has a sound financial structure and the existing equity level permits targeted growth through capital expenditure.

NA's Supervisory Board has appointed an Audit Committee. In accordance with Section 5.3.2 of the Germany Corporate Governance Code, this Committee is also concerning itself intensively with matters of risk management.

In compliance with statutory directives, our risk management system was additionally assessed by the auditors. Both the Audit Committee and the auditors determined that the Executive Board had taken the steps required under Section 91 § 2 Companies Act in a suitable manner and that the management system fulfilled the prerequisites for this.

**The strong demand for copper will also prevail in 2005.**

**The rapid economic growth in Asia and good economic trend in North America should be the driving forces in this. Analysts are expecting demand in Europe to be stable with slight growth. On the supply side the copper market will continue to be impacted by shortages. Stocks in the warehouses of the metal exchanges are low. Global cathode output is not growing to a sufficient degree. In 2005 this will therefore probably also result in a supply deficit on the global copper market. It will, however, not reach the level of 2004.**

In view of the high copper price, the enterprises in the mining industry will do everything possible to increase production. The supply of copper concentrates will therefore also exceed the smelters' processing capacities in the coming months. We assume that treatment and refining charges in the spot market will remain at a high level. This should also have a positive impact on the conditions under long-term agreements. The

impact of the trend in the U.S. dollar on NA's treatment and refining charges is limited in the current fiscal year. We have already hedged our dollar revenues. For sulphuric acid, we also expect the good market situation to continue in the current fiscal year.

The improvement in supplies on the copper scrap markets expected last year has taken effect. We have made good use of this. We assume that the market will consolidate with slightly lower refining charges. This is also a consequence of the increased pressure from competition, also from other European copper scrap processors. As to modern recycling materials, the range of feed materials for treatment in the KRS is being widened further. We will receive positive impulses from the new EU-wide guidelines for the electronic scrap and end-of-life vehicle recycling sectors. In total we are expecting the positive trend to continue here.

NA's success with customers from the semi-finished product industry in times of cathode shortages is partly due to NA's reliability in supplying its products. We expect the order intake for wire rod to be stable, in the continuous cast shape sector the high order intake is unabated. For seasonal reasons the 1st quarter of NA's fiscal year is generally impacted by maintenance work in the production sectors. Currently the effect will, however, be minimal. Altogether, NA expects to see business performance continue along the same positive trend as in the last fiscal year.



## FUTURE CAPITAL EXPENDITURE

We regard continuous growth as the basis for maintaining and developing our company further in the interests of all stakeholders. It is our aim to actively participate in structuring the changes in the copper world. We intend to keep and increase our competitiveness by intensive marketing activities, further performance enhancement and cost optimisation.

In fiscal year 2004/05 about € 47 million should be spent on property, plant and equipment in the NA Group. The capital expenditure can be funded from the current cash flow.

In the Copper Production Segment capital expenditure is focusing on the optimisation of the precious metal processing facilities, on enhancing the real net output ratio in the recycling business, the increased processing of complex smelter intermediates as well as the implementation of measures for environmental protection.

In the Copper Processing Segment the business unit Copper Products in Hamburg is planning several investment project to increase productivity in the continuous casting and rod plants.

Schwermetall Halbzeugwerk has a state-of-the-art plant structure. Consequently, mostly minor optimisation projects are planned here in the period under review.

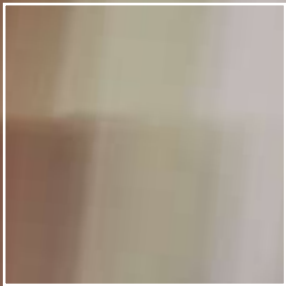
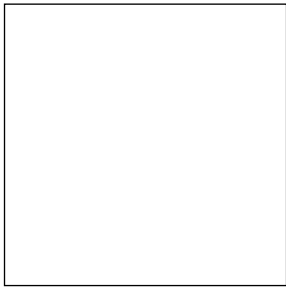
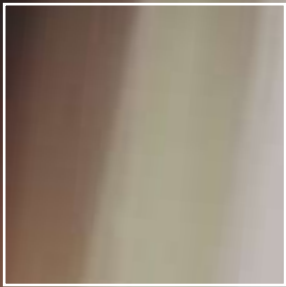
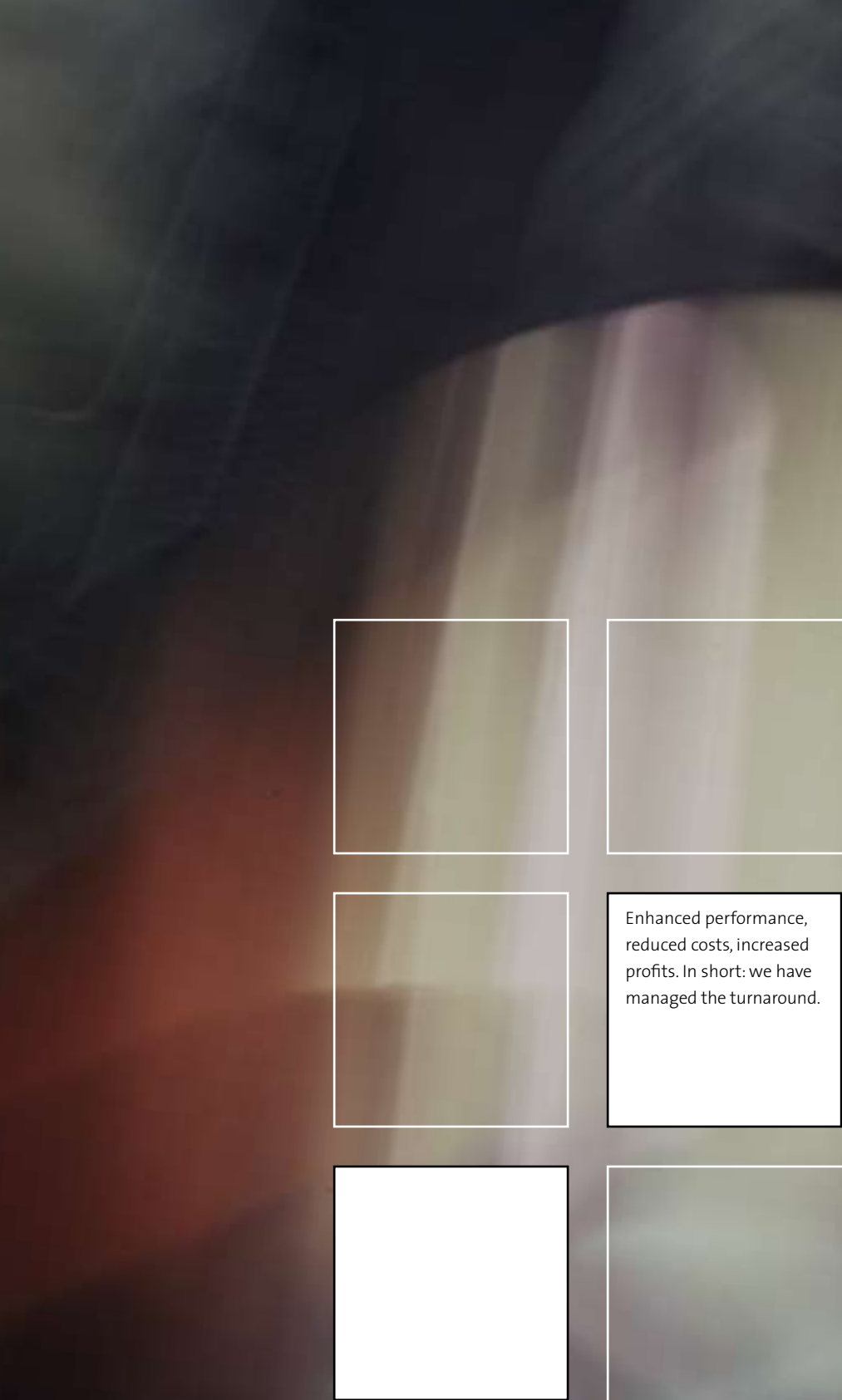
After having implemented all the main investment projects within the framework of the Euro-Copper programme at Prymetall, capital expenditure in fiscal year 2004/05 will – apart from minor replacement measures – mainly be invested in a new plant as part of the growth strategy “Strip and Wire”.

The projects for Central Services are divided between a number of infrastructure measures, increasing energy efficiency and reducing energy consumption.

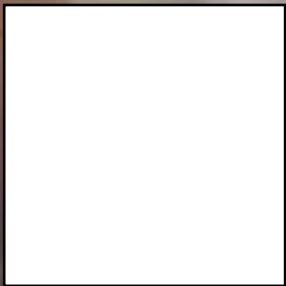
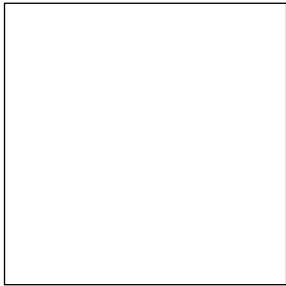
In line with the continuing globalisation of the raw material and product markets, the Group's future must be secured by a wider spread of production sites, which take growth regions and low cost conditions into account. NA as an integrated producer and downstream processor has already created a good starting position for internationalising its business. In view of this, international growth opportunities should be consistently used.

Precision strip in copper and copper alloys

# 47 million



Enhanced performance,  
reduced costs, increased  
profits. In short: we have  
managed the turnaround.



Earnings before taxes  
could be significantly  
increased by € 44 million  
to € 47 million.

# CONSOLIDATED PROFIT AND LOSS ACCOUNT (IFRS) for the period 1 October 2003 to 30 September 2004

in € thousand	Notes	2003/04	2002/03
<b>Revenues</b>	<b>1</b>	<b>2,480,708</b>	1,815,794
Changes in inventories of finished goods and work in process		<b>38,410</b>	(29,866)
Own work capitalised		<b>1,958</b>	2,680
Other operating income	<b>2</b>	<b>27,970</b>	37,098
Cost of materials	<b>3</b>	<b>(2,160,663)</b>	(1,471,445)
<b>Gross profit</b>		<b>388,383</b>	354,261
Personnel expenses	<b>4</b>	<b>(180,326)</b>	(191,816)
Depreciation and amortisation	<b>5</b>	<b>(70,454)</b>	(62,502)
Other operating expenses	<b>6</b>	<b>(79,611)</b>	(84,737)
Result from investments	<b>7</b>	<b>375</b>	1,032
Net interest expense	<b>8</b>	<b>(11,716)</b>	(12,893)
<b>Result from ordinary activities</b>		<b>46,651</b>	3,345
Income taxes	<b>9</b>	<b>(20,054)</b>	1,092
<b>Consolidated net income before minority interests</b>		<b>26,597</b>	4,437
Income attributable to minority interests	<b>10</b>	<b>(1,472)</b>	(1,209)
<b>Consolidated net income</b>		<b>25,125</b>	3,228
Basic earnings per share	<b>11</b>	<b>0.76</b>	0.10
Diluted earnings per share	<b>11</b>	<b>0.74</b>	0.10

## CONSOLIDATED CASH FLOW STATEMENT

in € thousand	2003/04	2002/03
Result from ordinary activities	46,651	3,345
Depreciation and amortisation	70,412	52,553
Impairment losses on current assets	3,592	80
Change in long-term provisions	1,924	4,550
Gain from disposal of non-current assets	795	444
Result from investments	(375)	(1,032)
Net interest expense	11,716	12,893
Income taxes paid	(16,570)	(8,604)
<b>Gross cash flow</b>	<b>118,145</b>	<b>64,229</b>
Change in receivables and other assets, including short-term security investments	(46,284)	(8,472)
Change in inventories	(66,883)	43,844
Change in short-term provisions	12,597	(1,728)
Change in liabilities (excl. financial liabilities)	28,972	(10,417)
<b>Cash inflow from operating activities (net cash flow)</b>	<b>46,547</b>	<b>87,456</b>
Purchase of non-current assets	(27,986)	(26,446)
Payments for the acquisition of interests in subsidiaries	0	(1,179)
Proceeds from disposal of non-current assets	1,280	1,186
Interest received	3,398	4,109
Dividends received	375	1,032
<b>Cash outflow from investing activities</b>	<b>(22,933)</b>	<b>(21,298)</b>
Proceeds from capital increases	3,243	927
Proceeds from issuance of bonds and taking up financial liabilities	31,436	7,616
Payments for the redemption of bonds and financial liabilities	(37,163)	(31,393)
Interest paid	(15,114)	(17,002)
Dividends paid	(1,200)	(22,297)
<b>Cash outflow from financing activities</b>	<b>(18,798)</b>	<b>(62,149)</b>
Net change in cash and cash equivalents	4,816	4,009
Cash and cash equivalents at beginning of period	11,008	6,999
<b>Cash and cash equivalents at end of period</b>	<b>15,824</b>	<b>11,008</b>

## CONSOLIDATED BALANCE SHEET (IFRS) as at 30 September 2004

Assets in € thousand	Notes	30.09.2004	30.09.2003
<b>Non-current assets</b>	<b>12</b>		
Intangible assets		<b>38,047</b>	58,846
Property, plant and equipment		<b>356,404</b>	376,404
Investment property		<b>141</b>	159
Financial assets			
Interest in affiliated companies		<b>300</b>	272
Investments		<b>603</b>	624
Other financial assets		<b>908</b>	1,110
		<b>1,811</b>	2,006
		<b>396,403</b>	437,415
<b>Current assets</b>			
Inventories	<b>13</b>	<b>326,364</b>	259,482
Receivables and other assets	<b>14</b>		
Trade accounts receivable		<b>161,682</b>	139,878
Other receivables and assets		<b>87,447</b>	56,756
		<b>249,129</b>	196,634
Short-term security investments	<b>15</b>	<b>967</b>	1,167
Cash and cash equivalents	<b>16</b>	<b>15,824</b>	11,008
		<b>592,284</b>	468,291
<b>Deferred tax assets</b>		<b>1,204</b>	8,272
<b>Total assets</b>		<b>989,891</b>	913,978

Equity and liabilities in € thousand			
	Notes	30.09.2004	30.09.2003
<b>Equity</b>	<b>17</b>		
Subscribed capital		85,528	84,593
Additional paid-in capital		29,409	27,101
Retained earnings		296,009	270,850
Changes in accumulated other comprehensive income		(6,136)	3,941
		404,810	386,485
<b>Minority interests</b>	<b>18</b>	<b>4,323</b>	<b>4,051</b>
<b>Long-term provisions and liabilities</b>			
Long-term provisions			
Pension liabilities	19	49,797	48,155
Deferred tax liabilities	20	43,027	49,881
Other long-term provisions	21	29,892	29,610
		122,716	127,646
Long-term liabilities	22		
Long-term financial liabilities		112,273	129,716
Other long-term liabilities		342	2,713
		112,615	132,429
		235,331	260,075
<b>Short-term provisions and liabilities</b>			
Other short-term provisions	21	75,574	50,532
Short-term liabilities	22		
Short-term financial liabilities		57,389	45,674
Trade accounts payable		131,495	119,459
Other short-term liabilities		80,969	47,702
		269,853	212,835
		345,427	263,367
<b>Liabilities</b>	<b>17</b>	<b>580,758</b>	<b>523,442</b>
<b>Total equity and liabilities</b>		<b>989,891</b>	<b>913,978</b>

## CHANGES IN NON-CURRENT ASSETS OF THE GROUP as at 30 September 2004

in € thousand	Acquisition or construction cost 01.10.2003	Additions in the fiscal year	Disposals
<b>Intangible assets</b>	25,001	710	816
Licenses, industrial property rights and similar rights and assets, and licences to such rights and assets	56,790	0	2,990
Goodwill	13	0	0
Payments on account	81,804	710	3,806
<b>Property, plant and equipment</b>			
Land and buildings	305,000	4,488	277
Technical equipment and machinery	860,876	14,203	13,262
Other equipment, factory and office equipment	68,640	3,250	7,489
Leased assets	9,641	415	666
Payments on account and assets under construction	13,497	4,881	207
	1,257,654	27,237	21,901
Investment property	363	0	0
<b>Financial assets</b>			
Interests in affiliated companies	2,297	1	0
Loans to affiliated companies	465	0	0
Interests in associated companies	0	0	0
Investments	1,110	6	0
Loans to enterprises in which investments are held	625	0	0
Long-term securities	127	0	127
Other loans	518	32	107
	5,142	39	234
	1,344,963	27,986	25,941



Transfers	Write-ups	Depreciation, amortisation and write-downs 30.09.2004	Carrying amount 30.09.2004	Carrying amount 30.09.2003	Depreciation and amortisation in the current fiscal year
239	0	19,152	5,982	8,705	3,691
(2,247)	0	19,488	32,065	50,128	12,826
(13)	0	0	0	13	0
(2,021)	0	38,640	38,047	58,846	16,517
3,432	22	225,307	87,358	87,171	8,430
12,858	0	627,786	246,889	257,233	42,407
(1,648)	20	51,161	11,612	12,898	2,371
0	0	4,395	4,995	5,605	711
(12,621)	0	0	5,550	13,497	0
2,021	42	908,649	356,404	376,404	53,919
0	0	222	141	159	18
27	0	2,025	300	272	0
0	0	0	465	465	0
0	0	0	0	0	0
(27)	0	486	603	624	0
0	0	625	0	0	0
0	0	0	0	127	0
0	0	0	443	518	0
0	0	3,136	1,811	2,006	0
0	42	950,647	396,403	437,415	70,454

# STATEMENT OF CHANGES IN EQUITY OF THE NA GROUP

in € thousand	Subscribed capital	Additional paid-in capital	Retained earnings	Changes in accumulated other comprehensive income	Total equity	Minority interests	Total
<b>Balance as at 30.09.02</b>	83,720	27,047	288,677	(7,400)	<b>392,044</b>	4,594	<b>396,638</b>
Capital increase	873	54			<b>927</b>		<b>927</b>
Dividend payments			(21,257)		<b>(21,257)</b>	(1,040)	<b>(22,297)</b>
Consolidated net income			3,228		<b>3,228</b>	1,209	<b>4,437</b>
Changes in accumulated other comprehensive income				11,341	<b>11,341</b>		<b>11,341</b>
Acquisition of minority interest			202		<b>202</b>	(712)	<b>(510)</b>
<b>Balance as at 30.09.03</b>	84,593	27,101	270,850	3,941	<b>386,485</b>	4,051	<b>390,536</b>
Capital increase	935	2,308			<b>3,243</b>		<b>3,243</b>
Dividend payments					<b>0</b>	(1,200)	<b>(1,200)</b>
Consolidated net income			25,125		<b>25,125</b>	1,472	<b>26,597</b>
Changes in accumulated other comprehensive income				(10,077)	<b>(10,077)</b>		<b>(10,077)</b>
Other changes			34		<b>34</b>		<b>34</b>
<b>Balance as at 30.09.04</b>	85,528	29,409	296,009	(6,136)	<b>404,810</b>	4,323	<b>409,133</b>

### GENERAL REMARKS

The accompanying consolidated financial statements of Norddeutsche Affinerie AG, Hamburg, as at 30 September 2004 have been prepared, as in the previous year, in accordance with the International Financial Reporting Standards (IFRS) of the International Accounting Standards Board, London (IASB), effective at the balance sheet date, giving due regard to the interpretations of the Standing Interpretations Committee (SIC). Comparative financial information for the previous year has been determined using the same principles.

The provisions of Section 292a of the German Commercial Code (HGB) for the exemption from the preparation of consolidated financial statements under German Generally Accepted Accounting Principles (German GAAP) have been fulfilled. The consolidated financial statements are in compliance with the Directive of the European Union on consolidated accounts (Directive 83/349/EWG).

The consolidated financial statements have been prepared in euros. All amounts with the exception of earnings per share and the proposed appropriation of earnings are shown in currency units of thousand.

### MAIN DIFFERENCES BETWEEN IFRS AND GERMAN COMMERCIAL CODE

The accompanying consolidated financial statements in accordance with IFRS contain the following significant differences from the German Commercial Code with regard to recognition and measurement:

- Non-current assets are measured using the straight-line depreciation method and, in some instances, longer useful lives. Leased items are capitalised by the lessee where de facto economic ownership exists (finance lease). Resultant lease obligations are recorded as financial liabilities. Major repairs are recognised as an asset and depreciated systematically.
- Receivables, cash and cash equivalents and liabilities denominated in foreign currencies are translated at the exchange rate on the balance sheet date. This can result in the recognition of unrealised gains. General allowances for doubtful accounts are not permitted in accordance with IFRS.
- The recognition of deferred taxes is based on the asset-liability approach. In addition, the recognition of deferred tax assets is obligatory, in contrast to the option to recognise them in the separate accounts under German GAAP. Deferred tax assets must be recognised for loss carryforwards if it is expected that these loss carryforwards will be realised.
- In accordance with IFRS, pension obligations are computed taking into account future demographic developments, income and pension trends as well as the long-term capital market interest rate used for discounting. Plan assets are netted with the pension obligations.
- The recognition of other provisions is more restrictive under IFRS than under German GAAP. Accruing expenses relating to future periods is not permitted. Provisions for obligations to third parties can only be recognised if it is probable that the particular obligation will occur and the amount can be reliably estimated.
- Derivative financial instruments are measured at market value.

### SCOPE OF CONSOLIDATION

In addition to the parent company, Norddeutsche Affinerie AG, six further companies were included in the consolidated financial statements as at the balance sheet date. Hüttenwerke Kayser AG and Gesellschaft für Metallanlagen mbH were amalgamated with Norddeutsche Affinerie AG. Resultant changes in valuation and impacts on results were eliminated on consolidation.

After performing a reduction in capital and the resolved liquidation, Berliner Kupfer-Raffinerie GmbH no longer has any significant assets and has therefore been deconsolidated due to its immateriality.

In accordance with IAS 31, Schwermetall Halbzeugwerk GmbH & Co. KG, a company in which a 50 % investment is held, which is jointly controlled together with another shareholder, was consolidated proportionately. The accounting policies used for fully consolidated subsidiaries were applied here. The share of Schwermetall Halbzeugwerk in the Group's assets and liabilities as at 30 September 2004 amounted respectively to € 57,013 thousand and € 38,733 thousand. Discounted bills of € 136 thousand were included in the contingent liabilities of the Group as of the balance sheet date. In the fiscal year the company generated € 234 thousand of the Group's net income and € 86,436 thousand of its revenues.

Subsidiaries with dormant or little business activity, which are immaterial for the fair presentation of the Group's overall financial position, are not consolidated. They are recognised at fair value or, if that value cannot be determined, at cost. These companies account for less than one percent of the balance sheet total, revenues and net income.

### **CONSOLIDATION POLICIES**

The financial statements of companies included in the consolidated financial statements are prepared in accordance with uniform accounting policies applied to the Norddeutsche Affinerie Group. The financial statements of all companies that are either significant or subject to a statutory audit requirement are audited by independent auditors.

Capital consolidation is performed at the time of the acquisition using the purchase method, whereby the acquisition cost of the acquired interest is allocated to the fair values of acquired assets and liabilities of the subsidiary at that time. Any unallocated difference is recognised as goodwill and amortised over the expected useful life. The amortisation charges for goodwill are included under depreciation and amortisation in the profit and loss account.

Intercompany payables, receivables and contingent liabilities and intercompany revenues, other income and expenses are eliminated. Intragroup profits are adjusted as long as they are not insignificant.

All companies consolidated in the consolidated financial statements are German companies. Foreign exchange differences resulting from the translation of financial statements denominated in foreign currencies therefore do not arise.

The same consolidation policies are applied accordingly for proportionately consolidated joint ventures. The consolidation procedures required for transactions between such companies and the remaining Group companies are performed proportionately based on the interest in the joint ventures.

All the consolidation procedures were unchanged compared with the previous year.

## ACCOUNTING POLICIES

### Applied standards

For the first-time adoption of IFRS, the consolidated financial statements as at 30 September 2003 were prepared in accordance with the provisions of IFRS 1.

Standards IFRS 2 to IFRS 5 as well as the amendments to existing standards within the framework of the IASB's Improvements Project have not yet been applied in the preparation of the consolidated financial statements as at 30 September 2004. The main impact of these innovations in future years will be a ban on the use of the simplified LIFO valuation method, and the prohibition, in accordance with IFRS 3, of the systematic amortisation of goodwill.

### Revenue and expense recognition

Revenues and gains are realised when the services are performed and the risks are transferred to the customer.

Operating expenses are recognised when incurred. Interest income and expense are recognised in the periods to which they relate. If income or expenses arise as a result of profit and loss transfer agreements, they are realised at the end of the fiscal year. Dividends to which Group companies are entitled are recognised as income at the time that the right to receive them arises.

### Non-current assets

Acquired intangible assets are recognised at cost, and internally generated intangible assets that will generate future economic benefit at construction cost. They are amortised systematically straight-line over their expected useful lives.

Property, plant and equipment used in business operations for more than one year are measured at acquisition or construction cost less systematic depreciation. Construction costs include all direct costs as well as a reasonable share of the construction related overheads. Interest expense is not taken into account. Systematic depreciation is recorded using the straight-line method. The depreciation periods used correspond to the expected economic useful lives in the Group. The following main useful lives are applied:

Buildings	25 to 40 years
Site installations	10 to 25 years
Technical equipment and machinery	5 to 20 years
Factory and office equipment	3 to 20 years

Leased property, plant and equipment are also recognised within the non-current assets if the criteria of IAS 17 for a finance lease are satisfied. This is the case if all significant risks and rewards of economic ownership are with the respective Group company. Such property, plant and equipment are recognised at fair value or, if lower, at the present value of the minimum lease payments, and depreciated using the straight-line method over the lease term or, if it is expected that ownership will be obtained at the end of the lease term, over the economic useful life. The future lease payment obligations are recognised at their present value as a liability.

Impairment losses on intangible assets and property, plant and equipment are recorded in accordance with IAS 36 if the net selling price or the value in use is less than the carrying amount. The recoverability is tested on the basis of the smallest cash generating unit.

Financial assets were capitalised at cost at the time of acquisition. Long-term or non-interest bearing loans were discounted if they were not immaterial. Held-to-maturity financial assets are measured at amortised costs at the balance sheet date.

Investment property is recorded at amortised cost less systematic depreciation.

Within the framework of a revaluation of the non-current assets of a proportionately consolidated subsidiary, adjustments were made to the non-current assets which resulted in a € 6,693 thousand increase in property, plant and equipment and a € 4,626 thousand decrease in the subsidiary's goodwill. The adjustments were recognised in income or expense for the current period in accordance with IAS 8.38 and, after the inclusion of deferred taxes, resulted in a reduction in earnings of € 611 thousand.

### **Inventories**

Inventories are measured at acquisition or production cost. Production cost includes all direct costs as well as a reasonable part of the production-related overheads. Metal inventories are accounted for using the LIFO method. Inventories are stated at the balance sheet date at the lower of acquisition or production cost and the net realisable value less estimated costs necessary to make the sale. In general, the net realisable value is based on the net sales price of the finished product.

### **Receivables and other assets**

Receivables and other assets are stated at amortised cost. Any risk in the receivables is provided for by specific allowances for doubtful debts or lump-sum allowances for doubtful debts. Non-interest bearing receivables are discounted. Receivables denominated in foreign currencies are translated at the offer price as of the balance sheet date.

### **Other current assets**

Short-term securities are recorded as available-for-sale financial assets at fair value as at the balance sheet date.

Cash and cash equivalents are stated at amortised cost. Foreign currency deposits were translated at the offer price as of the balance sheet date.

### **Deferred taxes**

In accordance with IAS 12, deferred taxes are recognised for temporary differences between the tax balance sheet of individual companies and the corresponding IFRS items if these differences will reverse in the future and result in future taxable or deductible amounts. Furthermore, tax loss carryforwards are capitalised if realisable in the near future. Deferred tax assets and deferred tax liabilities are offset if they relate to income taxes levied by the same tax authorities and the current taxes can be set off against each other.

### **Provisions**

Provisions for pension and similar obligations are based on actuarial reports in accordance with the projected unit credit method, as defined in IAS 19. The demographic assumptions as well as the salary and pension trends and the discount rate are determined on the basis of current estimates as of the balance sheet date. Actuarial gains and losses result from deviations in actual parameters compared with the assumptions used for the calculation. In accordance with the corridor method, as described in IAS 19, actuarial gains and losses at the beginning of the fiscal year are amortised if they exceed 10% of the defined benefit obligation or the fair value of plan assets at the beginning of the fiscal year. The amount recognised for the period equals the amount exceeding the corridor divided by the remaining service period of the employees participating in the pension plan. The interest portion included in the pension costs is recorded as net interest expense.

Other provisions are formed for all other uncertain obligations and risks of the Group inasmuch as an obligation to third parties exists from a past event, a cash outflow is probable and the amount can be reliably estimated. Long-term provisions are stated at their present value if the interest effect is significant.

### **Liabilities**

Financial liabilities with the exception of finance lease liabilities are stated at amortised cost. At the inception of the lease, finance lease liabilities are recognised at the present value of the minimum lease payments or, if lower, at the fair value of the leased items. In subsequent periods, the redemption portion included in the minimum lease payments reduces the liability. Liabilities denominated in foreign currencies are measured at the bid price as of the balance sheet date.

### **Financial instruments**

Derivative financial instruments are employed in the NA Group to hedge the risks arising from fluctuations in interest rates and foreign exchange rates as well as to hedge non-ferrous metal price risks.

Hedge accounting is applied if the criteria for an effective hedge relationship as defined by IAS 39 are fulfilled. This can take the form of both fair value and cash flow hedges.

In accordance with IAS 39, all derivative financial instruments are stated at fair value. In general, changes in the fair value of those derivatives, which are not a component of a cash flow hedge, are recognised in income. For fair value hedges, the derivative as well as the underlying transaction is adjusted with an impact on income. For cash flow hedges, on the other hand, the gain or loss on the effective part of the derivative is recognised in equity, whereas the ineffective part of the derivative is included in income. The gain or loss is recognised in income as soon as the hedged item affects earnings.

Various derivative financial instruments, such as futures, options and interest derivatives, are used in the Group to hedge operational risks resulting from changes in non-ferrous metal prices, foreign exchange rates and interest rates. Agreements are only concluded with reputable brokers and banks and are monitored as part of the risk management system.

The fair values of the financial instruments are determined by reference to commensurate market values or valuation methods. For cash and cash equivalents as well as other non-derivative financial instruments, except for liabilities to banks, the fair values correspond to the carrying amounts on the respective balance sheet dates.

Changes in fair value are recognised in income for those derivatives in the NA Group, which regardless of their economic hedge effect do not fulfil the criteria of IAS 39 for inclusion as hedge transactions.

## NOTES TO THE PROFIT AND LOSS ACCOUNT

## 1. Revenues

in € thousand	2003/04	2002/03
<b>By product groups</b>		
Copper cathodes	264,027	278,450
Continuous cast wire rod	901,444	603,198
Continuous cast shapes	548,163	256,388
Pre-rolled strip, strips and shaped wires	206,601	187,418
Precious metals	456,661	412,766
Chemicals	37,235	24,156
Other	66,577	53,418
	<b>2,480,708</b>	<b>1,815,794</b>

The revenues from continuous cast wire rod and shapes also include revenues from “Wandelkathoden” (copper on account), which have already been sold, but cannot be delivered in the required sizes until receipt of the customer’s specification.

The 37% growth in revenues was the result of higher metal prices and increased unit sales.

Further details of Group revenues are given in the Segment Reporting section on page 86.

## 2. Other operating income

in € thousand	2003/04	2002/03
Reversal of provisions	1,108	1,746
Net change in usage of provisions	3,701	3,923
Gains on disposal of non-current assets	144	229
Compensation in damages and indemnities	1,426	1,882
Other income	21,591	29,318
<i>of which rent received on investment property</i>	172	133
	<b>27,970</b>	<b>37,098</b>

Other income includes, in particular, cost reimbursements and services for third parties, lease income, income relating to prior periods, gains on the disposal of current assets as well as income from the deconsolidation of a subsidiary in the fiscal year in the amount of € 2,488 thousand. In the previous year, this item also included proceeds from the amortisation of negative goodwill totalling € 9,947 thousand in accordance with IAS 22.61.

## 3. Cost of materials

in € thousand	2003/04	2002/03
Raw materials, supplies and merchandise	2,085,357	1,420,701
Cost of purchased services	75,306	50,744
	<b>2,160,663</b>	<b>1,471,445</b>



Cost of materials increased due to the higher revenues. Taking the changes in inventories into account, the cost of materials ratio increased slightly to 85.7% on account of higher metal prices compared with the previous year.

#### 4. Personnel expenses and human resources

in € thousand	2003/04	2002/03
Wages and salaries	144,917	153,925
Social security, pension and other benefit expenses	35,409	37,891
<i>of which for pensions</i>	5,355	4,877
	180,326	191,816

Personnel expenses declined by € 11,490 thousand due to adjustments to staffing levels at the Lünen site of Norddeutsche Affinerie AG, as well as at the subsidiaries, Prymetall GmbH & Co. KG and Schwermetall Halbzeugwerk GmbH & Co. KG.

Expenditure for old-age pensions primarily comprises allocations to the provisions for pensions and to externally funded pension plans.

The average number of employees of the consolidated companies and the proportionately consolidated joint venture during the year was as follows:

	2003/04	2002/03
Blue collar	2,088	2,275
White collar	937	999
Apprentices/trainees	181	184
	3,206	3,458
<i>thereof number of employees in joint ventures</i>	127	164

#### 5. Depreciation and amortisation

Depreciation and amortisation for the Group totalled € 70,454 thousand. This comprises depreciation of € 53,919 thousand on property, plant and equipment, amortisation of € 12,826 thousand on goodwill, amortisation of € 3,691 thousand on other intangible assets and depreciation of € 18 thousand on real estate and buildings shown under investment property.

Depreciation and amortisation also includes impairment losses in the amount of € 10,000 thousand on the goodwill of Prymetall GmbH & Co. KG, € 1,713 thousand on property, plant and equipment and € 17 thousand on intangible assets. The goodwill impairment was recognised following an impairment test on account of changed basic conditions, primarily in the US \$ dominated export business.

A precise breakdown of depreciation and amortisation on intangible assets, property, plant and equipment and financial assets is provided in the details of changes in non-current assets on pages 66/67.

## 6. Other operating expenses

in € thousand	2003/04	2002/03
Expenses relating to prior periods	5,746	2,317
Allocations to provisions	2,515	2,143
Sundry expenses	16,391	26,284
Administrative expenses	21,477	20,465
Selling expenses	32,613	32,702
Other taxes	869	826
	<b>79,611</b>	<b>84,737</b>

Expenses relating to prior periods include mainly losses on the disposal of assets and allowances for doubtful receivables. Sundry expenses include in particular maintenance, cleaning and disposal costs not included under purchased services in the cost of materials. Foreign exchange losses have declined. Administrative expenses are at the previous year's level. Selling expenses mainly include freight costs.

## 7. Result from investments

The result from investments in the Group mainly comprises dividend payments from Spiess-Urania Chemicals GmbH, which are accounted for in accordance with IAS 39.

## 8. Net interest expense

in € thousand	2003/04	2002/03
Income from loans	26	45
Interest income	3,372	4,064
Interest expense	(15,114)	(17,002)
	<b>(11,716)</b>	<b>(12,893)</b>

Interest expense includes the interest component of pension costs in the amount of € 2,907 thousand (€ 4,209 thousand in the previous year).

## 9. Income taxes

Paid or owed income taxes as well as deferred taxes are reported as income taxes. The total income taxes including deferred taxes are as follows:

in € thousand	2003/04	2002/03
Current taxes	15,570	8,604
Deferred taxes	4,484	(9,696)
	<b>20,054</b>	<b>(1,092)</b>

Current taxes include back payments of taxes incurred in prior years in the amount of € 962 thousand (€ 108 thousand in the previous year).

In accordance with IAS 12.81, income taxes must be reconciled to the tax charge that would have resulted if the theoretical tax rates were applied to the consolidated income before taxes.

The total tax rate of 40 % used in the reconciliation consists of 25 % corporation tax plus a solidarity surcharge of 5.5 % on the corporation tax liability, plus an effective trade tax rate of 18.5 % determined on the basis of various municipal rates.

Reconciliation:

in € thousand	2003/04	2002/03
Earnings before taxes	46,651	3,345
Theoretical tax charge at 40 %	18,660	1,338
Change in theoretical tax charge due to:		
loss carryforwards	(2,386)	(3,770)
loss allocations of partnerships and deviating tax rates	1,733	1,934
taxes paid for prior years	962	108
reduction and increase in corporation tax	0	(198)
non-deductible expenses	972	472
non-taxable income	55	(1,099)
other	58	123
<b>Income taxes</b>	<b>20,054</b>	<b>(1,092)</b>

The change in the theoretical tax charge due to loss carryforwards results among other things from the amalgamation with Hüttenwerke Kayser AG as at 1 October 2003.

The following deferred tax assets and liabilities result from recognition and measurement differences in individual balance sheet items and from tax loss carryforwards:

in € thousand	Deferred tax assets 2003/04	Deferred tax liabilities 2003/04	Deferred tax assets 2002/03	Deferred tax liabilities 2002/03
Intangible assets	0	495	206	3
Property, plant and equipment	772	50,954	772	53,966
Financial assets	1,081	8,289	1,014	10,171
Inventories	0	0	1,153	0
Receivables and other assets	1,039	24,895	3,749	13,656
Other current assets	0	0	0	0
Pension liabilities	1,132	0	2,139	1,156
Other provisions	24,053	1,348	11,412	809
Liabilities	13,044	815	3,745	1,263
Tax loss carryforwards	4,284	0	10,784	0
Offsetting	(43,699)	(43,699)	(27,762)	(27,762)
Consolidation	(502)	(70)	1,060	(3,381)
<b>Consolidated balance sheet total</b>	<b>1,204</b>	<b>43,027</b>	<b>8,272</b>	<b>49,881</b>

The changes in receivables and other assets and liabilities are primarily due to the increase in the fair values of the derivative financial instruments as a consequence of higher metal prices. The increase in deferred tax assets on other provisions results mainly from the increase in taxed provisions for expected losses on onerous contracts as at the balance sheet date.

#### 10. Income attributable to minority interests

Of the consolidated net income before minority interests of € 26,597 thousand (€ 4,437 thousand in the previous year), € 1,472 thousand is attributable to minority interests for the past fiscal year (€ 1,209 thousand in the previous year). This relates to the interests of other shareholders in Deutsche Giessdraht GmbH, Emmerich.

#### 11. Earnings per share

Earnings per share are calculated by dividing the consolidated net income by the weighted average number of shares outstanding during the fiscal year.

	2003/04	2002/03
Consolidated net income in € thousand	25,125	3,228
Weighted average number of shares (in 1,000)	33,268	32,875
<b>Basic earnings per share in €</b>	<b>0.76</b>	<b>0.10</b>

To determine the diluted earnings per share, the maximum number of shares, which would be issued if all conversion rights on the convertible bonds of Norddeutsche Affinerie AG were exercised, is added to the weighted average of the shares outstanding in the fiscal year. The consolidated net income is increased accordingly by the interest expense incurred for the convertible bonds less the corresponding taxes.

in € thousand	2003/04	2002/03
Consolidated net income	25,125	3,228
+ Interest expense for convertible bonds	49	98
– Income taxes	(19)	(39)
Adjusted net income for the period	25,155	3,287
Weighted average number of shares – diluted (in 1,000)	33,832	33,863
<b>Diluted earnings per share in €</b>	<b>0.74</b>	<b>0.10</b>

### NOTES TO THE BALANCE SHEET

#### 12. Non-current assets

The breakdown and development of the Group's non-current assets are presented on pages 66 and 67.

Intangible assets include licenses acquired for a consideration and goodwill on consolidation. The latter is being amortised over its planned useful life of 15 years. In the fiscal year, it was necessary to record an impairment loss on goodwill at Prymetall GmbH & Co. KG. Development costs were not capitalised since the recognition criteria in IAS 38 were not completely satisfied.

Additions to property, plant and equipment refer mainly to capital expenditure on replacement and expansion measures taken at the Hamburg site as well as at the subsidiaries, Prymetall GmbH & Co. KG and Schwermetall Halbzeugwerk GmbH & Co. KG.

Rented and leased property, plant and equipment totalled € 4,995 thousand (€ 5,605 thousand in the previous year) and mainly consist of tanks for storing sulphuric acid, motorcars and EDP hardware.

As at 30 September 2004 non-current assets of the Group with a carrying amount of € 43,345 thousand were pledged as security for loans (€ 35,891 thousand in the previous year). Purchase commitments for property, plant and equipment amounted at that date to € 10,671 thousand (€ 18,998 thousand in the previous year).

The market value of real estate and buildings under investment property amounted to € 2,273 thousand. As at 30 September 2004 the expected rental income on this amounted to € 848 thousand, of which € 172 thousand is due within a year.

A detailed overview of the interests included in the financial assets of Norddeutsche Affinerie AG is presented on page 90.

### 13. Inventories

in € thousand	30.09.2004	30.09.2003
Raw materials and supplies	145,783	116,709
Work in process	123,213	105,432
Finished goods, merchandise	57,127	37,311
Payments on account on inventories	241	30
	<b>326,364</b>	<b>259,482</b>

For metal inventories, the difference between the net realisable value as at the balance sheet date and the carrying amount amounted to € 168,523 thousand (€ 31,188 thousand in the previous year). This reflects the significantly higher prices for most of the metals processed in the Group.

Write-downs in the fiscal year amounted to € 5,027 thousand (€ 5,918 thousand in the previous year). The carrying amount of all inventories reported at a lower net realisable value amounted to € 33,874 thousand (€ 27,798 thousand in the previous year). Reversals of write-downs in earlier years amounted in the fiscal year to € 468 thousand (€ 824 thousand in the previous year).

### 14. Receivables and other assets

in € thousand	less than 1 year	Maturing in		Total	Total
		1 to 5 years	more than 5 years	30.09.2004	30.09.2003
Trade accounts receivable	161,682	-	-	161,682	139,878
Receivables from related parties	5,504	-	-	5,504	1,865
Other receivables and assets	58,280	-	23,663	81,943	54,891
				249,129	196,634

The increase in trade accounts receivable is, above all, due to the significantly higher revenues in the Group. The increase was partly compensated by the sale of receivables without recourse in the amount of about € 48 million as part of a factoring agreement.

Receivables from related parties refer primarily to receivables from Schwermetall Halbzeugwerk GmbH & Co. KG, which is consolidated proportionately, as well as some minor receivables from non-consolidated subsidiaries.

Other receivables and assets include an asset amount from an over-funded pension fund in the amount of € 23,663 thousand as well as positive fair values from derivative financial instruments in the amount of € 31,298 thousand. Furthermore, claims for tax refunds from the tax authorities in the amount of € 14,285 thousand and deferred income in the amount of € 1,254 thousand are included. This item also includes the 20% interest in Spiess-Urania Chemicals GmbH, which was intended for sale as of the balance sheet date. The sale was completed at the beginning of fiscal year 2004/05.

#### **15. Short-term security investments**

All short-term security investments are pledged.

#### **16. Cash and cash equivalents**

Cash and cash equivalents include current accounts and time deposits, as well as cash in hand, and cheques. Deposits at the banks are mostly euro deposits at various banks.

#### **17. Equity**

The subscribed capital of Norddeutsche Affinerie AG amounts to € 85,527,552 as at 30 September 2004. It is divided into 33,409,200 bearer shares. Each share has a calculated par value on the subscribed capital of € 2.56.

Within the framework of the stock option plan for the Executive Board and senior staff, 365,200 new bearer shares were issued in exchange for convertible bonds during the last fiscal year. Their arithmetical share of the subscribed capital amounts to € 934,912. The premium of € 6.32 per share from the capital increase totalling € 2,308,064 was allocated to additional paid-in capital.

The conditional capital amounts to € 36,037 thousand and consists of Conditional Capital I in the amount of € 1,037 thousand and Conditional Capital II in the amount of € 35,000 thousand, which is used to grant rights to the holders of warrants and/or convertible bonds that could or can be issued by 11 June 2003 or 31 March 2005 respectively.

There is still an authorised (unissued) capital of € 40,000 thousand. The Executive Board is authorised, subject to the approval of the Supervisory Board, to increase the subscribed capital by 31 March 2005 by issuing new shares once or in several instalments for a cash contribution or a contribution in kind.

Retained earnings include the consolidated net income as well as the revenue reserves of the Group companies, the accumulated retained earnings of the subsidiaries since being consolidated and the accumulated amounts resulting from consolidation adjustments recognised as income or loss for the period, unless allocated to minority interests. The legal reserve in the amount of € 6,391 thousand, which is not available for dividend payments, is also included here.

The changes in the value of derivative financial instruments as part of cash flow hedges have been recognised directly in equity in the changes in accumulated other comprehensive income in the amount of € 10,077 thousand.

A detailed statement of changes in equity is presented on page 68 of this Annual Report.

### Proposed appropriation of earnings

The separate financial statements of Norddeutsche Affinerie AG were prepared in accordance with German GAAP (HGB – German Commercial Code).

Net income for the year of Norddeutsche Affinerie Aktiengesellschaft	€ 28,650,000.00
Brought forward from the previous year	€ 18,170,000.00
	<b>€ 46,820,000.00</b>
Allocations to other revenue reserves	€ 14,325,000.00
<b>Unappropriated earnings</b>	<b>€ 32,495,000.00</b>

It will be recommended at the Annual General Meeting that the unappropriated earnings of Norddeutsche Affinerie AG in the amount of € 32,495,000 be used to pay a dividend of € 0.65 per share (= € 21,715,980) and that € 10,779,020 be carried forward.

### 18. Minority interests

This item comprises the interests of non-Group shareholders in the equity of fully consolidated companies. As at 30 September 2004 these only exist at Deutsche Giessdraht GmbH.

### 19. Pension liabilities

In the Group, retirement benefits are granted based on both defined benefit plans and defined contribution plans.

Most of the pension plans are defined benefit plans, which are either funded or unfunded.

The pension liabilities were computed based on the following market discount rates, salary and pension trends:

	30.09.2004	30.09.2003
Discount rate	5.25%	5.25 %
Expected income trend	2.25%	2.5 %
Expected pensions trend	4 % every 3 years	4.5 % every 3 years
Fluctuation	3.5 % to 6,2 %	3.5 % to 6.2 %

The retirement age was assumed to be the earliest age at which an employee can claim benefits under the state pension scheme in accordance with the 1999 pension reform law. The corresponding assumptions are based on Prof. Dr Klaus Heubeck's 1998 mortality tables.

In the event of over-funded pension plans, the resulting assets are reported under other assets in accordance with IAS 19.54. The net liability recognised in the consolidated balance sheet for defined benefit plans is reconciled as follows:

in € thousand	2003/04	2002/03
Present value of unfunded pension obligations	33,348	32,614
+ Present value of funded pension obligations	216,937	218,136
= Present value of pension obligations	250,285	250,750
– Fair value of plan assets	(216,725)	(211,574)
– Unrealised actuarial losses	(7,426)	(13,825)
= Net debt included in the balance sheet	26,134	25,351
+ Assets in accordance with IAS 19.58	23,663	22,804
= <b>Net liability per balance sheet</b>	<b>49,797</b>	<b>48,155</b>

The development of the net liability during the past fiscal year was as follows:

in € thousand	2003/04	2002/03
Net liability at the beginning of the fiscal year	48,155	48,078
+ Net expense recognised in the profit and loss account	8,208	8,215
– Payments to beneficiaries during the fiscal year (unfunded plans)	(3,296)	(2,359)
– Payments to/by pension funds during the fiscal (unfunded plans)	(3,270)	(5,779)
= <b>Net liability at the end of the fiscal year</b>	<b>49,797</b>	<b>48,155</b>

The following amounts were included in the profit and loss account:

in € thousand	2003/04	2002/03
Current service cost	5,142	4,006
Interest expense on the pension obligation	12,884	14,015
Expected return on plan assets	(9,850)	(9,806)
Actuarial gains and losses	32	0
<b>Total amounts affecting net income</b>	<b>8,208</b>	<b>8,215</b>

The actual return on plan assets was € 2,143 thousand higher than expected.

## 20. Deferred tax liabilities

The deferred tax liabilities are shown in detail under Note 9 Income taxes.

## 21. Other provisions

The individual classes of provisions changed as follows during the past fiscal year:

in € thousand	Balance per 01.10.2003	Used	Released	Allocated	Balance per 30.09.2004
Personnel provisions	39,017	14,248	164	12,454	37,059
Environmental provisions	6,308	163	203	1,969	7,911
Expected losses on onerous contracts	27,921	2,358	310	26,151	51,404
Sundry provisions	6,896	3,535	431	6,162	9,092
	80,142	20,304	1,108	46,736	105,466



The allocations to personnel and environmental provisions include accrued interest in the amount of € 1,477 thousand.

The personnel provisions consist of obligations to employees with respect to Christmas bonuses, outstanding holiday claims, anniversary bonuses, bridging loans, termination benefits payments and from the early retirement scheme.

For the first time, expected cost increases have been included in the calculation of expected losses on onerous contracts for non-cost covering treatment and refining charges.

## 22. Liabilities

in € thousand	less than 1 year	Maturing in 1 to 5 years	more than 5 years	Total 30.09.2004	Total 30.09.2003
Financial liabilities	57,389	108,179	4,094	169,662	175,390
<i>thereof convertible bonds</i>	1,037	–	–	1,037	1,993
<i>thereof lease liabilities</i>	670	2,998	2,279	5,947	6,478
<i>thereof bills payable</i>	1,750	–	–	1,750	6,816
Trade accounts payable	131,495	–	–	131,495	119,459
Advance payments received on orders	594	–	–	594	1,725
Payables to related parties	2,576	–	26	2,602	1,228
Income tax liabilities	13,519	–	–	13,519	1,623
Other liabilities	64,280	200	116	64,596	45,839
				<b>382,468</b>	<b>345,264</b>

The conditions with respect to liabilities to banks from loans and their carrying amounts as at 30 September 2004 are presented in the following table:

Weighted average interest rate	Fixed interest period until	Carrying amount € thousand
Euribor + margin	2005	25,565
4.7	2005	911
Euribor + margin	2006	3,067
5.4	2006	6,961
Euribor + margin	2007	20,000
3.5	2007	32,394
Euribor + margin	2008	6,469
4.5	2008	17,386
4.8	2009	27,205
6.3	2011	1,688
2.3	2012	777
3.7	2013	1,300
4.4	2014	749
		<b>144,472</b>

€ 106,595 thousand of the above total are included in long-term and € 37,877 thousand in short-term financial liabilities. In addition, a bank overdraft in the amount of € 16,456 thousand is included under short-term financial liabilities.

Interest-swap agreements were concluded to hedge variable interest agreements. Based on current market interest rates, the fair value of the long-term financial liabilities amounts to € 116,786 thousand.

Liabilities to banks in the amount of € 15,596 thousand at subsidiaries and the Lünen site are secured by mortgages and non-current assets.

Convertible bonds with a face value of € 1,037 thousand are divided into 2,026 bearer bonds each with a face value of € 512 and interest is payable at 4.6 % p.a. They have been acquired by senior staff of the NA Group as part of a stock option plan.

Other liabilities include social security contributions of € 9,139 thousand (€ 6,754 thousand in the previous year). Further material items under other liabilities are tax liabilities and negative market values for metal futures and foreign currency forward contracts.

### 23. Contingent liabilities and other financial commitments

in € thousand	2003/04	2002/03
Contingent liabilities under discounted bills	666	7,808
Capital commitments	10,671	14,998
Commitments under tolling agreements	7,395	14,785
Warranty obligations and other contingencies	4,583	2,245
	23,315	39,836

Commitments under tolling agreements refer to the value of the metal extracted during the tolling process, which has to be returned. These obligations are matched by corresponding recourse claims.

#### Lease commitments

The finance lease liabilities reported under financial liabilities in the consolidated balance sheet include the present value of minimum payments as well as the guaranteed residual values at the end of the lease term. Minimum lease payments are due as follows:

in € thousand	less than 1 year	1 to 5 years	more than 5 years
Minimum lease payments	1,096	4,201	2,873
Interest portion	426	1,203	594
Redemption portion	670	2,998	2,279

As at 30 September 2004, minimum lease payments under operating leases amounted to € 3,726 thousand, of which € 1,292 thousand were due within one year.

### 24. Derivative financial instruments

In its operations, the NA Group is, in particular, subject to non-ferrous metal price and exchange rate fluctuations. It is company policy to mitigate these risks by entering into non-ferrous metals future and foreign currency forward contracts covering primarily copper and the U.S. dollar.

In addition, interest risks are hedged by interest derivatives.

in € thousand	Notional amount	
	30.09.2004	30.09.2003
<b>Non-ferrous metal future contracts</b>		
Maturity of up to 1 year	306.1	319.7
Maturity of 1 to 5 years	38.3	30.3
	344.4	350.0
<b>Foreign currency forward contracts</b>		
Maturity of up to 1 year	248.7	344.9
Maturity of 1 to 5 years	22.1	9.0
	270.8	353.9
<b>Options</b>		
Foreign currency options	57.4	51.2
<b>Interest derivatives</b>	93.9	81.0

The notional amount of the derivative financial instruments is the sum of all purchase and sales contracts. The market value is based on the measurement of all contracts at the prices on the measurement date, and indicates the impact of the settlement of all derivatives on income without taking into account the underlying transactions. As of the balance sheet date, the market value resulting from offsetting gains and losses on the individual contracts amounted to € 22.2 million for metal future contracts, € 2.6 million for foreign currency forward contracts and € – 1.9 million for interest derivatives. For option contracts, for which a premium was paid, the difference between the acquisition cost and the market value amounted to € 0.9 million.

#### NOTES TO THE CASH FLOW STATEMENT

The cash flow statement shows the change in cash and cash equivalents in the NA Group during the fiscal year. In accordance with IAS 7, the cash flows were separated into cash flows from operating activities, investing activities and financing activities.

Starting off from the result from ordinary activities, gross cash flow is derived by adjusting for depreciation and amortisation, non-cash expenses and income as well as net financial expenses and income taxes paid. Net interest expense consists of interest income of € 3,398 thousand (€ 4,109 thousand in the previous year) and interest expense of € 15,114 thousand (€ 17,002 thousand in the previous year). Write-ups in the fiscal year were set off against depreciation and amortisation. The cash inflow from operating activities (net cash flow) is computed by adjusting the gross cash flow for changes in working capital.

The cash outflow from investing activities for the reporting period primarily comprised the purchase of non-current assets. In detail, € 710 thousand (€ 2,359 thousand in the previous year) was invested in intangible assets, € 27,237 thousand (€ 24,030 thousand in the previous year) in property, plant and equipment and € 39 thousand (€ 57 thousand in the previous year) in financial assets.

In addition to proceeds and payments from issuing and redeeming bonds and financial liabilities, the financing activities also include capital increases, dividends and interest payments.

## SEGMENT REPORTING

in € thousand	Copper Production segment		Copper Processing segment		Other		Group total	
	2003/04	2002/03	2003/04	2002/03	2003/04	2002/03	2003/04	2002/03
Revenues								
Total revenues	<b>1,571,732</b>	1,231,027	<b>1,966,614</b>	1,351,051	<b>465</b>	575		
Inter-segment revenues	<b>1,034,275</b>	740,784	<b>23,826</b>	26,041	<b>2</b>	34		
Revenues with third parties	<b>537,457</b>	490,243	<b>1,942,788</b>	1,325,010	<b>463</b>	541	<b>2,480,708</b>	1,815,794
Earnings before taxes	<b>22,372</b>	(3,027)	<b>20,284</b>	5,763	<b>3,995</b>	609	<b>46,651</b>	3,345
EBIT	<b>27,110</b>	4,506	<b>27,222</b>	10,910	<b>4,035</b>	822	<b>58,367</b>	16,238
EBITDA	<b>70,251</b>	48,844	<b>54,323</b>	28,855	<b>4,247</b>	1,041	<b>128,821</b>	78,740
Result from investments	<b>0</b>	1	<b>0</b>	5	<b>375</b>	1,026	<b>375</b>	1,032
Non-current assets	<b>286,031</b>	311,233	<b>106,985</b>	122,935	<b>3,387</b>	3,247	<b>396,403</b>	437,415
Capital expenditure	<b>20,506</b>	18,234	<b>7,425</b>	7,987	<b>55</b>	225	<b>27,986</b>	26,446
Depreciation and amortisation	<b>43,141</b>	44,338	<b>27,101</b>	17,945	<b>212</b>	219	<b>70,454</b>	62,502
Other non-cash expenses	<b>9,922</b>	1,122	<b>7,179</b>	628	<b>1,012</b>	1,152	<b>18,113</b>	2,902
Segment assets	<b>605,495</b>	569,122	<b>359,643</b>	320,116	<b>7,725</b>	5,460	<b>972,863</b>	894,698
Segment liabilities	<b>273,415</b>	247,537	<b>90,668</b>	48,765	<b>3,986</b>	1,869	<b>368,069</b>	298,171
Average number of employees	<b>2,075</b>	2,284	<b>1,131</b>	1,174			<b>3,206</b>	3,458
Personnel expenses	<b>115,905</b>	128,067	<b>64,421</b>	63,749			<b>180,326</b>	191,816

The segment reporting uses the internal organisation and reporting in the NA Group. The identification of segments is based on internal processes and the production structure. All amounts and results that cannot be allocated to one of the two defined segments are reported in the „Other“ column.

The segment information was determined using the accounting policies described in the notes. Geographical segmentation is not necessary, as the Group only has production sites in Germany.

Of the Group revenues in the fiscal year, 62 % were generated in Germany, 25 % in countries in the European Union and 5 % in the rest of Europe. The remaining 8 % of the revenues resulted from sales to customers in non-European countries, mainly in North America.

**Copper Production segment:**

- Business Unit Marketing Metallurgy
- Business Unit Marketing Recycling
- Production Sector Primary Copper Production
- Production Sector Secondary Copper Production/Precious Metals

**Copper Production segment**

The Copper Production segment comprises all sectors from the procurement of copper and precious metal bearing raw materials to the production of marketable metals. The raw materials include, above all, copper concentrates, copper-bearing recycling materials and precious metal-bearing raw materials. These are processed, in particular, into marketable copper cathodes, marketable gold, silver and platinum metal products. The by-products extracted from the raw materials during the copper production process are also processed into saleable products, such as sulphuric acid and iron silicate stone.

Precious metals, sulphuric acid and iron silicate stone are mainly sold to external customers. The copper cathodes produced, on the other hand, are largely passed on to the Copper Processing segment, where they are processed into copper products and sold externally. For this reason, most of the revenues in the Copper Production segment are generated within the Group. This segment also includes the production of high-grade selenium products as well as the environmentally friendly recycling of cables and the sale of the granules produced from this.

**Copper Processing segment:**

- Business Unit Copper Products
- Prymetall
- Schwermetall Halbzeugwerk

**Copper Processing segment**

The Copper Processing segment is engaged in the production of continuous cast wire rod and shapes, pre-rolled strip, strips and profiles as well as copper trading. The starting products for these are mainly the copper cathodes produced in the Copper Production segment. The products of the Copper Processing segment are largely sold in Europe.

**Segment data**

The revenues of the individual segments consist firstly of inter-segment revenues and secondly of revenues with third parties. The latter correspond with the consolidated revenues of the Group. Products and services are exchanged between Group companies and segments at market prices corresponding to those with third parties.

Earnings before taxes represent the contributions of the respective segments to Group earnings. Earnings attributable to minority interests in subsidiaries are not disclosed separately here.

EBIT (earnings before interest and taxes) of the individual segments is derived from earnings before taxes, adjusted for the respective net interest. EBITDA (earnings before interest, taxes, depreciation and amortisation) is EBIT plus depreciation and amortisation.

The result from investments comprises dividend payments from non-consolidated companies.

The non-current assets of the segments are also shown. Goodwill from consolidation is allocated to the respective segment. Depreciation and amortisation on non-current assets, including changes in goodwill, are reported accordingly.

Allocations to provisions, to the extent that they can be allocated to the segments, and write-downs in current assets are included under the non-cash expenses.

Segment assets totalling € 972,863 thousand (€ 894,698 thousand in the previous year) comprise all assets except for deferred tax assets in the amount of € 1,204 thousand (€ 8,272 thousand in the previous year) and cash and cash equivalents in the amount of € 15,824 (€ 11,008 thousand in the previous year).

Segment liabilities include provisions and trade accounts payable, and other liabilities for each segment. Total Group liabilities of € 580,758 thousand (€ 523,442 thousand in the previous year) comprise segment liabilities of € 368,069 thousand (€ 298,171 thousand in the previous year) and financial liabilities of € 169,662 thousand (€ 175,390 thousand in the previous year) and deferred taxes in the amount of € 43,027 thousand (€ 49,881 thousand in the previous year).

The average number of employees for each segment includes the employees of all the companies, which were consolidated fully or proportionately in the accompanying consolidated financial statements. For proportionately consolidated companies, the number corresponds to the interest held by the Group. Personnel expenses are shown accordingly.

## OTHER INFORMATION

### Related parties

In accordance with IAS 24, related parties are regarded as all persons and enterprises that are influenced by or that can influence the company.

In the NA Group, several companies provide and consume various services to or from related companies as part of their normal business activities. These supplies and services are charged at market prices. Services are charged on the basis of existing contracts.

Individual shareholders of Norddeutsche Affinerie AG do not exercise a significant influence on the Group. The relationships to the Executive Board and Supervisory Board are disclosed below.

### Executive Board and Supervisory Board

The members of the Supervisory Board and the Executive Board are listed on pages 94 and 95 of this Annual Report.

The total remuneration of the Executive Board for fiscal year 2003/04 amounted to € 2,081 thousand and included a fixed component for the last fiscal year in the amount of € 1,286 thousand, a performance-related component of € 753 thousand and a long-term incentive component of € 42 thousand. Former members of the Executive Board and their surviving dependents received a total of € 955 thousand, while € 11,128 thousand have been provided for their pension claims.

The remuneration of the Supervisory Board in fiscal year 2003/04 amounted to € 283 thousand.

Members of the Supervisory Board hold 8,443 shares and members of the Executive Board 9,691 shares in Norddeutsche Affinerie AG. In addition, members of the Executive Board have acquired convertible bonds with a face value of € 156 thousand, which can be exchanged on maturity in accordance with the bond conditions for shares in Norddeutsche Affinerie AG.

#### **Directors' dealings**

The members of the Executive Board, Dr Werner Marnette, Dr Michael Landau and Dr Bernd Langner, have informed the company that, by the conversion and sale within the framework of the Stock Option Plan of Norddeutsche Affinerie AG in the period from 26 March 2003 to 8 April 2004, they have transacted notifiable business, i.e. they have acquired a total of 47,000 shares in the company, of which 41,000 were sold during the conversion period. The company has reported this to the Federal Authority for Financial Services Supervision (BaFin) and has published this information.

#### **Declaration of Conformity with the German Corporate Governance Code in accordance with Section 161 Companies Act**

The declaration required under Section 161 Companies Act has been submitted by the Executive Board and Supervisory Board and has been made accessible to the shareholders at the company's website.

#### **Events after the balance sheet date**

No events of particular importance, which are significant for the consolidated financial statements and could result in a changed assessment of the Group, have occurred since the end of fiscal year 2003/04.

Hamburg, 14 January 2005

THE EXECUTIVE BOARD



Dr Werner Marnette



Dr Michael Landau



Dr Toralf Haag



Dr Bernd Langner

SHAREHOLDINGS AS PER SECTION 285 NO. 11 HGB (German Commercial Code) as at 30 September 2004

Company name and registered office	% of capital held by NA Group	Currency	Subscribed capital in 1,000	Held directly by	Holding in %	Equity in 1,000	Net earnings in 1,000
1 Norddeutsche Affinerie AG		€	85,528				
2 Deutsche Giessdraht GmbH, Emmerich	60	€	6,200	1	60	11,006	3,563
3 Prymetall GmbH, Stolberg	100	€	30	1	100	31	1
4 Prymetall GmbH & Co, KG, Stolberg	100	€	12,800	1	100	10,107	(721)
5 CABLO Metall-Recycling & Handel GmbH, Hamburg (in future Fehrbellin)	100	€	767	1	100	4,763	1,171
6 RETORTE Ulrich Scharrer GmbH, Röthenbach	100	€	2,045	1	100	3,077	981
7 PEUTE BAUSTOFF GMBH, Hamburg	100	€	52	1	100	636	480
8 NA Venture GmbH, Hamburg	100	€	25	1	100	(1,187)	(2)
9 E.R.N. Elektro-Recycling NORD GmbH, Hamburg	70	€	512	1	70	518	55
10 C.M.R. International N.V., Antwerp	50	€	1,000	1	50	1,187	(38)
11 Berliner Kupfer-Raffinerie GmbH, Hamburg	100	€	30	1	100	47	16
12 Hüttenbau-Gesellschaft Peute mbH, Hamburg	100	€	26	1	100	87	0
13 Hüttenwerk Kayser GmbH, Lünen	100	€	26	1	100	26	0
14 Spiess-Urania Chemicals GmbH, Hamburg	20	€	8,667	1	20	6,898	(3,328)
15 PHG Peute Hafen- und Industriebetriebs-gesellschaft mbH, Hamburg	7	€	26	1	7	74	3
16 Schwermetall Halbzeugwerk GmbH, Stolberg	50	€	52	4	50	64	11
17 Schwermetall Halbzeugwerk GmbH & Co. KG, Stolberg	50	€	12,500	4	50	23,098	1,750
18 CIS Solartechnik GmbH, Hamburg	87	€	52	8	87	(639)	(193)
19 Prymetall UK Ltd., London	100	£	0	4	100	0	-
20 JoSeCo GmbH, Kirchheim/Schwabia	33	€	225	6	33	164	(46)
21 Hungurania Kft., Budapest	20	HUF	3,000	14	100	7,661	6,549
22 J.M. Lauff GmbH, Cologne	20	€	256	14	100	1,355	683
23 Dr Spiess Chemische Fabrik GmbH, Kleinkarlbach	20	€	512	14	100	777	265
24 Spiess-Urania Pflanzenschutz GmbH, Ochsenfurt	20	€	200	14	100	506	60
25 EGC Eisenbahn- u. Gleisbau-Consulting GmbH, Berlin	10	€	31	14	50	77	(4)

Companies 2 and 4 to 8 were fully consolidated as part of the consolidated financial statements.

Company 16 was consolidated proportionately.

A complete list of shareholdings is on file at the commercial register of the Hamburg Municipal Court under number B 1775.



We have audited the consolidated financial statements, comprising the balance sheet, profit and loss account and the statements of changes in equity and cash flows as well as the notes to the financial statements prepared by Norddeutsche Affinerie AG for the fiscal year from 1 October 2003 to 30 September 2004. The preparation and the content of the consolidated financial statements in accordance with International Financial Reporting Standards (IFRS) are the responsibility of the Company's management. 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 and the German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer (IDW). Those standards require that we plan and perform the audit such that it can be assessed with reasonable assurance whether the consolidated financial statements are free of material misstatements. Knowledge of the business activities and the economic and legal environment of the Group and evaluations of possible misstatements are taken into account in the determination of audit procedures. The evidence supporting the amounts and disclosures in the consolidated financial statements is examined on a test basis within the framework of the audit. The audit includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements give a true and fair view of the net assets, financial position, results of operations and cash flows of the Group for the fiscal year in accordance with International Financial Reporting Standards.

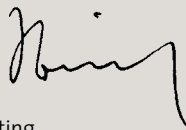
Our audit, which also extends to the group management report prepared by the Company's management for the fiscal year from 1 October 2003 to 30 September 2004, has not led to any reservations. In our opinion, on the whole the group management report provides a suitable understanding of the Group's position and suitably presents the risks of future development. In addition, we confirm that the consolidated financial statements and the group management report for the fiscal year from 1 October 2003 to 30 September 2004 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 law.

Hamburg, 14 January 2005

KPMG Deutsche Treuhand-Gesellschaft  
Aktiengesellschaft  
Wirtschaftsprüfungsgesellschaft



Krall  
Wirtschaftsprüfer



Ditting  
Wirtschaftsprüfer

### Dear Shareholders,

Again in the year under review, the Supervisory Board was in constant contact with the Executive Board and followed the major business transactions. The Supervisory Board supports the strategic orientation of the Group and the business management of the Executive Board. All credit goes to the Executive Board, senior staff and employees in all sectors for their performance and creativity.

In the fiscal year the Supervisory Board performed the duties that are incumbent on it by law. Executive Board and Supervisory Board worked closely together. The Supervisory Board regularly advised and constantly monitored the Executive Board in the management of the company. The Supervisory Board was included in all decisions of fundamental importance for the company.

The Executive Board informed the Supervisory Board at regular intervals, promptly and in depth, in written and oral reports, about all the relevant questions regarding corporate planning and strategic development. In addition, the Executive Board advised about the course of business, the Group's position including the risk situation as well as about risk management. Deviations in the course of business from the prepared plans and targets were explained, discussed and reasons given.

The Executive Board agreed the company's strategic orientation with the Supervisory Board and at regular intervals discussed the progress in implementing the strategy. After being given detailed reports by the Executive Board, all the significant business transactions were debated in detail at the Supervisory Board meetings and by the respective responsible committees. Necessary documents for decisions to be taken, in particular the financial statements, consolidated financial statements and the auditor's report, were sent to the members of the Supervisory Board in good time before the meetings. The Supervisory Board gave its consent to important business requiring its approval.

Apart from the Supervisory Board meetings, the Chairman of the Supervisory Board was in regular contact with the Executive Board and was kept constantly informed about the current trend in business and significant business issues.

In fiscal year 2003/04 four regular Supervisory Board meetings and one extraordinary meeting were held. Mr Rainer Grohe could not attend three meetings due to other important appointments and had to send his apologies for absence. The Supervisory Board was also kept informed in detail between the meetings about projects and plans, which were of particular significance for the company, and on one occasion a resolution was passed by written ballot.

### WORK ON THE COMMITTEES

In addition to the Committee required by law in accordance with Section 27 para. 3 Codetermination Law, the Supervisory Board again formed a Preparatory Committee, a Personnel Committee and an Audit Committee. The Committees are each formed with equal representation as regards shareholders and employees. With the exception of the Audit Committee the Chairman of the Supervisory Board is also the Chairman of the Committees. The Personnel Committee convened four times in the fiscal year, the Audit Committee three times. The Preparatory Committee did not hold a meeting in the year under review. The Personnel Committee was mainly concerned with the reappointment of members of the Executive Board, the structure and height of the remuneration for the Executive Board as well as long-term planning of successors. The Audit Committee was concerned with awarding the audit assignment to the auditor, determining the focal points of the audit and agreeing on fees. Furthermore, it monitored the independence of the auditor. The Audit Committee also looked into questions regarding accounting standards and the company's risk management including the tasks of the internal audit. The financial statements of NA AG and the Group as at 30 September 2004 were discussed in the meeting of the Audit Committee on 18 January 2005, which was also attended by the auditors. The Committee discussed major risks with the Executive Board. In the current fiscal year this Committee has already held two meetings, the Personnel Committee has had one.

After each meeting the respective Chairman of the Committee reported to the Supervisory Board on the Committees' work.

## **FOCAL POINTS OF THE SUPERVISORY BOARD CONSULTATIONS**

The regular consultations in the meetings covered the developments on the metal and exchange markets as well as the raw material and product markets. The resultant impacts on the business performance of the company as well as of its individual segments including the subsidiaries were discussed. These included questions of receivables management. At each meeting the Supervisory Board concerned itself with the current measures to enhance performance in the Group and increase enterprise value. At an extraordinary meeting the Supervisory Board dealt with strategy and the operating plan of the secondary copper production plant and precious metal production facilities as well as material preparation at the Lünen production site.

## **CORPORATE GOVERNANCE**

The Supervisory Board consulted about the structure of the remuneration system for the Executive Board and will review this at regular intervals. The Supervisory Board examined the efficacy of its activities at several meetings. After the evaluation of a questionnaire, the Supervisory Board debated and resolved possibilities for improvement at a meeting on 22 September 2004 which was held without the Executive Board.

There are no former members of the company's Executive Board on the Supervisory Board.

On 26 January 2005 the Executive Board and Supervisory Board again submitted a Declaration of Conformity in accordance with Section 161 Companies Act to the effect that the recommendations of the Government Commission on the German Corporate Governance Code in the version dated 21 May 2003 as published on 4 July 2003 were or would be applied with three well-founded exceptions. The Declaration of Conformity can be accessed at <http://www.na-ag.com>.

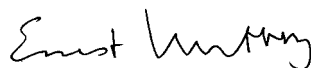
## **ANNUAL AUDIT**

The financial statements for the company issued by the Executive Board in accordance with the German Commercial Code (HGB) and the consolidated financial statements prepared pursuant to IFRS – International Financial Reporting Standards for the fiscal year from 1 October 2003 to 30 September 2004 as well as the management report for the Company and its Group have been audited by KPMG Deutsche Treuhand-Gesellschaft Aktiengesellschaft, Wirtschaftsprüfungsgesellschaft, Berlin und Frankfurt a. M., in accordance with the resolution passed at NA's Annual General Meeting held on 24 March 2004 and the subsequent order placed by the Supervisory Board. The auditor has issued an unqualified report. All the members of the of the Supervisory Board received copies of the financial statements and the audit reports as well as the Executive Board's recommendation for the appropriation of the net earnings. These documents were discussed in detail at the Balance Sheet Meeting on 26 January 2005. During this meeting the auditor reported on the main results of the audit and was available to give the Supervisory Board further information. The Supervisory Board agreed with the findings of the audit performed by the auditor on the basis of its own examination of the financial statements, the consolidated financial statements, the combined management report and the recommendation for the appropriation of the net earnings and ascertained that after the conclusion of its examination it had no objections to raise. The Supervisory Board approved the financial statements, which are thus adopted, as well as the consolidated financial statements. The Supervisory Board concurred with the Executive Board's recommendation for the appropriation of the net earnings.

The Supervisory Board would like to take this opportunity to thank the Executive Board, the company management as well as all NA staff and the employees' representatives for their personal effort and commitment during the year under review.

Hamburg, 26 January 2005

THE SUPERVISORY BOARD



Dr Ing. Ernst J. Wortberg  
Chairman

## SUPERVISORY BOARD

**Dr Ing. Ernst J. Wortberg**, Dortmund

Chairman

Former Chairman of the Executive Board  
of L. Possehl & Co. mbH, Lübeck

**Hans-Jürgen Grundmann**, Seevetal\*

Deputy Chairman

Shop mechanic

Chairman of the Works' Council of Norddeutsche Affinerie AG

**Gottlieb Förster**, Itzstedt\*

Union Secretary of the Industrial Union:

Mining, Chemistry, Energy, Hanover

- Bayer Industry Services Geschäftsführung GmbH, Leverkusen  
Member of the Supervisory Board
- Gerresheimer Glas AG, Düsseldorf  
Member of the Supervisory Board
- Chemie Pensionsfonds AG, München  
Member of the Supervisory Board

**Dr Peter von Foerster**, Hamburg

Managing Director of Holcim Beteiligungs GmbH  
(Deutschland), Hamburg

- Holcim (Deutschland) AG, Hamburg  
Chairman of the Supervisory Board
- Hamburger Hafen- und Lagerhaus AG, Hamburg,  
Chairman of the Supervisory Board
- Unilever Deutschland GmbH, Hamburg  
Member of the Supervisory Board
- Hemmoor Zement AG i.L., Hamburg  
Member of the Supervisory Board
- Desitin Arzneimittel GmbH, Hamburg  
Deputy Chairman of the Advisory Council
- Bernhard Schulte KG, Hamburg  
Member of the Advisory Council

**Ulf Gänger**, Hamburg

Former member of the Executive Board of Hamburgische Landesbank, Hamburg (now HSH Nordbank AG, Hamburg and Kiel)

- Helm AG, Hamburg  
Chairman of the Supervisory Board
- mobilcom AG, Büdelsdorf  
Member of the Supervisory Board
- NAVIS Schiffahrts- und Speditionen-Aktiengesellschaft, Hamburg  
Chairman of the Supervisory Board
- VON ESSEN KG BANKGESELLSCHAFT, Essen  
Chairman of the Advisory Board
- Peter Cremer Holding GmbH & Co, Hamburg  
Chairman of the Advisory Council
- Gewürzwerk Hermann Laue (GmbH & Co.), Ahrensburg  
Deputy Chairman of the Advisory Council

**Rainer Grohe**, Otterstadt

Executive Director of the Galileo Joint Undertaking, Brussels, Belgium

- Ball Packaging Europe GmbH, Ratingen  
Chairman of the Supervisory Board
- K+S Aktiengesellschaft, Kassel  
Member of the Supervisory Board

**Prof. Dr Ing. Jürgen Haußelt**, Germersheim

Head of the Institute for Material Research III of the  
Research Centre Karlsruhe GmbH, Karlsruhe

- Chair for Material Process Technology,  
11th Faculty, Albert-Ludwigs University, Freiburg i. Br.

**Gerd Körner**, Hamburg\*

Commercial employee in the Accounts Department  
of Norddeutsche Affinerie AG

Member of the Works' Council of  
Norddeutsche Affinerie AG

**Günter Kroll**, Hamburg\*

Graduate engineer

Head of the Vocational Training Department of  
Norddeutsche Affinerie AG

**Rolf Schwertz**, Datteln\*

Bricklayer and boiler operator

Member of the Works Council of Norddeutsche Affinerie AG  
Hüttenwerke Kayser

\* = elected by the employees

**Prof. Dr Fritz Vahrenholt**, Hamburg

Chairman of the Executive Board of REpower Systems AG,  
Hamburg

- Denker & Wulf AG, Sehestedt  
Member of the Supervisory Board
- ThyssenKrupp Technologies AG, Essen  
Member of the Supervisory Board
- Hamburger Sport-Verein e.V., Hamburg  
Deputy Chairman of the Supervisory Board

**Helmut Wirtz**, Stolberg\*

Managing Director of IG Metall, Stolberg

#### **SUPERVISORY BOARD COMMITTEES**

##### **Conciliation Committee in accordance with Section 27 § 3 Law on Codetermination**

Dr Ernst J. Wortberg (Chairman)  
Hans-Jürgen Grundmann (Deputy Chairman)  
Dr Peter von Foerster  
Gerd Körner

##### **Audit Committee**

Ulf Gänger (Chairman)  
Gottlieb Förster  
Hans-Jürgen Grundmann  
Dr Ernst J. Wortberg

##### **Personnel Committee**

Dr Ernst J. Wortberg (Chairman)  
Dr Peter von Foerster  
Hans-Jürgen Grundmann  
Gerd Körner  
Günter Kroll  
Prof. Dr Fritz Vahrenholt

##### **Preparatory Committee**

Dr Ernst J. Wortberg (Chairman)  
Dr Peter von Foerster  
Hans-Jürgen Grundmann  
Günter Kroll

#### **EXECUTIVE BOARD**

**Dr Werner Marnette**, Hollenstedt

born: 27 September 1945

Chairman of the Executive Board and Director of Labour Affairs  
appointed until 31 March 2010

- Leoni AG, Nuremberg  
Member of the Supervisory Board

**Dr Michael Landau**, Mölln

born: 26 July 1950

Member of the Executive Board  
appointed until 31 May 2007

**Dr Toralf A. Haag**, Hamburg

born: 29 March 1966

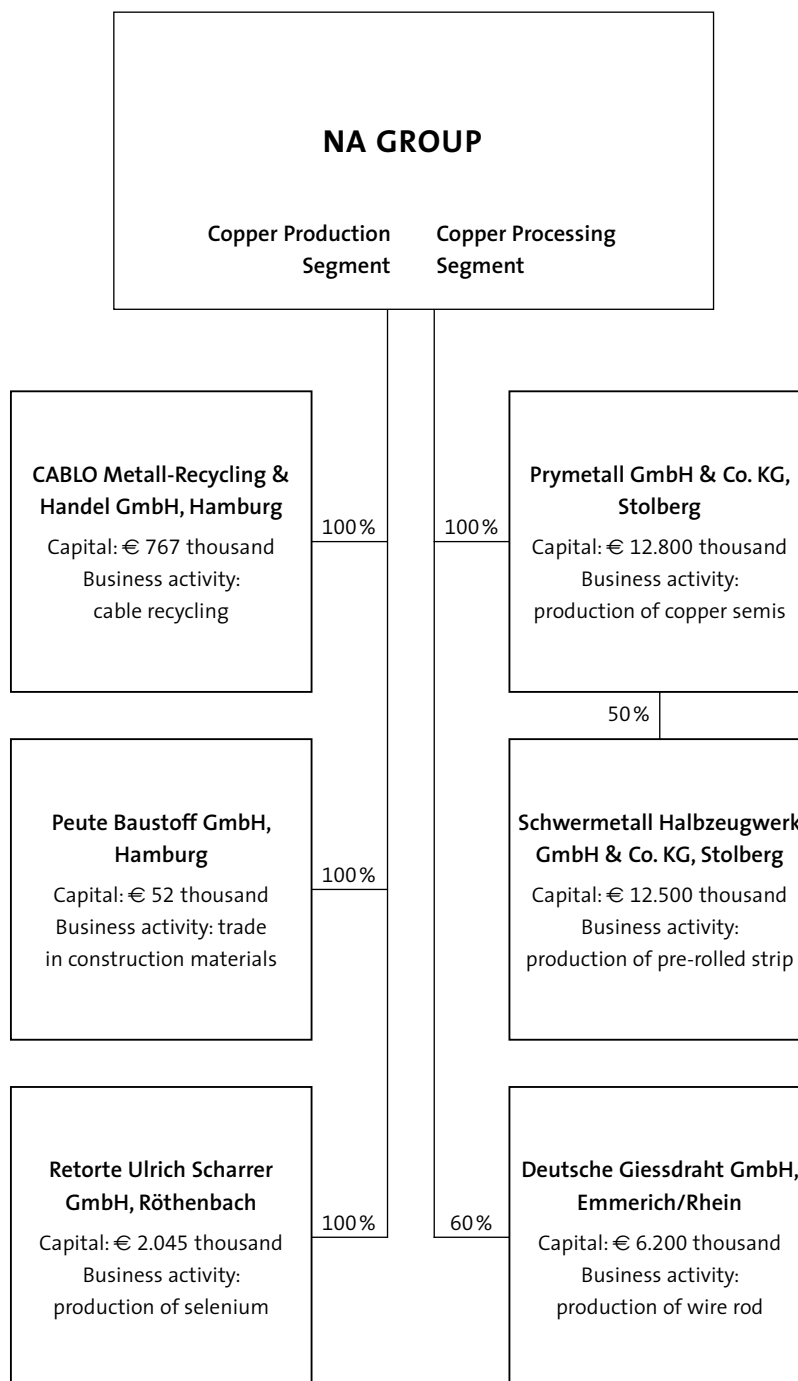
Member of the Executive Board  
appointed until 31 December 2006

**Dr Bernd E. Langner**, Winsen/Luhe

born: 30 January 1949

Member of the Executive Board  
appointed until 31 December 2005

- Prymetall GmbH & Co. KG, Stolberg  
Spokesman of the Management Board



<b>Anodes</b>	Positive electrodes of an electrolytic cell, end-product of the RWO; copper content about 99.5 %.
<b>Anode slimes</b>	Important by-product of the copper tankhouse, which settles on the bottom of an electrolytic cell as the copper anodes dissolve. The precious and non-soluble components of the anodes are recovered with the anode slimes (e.g. silver, gold, selenium and lead).
<b>Backwardation</b>	Price relationship on the LME, when the spot price is higher than the forward or futures price. The price difference between cash and three month transactions is generally quoted; an indication of poor availability of cathodes for prompt delivery.
<b>Cathodes</b>	Product of the copper tankhouse (copper content > 99.99 %) and the first marketable product in copper production which can be sold on the metal exchanges; basis of the copper price fixation on the metal exchanges.
<b>COMEX</b>	Together with the LME one of the two most important metal exchanges. It is of particular importance to the American market.
<b>Continuous cast wire rod</b>	Semi-finished product produced in a continuous process for the production of copper wire. The wire rod diameter ranges from 8 to 21.4 mm.
<b>Continuous casting</b>	Continuous casting produces a continuous strand. During the casting process, sizes of various lengths are separated from the casting billet by a flying saw. A variety of profiles (billets and cakes) and lengths can be created. These so-called continuous cast shapes are processed further by rolling and pressing into sheets, foils, profiles and tubes.
<b>Converter</b>	A furnace in which metal production or refining processes are typically carried out through oxidation. Copper matte from the flash smelter is treated in the converter to blister copper.
<b>Copper concentrates</b>	A product resulting from the processing (enriching) of copper ore, NA's main raw material. Since copper is found principally only in ores in compound form and in low concentrations (0.5 to 4 % copper content), the ores, after extraction from the mine, are enriched in processing facilities into concentrates (copper content of 25 to 40 %).
<b>Copper tankhouse</b>	In the copper tankhouse an electrochemical process, the last refining stage in copper recovery, takes place. Anodes and cathodes are hung in a sulphuric acid solution (electrolyte) and connected to an electric current. Copper and soluble impurities (nickel, etc.) are dissolved in the electrolyte. Copper from the solution is deposited on the cathode with a purity of more than 99.99 %. More precious elements (e.g. silver and gold) and insoluble components settle as so-called anode slimes on the bottom of the tankhouse cell.
<b>Flash smelter</b>	First phase in the processing of copper concentrate. The concentrate, which is suspended in a reaction shaft, reacts with oxygen and is melted through the heat released. Sulphur and iron are separated into intermediary products. The copper is then enriched in the copper matte (copper content about 65 %).

<b>Iron silicate stone</b>	A by-product of the (primary) copper concentrate smelting process. During such process the iron contained in the copper concentrate is combined with silicate flux to yield iron silicate. Although its structure is similar to natural rock, this artificially produced stone has a substantially higher density and hardness.
<b>KRS</b>	Kayser Recycling System; a state-of-the-art recycling plant in Lünen for the treatment of a large range of copper-bearing secondary raw materials.
<b>LME</b>	London Metal Exchange: the most important metal exchange in the world with the highest turnover.
<b>OF copper</b>	Oxygen-free copper. Special copper brand with high conductivity for electric and electronic applications.
<b>Primary copper</b>	Copper recovered from copper ores.
<b>RWO</b>	The primary smelter at NA's production site in Hamburg.
<b>Secondary copper</b>	Copper produced from recycling material.
<b>Smelter</b>	A part of a works or company, in which crude metal or bullion are recovered, is called a smelter. Typical products are lead bullion or blister copper.
<b>Spot market</b>	Market for prompt deliveries.
<b>Stainless steel cathode sheets</b>	Negatively polarised electrodes used in the copper tankhouse, on to which the copper ions which are dissolved from the anodes are deposited cathodically as metallic copper.
<b>Sustainable Development</b>	Lasting future-oriented development targeted since the 1992 UN Conference as being the most sensible ideal of the way forward.
<b>TOP ROD</b>	Oxygen-free copper wire rod which depending on the customer's requirements contains alloying elements of up to 5%.
<b>Top blown rotary converter (TBRC)</b>	A single-stage pyrometallurgical facility for the recovery of precious metals from the anode slimes in the copper tankhouse.
<b>Treatment and refining charges (TC/RCs)</b>	Compensation which NA receives for the processing of copper concentrates and other raw materials into copper.



Interim report on 1st quarter 2004/2005	31 January 2005
Annual Press Conference	31 January 2005
Analysts Conference	31 January 2005
Annual General Meeting	31 March 2005
Dividend payment	1 April 2005
Interim report on 2nd quarter 2004/05	10 May 2005
Interim report on 3rd quarter 2004/05	16 August 2005
Open Day at the Hamburg Stock Exchange	29 October 2005
Results of the 4th quarter 2004/05 (unaudited financial statements)	20 December 2005

## DISCLAIMER

### Forward-looking Statements

This information contains forward-looking statements based on current assumptions and forecasts. Various known and unknown risks, uncertainties and other factors could have the impact that the actual future results, financial situation or developments differ from the estimates given here. We assume no liability to update forward-looking statements.



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