
ANNUAL REPORT
2004
ANDRITZ

FINANCIAL FIGURES in MEUR	2004	2003	2002	2001
Order Intake	1,837	1,394	1,300	1,121
Order Backlog as of 31.12.	1,439	1,054	904	740
Sales	1,481	1,225	1,110	1,319
EBITDA [1]	115	84	81	95
EBITA [2]	93	63	59	68
Operating Result (EBIT)	76	49	45	55
Earnings before Taxes (EBT)	77	49	46	60
Net Income after Minorities	53	29	26	34
Cash flow from Operating Activities	208	5	76	72
Capital Expenditure [3]	29	21	23	24
Employees as of 31.12. (excluding apprentices)	5,314	4,771	4,601	4,545
Fixed assets	276	279	293	317
Current assets	877	688	617	625
Shareholders' Equity [4]	270	232	223	230
Provisions	160	150	145	159
Liabilities	717	577	536	544
Balance sheet total	1,153	967	910	942
EBITDA margin (%)	7.8	6.9	7.3	7.2
EBITA margin (%)	6.3	5.1	5.3	5.2
EBIT margin (%)	5.1	4.0	4.1	4.2
Net profit after Minorities/Sales (%)	3.6	2.4	2.4	2.6
ROE (%) [5]	19.6	12.5	11.6	14.8
Equity Ratio (%)	23.4	24.0	24.5	24.4
EV [6]/EBITDA	4.4	5.2	2.4	2.1
Depreciation/Sales (%)	1.5	1.7	2.0	2.0
Amortization/Sales (%)	1.1	1.2	1.2	1.0

STOCK EXCHANGE RELATED FIGURES	2004	2003	2002	2001
Earnings per share (EUR)	4.13	2.26	2.04	2.82
Dividend per share (EUR)	1.4 [7]	1.0	0.9	0.9
Payout ratio (%)	34.3	44.2	44.1	31.9
Equity per share (EUR)	20.7	18.0	17.2	19.3
Market Capitalization as of end of period (MEUR)	729.3	493.4	298.9	276.9
Share price at year-end (EUR)	56.10	37.95	22.99	21.30
Highest closing price (EUR)	56.50	37.95	28.00	23.50
Lowest closing price (EUR)	35.00	21.00	19.40	20.52

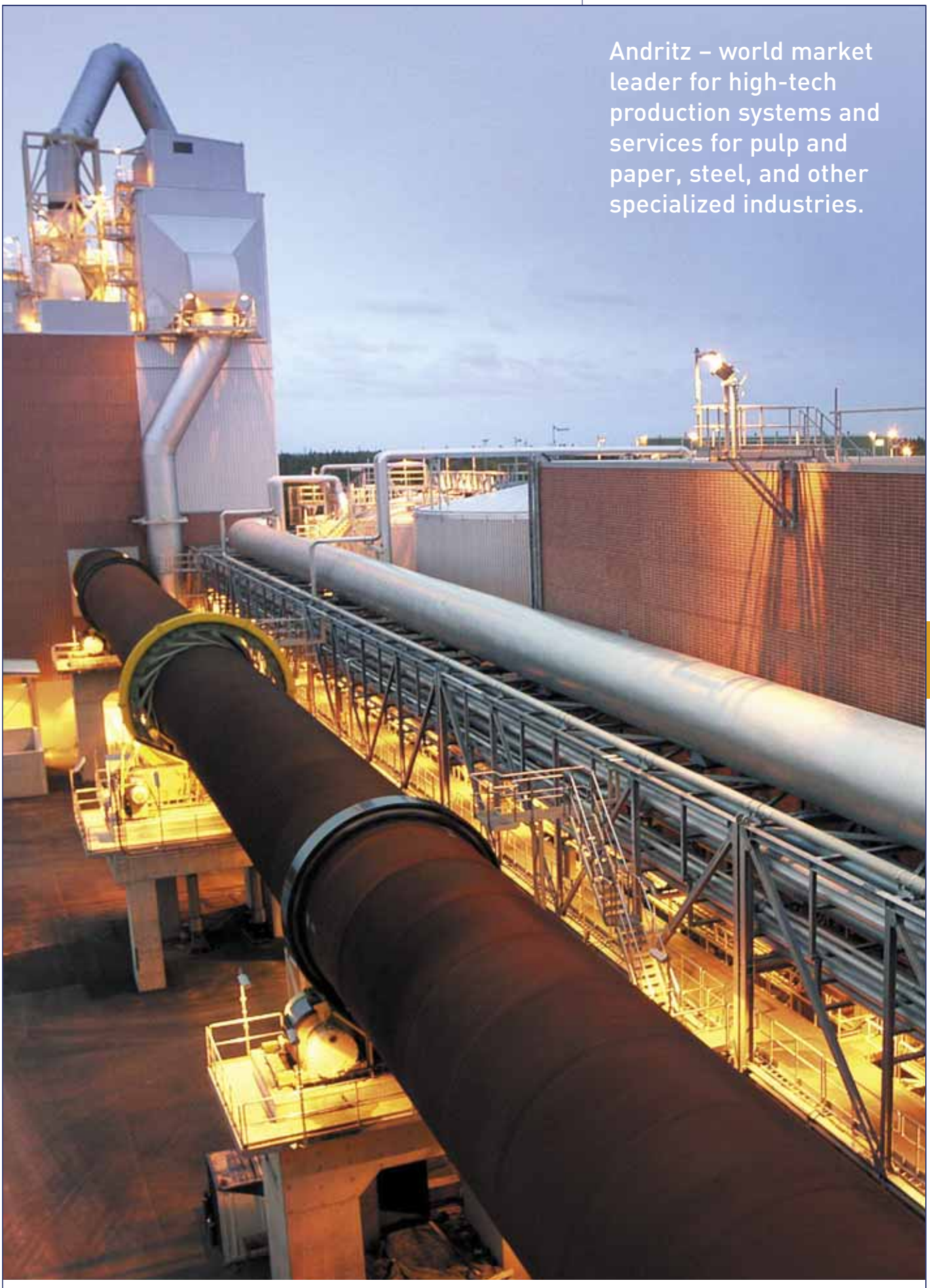
Notes:
1) EBITDA: Earnings Before Interest, Taxes, Depreciation, and Amortization of goodwill
2) EBITA: Earnings Before Interest, Taxes, and Amortization of goodwill
3) Additions to tangible and intangible assets
4) Equity excl. minority interests
5) ROE (Return On Equity): Net profit after minorities/shareholders' equity
6) Enterprise Value: market capitalization based on year-end closing price minus net liquidity
7) Proposal to the Annual General Meeting

FINANCIAL CALENDAR 2005

03.03.2005 Results for 2004
30.03.2005 Annual General Meeting
04.04.2005 Ex-Dividend
08.04.2005 Dividend payment
09.05.2005 First Quarter of 2005
05.08.2005 First Half of 2005
08.11.2005 First three Quarters of 2005


Edmonton
Saskatoon
Bellingham
Tualatin
Janesville
Brantford
Lachine
Glens Falls
Walpole
Canonsburg
Muncy
Lenexa
Springfield
Exton
Scott Depot
Alpharetta
Roswell
Arlington
Pell City
Decatur
Houston
Lakeland
Valencia
AMERICAS
Eunápolis
Serra
São Paulo
Curitiba
Pomerode
Porto Alegre/RS
Santiago
Concepción
Puerto Montt


EUROPE
Örnsköldsvik
Varkaus
Savonlinna
Tampere
Hedemora
Helsinki
Kotka
Karlstad
Stockholm
St. Petersburg
Hollola
Hull
Växjö
Belper
Esbjerg
Moscow
Den Helder
Newcastle-
under-Lyme
Rotterdam
Mettmann
Warsaw
Geldrop
Hradec Králové
Dorsten
Gennevilliers
Cologne
Selb
Regensburg
Vélizy
Spišská Nová Ves
St. Martin Le Beau
Vienna
Scorbé-Clairvaux
Graz
Ravensburg
Châteauroux
Hemer
Barcelona
Kirchheim/Teck
Madrid
Wohlen
Bretten
Beijing
Tianjin
Tokyo
Shanghai
New Delhi
Taipei
Foshan
ASIA
Bangalore
Chennei
Bangkok
Singapore
Jakarta
Edenvale
Durban
AFRICA
Dandenong
AUSTRALIA



Andritz – world market leader for high-tech production systems and services for pulp and paper, steel, and other specialized industries.

Andritz supplied UPM-Kymmene, Finland with one of the world's largest single-line chemical recovery plants. Photo: Lime kiln

COMPANY PROFILE

The Andritz Group is a global market leader in the supply of customized plants, systems, and services for the pulp and paper industry, the steel industry, and other specialized industries (solid/liquid separation, animal feed technology). Headquartered in Graz, Austria the Group has about 5,300 employees. It manufactures and sells its products and services globally. Andritz has 15 production sites and maintains more than 100 offices/service centers worldwide.

In 2004, the Andritz Group achieved a record Order Intake of over 1.8 billion Euros and record Sales of over 1.5 billion Euros. Since 1990, Sales have grown an average of more than 10% per year.

The activities of the Andritz Group are focused within the following Business Areas: Pulp and Paper, Rolling Mills and Strip Processing Lines, Environment and Process, Feed Technology, and Others. The Group is regarded as a market leader in each of its Business Areas, with full-line capabilities in critical process areas. In addition, Andritz offers comprehensive services including the sale of replacement parts, the manufacture of engineered wear products, and technical services, which help customers optimize production and reduce overall costs.

CONTENTS

The Managing Board of Andritz AG (from left to right):
Franz Hofmann, Friedrich Papst, Wolfgang Leitner (President & CEO), Markku Hänninen, Bernhard Rebernik

LETTER FROM THE BOARD

Ladies and Gentlemen, Dear Shareholders,

In 2004, the Andritz Group achieved its best financial results since the founding of the Company over 150 years ago. Sales, Net Income, and Order Intake reached record levels and grew substantially over the previous year. In all major business and product segments Andritz booked large and important reference orders, thus confirming its leading global market positions in all of its Business Areas.

The contract from CMPC Celulosa S.A. in Chile for the supply of a complete new fiberline (including chemical recovery) is worth special mentioning. This large order confirms the validity of Andritz's strategy: focused R&D, acquisition of complementary companies and technologies, quick integration of these acquisitions into the overall business, and intensive cost-reduction measures. By buying integrated process solutions and leading technologies from one supplier, our customers benefit from an optimized production process and seamless project execution.

In Asia, especially in China, Andritz booked a number of important reference orders for Rolling Mills and Strip Processing Lines, as well as Pulp and Paper equipment. These orders have strengthened – and in some areas further extended – the market position in this region. The measures taken by the Chinese government to avoid overheating and too fast growth in some industry segments (e.g. in steel and cement) appear to have the desired effect, while maintaining the needed, very substantial investment level, particularly of the large, established, and experienced companies. For this reason, good project activity is anticipated in China in 2005.

In 2004, the Andritz Group continued its strategy of acquiring companies with complementary products/technologies. The acquisitions of Bird Machine, NETZSCH Filtration, Otto Kaiser, and VA TECH WABAG's fluidized bed drying systems further strengthen the Group's product portfolio and technology expertise in the Environment and Process, and the Rolling Mills and Strip Processing Lines Business Areas.

Bird Machine and NETZSCH Filtration improve Andritz's market position in solid/liquid separation for municipal and industrial applications, and also reduce dependency on the comparatively volatile dryer business. The purchase of the fluidized bed drying systems Business Area from VA TECH WABAG adds an important technology to the product range and extends Andritz's capabilities, which have been focused on sewage sludge, to also cover applications for product drying, such as minerals, salts, chemicals, petrochemicals, food, feed, and pigments.

With these acquisitions, Sales of the Environment and Process Business Area are approximately 220 MEUR annually, representing a sufficient size and solid basis for further organic growth in the dewatering and drying areas.

With the purchase of certain assets of Otto Kaiser (a manufacturer of high-performance mechanical presses for the processing of steel strip into stampings and drawing parts), the Rolling Mills and Strip Processing Lines Business Area extends its process capabilities for the "downstream" area

of steel strip finishing. This acquisition is the logical continuation of the Business Area's strategy to focus on value-added steel strip production. In addition, the Business Area's dependence on China is also balanced, as Kaiser's business activities are primarily focused on Europe.

One of the major corporate goals for 2005 will be the smooth integration of the newly acquired companies into the Group, so that optimum synergies can be quickly realized. Due to the fast growth and the size of the Group, it is necessary to follow Group-wide rules for Controlling, Accounting, Treasury, Production, Purchasing, and IT on a wider basis. Implementation of the new Andritz Group ERP system is an important step in this direction. The blueprint phase of the project, which had been launched in March of 2004, was finalized at the end of the reporting year. Over the next years, the Andritz Group will gradually switch to a uniform ERP system.

Continuous increase of the quality of our systems and products is a permanent and high-priority goal of Andritz. In 2005, we will again launch several new Group-wide projects to further increase our already high level of product quality. Through the implementation of a focused Group-wide project team, we aim at further enhancing our quality assurance procedures. This should result in increased customer satisfaction and an overall cost reduction for warranties.

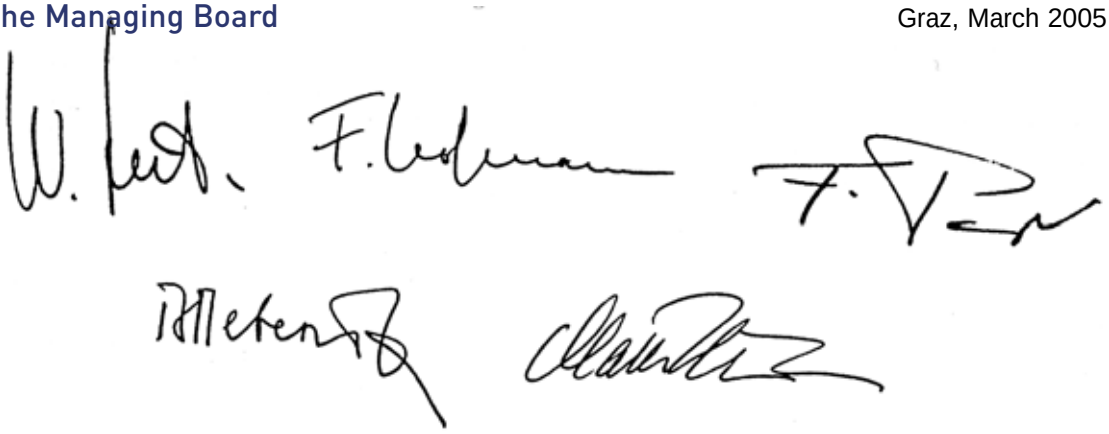
Finally, here are a few words about the long-term development of the Company. Intensive R&D initiatives and complementary acquisitions have helped considerably strengthen, and in some areas expand, Andritz's global market position. These initiatives will continue in 2005, as will the focus on product innovations that improve efficiency and reduce consumption (chemicals, raw materials, etc.). At the same time, programs are in place to further reduce manufacturing and overhead costs in order to increase the Group's competitiveness. Based on this strategy, the medium-term goal is to achieve a business volume of two billion Euros by 2007 while increasing profitability of the Company.

The very favorable business development of the Andritz Group is mirrored in the strong rise of the Andritz share price during 2004, which is being watched closely by financial analysts, shareholders, business partners, and customers. After the full withdrawal of the financial investors in the summer of 2004, Andritz is a true public company with a free float of more than 70%.

The Managing Board of Andritz wants to thank all employees for their contributions and performance during 2004. The Board also wishes to thank each customer and business partner for the confidence they have placed in us. For 2005, we will do the utmost to fully meet their requirements and expectations.

The Managing Board

Graz, March 2005



MARCH

Success in tissue

Andritz receives its third tissue machine order from Hengan, China. Also, Procter & Gamble, Germany orders a tissue machine modernization at their Neuss mill.

Major supplier for market pulp mill

Andritz is selected as a main supplier for M-real's new BCTMP (Bleached Chemi-Thermo Mechanical Pulp) market pulp mill to be built in Kaskinen, Finland. Scope of supply comprises equipment for chip handling and impregnation, bleaching/washing, drying, and auxiliary equipment.

APRIL

70th MDF refining system for China

Andritz receives an order from Shandong Chenming Group, China to supply a pressurized refining system for Medium Density Fiberboard (MDF). This is Andritz's third delivery of an MDF refining system to Shandong Chenming, and its 70th to China.

Successful start-up

The single-line chemical recovery plant – one of the largest worldwide – supplied by Andritz to UPM-Kymmene's Pietarsaari mill in Finland starts up precisely on schedule.

JUNE

Acquisition of NETZSCH Filtration

Andritz acquires NETZSCH's Filtration business unit (a supplier of dewatering systems for industrial and municipal applications).

New joint venture

Andritz and German Rheinhold & Mahla AG form a 50:50 joint venture to provide comprehensive maintenance services to pulp, paper, and MDF mills in Europe. The new company is called European Mill Service GmbH (EMS) and is based in Graz, Austria.

Andritz to supply market pulp mill to Estonia

Andritz is selected to supply all major production systems – woodyard, chip handling, impregnation, refining, bleaching, dewatering, drying, and baling – for a new chemi-mechanical pulp mill to be built in Kunda, Estonia.

JULY/AUGUST

Andritz to build stainless steel mills in China

Andritz receives an order from the Taigang Group in China to supply the world's largest annealing and pickling line for cold-rolled steel strip. Shanghai Krupp Stainless (SKS) orders a hot strip annealing and pickling line from Andritz for a new steel mill being constructed in Shanghai, China.

SEPTEMBER

Acquisition of VA TECH WABAG's fluidized bed drying systems

Andritz acquires the fluidized bed drying systems Business Area of VA TECH WABAG, Germany, a global supplier of plants for granulation and drying of solutions, suspensions, and bulk materials. This acquisition further expands Andritz's dryer product range.

Large order from Chile

Andritz receives an order from CMPC to supply a complete fiberline, including pulp drying and baling, Recovery Boiler, and white liquor production plant for the new Santa Fe Line 2 Pulp Project in Chile. Total value of the order is approximately 320 MEUR.

Acquisition of Otto Kaiser

Andritz expands its product portfolio in the Rolling Mills and Strip Processing Lines Business Area by purchasing certain assets of Otto Kaiser GmbH, Germany, a manufacturer of high-performance mechanical presses for the processing of steel strip into stampings and drawing parts.

OCTOBER

Recovery boilers for Sweden and the USA

Swedish SCA and Weyerhaeuser of the USA order High Energy recovery boilers to maximize energy production and to further reduce emissions.

DECEMBER

New fiberline for APPM

The Andritz Group will deliver a new fiberline, recovery island, and woodroom upgrade to the Rajahmundry mill of Andhra Pradesh Paper Mills (APPM) in India.

PRESIDENT AND CEO

Wolfgang Leitner ...

... joined Andritz in 1987 as Chief Financial Officer. He has served as President and CEO since 1994. His responsibilities encompass central Group functions such as Human Resources, Controlling & Finance, Corporate Communications & Investor Relations, Internal Auditing, Information Technology, and Business Process Development.

Professional career:
- Member of the Managing Board of AGIV AG
- Founding member of GENERICON Pharma GmbH
- Management consultant at McKinsey & Company
- Researcher for Vianova

MEMBERS OF THE MANAGING BOARD

Markku Hänninen ...

... joined Andritz in 1994 as manager of the Group's Wood Processing Division, which Andritz had acquired from the KONE Group. He has been a Member of the Andritz Managing Board since 2002 and is responsible for Pulp Mill Technologies.

Professional career:
- President of Andritz-Ahlstrom Oy
- President of Andritz Oy
- President of Andritz Kone Wood Inc.
- Division President at KONE Corporation

Franz Hofmann ...

... joined Andritz in 1999 as Member of the Managing Board. He is responsible for the Rolling Mills and Strip Processing Lines Business Area, the Environment and Process Business Area, and the Automation department.

Professional career:
- Divisional Director at SMS Schloemann-Siemag AG
- Management consultant at A.T. Kearney
- Researcher at Vereinigte Deutsche Metallwerke

Friedrich Papst ...

... joined Andritz in 1979 and held leading positions in manufacturing and logistics. He has been a Member of the Managing Board since 1998 and is responsible for the Feed Technology and the Hydraulic Machines Business Areas, as well as for Manufacturing, Procurement, and Quality Management.

Professional career:
- Vice President of Andritz Sprout-Bauer Inc.
- Director of manufacturing at Andritz AG
- Director of production planning at Andritz AG

Bernhard Rebernik ...

... joined Andritz in 1979 as a manager of the design and development department for pumps and nuclear components. He has been a Member of the Managing Board since 1991 and is responsible for Paper Mill Technologies.

Professional career:

- Chairman of Andritz Sprout Bauer Inc.
- Division Manager of Pulp and Paper at Andritz AG
- Vice President of Aströ GmbH
- Assistant professor at the Graz University of Technology

SUPERVISORY BOARD

CHAIRMAN

Kurt Stiassny: Chief Executive Officer of UIAG; Chairman of the Supervisory Board of Andritz AG since 1999.

Other relevant functions: Member of the Supervisory Boards of Palfinger AG and Wiener Börse AG.

Stock companies with major shareholdings:

Chairman of the Supervisory Board of Bene AG; Chairman of the Supervisory Board of ET Multimedia AG; Deputy Chairman of the Supervisory Board of Wirtschaftsblatt Verlag AG.

DEPUTY CHAIRMAN

Heiner Rutt: Managing Director of The Carlyle Group; Deputy Chairman of the Supervisory Board of Andritz AG since 2003.

Other functions: Chairman of the Supervisory Board of Beru AG (until 4 January 2005)

OTHER APPOINTED MEMBERS OF THE SUPERVISORY BOARD

Peter Mitterbauer: Chairman of the Managing Board of MIBA AG; Member of the Supervisory Board of Andritz AG since 2003.

Other functions: Chairman of the Supervisory Board of FFG – Austrian Research Promotion Agency; Member of the Board of Trustees of IHS – Institute for Advanced Studies; Member of the Supervisory Boards of Generali Holding Vienna AG, Oberbank AG, Teufelberger Holding AG, and DIE ERSTE österreichische Spar-Casse-Privatstiftung.

Christian Nowotny: Professor at the University of Economics in Vienna; Member of the Supervisory Board of Andritz AG since 1999.

Other functions: Member of the Supervisory Boards of UIAG and CA Immo AG.

Klaus Ritter: President & CEO of AVI Alpenländische Veredelungs Industrie Ges.m.b.H, EVG Entwicklungs- und Verwertungs-Gesellschaft m.b.H., and Stahl- und Walzwerk Marienhütte Ges.m.b.H.; Member of the Supervisory Board of Andritz AG since 2004.

Hellwig Torggler: Attorney-at-law and senior partner of Schönherr Rechtsanwälte OEG; Member of the Supervisory Board of Andritz AG since 2000.

Other functions: Chairman of the Supervisory Board of FRAPAG Immobilienholding GmbH; Chairman of the Supervisory Board of FRAPAG Industrieholding AG; Deputy Chairman of the Supervisory Board of Theater in der Josefstadt Betriebsges.m.b.H.; Member of the Supervisory Boards of Mondi Packaging AG and Mondi Packaging Services AG.

DELEGATED MEMBERS OF THE SUPERVISORY BOARD

Andreas Martiner: Member of the Supervisory Board of Andritz AG since 2001

Johann Tschrischnig: Member of the Supervisory Board of Andritz AG since 1994

Brigitta Wasserbauer: Member of the Supervisory Board of Andritz AG since 2000

STRATEGY

The overall strategic goal of the Andritz Group is to leverage its strong market position to become the leading supplier of production systems and processes in the Business Areas in which it operates. The strategic direction is based on the following pillars, which aim at achieving sustained Group growth and profitability:

ENHANCED TECHNOLOGICAL LEADERSHIP

Andritz is a technological leader in all of its Business Areas and is committed to continuously widening its technology lead. To this end, Andritz will continue to invest in research and development programs, often in cooperation with customers, to create and/or further develop technologies that result in improved cost-efficiency, reliability, and productivity for its customers.

IMPROVED GLOBAL MARKET POSITION AND PENETRATION

Andritz is a global organization with a presence in all major geographic market areas. The company targets to enhance its strong global reach by improving its service presence and sustaining ongoing business relations with key customers globally. Andritz seeks to achieve this objective in part through recently established centers in growth areas such as Chile, Brazil, China, and India. As the Group also has production sites in major economic areas of the world, it can better balance potential currency fluctuations, thus avoiding or reducing major negative impacts on the Group's competitiveness.

COMPLETE FULL-LINE SYSTEMS CAPABILITY THROUGH PRODUCT DEVELOPMENT AND COMPLEMENTARY ACQUISITIONS

Customers in all of Andritz's Business Areas are increasingly seeking integrated production lines and full-service customization. Accordingly, Andritz will continue to augment its product range by developing its own technologies and/or selectively acquiring businesses that complement the existing product portfolio, as well as service capabilities that complement those currently provided. This allows Andritz to design, supply, and service substantially all of the production lines, equipment, and processes required by its customers.

EXPANDED RANGE OF SERVICES

Service sales of Andritz, which account for basically one-third of Andritz's total Group Sales, have grown significantly during the last few years. This is in line with the increasing requirements from customers who choose to outsource service and maintenance activities. Andritz will continue to grow its service capabilities in order to support its customers and to maintain profitability during market cycles. Recognizing the importance of a

local presence for service, Andritz will organically expand its geographic network and, when appropriate, acquire specialist service providers in local markets.

INCREASED EFFICIENCY AND UTILIZATION OF INTERNAL SYNERGIES

Andritz benefits from its investments in the knowledge and expertise of its employees, manufacturing capabilities, and product development and will continue to exploit internal synergies to enhance its competitiveness. This is often achieved through technology transfers between Business Areas and the sharing of functional resources. Quick integration of newly acquired companies is one of main goals in order to achieve optimum synergies.

ACTIVE MANAGEMENT OF FIXED COSTS

It has been a strength of the Andritz Group to actively pursue cost management programs, including a "make/buy" strategy for the components used to manufacture its products. This enables Andritz to source a significant proportion of non-essential components from qualified external suppliers while focusing its manufacturing activities on more complex or proprietary products. All major system components are pre-assembled in Andritz's own workshops or at qualified sub-suppliers to ensure high quality of delivered systems. In periods of sales declines, the Group uses this strategy to reduce dependence on outsourcing, thereby maintaining in-house utilization levels and reducing external costs.

IMPROVED PRODUCTIVITY THROUGH PRE-EMPTIVE RESTRUCTURING

Andritz's manufacturing facilities are utilized to support the Business Areas and operate in global markets. Andritz continually evaluates the productivity of its manufacturing facilities, and actively rationalizes and restructures operations when it identifies opportunities to reduce fixed operating costs.

SHARE PRICE DEVELOPMENT

After a strong performance in 2003 (+65.0%), the Andritz share price again developed very favorably in 2004. By year's end, it had increased by 52.5%. Since the IPO in June 2001, the share price of Andritz has increased by 167.1%, and it significantly outperformed the ATX, which rose 96.5% during the same period.

The highest closing price of Andritz during 2004 was 56.50 Euros (14.12.2004); the lowest was 35.00 Euros (8.1.2004).

TRADING VOLUME

In 2004, the average daily trading volume of Andritz shares at the Vienna Stock Exchange was 70,744 shares (2003: 45,410 shares). The highest trading volume was recorded on 23.4.2004 (341,628 shares); the lowest on 27.5.2004 (3,754 shares).

SHARE BUY-BACK/SALE PROGRAM

On March 30, 2004, the Annual General Meeting of Shareholders authorized the Managing Board to buy back and sell up to 10% of Andritz's total shares for a period of 18 months from the resolution. The maximum price for purchasing shares was fixed at 30% above the average, unweighted closing price of the share over the ten trading days preceding the buy-back. The minimum price was fixed at 10.0 Euros per share. The purpose of this share buy-back/sale program is to balance the supply and demand for Andritz shares on the Vienna Stock Exchange. In addition, the purchased shares are eligible for use in the stock option program which covers approximately 60 Andritz Group executives, including the members of the Managing Board of Andritz.

As of December 31, 2004, the number of own shares held by the Company amounted to 40,410.

Detailed information about the share buy-back/sale program, as well as the transactions carried out in relation to this program, can be found exclusively on the www.andritz.com website.

STOCK OPTION PROGRAM

In March 2004, the Annual General Meeting approved a stock option program for members of the Managing Board and other executives of the Andritz Group. This program aims at a long-term sustainable increase in shareholder value and to secure management commitment. Participation in the program was contingent on each individual manager purchasing Andritz shares equal to at least 20,000 Euros in value. Exercise of the options is based on certain defined share price increases and certain improvements of earnings per share. Exercise periods are between May 1, 2006, and April 30, 2008.

INVESTOR RELATIONS

Proactive Investor Relations focusing on the provision of transparent, detailed, and comprehensive

STOCK EXCHANGE FIGURES

	2004	2003	2002
Highest closing price (EUR)	56.50	37.95	28.00
Lowest closing price (EUR)	35.00	21.00	19.40
Closing price at year-end (EUR)	56.10	37.95	22.99
Market capitalization as of 31.12. (MEUR)	729.3	493.4	298.9
Performance	+52.5%	+65.0%	+7.9%
ATX weighting as of 31.12. (%)	1.7656	2.3250	0.6992
Average daily number of shares traded	70,744	45,410	13,255

KEY FIGURES FOR ANDRITZ SHARES

ISIN Code	AT0000730007
First Listing Day	June 25, 2001
Types of Shares	no-par value shares, bearer shares
Total Number of Shares	13 million
Authorized Capital	3.5 million shares, to be used by September 15, 2005
Free Float	approx. 72%
Stock Exchange	Vienna (Prime Market)
Ticker Symbols	Reuters: ANDR.VI; Bloomberg: ANDR, AV
Stock Exchange Indices	ATX, ATX Prime, WBI

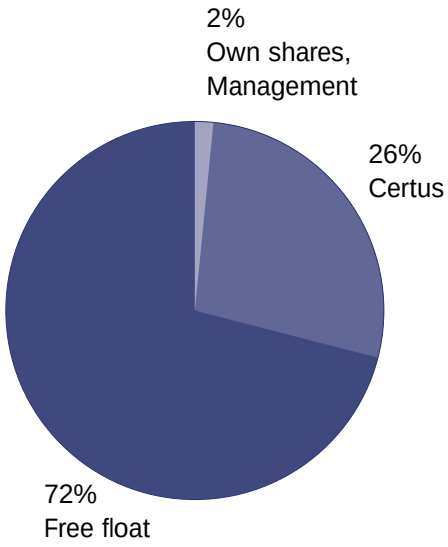
corporate information to the financial community is a clearly defined goal of Andritz. In 2004, Andritz once again received an award for its performance in the area of Investor Relations. Andritz was ranked third in the most important category, the "Austrian Financial Analysts' Stock Exchange Award." This award is conferred annually by the Austrian Association for Financial Analysis and Asset Management (ÖVFA) and the Austrian business magazine, GEWINN. Assessment criteria include transparency of information policy, reliability of financial guidance, and functional competence of Investor Relations officers. This is the third year in a row Andritz received such an award.

In 2004, Andritz staged several roadshows in Austria and other countries. On the occasion of the publication of the full year 2003 and the quarterly reports for 2004, Andritz Management held several one-on-one or group meetings with large institutional investors and financial analysts. Andritz was also showcased at various investment bank conferences, e.g. at Deutsche Bank's small- and mid-cap conference in London, and Bank Austria's investor conference in Kitzbühel, Austria. For financial analysts and selected fund managers, Andritz organized "Investor Days 2004" in Finland, which presented Andritz's expertise in Pulp Mill Technologies. In cooperation with the Vienna Stock Exchange, Andritz gave presentations to institutional investors in London, Edinburgh, Milan, Geneva, and New York.

ANALYST COVERAGE

At the end of November 2004, Kaupthing Sofi, a specialized bank of Iceland with operations in ten countries, initiated research coverage of Andritz. In total, seven banks and investment firms publish reports on Andritz on a regular basis. They are: Bank Austria/Creditanstalt, Berenberg Bank, Deutsche Bank, Erste Bank, JPMorgan, Kaupthing Sofi, and Raiffeisen Centrobank.

SHAREHOLDER STRUCTURE OF ANDRITZ (AS OF 31.12.2004)



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CORPORATE GOVERNANCE

Andritz endorses compliance with the Austrian Corporate Governance Code, which was officially introduced in September 2002. It regards the Code as an essential means to implement responsible management and control of Andritz, which is directed toward creating added value.

Implementation of and compliance with the Code will promote and intensify the confidence of shareholders, investors, customers, employees, suppliers, representatives of the media, and other stakeholders in the company. The Managing Board and the Supervisory Board, as well as the entire staff of Andritz, are committed to complying with the Code.

Besides the mandatory "L" Rules, which refer to legal requirements, Andritz complies with the Code's "C" Rules, with the following deviations:*)

Rule 38:
Andritz AG Articles of Association do not stipulate an age limit for its Managing Board members. Appointment of Managing Board members is solely contingent on personal and professional qualifications.

Rule 42:
Andritz AG does not have a separate strategy committee. Andritz AG's Supervisory Board is composed of experts in different fields who hold constructive sessions at regular intervals, to discuss, inter alia, strategic alignment. In this framework, the Supervisory Board is also involved in all strategic decisions of the Managing Board as a consultative body.

Rule 61:
Since the Internet allows continuous updating of information, unlike a printed publication such as the annual report, Andritz publishes all information requested under Rule 61 on its website and updates it when necessary. In addition, most of the requested information is published in the annual report.

Rule 69:
Andritz AG is of the opinion that the notifications of share purchases and sales by members of the Managing Board and Supervisory Board, which it is obliged to make to the financial market supervisory authority and the Vienna Stock Exchange pursuant to Article 91a of the Stock Exchange Act, represent a comprehensive, lawful means of ensuring equal treatment for all shareholders.

The complete Corporate Governance Code can be accessed and downloaded from the Andritz website (www.andritz.com). The website also contains Andritz's statement on compliance with the Code, including explanations to deviations.

*) The Austrian Code of Corporate Governance encompasses the following three categories of rules: **Legal Requirement (L):** referring to mandatory legal requirements, **Comply or Explain (C):** this rule is to be followed; any deviation must be explained and the reasons stated in order to be in compliance with the Code, **Recommendation (R):** the nature of this rule is a recommendation; non-compliance with this rule requires neither disclosure nor explanation.

STATUS REPORT

GENERAL ECONOMIC CONDITIONS

The year 2004 was characterized by a global economic recovery, with the US showing a much faster and sustained growth than Euroland.

According to preliminary figures, Gross Domestic Product (GDP) of the USA grew at an annualized rate of 4.6% in 2004. Although economic growth was primarily based on consumption of private individuals, who contribute approximately two-thirds of total economic spending, the economic upturn was also somewhat based on increased capital expenditures by corporations. Due to this economic development, the Federal Reserve Board (the FED) increased key interest rates in several steps from 1% at the beginning of January to 2.25% by the end of the year.

The economy in Euroland developed in a similar fashion, although much more moderately. GDP grew by approximately 1.8% compared to 2003. Continued weak domestic demand and the rise of the Euro against the US dollar, which dampened export activities, were the main burdens to growth.

China's economy continued its strong growth shown during the last few years also in 2004. The measures of the Chinese government to slow down over-investment in some economic sectors, e.g. in the steel or cement industries, have shown the desired effects, with the risk of overheating clearly reduced. Nevertheless, overall economic growth of China remained very substantial during the reporting year.

Sources: OECD, WIFO

BUSINESS DEVELOPMENT

Increase in Sales

Sales of the Andritz Group in 2004 developed very favorably. As a result of the execution of the high Order Backlog as of the end of last year, the growth of the services business, and Sales contributions from the companies acquired in 2004, Sales increased by 20.9% to 1,481.3 MEUR (2003: 1,225.0 MEUR). In particular, the Pulp and Paper, Rolling Mills and Strip Processing Lines, and Environment and Process Business Areas increased their Sales significantly compared to 2003. Sales of the Feed Technology Business Area were only slightly higher than in the previous year, mainly as a result of weak market conditions and the decline of the US dollar against the Euro, which led to negative translation effects, especially for this Business Area.

Sales of the companies/business areas acquired in 2004 (Bird Machine, NETZSCH Filtration, Kaiser, and VA TECH WABAG's fluidized bed drying systems Business Area), which were not included in the financial statements of 2003, added approximately 96 MEUR to the Group's total Sales in 2004. Organic Sales growth of the Group therefore was approximately 13%.

Order Intake and Order Backlog at record levels

Order Intake of the Andritz Group reached an historic record level in 2004. Due to the very favorable business development in almost every Business Area, Group Order Intake surged from 1,394.4 MEUR in 2003 to 1,837.0 MEUR in 2004, an increase of 31.7%. Order Intake in the Fourth Quarter of 2004, at 768.5 MEUR, reached an extraordinarily high level. In particular, the Pulp and

Paper Business Area received several large orders (including the large order from CMPC in Chile at approximately 320 MEUR, and the supply of two new recovery boilers to SCA and Weyerhaeuser at approximately 130 MEUR). Order Intake of the Environment and Process Business Area also increased significantly compared to 2003, mainly due to contributions from newly acquired companies, and the favorable development of the centrifuge business.

Order Intake of Bird Machine, NETZSCH filtration, VA TECH WABAG's fluidized bed drying systems Business Area, and Kaiser, which were not included in the Order Intake figure of last year, amounted to approximately 106 MEUR in 2004.

As a consequence of excellent Order Intake, the Group's Order Backlog reached a record level of 1,439.2 MEUR at the end of 2004 (31.12.2003: 1,053.6 MEUR). This provides a solid workload for the Andritz Group in 2005.

Significant increase in Earnings

As a result of increased Sales, ongoing cost optimization programs, and positive Earnings contributions from some of the newly acquired companies, the Group's Earnings Before Interest, Taxes, Depreciation, and Amortization of Goodwill (EBITDA) surged from 84.4 MEUR in 2003 to 115.4 MEUR in 2004. With the exception of the Feed Technology Business Area, whose Earnings were affected by internal restructuring costs and weak market conditions, every Business Area increased its Earnings and profitability compared to last year. Group profitability expressed as EBITDA margin improved from 6.9% in 2003 to 7.8% in 2004.

EBIT (Earnings Before Interest and Taxes) increased by 55.6% to 76.1 MEUR (2003: 48.9 MEUR). The lower tax rate compared to 2003 results from lower deferred taxes due to the Austrian 2005 tax reform. Net Income after the deduction of Minority Interests amounted to 53.4 MEUR (2003: 29.1 MEUR).

Cash flow and CAPEX

Cash flow from operating activities amounted to 208.0 MEUR in 2004, increasing significantly compared to last year (2003: 4.6 MEUR). Investments in tangible and intangible assets amounted to 29.4 MEUR (20.5 MEUR).

Net worth position and capital structure

The balance sheet as of 31.12.2004 shows no major changes compared to 31.12.2003.

Net liquidity (cash and cash equivalents minus interest-bearing financial liabilities) as of 31.12.2004, at 219.6 MEUR, almost quadrupled compared to the reference date of last year (31.12.2003: 55.0 MEUR). With an equity ratio of 23.4% as of 31.12.2004 (24.0% as of 31.12.2003), the Andritz Group has a solid and balanced financial structure.

Effects from exchange rates

In 2004, approximately 35% of the Andritz Group's Sales were denominated in US dollars. Although the Group attempts to hedge the net currency exposure of each individual order to mitigate the risk of currency fluctuations, changes in exchange rates could result in the recognition of exchange losses in the Group's financial statements and in translation effects on Order Intake, Sales, and Earnings.

In 2004, the strength of the Euro against the US dollar (the average exchange rate increased by 9.9% in 2004) led to a shortfall in Group Sales of approximately 24 MEUR and in Order Intake of approximately 32 MEUR. At unchanged Euro/US dollar exchange rate, EBITA would have been approximately 1 MEUR higher.

RESEARCH AND DEVELOPMENT

Research and Development (R&D) is one of the Group's important strategic goals. In 2004, Andritz invested approximately 21.1 MEUR in the development of existing and new products and processes. Approximately 180 people work in the Group's research centers in the USA, Austria, Finland, and France to develop new processes and equipment and expand Andritz's technological leadership.

The Divisions of the **Pulp and Paper Business Area** focus their R&D programs primarily on improving fiber quality, increasing energy efficiency, lowering the investment cost per ton of product manufactured, lowering maintenance costs, and reducing the environmental impact.

Some newly developed products of the Pulp and Paper Divisions include:

- Wood Processing: Chip Sampler/Analyzer and RotaBarker™ for frozen wood and tropical hardwoods
- Fiberline: ModuScreen™ A for combined coarse and fine screening of pulp
- Recovery: High Energy Recovery Boilers (HERB) which considerably increase electrical generation capacity
- Chemical Systems: LMD-Filter™ for lime mud dewatering
- Mechanical Pulping: optimization of the Preconditioning-Refiner Chemical (P-RC™) Alkaline Peroxide Mechanical Pulping (APMP) process for alternative raw materials; Bleach Commander™ process control system
- Pulp Drying: world's largest single-line systems; slab press for flash drying
- Fiber Preparation: LC/HC pulpers with reduced energy consumption; ShortFlow™ paper machine approach; RotoWash™ for ash washing and fiber recovery
- Tissue: Machine Direction (MD) flexibility for TissueFlex™ shoe press; PrimeReel™ Centerwind for crease-free winding at very low nip loads to secure highest softness and volume of tissue paper; PrimeRun™ for utmost sheet stability in the dry end; enter the TAD technology and start up of first TAD machine
- Services: Bar-Tec™ wedgewire screen baskets; conical refiner plates; digester screen plates; diagnostics and condition monitoring systems; screw press shaft machining device

The trend today is toward large, single-line mills since redundant or repetitive smaller systems increase both capital and operating costs. This places extreme demands on the equipment in terms of scale, reliability, and availability. All Andritz Divisions are actively developing larger scale equipment. UPM-Kymmene's Pietarsaari mill demonstrates Andritz's capabilities in engineering and producing one of the world's largest and most efficient chemical recovery systems. Recent orders from Veracel in Brazil, Hainan in China, and CMPC in Chile will showcase large-scale Andritz fiberline and pulp drying systems. The chemi-mechanical pulp mill being built in Kunda, Estonia, will have a large twin wire pulp dewatering press, and the installation at UPM's Shotton (UK) showcases a nearly 1,000 t/d large single-line screw press and disperser from Andritz for recycled fiber processes.

The patented TurboFeed™ system is now generally accepted to be the most advanced, but also the simplest and most reliable solution for chip feeding to a continuous digester. It has been included on the most recent orders Andritz has received for continuous cooking systems, including very large (3,000 t/d) digesters.

In the pulp bleaching area, chemical consumption has been decreased to record low levels with Andritz technology. The key elements to achieving this are the fractional washing capabilities of the DD Washer and selective removal of hexenuronic acids (A-Stage Bleaching).

Andritz has done considerable development work to minimize emissions from the recovery boiler (particularly NO_x) and to improve the reliability and safety of the boiler while maximizing energy production of the boiler at the same time.

Sophisticated simulation programs (designed in cooperation with IDEAS Simulation within the Andritz Group) are now being utilized for fiberlines, chemical recovery boilers, evaporation plants, pulp drying lines, and tissue production lines.

In the fiber preparation area, Andritz now can perform full-line production trials and testing for recycled fiber applications in its new Graz pilot plant.

In the **Rolling Mills and Strip Processing Lines Business Area**, R&D focused on further strengthening the competitive advantage of processes offered to customers. The mixed acid recovery system has been optimized to increase the nitric-acid recovery rate as well as the water balance between stainless steel pickling lines and acid recovery plants. Work continues on the project to develop alternative corrosion-resistant coatings with special focus on zinc/chromium- and zinc/magnesium-coatings. This reduces the zinc-layer thickness for improved laser welding in the automotive industry.

In the **Environment and Process Business Area**, the R&D program for drying technologies focused on further developing the range of belt drying systems. New sizes were developed and an entire new design based on using a full concrete casing was successfully introduced to the market. For centrifuges, a newly developed drive system has successfully proven reliability. Marketing of the new drive system began in the Second Half of 2004.

Feed Technology's R&D activities were focused on further developing existing products, improving maintainability of equipment, increasing the service intervals for equipment, and standardizing systems and sub-systems in the product range.

OUTLOOK

In 2005, the global economy is expected to continue the growth shown in 2004. Reports and forecasts by leading economic researchers (OECD, WIFO) predict that the GDP of the USA will grow by approximately 3.3% in 2005. The economic development in Euroland should again remain much more moderate compared to the USA, mainly as a result of continued weak domestic demand and the strength of the Euro against the US dollar, which will dampen export activities of the European exporting industries.

The outlook for the markets relevant to Andritz – pulp, paper, and steel – is also favorable according to market researchers. In pulp and paper, it is expected that project activity will primarily focus on greenfield pulp mills and major modernizations of existing installations in the southern hemisphere. In Europe and North America, investment activities should remain moderate, although a slight pickup in the course of the year 2005 can be expected.

In steel, the very high investment activity in China and Asia seen in 2004, particularly in the stainless steel area, is likely to show some cooling off in 2005, but still is expected to remain at an attractively high level. Researchers expect the focus of investments to shift to the downstream area of steel strip finishing.

For the Environment and Process Business Area, centrifuges are expected to continue their high volume growth; margins, however, could be under some pressure, not at least because of increasing steel prices. The market for thermal sludge treatment should pick up in the course of the year.

Full integration of the newly acquired companies into the Group and the implementation of Group-wide rules and procedures for Controlling, Accounting, IT, Production, and Purchasing will be the main corporate targets for 2005. This should enable Andritz to realize optimum synergies.

Given the positive forecasts for the global economy and the relevant Andritz markets, the Andritz Group expects Sales and Net Income for 2005 to increase compared to 2004. However, if the expected positive development of the global economy does not materialize, Sales and Earnings of the Andritz Group may be negatively affected.

Disclaimer
Certain statements contained in this report constitute "forward-looking statements." These statements, which contain the words "believe", "intend", "expect" and words of similar meaning reflect Management's beliefs and expectations and are subject to risks and uncertainties that may cause actual results to differ materially. As a result, readers are cautioned not to place undue reliance on such forward-looking statements. The Company disclaims any obligation to publicly announce the result of any revisions to the forward-looking statements made herein, except where it would be required to do so under applicable law.

CORPORATE RISKS

The Andritz Group is a globally operating company serving a variety of industrial markets and customers. As such, the Group is subject to certain general and industry-specific risks. To identify, manage, and mitigate these risks, Andritz has a long-established Group-wide management steering committee whose main task is to identify nascent risks early and to take counter-measures. This is an important element in the active risk management within the Group. The risks described below, and the effects these risks may have on the business development of Andritz, have been taken into account in the Group's corporate planning.

The risks that the Andritz Group may incur include, but are not limited to, the following:

RISKS RELATED TO THE INDUSTRIES IN WHICH THE GROUP OPERATES

Volatility of incoming orders

Some customers and industries served by the Andritz Group are directly dependent on general economic development and frequent fluctuations in demand for their products. This is especially true of the Pulp and Paper and the Rolling Mills and Strip Processing Lines Business Areas, but all Business Areas can be affected. The prices for these products are, in part, dependent on the prevailing relationship between supply and demand. Possible price fluctuations are therefore apt to have a direct influence on each customer's capital investment decisions, with subsequent influence on the Group's Order Intake. This may lead to volatility in the development of Order Intake of the Group.

Customer concentration

In some of the industries served by Andritz, there is a trend toward company mergers. This is especially prevalent in the pulp and paper and the steel industries. These mergers might result in a reduction of the number of customers in the future, as well as the Group having to negotiate with global companies with greater purchasing power. The dependence on key customers might increase, which could have direct consequences on the Group's financial development.

Uncertainty of future contracts

The Group's future performance depends on, among other things, securing certain new contracts. It can sometimes be difficult to predict when an order for which the Andritz Group has provided a quotation will actually be awarded. Contract awards are often affected by events outside the control of the Group, such as prices, demand, and general economic conditions. This can cause difficulties in matching the Group's workforce with contract needs. Although Andritz has been able to successfully manage this risk by outsourcing during brisk sales periods and producing in-house in periods of sales decline, this may change in the future

Environmental matters

The Group's operations are subject to numerous local, national, and supranational environmental regulations. The Group uses and generates hazardous substances in its manufacturing operations. In addition, many of the Group's current and former properties are, or have been, used for industrial purposes, and disposal of waste at disposal sites has been arranged for. It is possible that the Group may in the future be subject to liabilities relating to the investigation and clean-up of contaminated areas.

RISKS RELATED TO THE GROUP'S BUSINESS

Currencies

The Group has operations and subsidiaries in a large number of countries outside Euroland, and a significant portion of its Sales and costs are

denominated in non-Euro currencies, mainly in US dollars and British Pounds. The currencies in these countries may be subject to fluctuations in exchange rates. Although the Group attempts to hedge the net currency exposure of the orders to mitigate the currency risk, currency fluctuations can result in the recognition of exchange rate losses in the Group's financial statements. Developments of exchange rates may also have translation effects on the Group's Sales and Earnings, whose values are converted into Euros. In addition, shifts in exchange rates may affect Andritz's position relative to its competitors, although most of the main competitors of Andritz are also based in Euroland. As some of Andritz's major customers are based outside Euroland, changes in exchange rates could lead to a delay of project decisions by those customers. Also, the Shareholders' Equity of the Andritz Group is not hedged and is thus susceptible to being affected by changes in the exchange rate.

Competitive position

The Andritz Group does business in very competitive markets. Some of the markets in which the Group competes are highly fragmented, with a few large, international manufacturers competing against each other and against a high number of smaller, local companies. This has, in some cases, adversely impacted sales margins realized by certain of the Group's businesses. The Andritz Group invests approximately 3% of total Sales in Research and Development and has so far been able to offer its customers the latest technological developments. There is, however, no assurance that the Group can maintain and defend this position in the future.

Acquisition and integration of complementary businesses

One of the Group's strategies is to become a comprehensive supplier of systems and equipment in all of its Business Areas through organic growth and complementary acquisitions. In the course of implementing this strategy since 1990, the Group has acquired and integrated a number of businesses with worldwide operations. However, no assurance can be given that the Group will be successful in identifying and acquiring appropriate acquisition candidates in the future, or that suitable candidates will be available, or that sufficient financing will be available. Furthermore, although Andritz has an excellent track record of integrating newly acquired businesses, it is possible that in connection with future acquisitions, the integration will not succeed and that planned objectives and synergies are not realized or the Group may be exposed to new risks that have not been properly managed.

Legal proceedings

In the course of its ordinary business, the Andritz Group is party to numerous legal proceedings before both administrative and judicial courts and bodies and arbitration tribunals. The substantial majority of such proceedings are of a nature considered typical of the Group's business. Where appropriate, provisions are made to cover the expected outcome of proceedings to which Group companies are a party, to the extent that negative outcomes are likely and reliable estimates can be made. However, even when provisions are made, there is no guarantee that these will always be sufficient.

As of December 31, 2004 Andritz Inc., a subsidiary of the Andritz Group, is one of many defendants in a total of approximately 85 asbestos cases in the USA. In aggregate, the cases involve approximately 19,500 plaintiffs. Nearly all of these cases involve claims by multiple plaintiffs against multiple defendants. Andritz Inc. does not believe it should be found liable in connection with any of these claims and plans to vigorously defend each claim.

For further information on asbestos litigation, please see pages 110ff. of this report.

RISKS RELATED TO MAJOR ORDERS

Payment risks from customers

Much of the Group's business involves handling major projects with a large contract volume. If customers fail to meet their payment obligations for these projects, this may have negative effects on the net worth and liquidity position of the Group. The Andritz Group tries to limit these risks by securing payment guarantees from banks. Even in projects covered by export credit insurance, typically only 85% of the purchase price is secured through such insurance.

Liabilities and performance of projects

In conjunction with the performance of plants supplied by Andritz, the Group is in many cases under contractual obligation to make performance guarantees and to meet certain deadlines. If the performances stated are not achieved, or if deadlines are exceeded, the Group may have to perform remedial work at its expense or pay damages. If a guaranteed performance level or deadline is missed by a wide margin, the customer may have the right to terminate the agreement and return the delivered system to the Group for a full refund and/or recover damages. Such action could adversely affect the Group's financial development. The Group has put risk management procedures in place to reduce, inter alia, its contractual and financial risk exposure on projects.

Cost overruns

The Group's projects are usually based on long-term contracts, the substantial majority of which are fixed price contracts awarded on a competitive bidding basis. The sales and operating margins realized in a fixed price contract may vary from original estimates as a result of changes in costs and productivity over the term of the contract, especially on projects that include plant-wide engineering and/or construction. In addition, since certain parts of the manufacture of the Group's supplies are outsourced, the Group may be compelled to quote at a fixed price to the customer without knowing exactly how much the purchased parts will cost. While estimates are made using empirical data and quotes from potential suppliers, these may not be accurate. The Group has experienced significant losses on certain past and pending projects and project difficulties and losses may occur in the future in a way that would adversely affect the Group's financial condition.

RISKS RELATED TO THE CAPITAL MARKETS

Dependence on the development of international financial markets

Apart from company-related occurrences, development of the Andritz share price is also dependent on price fluctuations within international financial markets. Possible price fluctuations and high volatility of major stock markets might adversely affect the price of Andritz shares.

Recommendations by research analysts

As a publicly-listed company, Andritz is regularly analyzed by financial analysts and institutional investors. Analysts' recommendations to buy or sell Andritz shares and subsequent investment decisions by shareholders may lead to considerable price fluctuations of the shares. The Andritz Group has consistently followed a policy of open and transparent information exchange with shareholders and the financial community to minimize unfounded price fluctuations of its shares.

Active trading of Andritz shares

The high level (over 70%) of public free float of the Company's total outstanding shares has led to active trading in Andritz shares on the Vienna Stock Exchange. However, there is no assurance that active trading will be maintained in the future. If active trading is not maintained, the liquidity and the market price would be adversely affected, and investors might not be able to sell their shares at what they perceive to be an acceptable price. It could also result in the removal of Andritz shares from the ATX, the leading index of the Vienna Stock Exchange.

BUSINESS AREA MANAGERS

Markku Hänninen
Helsinki, Finland

Bernhard Rebernik
Graz, Austria

PULP AND PAPER

Chemical recovery plant

Andritz supplied UPM-Kymmene's Wisaforest mill in Finland with one of the world's largest single-line chemical recovery plants. The chemical recovery island consists of an evaporation plant (photo), recovery boiler, recausticizing plant, and lime kiln. Andritz chemical recovery systems fulfill the most stringent environmental requirements. The Wisaforest project started successfully on time in April 2004.

PROFILE

The Pulp and Paper Business Area is a leading global supplier of systems, equipment, and services for the production of fiber, for chemical recovery, and for sludge dewatering/handling in pulp, paper, and Medium Density Fiberboard (MDF) mills. The Business Area's technology is employed for the preparation of chemical, mechanical, and recycled pulp for all grades of paper, board, and tissue. The Business Area also supplies stock preparation and machine approach systems, tissue production systems, machine ventilation/drying equipment, sheet dewatering/drying/baling systems for market pulp, and flash drying systems and slab presses for fluff pulp. The Business Area's service activities include engineered wear products (refiner plates, screen baskets, pulpers, rotors, chipper knives etc.), as well as complementary technical services.

The successful acquisition of complementary product areas over the past few years enables the Pulp and Paper Business Area to supply complete processing lines from log handling to the production, drying, sheeting, and baling of pulp. The most recent acquisitions extend the Business Area's expertise in specialized sensors, process control, technologically advanced wear products, and equipment condition monitoring.

The Pulp and Paper Business Area provides basic and detailed engineering, procurement, manufacturing, equipment erection, construction supervision, commissioning, and maintenance services, as well as EPC contracts.

The Business Area has service and sales locations in each major market. In the emerging regions of Asia and South America, Andritz has built upon its strong foothold with local service centers and excellent reference deliveries.

Market development

In 2004, the international pulp markets and the related equipment market showed satisfactory development. Major project activity developed favorably throughout the reporting period, with investments and greenfield projects mainly concentrated in the southern hemisphere. In Europe and North America, investments focused more on modernizations and capacity expansions of existing pulp mills.

The capacity levels of market pulp producers increased modestly for mechanical pulp producers and more substantially for chemical pulp producers. Underlying demand for pulp remained strong during 2004. Pulp prices are denoted in US dollars, whose value decreased significantly against the Euro and other major currencies during 2004. This forced Canadian and Euroland producers to raise the minimum price level for market pulp, leading to increasing pulp prices.

Capacity utilization of international pulp producers was relatively stable and at a very high level. In the First Half of 2004, the price for Northern Bleached Softwood Kraft (NBSK) pulp increased significantly. Due to strong demand and unchanged supply, the price went from approximately 560 US dollars per ton in January 2004 to approximately 650 US dollars per ton at the end of June 2004. However, due to slight oversupply and seasonal temporary shutdowns of several paper manufacturers, the pulp market weakened during the Second Half of 2004, especially during the Third Quarter. Towards the end of the year, the price started to increase again as a consequence of increased demand.

The market for short fiber pulp (birch and eucalyptus) developed in step with the price development of NBSK.

Business development

The financial results developed very favorably during the reporting period. As a result of increased execution of some major orders and the growth of the services business, Sales increased by 9.2% to 884.6 MEUR (2003: 810.3 MEUR).

Due to increased Sales, the favorable development of the services business and continued cost optimization measures, EBITA of the Business Area surged 32.0% to 64.8 MEUR in 2004 (2003: 49.1 MEUR). Profitability expressed as EBITA margin increased from 6.1% in 2003 to 7.3% in 2004.

The integration of Fiedler GmbH of Germany acquired in September 2003 progressed very favorably in 2004. This acquisition made Andritz one of the leading global suppliers of screen baskets and rotors. A result of the synergies is the new wedgewire screen basket – the Bar-Tec™ Wedgewire – which utilizes the strengths of the Andritz FiberSentry™ and the former Fiedler Strong-Bar©. The new basket will be introduced to customers in the First Quarter of 2005.

Andritz and Rheinhold & Mahla AG of Germany, a leading provider of industrial services in Europe, formed a joint venture (European Mill Service GmbH) to provide a broad range of industrial maintenance services and long-term maintenance contracts for pulp, paper, and panelboard mills in Europe. This is consistent with customer requirements to increasingly outsource support services, such as maintenance, to competent external suppliers.

Andritz strengthened its ability to serve the growing market in Chile by providing local contact points with Chilean customers. A new office for capital sales and project management was established in Santiago. Andritz also enlarged the service office in Concepción. The office now provides spare parts sales, field services, technical assistance, and the sale of engineered wear parts for pulp mills, paper mills, and MDF plants in Chile.

Following a successful period of joint research, development, and marketing in the field of tissue machines, Andritz and Voith have decided to change their existing cooperation. As part of this, Voith Andritz Tissue LLC, Janesville, WI, USA, the joint venture company which was founded to serve the NAFTA tissue market, will continue as

KEY FIGURES PULP AND PAPER

MEUR	2004	2003	2002	2001
Sales	884.6	810.3	672.2	883.0
Order Intake	1,218.9	857.3	843.3	642.8
Order Backlog as of 31.12.	951.1	622.7	582.0	431.5
EBITDA	77.9	63.9	53.5	69.8
EBITDA margin	8.8%	7.9%	8.0%	7.9%
EBITA	64.8	49.1	39.2	53.9
EBITA margin	7.3%	6.1%	5.8%	6.1%
Capital investments	14.3	9.3	11.5	10.8
Employees as of 31.12.	2,805	2,959	2,634	2,626

Andritz Tissue Inc., supplying tissue machines to US, Canadian and Mexican customers with the same tissue professionals. Andritz Tissue Inc. will be a 100% affiliate of Andritz in 2005, as part of the Tissue Machines Division.

The large single-line chemical recovery plant supplied by Andritz for Wisapower at UPM-Kymmene's Pietarsaari mill in Finland started very successfully in early April. Guaranteed production was achieved after only five days, and a new record for pulp production was reached within a week of operation. Andritz's delivery included a new recovery boiler, evaporation plant, and white liquor plant.

Andritz chemical recovery systems were successfully started up in July at Mercer's Zellstoff Stendal mill, a greenfield Kraft pulp mill constructed in the Saxony region of Germany. Andritz supplied the black liquor evaporation plant, the chemical recovery boiler, and a complete recausticizing system for the production of white liquor. The Stendal mill is fulfilling the most stringent environmental requirements.

In 2004, the Business Area booked a record level of orders. At 1,218.9 MEUR, Order Intake increased by 42.2% compared to 2003 (857.3 MEUR). The surge is mainly due to the receipt of the large order from CMPC Celulosa S.A., worth approximately 320 MEUR.

Major orders

- The largest single order ever received in the Group's history was the contract signed in September with CMPC Celulosa S.A. to supply a complete fiberline – from digester to finished bales of market pulp – and chemical recovery systems for a new pulping line at the Santa Fe, Chile mill.

- Andritz will provide the systems for pulp production and pulp drying/baling – as well as the chemical recovery boiler and white liquor plant. All systems will be delivered on an EPC basis. In addition, CMPC ordered two high-efficiency multi-stage DD Washers and oxygen delignification equipment from Andritz for their Laja, Chile mill.

- Celulosa Arauco y Constitución ordered a woodroom, recausticizing, and lime kiln for its new Itata mill in Chile.

- Estonian Cell selected Andritz to deliver a complete hardwood chemi-mechanical pulp mill from the woodyard to the finished pulp bales. The greenfield mill will be built in Kunda, Estonia.

- In Russia, Andritz will supply a complete wood and chip processing installation for SC Arkhangelsk Pulp and Paper Mill.

- Andra Pradesh Paper Mills of India (APPM) ordered a new fiberline, chemical recovery island, and woodyard upgrade from Andritz to increase pulping capacity at its Rajahmundry mill. The new fiberline incorporates the most modern, efficient, and environmentally-friendly technologies in the Indian market.

- In Canada, Irving Pulp & Paper ordered a complete lime kiln system. This is the first LMD lime kiln system to be installed in Canada.

- Andritz High Energy Recovery Boiler (HERB) technology, proven at the successful Pietarsaari installation of UPM-Kymmene in Finland, is quickly gaining acceptance as the technology of choice. New recovery boilers utilizing HERB technology have been ordered by SCA in Sweden and Weyerhaeuser in the USA.

- JSC Kotlas Pulp & Paper ordered a new six-effect evaporation plant. This is the first completely new evaporation plant to be installed in Russia in over a decade.

- Based upon their positive experience with the Andritz OPE® (Overall Production Efficiency) service contract for the white liquor plant at their Joutseno mill in Finland, Metsä-Botnia expanded Andritz's scope to include the entire fiberline.

- As a result of its excellent reputation in MDF, Andritz received 14 additional orders during the year for refining systems – eleven from China, two from Russia, and one from Austria.

- Andritz sold two P-RC™ APMP mechanical pulping lines to Jiaozuo and Ningxia Meili in China, a refiner system to Norske Skog in Brazil, a complete RTS™ line to Germany, and an upgrade of conventional Thermo-Mechanical Pulping (TMP) to RTS™ energy-saving technology to Norske Skog in France.

- Andritz will provide the complete chip impregnation system and a complete bleaching, washing, and drying line for M-real's new BCTMP mill to be built in Kaskinen, Finland.

- Fiber preparation systems were sold to Holmen Peninsular of Spain, Shandong Huatai of China, and Perlen Paper of Switzerland. The strong market position of the FibreFlow® Drum was underscored by additional orders from the USA, Korea, Finland, Spain, and China.

- Andritz will supply another CrescentFormer tissue machine and stock preparation equipment to Hengan in China. This is the third consecutive installation of an Andritz machine by Hengan. The ICT Group of Italy has also ordered a CrescentFormer machine and stock preparation for its greenfield mill to be built in Spain.

PROFILE

→ The Wood Processing Division is a global market leader for the supply of systems, equipment, and processes for all steps required in a woodyard — from receiving logs to their subsequent preparation into wood chips — for the production of chemical and mechanical pulps.

The Wood Processing Division is based in Hollola, Finland and also has operations in Brazil, Canada, Sweden, and the USA.

Business development

Business activities in the Wood Processing Division progressed favorably during 2004. The Division succeeded in maintaining its leading position in the major markets of Northern and Central Europe, South America, China, Canada, and the USA.

The woodyard at Celulosa Arauco y Constitución S.A.'s mill in Valdivia, Chile reached full production on schedule early in the year. A successful start-up was also conducted for the wood and chip processing plant at Hainan Island, China. In the USA, a tree-length debarking line was successfully started for Weyerhaeuser's Valliant, Oklahoma mill; a stacker/reclaimer was started for Interstate Paper's Riceboro, Georgia mill; and a circular crane and chipper modernization project was successfully completed for Weyerhaeuser's Oglethorpe, Georgia mill. The first HHQ™ chipper in the USA was successfully started up for Sappi Fine Paper's Cloquet, Minnesota mill.

Major orders

- The Division booked an order for a complete wood and chip processing installation in Russia for SC Arkhangelsk Pulp and Paper Mill.
- The Division received a significant debarking and chipping order from Celulosa Arauco y Constitución's Itata mill in Chile.
- The Division will deliver TMP wood handling systems to three mills in China: Shandong Huatai Paper Co., Henan Jiaozuo Ruifeng Forestry & Paper Co., and Shandong Zhongmao Shengyuan. Also, several Chinese MDF mills confirmed the Division's expertise by ordering wood handling systems.
- The Division will deliver a wood handling system to Estonian Cell that will be integrated with mechanical pulping systems from other Andritz divisions.
- Portal crane and circular crane orders have been received in Canada from Slocan-LP OSB Corp. and in the USA from Weyerhaeuser. Weyerhaeuser also ordered tree-length debarking lines for two mills in the USA.

DIVISION MANAGER

Jarmo Viiala
Hollola, Finland

Research and Development

Joint R&D with customers is an essential step in product development when implementing new technologies and applications. During 2004, two major agreements were signed for the Division to conduct full-scale product tests at customer sites.

The first is a cooperation project with a customer in Northern Europe for chip sampling and analysis. Representative chip sampling and reliable analysis are critical elements in chip quality monitoring.

In Southern Europe, a project is underway to test the Division's RotaBarker™ debarking technology on tropical hardwood.

Chipping plant

Andritz supplied a complete four-line chipping plant to Jiang Lin pulp mill, Hainan Island, China. The Andritz Chip Quality Package includes chipping with HQ-Chipper™, chip screening with JetScreen™, and processing of over-sized chips with HQ-Sizer™.

PROFILE

The Fiberline Division is one of the world's leading suppliers of systems, equipment, and processes for the production of chemical pulp. Products include continuous cooking systems, brownstock washers and screens, bleaching systems, and related equipment.

The Division is headquartered in Kotka, Finland and also has operations in Brazil, Japan, Sweden, and the USA.

Business development

A modernization of the continuous cooking system for Lwarcel Pulp in Brazil was successfully started up. The project included installation of a Lo-Level® chip delivery system, a Lo-Solids® cooking technology upgrade, and a retrofit of the digester.

Four projects involving Drum Displacer® (DD) Washers were started up in Russia, Portugal, South Africa, and the USA.

The Division started up three sawdust digesters (Canada, Indonesia, and Finland). The deliveries in Indonesia and Finland also included screen rooms and DD Washers.

While Western European market activity was light, activity in the Russian market continued to improve. The North American market activity for upgrades and system replacements continues at a modest pace. The most active market continues to be South America, including system modernizations, and capacity expansions of existing and new mills. Sales activity for system upgrades and mill expansions in Japan, China, and Southeast Asia continues to be promising.

Major orders

- The Division will supply a major portion of the order received from CMPC Celulosa S.A. in Chile. Included is a complete EPC fiberline (capacity: 2,405 t/d) with a two-vessel Lo-Solids® digester, TurboFeed™ chip feeding, high-efficiency DD Washers for washing and bleaching, and the patented A-stage bleaching process for reduced chemical consumption.
- In addition, the Division will deliver high-efficiency DD Washers and oxygen delignification equipment for CMPC's Laja, Chile mill.
- Andhra Pradesh Paper Mills (APPM) in India ordered a new fiberline to increase pulping capacity at its Rajahmundry mill. The new fiberline will consist of a DownFlow Lo-Solids® cooking system, brownstock washing with DD Washers, two-stage oxygen delignification, deknotting/screening, and ECF bleaching with DD Washers.
- In North America, the Division sold a four-stage DD Washer to a Weyerhaeuser mill in Wisconsin and a Lo-Solids® cooking upgrade for a digester to another major customer. The Division was also selected to supply a customer in the Southeastern USA with systems for brownstock screening, washing, and oxygen delignification using the proven DD Washer technology.
- In China, the Division sold a screening system to Shandong Zhanhua Jingbo.
- In Brazil, Lwarcel Pulp ordered the machinery and engineering services for a new washing, screening, and bleaching line.
- In Estonia, Horizon Paper ordered a four-stage DD Washer for brownstock washing, a knot separation system, and advanced process controls from the Division.

DIVISION MANAGER

Jukka Sainiemi
Kotka, Finland

Research and Development

Technology development in the Fiberline Division continues to focus on lowering the investment cost per ton of pulp produced. This is being accomplished through process simplification, optimization, standardization, and modularization.

Bleach plant
This ECF bleach plant was supplied for the 1,900 t/d hardwood fiberline at Stora Enso's Imatra mill in Finland. The delivery also included brownstock washing, oxygen delignification, and deknotting/screening.

TurboFeed™ has made the breakthrough and is today the standard solution in chip feeding systems into the digester. The new developments of the DD Washer show remarkable progress with regard to reliability, washing efficiency, and capacity. These improvements are available for modernizations and upgrades of existing lines, in addition to new fiberlines.

Recent start-ups and sales of the new coarse/fine screening systems (combined unit) is a clear indication of market acceptance of this new product. The combined unit further reduces screen room costs.

The Division is also continuing to focus development efforts on MC® based technology throughout the fiberline. Research is ongoing in the development of fiberline processes for Southern hemisphere wood species. Sophisticated simulation programs are being utilized to improve upon washing and cooking technologies. Advanced control systems for all of the fiberline process areas are being developed and tested.

PROFILE

The Chemical Systems Division offers solutions for pulp mill on-site chemical preparation. The main process areas served by the Division are recausticizing, lime reburning, and white liquor production.

The Division is headquartered in Kotka, Finland and also has operations in Brazil, Indonesia, Japan, Sweden, and the USA.

DIVISION MANAGER

Markku Kosonen
Kotka, Finland

Business development

The Division's business activities progressed very favorably during 2004. Major business activities were in the Southern hemisphere, although modernizations of equipment have stimulated business in market areas worldwide.

The recausticizing plant and lime kiln for Arauco's Valdivia mill in Chile were successfully started up in March. In April, the chemical recovery island at UPM-Kymmene's Pietarsaari mill in Finland went online. Included in this project was the world's largest single line white liquor plant (10,000 m^3/d) supplied by the Division.

At the end of July, the 8,000 m^3/d white liquor plant for Zellstoff Stendal in Germany was successfully started up. This greenfield project includes two CPR-Filter™ systems for lime mud filtration.

In the Fourth Quarter, new X-Filter™ systems for green liquor filtration were started up at Södra's Mörrum mill in Sweden.

Major orders

- The Division received its largest order ever as part of the multi-Division order from CMPC Celulosa S.A. in Chile. For the Santa Fe mill, the Division will supply a complete EPC white liquor plant (including lime kiln).

- The Division received an order from Complejo Forestal Industrial Itata to deliver a complete white liquor plant, including recausticizing and lime reburning.

- The Division was chosen to modernize a lime kiln for Billerud Skärblacka, Sweden.

- In India, the Division will provide a CD-Filter™ for white liquor, an LMD-Filter™ for lime mud, and a lime kiln burner as part of the capacity expansion for Andhra Pradesh Paper Mills' Rajahmundry facility.

- In Canada, Irving Pulp & Paper ordered a complete lime kiln system. This is the first LMD lime kiln system to be installed in Canada.

Research and Development

The Chemical Systems Division successfully launched new technology for lime mud dewatering – the LMD-Filter™. The filter is a compact design based upon disc filter technology, which reduces emissions from the lime kiln, and is a completely closed system so there is no dusting. A large LMD-Filter™ was installed at UPM-Kymmene's Pietarsaari mill in Finland and has been operating with excellent results.

The trend today is toward large "single line" mills, since redundant or repetitive smaller systems increase capital and operating costs. The Division has led this development and has active programs to produce larger scale equipment. New, higher capacity X-Filter™ systems, CD-Filter™ sizes, slakers, and lime kilns are now commercially available. An example from the Pietarsaari installation is the single, large LMD-Filter™ (to support 10,000 m^3/d white liquor production) which does the work of two large drum filters.

A new lime kiln burner is being developed to meet the demanding environmental requirements of modern mills. New equipment for dregs handling (green liquor dregs) is in the final phase of developmental testing before introduction to the market.

LMD-Filter™

This LMD-Filter™, with Continuous Precoat Renewal (CPR), was delivered to UPM-Kymmene's Wisaforest mill in Finland. The LMD-Filter™ is the latest technology for lime mud dewatering. It achieves optimum dry solids and excellent washing results. This ensures efficient lime kiln operation with low heat consumption and low emissions.

DIVISION MANAGER

Harry Rickman
Helsinki, Finland

PROFILE

The Recovery Division is a global leader in the supply of systems, processes, and equipment used in chemical recovery processes in pulp mills. The products of the Division include chemical recovery boilers, evaporation plants, effluent evaporators, NCG systems, and TMP heat recovery systems.

The Recovery Division's major activities are located in Kotka and Varkaus, Finland, with significant operations in Brazil, Sweden, and the USA.

Business development

The Recovery Division saw a very favorable business development in 2004. Much of the business activity was in South America, but market improvement in North America and Russia is also promising.

The evaporation plant for Arauco's Valdivia mill in Chile was successfully started up in March.

There is significant customer interest in the Andritz High Energy Recovery Boiler (HERB), which has been a focus of the Division's R&D program for several years. The technology has proven itself in commercial-scale installations – most notably the recovery boiler at UPM-Kymmene's Pietarsaari mill in Finland. The boiler started up in April, exactly on schedule. It is rated at 4,450 tons of dry solids per day, and has the capacity to fire 600 MW per day of biofuel with virtually no fossil carbon dioxide emissions. The next step towards Advanced HERB is implemented in the new SCA/Östrand recovery boiler with higher steam values to increase the power output.

In addition to the Pietarsaari project, the Division also started up the recovery island for Zellstoff Stendal GmbH of Germany in July. This recovery island is capable of meeting the tightest environmental regulations using up-to-date technologies developed by Andritz.

In August, the Division started up a rebuilt evaporation plant and new chemical recovery boiler for Neusiedler's Ruzomberok mill in Slovakia. A new evaporation plant for Mondi Paper's Richards Bay mill in the Republic of South Africa was started up in September.

The evaporation plant and recovery boiler rebuilds at Portucel Tejo in Portugal were started up in October.

The recovery boiler at Portucel Soporcel successfully started up in December. This project included the first chlorine and potassium removal system delivered by Andritz.

Major orders

- The Division received an order for a new recovery boiler at Portucel's Cacia mill in Portugal. The capacity of the boiler is 1,300 tds/d and it will replace two older, smaller boilers.
- A new 3,800 tds/d recovery boiler featuring a Vertical Air™ system is included in the major EPC pulp mill order from CMPC Santa Fe in Chile.
- Andhra Pradesh Paper Mills (APPM) ordered a recovery boiler and evaporation plant from the joint venture Enmas-Andritz in India.
- SCA ordered a new 3,300 tds/d recovery boiler and an evaporation plant retrofit for their Östrand mill in Sweden. The boiler will utilize state-of-the-art HERB technology with high pressure and temperature.
- A new recovery boiler for Weyerhaeuser's Valliant, Oklahoma mill in the USA will incorporate HERB technology.

Recovery boiler
Andritz recovery boiler at UPM-Kymmene's Wisaforest mill in Finland. It is a High Energy Recovery Boiler (HERB) designed for 103 bar/505°C and provides high energy output at minimal emissions.

- Metsä-Botnia's Kaskinen mill in Finland selected Andritz to retrofit an existing recovery boiler.
- JSC Kotlas Pulp & Paper of Russia ordered a new six-effect evaporation plant. This is the first new evaporation plant to be installed in Russia in over a decade.
- Weyerhaeuser ordered a recovery boiler upgrade for their Springfield, Oregon mill in the USA.
- JSC Neusiedler Syktyvkar ordered a recovery boiler retrofit for their Syktyvkar mill in Russia.
- Frantschach Swiecie in Poland ordered an upgrade to its existing Andritz evaporation plant to increase the dry solids content of the black liquor to 80%.
- VCP in Brazil selected Andritz to perform the modernization work for its evaporation plant and recovery boiler at the Luiz Antonio mill.

Research & Development

Chloride removal is becoming more important as mills close their chemical circulation loops to reduce emissions to the environment. A new, low cost alternative for Ash Recrystallization (ARC) using a leaching process is being developed. The leaching process removes chlorine from the fly ash of the recovery boiler. Pilot tests at the Wisaforest mill in Finland are demonstrating the success of this process for removing chlorides from the chemical circulation in the pulp mill.

Another increasing need is the ability to split the steam condensates from the evaporation process into separate streams in order to facilitate their proper reuse or treatment. A development study has been conducted by the Division to improve the calculation model for condensate segregation and to predict the quality of secondary condensate in order to meet performance guarantees.

The new giant evaporation plant at UPM-Kymmene's Wisaforest mill in Pietarsaari is the first one in the world having a steam condensate optimization to four fractions using integrated condensate segregation allowing most effective re-utilization of the condensates in mill processes.

Intensive material research has been continued to select safe and cost-effective construction materials for evaporators. Research has especially concentrated on selecting materials for evaporators operating at high concentrations and temperatures.

Development of software to model the heat transfer and fluid streams of the recovery furnace (CFD Modeling) is continuing in order to predict furnace behavior and performance. The accuracy of CFD Modeling has been compared with field measurements and the pre-processing time has been cut in half.

The Division has done considerable development work to minimize emissions from recovery boilers (particularly NO_x emissions) and to improve the reliability and safety of the boiler. The chemical recovery boiler at UPM-Kymmene's Pietarsaari mill included several innovations. The Andritz Vertical Air System™ for the first time includes a two-level spraying arrangement of black liquor. This will further decrease NO_x emissions in the flue gas. Also, a virtual dynamic simulator was included in the recovery boiler plant delivery. The simulation is so realistic that operators cannot tell the difference between a simulated operation and the actual process.

DIVISION MANAGER

Risto Hämäläinen
Savonlinna, Finland

PROFILE

The Pulp Mill Services Division encompasses the service activities for the Wood Processing, Fiberline, Chemical Systems, and Recovery Divisions. Primary emphasis is on the production efficiency of woodyards and kraft pulp mills, and the availability of process equipment, whether supplied by Andritz or other equipment manufacturers.

Today, there is more emphasis on Overall Production Efficiency (OPE®) of a mill's machinery throughout its lifetime. The Division provides services for continuous improvement and optimization of mill operations, as well as field services, rebuilds and upgrades of equipment, and replacement parts or engineered wear products.

The Division is headquartered in Savonlinna, Finland. It is managed through Regional Centers and operates through service centers worldwide in all important pulp producing countries. Production facilities for rebuilds are located in Austria, Finland, and the USA. The Division also partners with external workshops in other locations around the globe.

Business development

The Division's business has developed satisfactorily. There was continued strong demand for services in North America, especially for HQ Plus™knife systems for woodyard chippers (recently introduced to the North American market), recovery boiler services, and woodyard services.

Andritz services were enhanced by acquiring the smelt pumping service business from Kaakon Teollisuuspalvelu Oy of Finland. Andritz previously was a licensee of the company's technology for North and South America.

Acutest Oy, which was acquired in 2003, was merged into the Division as a specific product group, supporting the OPE® service business. The acoustic emissions condition monitoring technology from Acutest will be utilized to support the Life Cycle Management concept offered by Andritz for different processes.

Major orders

- Significant orders for recovery boiler rebuilds and upgrades were received from customers in diverse geographies. For example, the CRISOBA mill in Mexico ordered a Vertical Air™ System upgrade, Georgia-Pacific ordered upgrades for two mills in the USA, and Visy Pulp & Paper selected the Division to perform an air system upgrade for their boiler in Tumut, Australia.

- The Division signed agreements with Metsä-Botnia's Joutseno mill in Finland for maintenance services and development. Based upon their positive experience with Andritz OPE® in one process area (white liquor plant), Metsä-Botnia expanded Andritz's role to include the entire fiberline.

- Several HQ Plus™ chipper knife systems were started up in wood processing operations. UPM-Kymmene's Wisaforest mill in Finland asked the Division to expand its service to both of the mill's chipper lines. In the wood processing area, several significant debarking drum rebuild orders were also received.

- A large boiler monitoring system based on Acutest® technology was awarded to Andritz for VCP's Luiz Antonio in Brazil. This is the second Acutest® installation in South America, showing global acceptance of this technology.

- The Division was selected to supply a displacement washing upgrade for the digester system at the MeadWestvaco mill in Wickliffe, Kentucky, USA. This delivery will include the first set of new diagonal digester screens sold in North America.

- Andritz's burner technology for lime kilns was selected by APP of Indonesia. New burners will be supplied for five lime kilns in the company's Perawang and Jambi mills.

Research and Development

Development work in diagnostics and condition monitoring continues, with the primary focus on applications for specific Andritz process equipment. The goal of the development program is to combine data from the condition monitoring equipment with certain data collected from the processes, to optimize efficiency from both a maintenance and operations view.

New applications for Acutest® technology are being researched and developed. A program to optimize the performance and adjustment of DD Washer seal elements is one of the most recent examples. This optimizes washer performance while simultaneously reducing start-up time and life cycle costs.

To support and supplement the OPE® concept, new development agreements with customers were introduced. These agreements increase cooperation between customers and Andritz to improve both the production process and the machinery. This cooperation utilizes Andritz's complete knowledge and experience – from all relevant Andritz Divisions.

The development and testing of two new style (step-in and tapered) digester screen plates continues. The step-in design simplifies the addition of new screen rows to existing digesters or the reinstallation of screens that had been previously removed. The tapered design may allow for an increase in the circulation or extraction flow for a given amount of open screen area. Both of these designs have been sold and installed on Andritz continuous cooking systems. The early operating data is extremely positive.

Many smaller improvements for existing equipment were developed to improve the customer's process. Examples include new wash piping systems for filter washers and the cleaning of rotating wires. An example for recovery boilers is the patented cleaning device for secondary and tertiary air ports.

Service for improved production efficiency
Andritz offers customers its expertise in continuously optimizing the performance of process equipment to maintain or improve overall production efficiency of mills. Here, an Andritz service engineer works on optimizing a DD Washer at Stora Enso's Kotka mill in Finland.

DIVISION MANAGER

Wolfgang Lashofer
Vienna, Austria
(since January 1, 2005)

PROFILE

The Mechanical Pulping Systems Division is a leading global supplier of complete systems for producing high-quality and high-brightness mechanical and chemi-mechanical pulps for paper and board production and high-quality fibers for Medium Density Fiberboard and Particleboard producers.

The high-efficiency pulping technology is based on proprietary RTS™ (Retention time, Temperature, and Speed) refining and alkaline P-RC™ APMP (Preconditioning-Refiner Chemical / Alkaline Peroxide Mechanical Pulping) processes. Equipment for washing and high-consistency bleaching makes the Division a comprehensive supplier of systems solutions for mechanical pulping.

The Division operates through its headquarters in Vienna and Graz, Austria, as well as locations in Canada and the USA. The Division's research laboratory and pilot plant in the USA is a completely equipped and independently certified process research facility.

Business development

In a move to better support customer needs with focused solutions, the Mechanical Pulping Systems Division has recently been reorganized. Pulp dewatering and drying systems had grown to the extent that it became a separate Division, enabling Mechanical Pulping Systems to increase its focus on its core technologies.

The Division successfully completed the HC bleach plants for MD Paper in Plattling, Germany, StoraEnso in Veitsiluoto, Finland, and Holmen Paper in Wargön, Sweden. Another twin wire press was also installed at Holmen Paper's mill in Hallstavik, Sweden.

Twin wire press washing systems were successfully commissioned for Lenzing, Austria, and Jiangmen Paper in China.

P-RC™ APMP systems were started up successfully for Shandong Tralin Paper, Shandong Chenming, Yueyang Paper of China, and Tembec's Malette mill in Canada.

The RTS™ system, bleaching line, and heat recovery system for CMPC Papeles in Chile was started up successfully. Another RTS™ system was completed for Solikamsk in Russia.

A total of 17 MDF refining systems were successfully started up in China for several different customers. In addition, two MDF start-ups in Turkey and the start-up of an MDF production line in Russia were completed in 2004.

Major orders

- The Division will supply, in cooperation with the Wood Processing and Pulp Drying Systems Divisions, a complete hardwood chemi-mechanical market pulp mill – including woodyard, chip handling, impregnation, refining, bleaching, dewatering, drying, and pulp baling systems – to be built in Kunda, Estonia. The mill will use proven Andritz P-RC™ APMP technology to produce a variety of market pulp grades from aspen wood. Andritz will supply all the major production systems.

- The Division will supply the complete chip impregnation system, bleaching, and washing systems as part of the multi-Division order from M-real for a greenfield Bleached Chemi-Thermo Mechanical Pulp (BCTMP) mill to be built in Kaskinen, Finland.

Refiner

The high-speed refiner depicted is part of the new RTS™-TMP line supplied to Cartulinas CMPC S.A. in Maule, Chile. It is a key element of the pulping system which produces fiber for paperboard from local pine wood resources. In addition to the new mechanical pulping line, the Andritz delivery included a high-consistency bleach plant, a heat recovery system, and an existing machinery upgrade program.

- Four new P-RC™ APMP plants were sold to Chinese producers – Jiaozuo Paper, Ningxia Meili, Zhongmao, and Xinya Paper.

- Norske Skog in Golbey, France ordered a conversion of its existing TMP refining system to advanced RTS™ technology. Norske Skog also ordered a complete new RTS™ line for their Walsum, Germany mill.

- A contract for two RTS™-TMP pulping lines was awarded by Kondopoga of Russia.

- UPM Caledonian of Scotland ordered a conversion of its bleach plant to state-of-the-art high-consistency peroxide (PHC) bleaching. M-real of Finland ordered bleaching equipment for its reject refining line in Joutseno.

- Refining systems were sold to Bowater Newsprint of Calhoun, Tennessee and Weyerhaeuser of Springfield, Oregon in the USA; Norske Skog in Pisa, Brazil; Tann Papper Dunyavaros in Hungary; Holmen Paper's Braviken, Sweden mill; and Quingsha Paper of China.

- Upgrade orders were received for a TMP reject system at Norske Skog in Albury, Australia; a chip washing system at Södra Cell's Folla mill in Sweden; and MSD Impressafiners for sawdust moisture control at Georgia-Pacific's Wauna, Washington mill in the USA.

- As a result of its reputation and rapidly growing base of MDF installations, the Division received eleven additional orders from Chinese MDF producers, one from Austria, and three large upgrade orders from customers in Luxembourg, Poland, and Germany.

Research and Development

The Mechanical Pulping Systems Division focuses its development activities on the broader use of mechanical pulps in paper and board production, minimizing operating costs in the mill, and reducing environmental impact.

As production increases worldwide, a shortage of conventional wood resources (spruce, aspen) can be foreseen in certain regions for the near future. The Division has developed technologies and equipment to process alternative raw materials such as different species of pine and a variety of hardwoods (eucalyptus, acacia, birch, and maple). The goal is to maintain the Division's technical leadership in advanced processes such as P-RC™ APMP and RTS™-TMP refining, RT pretreatment, and PHC bleaching.

In chemi-mechanical pulping, the R&D program is concentrated on mill-scale optimization of the advanced P-RC™ APMP process, which had been successfully started up in two mills in China and one in Canada. All results that had been achieved in pilot plant work were confirmed or surpassed in actual mill operation.

New pre-treatment and high-consistency refining technologies were developed to allow, for the first time, the use of alternative wood species (pine) in the RTS™-TMP process. Pulps of very high quality have been produced with these processes, and specific energy consumption has been reduced 20–30% compared to standard TMP.

Major drivers in equipment development are productivity improvements and increased production capacities. The mechanical availability and ease of maintenance for refiners and dewatering machines have been improved. An ongoing program to standardize equipment and manufacturing processes has resulted in improved quality of the machinery, reduced delivery times, and lower investment costs.

Due to the development of new screen baskets, the production capacity and dryness achieved by screw presses have been significantly increased.

Customer requirements include sophisticated process control. The new Andritz Bleach Commander™ uses modeling and predictive control strategies to better control the bleaching process – minimizing quality deviations and maximizing the production of "on-grade" pulp. Chemical consumption is optimized to the target brightness, which reduces bleaching costs.

The acquisition of a majority stake in CyberMetrics, a supplier of online sensors for fiber quality monitoring, will further enhance the Division's ability to offer advanced measurement and control strategies for mechanical pulping in the future.

PROFILE

The Pulp Drying Systems Division is the leading global supplier of complete sheet drying lines comprising screening, dewatering, drying, sheet cutting, and bale finishing systems. These systems are offered separately or as a completely integrated line for the production of market pulp. Capacities over 3,500 t/d with working widths up to 9.3 m in a single line are available.

The Division also supplies wet lap systems, flash dryers, and bale forming (slab press) equipment, as well as finishing lines. As part of its services, the Division also modernizes pulp drying lines to increase production, quality, and useful life.

The Division is headquartered in Graz, Austria and has locations in Canada and Sweden.

DIVISION MANAGER

Karl Hornhofer
Graz, Austria
(since January 1, 2005)

Business development

In order to better focus on customers needs, Pulp Drying Systems was newly organized as a Division within Paper Mill Technologies in 2004. The Division works in close cooperation with the other Divisions to meet customers' requirements for drying and finishing pulp (mechanical, recycled, or chemical pulp) and uses synergies in sheet forming, dewatering, pressing, and drying with the Tissue Machines Division.

The world's largest high-speed cutter for a single-line pulp machine (9.3 m sheet width) was successfully started up at the Jiang Lin Pulp Mill in China. New systems for automated tail threading to the cutter/layboy were successfully started up at a mill of Mondi Paper in the Republic of South Africa and the Jiang Lin mill in China.

Major orders

- The Pulp Drying Systems Division will contribute the Single-Line Drying Package (including Fläkt Dryer) to the multi-Division order from CMPC Celulosa S.A. in Chile. When completed, the plant will be among the largest in the world, rated at up to 2,560 t/d production and a working width of 9.23 m.
- The Division will supply the complete drying line for M-real's new BCTMP mill to be built in Finland. This technology is the most efficient flash drying system available today.
- An upgrade to the world's largest pulp drying line at a pulp mill in Hainan, China was ordered by the mill to increase production from 3,000 to 3,250 t/d.
- The Division will provide the flash drying and baling line for the greenfield chemi-mechanical market pulp mill of Estonian Cell to be built in Kunda, Estonia.
- A fiberboard plant drying system (Twin Wire technology) was sold to Pavatex AG in Switzerland.

Research and Development

Technology development in the Pulp Drying Division continues to focus on lowering the investment cost per ton of pulp produced. The main R&D thrust is to produce a single drying line with a production of 4,000 t/d (1,000,000 t/y) based upon the successful Twin Wire Former technology. In addition, development is underway to continually improve the machinery's uptime through easy/fast sheet threading and process condition monitoring.

A highly sophisticated process simulator based on Andritz's process simulation technology from IDEAS for the entire sheet drying line has been developed. This is used for operator training and DCS check-out prior to start-up. This simulation approach is proven to deliver fast production ramp-ups after the line is started. The simulator also contributes to continuous optimization of the plant.

Work is progressing on improving the Andritz slab press, which is an advanced development based on the successful Nilsen design acquired in 2004. The first commercial installation of this press will be at the Estonian Cell greenfield mill being built in Kunda, Estonia.

Pulp drying plant
This pulp drying plant was delivered to Jiang Lin pulp mill, Hainan Island, China. It is the largest single-line pulp drying plant worldwide, with a working width of 9.3 m and a capacity of 3,250 t/d.

DIVISION MANAGERS

Jarmo Häkkinen
Kotka, Finland

Christian Pedratscher
Graz, Austria

PROFILE

The Fiber Preparation Systems Division is a global supplier of systems, processes, and equipment for the provision of fiber for all papermaking processes such as recycled fiber processing, fiber stock preparation, paper machine approach systems, broke handling, sludge and reject handling, and internal water loop handling in the paper mill.

The Division has its headquarters in Graz, Austria and Kotka, Finland with significant operations in China and the USA.

Business development

Business of the Division developed very favorably in 2004. The most active markets for the Division's products were in Central Europe and China.

The majority of the systems and equipment ordered by customers in 2003 were started up successfully in 2004. This includes the stock preparation system for Jian Hui Paper Co. in China and the 400 t/d deinking line at Vipap Videm Krško in Slovenia. FS-Karton of Germany has also taken a new 200 t/d deinking line into daily operation. The line provides furnish for the top layer of a multi-ply board grade. A complete new OCC line at Cartiera del Polesine in Italy was successfully started.

Also of note are two Chinese start-ups: a complete new deinking line for newsprint production at Nanping Paper; and a complete stock preparation system for Yanzhou Tian Yuan Paper (Sun Paper), which includes newly developed FibreSolve™ pulpers and Papillon™ LC refiners.

The rebuild of a deinking line for P.T. Aspex of Indonesia was completed. The project included the start-up of a new SelectaFlot™ flotation deinking system.

Major orders

- Holmen Paper Peninsular of Spain, UPM-Kymmene of Finland, and Shandong Huatai of China ordered key equipment for their new newsprint machines, including the market leading FibreFlow® Drum pulper and Andritz dewatering presses for pulp and sludge.
- Perlen Papier, Switzerland, awarded the Division an order for a major upgrade of an existing DIP line, including SelectaFlot™ flotation and ModuScreen™ screening systems.
- The strong market position of the FibreFlow® Drum was underscored by additional orders from the USA at SP Newsprint and American Fiber Resources. In addition, the Division received orders for FibreFlow® Drums to be delivered to Korea and Finland.
- Also in the USA, World Waste Technologies will install a unique and patented system to recover aluminum, plastics, and cellulose fiber from municipal solid waste. World Waste Technologies selected the Division to provide the major components for their recycled fiberline at the facility.
- In cooperation with the Tissue Machines

Division, the Fiber Preparation Systems Division was successful in winning orders for complete stock preparation and approach systems or major upgrades at Thüringer Hygiene Papier and Procter & Gamble, Germany; Shandong Hengan Paper, China; and ICT Iberica, Spain.

- Also, Holmen Paper Peninsular, Spain; Al Sindian Paper, Egypt; Shandong Huatai, China; and Norske Skog Albury, Australia awarded orders for paper machine approach systems to the Division.

Research and Development

The success of a recycled fiberline or stock preparation system is based on the right integration of sub-processes such as pulping, screening, cleaning, flotation, dispersion, bleaching, and refining. It is important to have a pilot plant to run trials – upon customer request and for internal product development. A major investment by the Division in 2004 was the extension of the pilot plant in Graz, Austria so that it can run full-line trials. The Division is now able to offer full-line trials for all recycled fiber and stock preparation sequences and comprehensive testing of different process steps.

In addition to the pilot plant, the Division focused its development activities on optimizing new products (e.g. SelectaFlot™ flotation, CompaDis™ dispersion, and Papillon™ LC refining).

Also, the Division was engaged in the complete redevelopment of conventional equipment (such as LC/HC pulpers to reduce energy consumption and widen the operating window; and the RotoWash™ "screen" which is now equipped with electron beam drilled baskets for ash washing and fiber recovery).

After extensive research in paper machine approach systems, the new ShortFlow™ concept was introduced. ShortFlow™ reduces space requirements, lowers investment and operating costs, and increases the flexibility of a paper, board, or tissue machine.

Extensive development work is underway to design a complete water handling system from the paper machine back to the pulper.

Screening plant
This screening plant is part of the complete stock preparation line supplied by Andritz to Cartiera del Polesine in Italy. The mill produces board grades from the recycling of old corrugated containers.

PROFILE

The Tissue Machines Division provides modern tissue machines including CrescentFormers with conventional press configurations, Through-Air Drying (TAD) technology, and machines with the patented TissueFlex™*) shoe press. Ventilation and drying systems for tissue and other paper and board grades complement the product portfolio.

The Tissue Machines Division is headquartered in Graz, Austria with locations in Canada, Sweden, and the USA.

*) Trademark of Voith

DIVISION MANAGER

Rudolf Greimel
Graz, Austria

Business development

Gold Hong Ye, Suzhou, China set a new speed record for CrescentFormers with an Andritz tissue machine. In January 2004, the machine ran at 2,100 m/min for five consecutive days producing 13.2 gsm facial tissue. A second Andritz machine at the mill also achieved a speed record of 2,060 m/min producing 17.5 gsm toilet paper. The addition of the patented Andritz PrimePickup™ device in the former section of both machines improved runability considerably.

The current world speed record is also held by an Andritz CrescentFormer tissue machine, at PT. Lontar Papyrus, Jambi, Indonesia. In December 2004, a 32-hour high-speed run was performed at a continuous speed of 2,110 m/min (product: 13.5 gsm facial tissue). Andritz tissue machines now come first, second, and fourth in the international speed rankings for CrescentFormers.

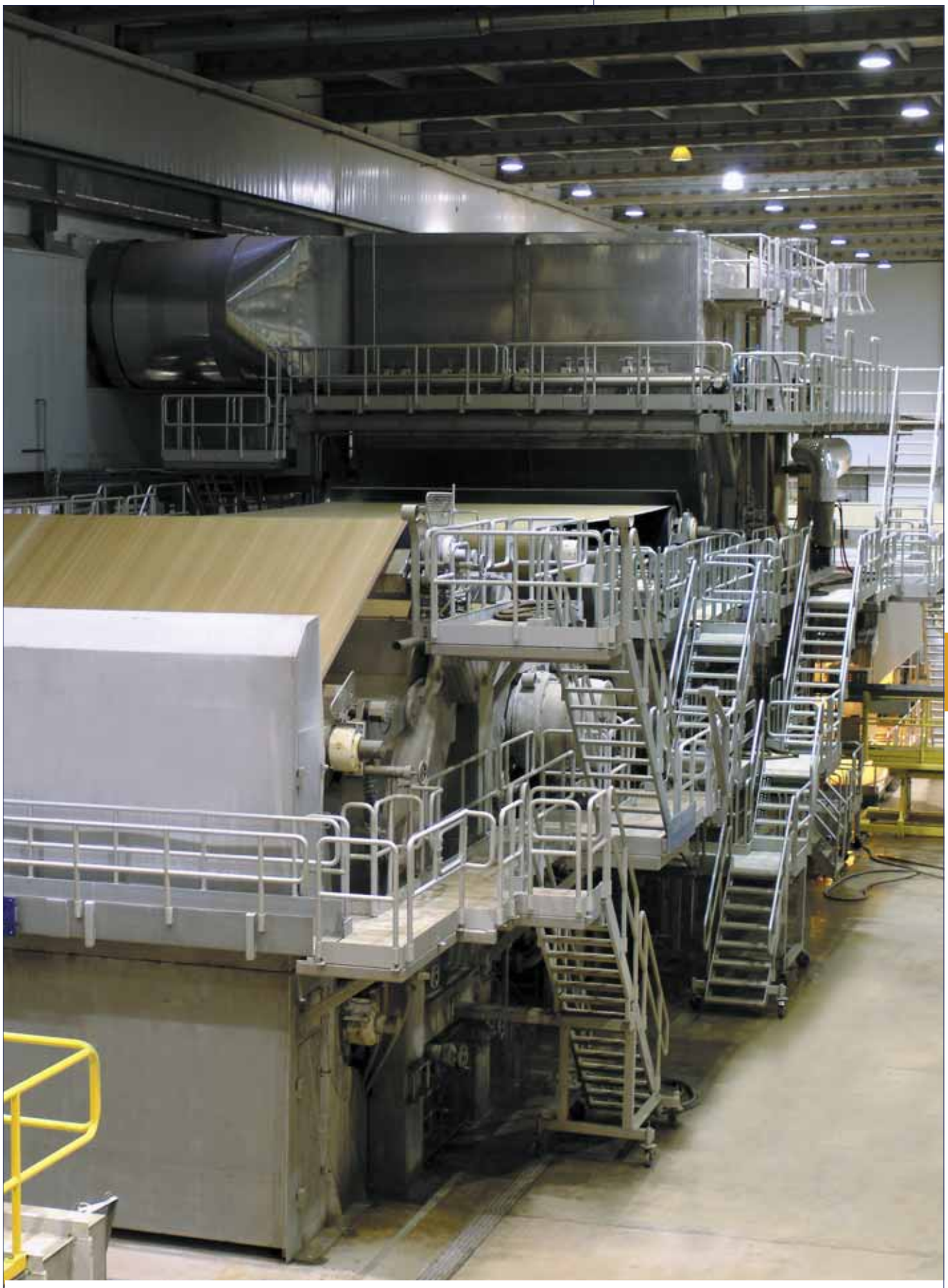
Andritz started up its first 200" wide PrimeTAD™ through-air drying production system with an annual capacity of 80,000 tons, in January 2005. Production is already ahead of the projected ramp up curve. The TAD technology applied is a new Andritz development.

Just 17 months after contract signing, a new wet-crepe tissue machine started up at SCA's greenfield tissue mill in the USA (Barton, Alabama). The machine has a total capacity of 110,000 t/y giving the highest specific production worldwide.

Andritz was selected by Procter & Gamble to modernize a tissue machine at the Neuss, Germany mill. The aim of the retrofit, which was started up in June 2004 after only ten days of rebuild activity, was to increase machine speed and improve paper quality. The Andritz scope of supply comprised a new approach flow system, a new headbox, a "speed-up package" in the wet section, web stabilizing equipment, and an Andritz dust removal system in the dry end.

An EquiDry F high-temperature hood supplied by Andritz to German Papierfabrik Gebr. Grünewald's Kirchhundem mill is responsible for a production increase of more than 25%. After one year of operation with the new Andritz hood, the machine has become one of the highest capacity machines in Europe producing machine-glazed paper.

A new PrimeLine™ CrescentFormer tissue machine equipped with a TissueFlex™ shoe press for Thüringer Hygiene Paper GmbH of Germany saw first paper on the reel in December 2004. The machine is installed at a greenfield site and will produce 30,000 t/y of high-quality toilet and towel paper.



Tissue machine
This wet-crepe tissue machine was delivered to SCA Tissue North America in Barton, AL, USA. With an annual capacity of 110,000 tons, the Barton machine has the highest specific tissue production worldwide.

The Andritz Fiber Drying group in Växjö, Sweden is positioned to capitalize on hall ventilation projects for mechanical pulping and pulp drying lines around the world. This is another result of Andritz's position as a full-line supplier of systems and processes for the pulp and paper industry.

The Division provides engineered services, such as machine surveys and machine optimization recommendations. An example of optimization services are the PrimeDry™ TCS (Temperature Coating Surface) measurements on the Yankee cylinder of a European tissue manufacturer's TAD machine. Recommendations based upon these measurements helped the mill improve the Yankee crowning curve considerably, which had a positive impact on the runability of the TAD machine.

Major orders

- The Division received an order to supply another CrescentFormer tissue machine, including stock preparation equipment, to Hengan, a leading manufacturer of high-quality tissue products in China. The new machine will be the third consecutive installation of an Andritz tissue line for Hengan. It will be erected at a greenfield site in Shandong Province. The new machine will produce 60,000 t/y of high-quality and very soft tissue paper.

- The ICT Group of Italy has placed an order for the supply of a new CrescentFormer tissue machine and stock preparation system. The machine will be installed in Pozuelo de Alarcon, Spain. This is the second greenfield project outside of Italy for ICT. The first project, in Poland, also included an Andritz machine.

- In the market for drying equipment outside of tissue production, Andritz Fiber Drying in Sweden received orders for a paper machine hood and air systems from Holmen Paper Papelera Peninsular in Spain (newsprint production), and from Voith for Adolf Jass in Germany (board production).

- Andritz Fiber Drying in Canada will deliver a wet end mist removal system, Yankee hood with process air system, and tissue machine dust removal system to CMPC's Talagante mill in Chile. From Familia Sancela in Colombia, the unit received an order of similar scope.

Research and Development

For optimum "hands-on" operator training, the Tissue Machines Division developed a tool to provide dynamic simulation of all mass and energy flows in a TAD plant. Operators can virtually run the future paper production line and change settings in a safe, virtual environment.

The patented TissueFlex™ shoe press has been proven in eleven installations around the world. One of its latest features is Machine Direction (MD) shoe movement for the highest operational flexibility. This additional functionality of the shoe press results in gaining more bulk, or achieving higher post-press dryness, giving the operator more flexibility.

A further development of the reel with linear primary and secondary arms is the centerwind assist drive in the secondary arm. A centerwind reel is mainly used in TAD machines to retain the bulk of heavyweight tissue and towel grades. The new PrimeReel™ Centerwind controls very low nip loads sufficient for crease-free winding. Furthermore, it allows winding of larger diameter rolls to increase productivity.

A stable sheet run in the area between the creping doctor and reel is critical to runability. The Tissue Machines Division developed a system of sheet run components, such as air or dust deflectors, suction headers, active headers with low sheet contact, and guiding/stabilizing foils. The new PrimeRun™ system ensures better runability, especially with lightweight tissue at high machine speeds.

DIVISION MANAGER

Humbert Köfler
Vienna, Austria
(since January 1, 2005)

PROFILE

The Paper Mill Services Division encompasses the service activities for the Mechanical Pulping Systems, Fiber Preparation Systems, and Pulp Drying Systems Divisions. Primary emphasis is on establishing service partnerships with customers to increase the overall production efficiency and availability of process equipment.

The Division offers solutions to increase the reliability, efficiency, and availability of equipment while also providing innovative upgrades, engineered wear products (Durametal® refiner plates and Andritz Fiedler screen baskets), automation products, and modernization programs.

The headquarters for the Paper Mill Services Division is Vienna, Austria. The Division is managed in major geographic regions, each with at least one service center equipped to provide responsive service to local customers. Durametal® refiner plates are manufactured in Muncy, Pennsylvania, USA, while the manufacturing of Andritz Fiedler screen baskets is performed in Regensburg, Germany (center of competence) and Brantford, Ontario, Canada.

Business development

The Division developed favorably in 2004, with customer projects mainly concentrating on modernizing and reducing production costs in paper mills.

Customer requirements to measure process parameters and product quality were the driving force behind Andritz's purchase of controlling interest in CyberMetrics, a research and development company in the USA specializing in online measurement sensors and other instruments. This will considerably strengthen Andritz's advanced refiner process control systems.

EMS, the new joint venture of Andritz and Rheinhold & Mahla, offers long-term maintenance and service contracts based upon key performance indicators that are considered most important to each customer facility. Depending on the scope of the service contract, significant economic savings can be obtained for the customer. EMS will assume responsibility for maintenance management for a production area within a mill, or a complete mill.

Major orders

- Innovations introduced to the market, not only for Andritz equipment but also for competitors' equipment, enabled the Division to secure several orders for rebuilding competitors' refiners. The Division completed six Twin Refiner modernization contracts in Central and Northern Europe, and further rebuilds of mechanical pulping lines in North America to increase productivity and reliability of the machines.

- UPM-Kymmene's mill in Steyrermühl, Austria entrusted the Division with a modernization contract for a FibreFlow® drum, an upgrade of the bleaching plant to improve the process conditions, and a shaft exchange to extend the life of a Hedemora filter.

- Several high performance screen baskets and screen rotors were started up in various screening lines worldwide. Nine Dragon Paper in China selected Andritz Fiedler as the main supplier of engineered wear products for their screening lines and expanded the service contract for Bar-Tec™ wedgewire screen baskets. The packaging paper producer APP Ningbo in China, and the American printing and writing paper producer MeadWestvaco Corp. in Wickliffe, Kentucky, awarded the Division with modernization orders to improve screening performance.

- The high performance and very low energy consumption of LemaxX Spiral™ refiner plate technology for low-consistency refiners convinced several customers, such as Neusiedler SCP a.s. Ruzomberok in Slovakia and Frantschach Swiecie S.A. in Poland, to sign annual contracts for refiner plate deliveries.

- Aylesford Newsprint Ltd. in the UK ordered a complete service and modernization for their Kvaerner washer drums. International Paper in Pine Bluff, Arkansas, USA ordered a modernization of their Bauer screw press to improve performance and reliability.

Research and Development

Intensive efforts to combine the technology of the Andritz FiberSentry™ and the former Heinrich Fiedler Strong-Bar© screen baskets has led to the creation of a new wedgewire basket. The product, known as the Bar-Tec™ wedgewire basket, will be introduced to customers in the First Quarter of 2005.

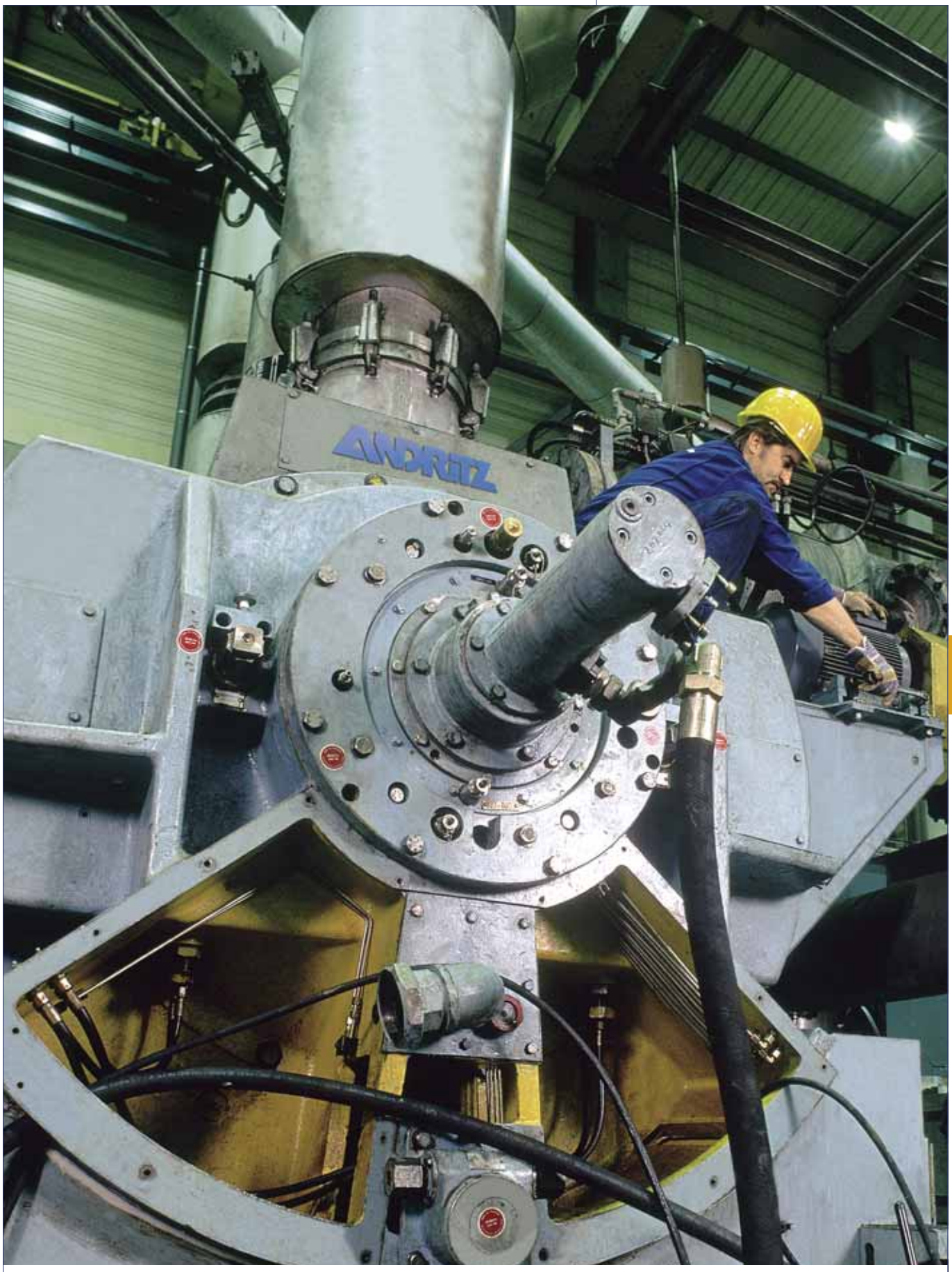
Another development in the field of engineered wear products is conical refiner plates. The first mill trial of the design was very successful. In this specific case, plate life is excellent (3,350 operating hours), as is pulp quality.

Development programs for mechanical pulping focused on a versatile new sealing system, comprehensive modular machine diagnostics to enhance condition-based service strategies, and upgrades to allow production increases of TMP at lower specific energy.

Several new techniques for equipment optimization were investigated: pulper upgrades for virgin fiber and broke; and cleaner plant rebuilds (TC 133 vortex control) for both Andritz and other manufacturers' equipment.

One example of an innovation to reduce maintenance costs is the SCP shaft machining device. This enables customers to repair and rebuild a screw press shaft without dismounting the shaft from the press – saving time and the cost of having a replacement shaft in inventory.

Together with Acutest, the Division developed a new condition monitoring system for the slowly rotating bearings in a twin wire press. The sensors continuously monitor the lubrication condition of the bearings. Defects are detected at a very early stage to avoid unplanned shutdowns.



Service for a large refiner

In 2004, Andritz once again serviced the large refiner installed at NSI Golbey, France. With Andritz's preventive maintenance program, the system maintains state-of-the-art technology with consistent improvements. It has been operating at highest availability since 1990.

ROLLING MILLS AND STRIP PROCESSING LINES

Annealing and pickling line
Annealing and pickling line for cold-rolled strip supplied to Baoxin Stainless Steel, China. Production: approx. 180,000 t/y of stainless steel; strip widths: 650–1,350 mm; strip thicknesses: 0.3–3.0 mm.

BUSINESS AREA MANAGER

Peter Gravert
Vienna, Austria

PROFILE

The Rolling Mills and Strip Processing Lines Business Area designs and builds complete lines for the production and further processing of cold-rolled stainless steel, carbon steel, and non-ferrous metals. These lines consist of equipment for cold-rolling, surface treatment, strip coating and finishing, stamping and deep drawing, and acid regeneration. The expertise and key equipment are developed in-house and manufactured at the Business Area's own facilities.

The Andritz Group is the only single-source supplier capable of providing all technologies and processes involved in the manufacturing of stainless steel strip (cold rolling, annealing, pickling, and finishing) on a comprehensive basis (mechanical, process, and electrical equipment). This ensures minimized interfaces and takes the interdependencies of the overall process into consideration.

The assets of Otto Kaiser GmbH, acquired in 2004 and now called "Andritz Kaiser", enable the Business Area to extend its range of equipment for the "downstream" area of strip finishing. The products and technology portfolio of Andritz Kaiser are a valuable supplement to the existing product range and strengthen the Business Area's strategic focus on value-added steel strip production.

The Rolling Mills and Strip Processing Lines Business Area operates through the following companies: Andritz AG, Austria; Andritz-Ruthner, Inc., USA; Thermtec B.V., Netherlands; Sundwig GmbH, Germany; Andritz Selas S.A.S., France; Andritz Technologies Pvt. Ltd., India; and Andritz Kaiser GmbH, Germany. There are manufacturing and assembly facilities in Graz, Austria, and Hemer and Bretten, both in Germany.

Market development

The year 2004 was characterized by continued high demand for steel and stainless steel products, mainly as a result of strong demand from China. World consumption of finished steel has risen by 7.7% to approximately 950 million tons in 2004. The stainless steel market developed likewise, with global consumption of stainless steel growing by 7% to approximately 24 million tons in 2004. China continued to lead the growth of global (stainless) steel consumption and production.

Prices for cold-rolled steel and stainless steel products increased steadily during the reporting period and remained at a very high level until the end of the year. Capacity utilization was at a very high level throughout the whole year even though capacities increased quite steeply.

Project activity was almost solely concentrated on China (including Taiwanese, Korean, and European investments in China), where several large projects, especially in stainless steel, were decided. Andritz was able to secure a large share of orders for stainless steel plants, thus confirming its leading market position in this area. In North America and Europe, only selective investments were made.

The measures of the Chinese government to slow down over-investment in some industries like cement or steel led to a delay of some projects from new private companies. However, projects of established steel producers continued as planned.

Sources: ISSF, IISI

Business development

Sales of the Rolling Mills and Strip Processing Lines Business Area in 2004 increased significantly. At 235.4 MEUR, Sales surged by 36.0% compared to 2003 (173.1 MEUR). This favorable development is mainly due to the execution of the record Order Backlog as of the end of 2003.

EBITA also developed very favorably in 2004. At 12.1 MEUR, it almost tripled compared to 2003 (4.4 MEUR), which was affected by a tem-

porary capacity under-utilization in one of the Business Area's product segments. Profitability also showed a positive development, with EBITA margin increasing to 5.1% in 2004 (2003: 2.5%).

The Business Area's Order Intake in 2004 was 266.7 MEUR, a decrease of 7.3% compared to the record level achieved in 2003 (287.6 MEUR). However, several orders were announced in the Third Quarter 2004 which will become effective in the First Quarter 2005. The main portion of the Order Intake came from China, amounting to approximately 71% of the Business Area's total Order Intake in 2004.

Major orders

- Chinese Taigang Group placed an order to supply the world´s largest annealing and pickling line for cold-rolled stainless steel strip. The plant will have an annual capacity of 500,000 tons and will be installed at Taiyuan Iron and Steel Co. Ltd., Taiyuan Shanxi, China. With this order, Andritz further strengthens its position as a leading technology supplier for complete stainless steel processing lines. In addition, several orders for strip processing lines (tension levelers, recoiling lines), including mechanical and electrical equipment, were obtained.
- SeAH Steel Group, Seoul, South Korea ordered a 6-high cold-rolling mill which will be delivered in spring 2005. This mill will roll carbon steel up to 1,360 mm width at a maximum speed of 1,400 m/min. The line is equipped with a POS (Process Optimization System).
- The Business Area will supply two sophisticated inspection lines for steel strip for automotive applications to Wuhan Iron & Steel (Group) Corporation, Changqian, Quingshang, Wuhan, China. In addition, Andritz received an order from this customer to supply a very special hydrochloric acid regeneration plant with a twin reactor design, with a total capacity of 15,000 l/h.
- Hunan Valin Iron & Steel Group of the Hunan province in China ordered an hydrochloric acid regeneration plant with waste acid purification and silicon pre-sedimentation. Capacity of this plant is 10,000 l/h.
- The Business Area received an order from Shanghai Krupp Stainless (SKS), a joint venture of Thyssen Krupp Stainless and Shanghai Pudong Iron & Steel Company Ltd. (subsidiary of Baosteel Group), to supply a hot-strip annealing and pickling line for stainless steel

KEY FIGURES ROLLING MILLS/STRIP PROCESSING LINES

MEUR	2004	2003	2002	2001
Sales	235.4	173.1	177.4	167.4
Order Intake	266.7	287.6	175.7	196.3
Order Backlog as of 31.12.	293.1	265.4	154.0	159.2
EBITDA	14.3	6.6	11.1	8.7
EBITDA margin	6.1%	3.8%	6.3%	5.2%
EBITA	12.1	4.4	8.5	6.1
EBITA margin	5.1%	2.5%	4.8%	3.7%
Capital investments	3.2	1.4	1.6	3.4
Employees as of 31.12.	736	533	642	562

strip. The line will have an annual production capacity of approximately 440,000 tons. Equipment delivery is scheduled for the end of 2005 and production of the first strip is planned for the summer of 2006.

- Andritz also received a large follow-up order from Lianzhong Stainless Steel, a member of Taiwanese Yieh Group, for the extension of the new stainless steel mill in Guangzhou, China. In 2003, Andritz had received an order to build the world's largest stainless steel hot strip annealing and pickling line for the same customer and that project is currently underway. The recent order relates to a stainless steel cold strip annealing and pickling line with a capacity of approximately 250,000 t/y. Delivery is scheduled for August 2005, with production of the first strip expected in July 2006. In order to regenerate the waste mixed acids of these lines, the customer additionally ordered a Pyromars plant, which will recover nitric acid and fluoric acid.

- For the automotive plant joint venture of Mazda in China on the island of Hainan, Andritz received the first cut-to-length line which will be implemented together with Jier Company, a Chinese press manufacturer.

- JISCO, a steel company in the northwestern Chinese province Gansu, signed a contract with Andritz for the supply of a complete stainless steel strip manufacturing plant, consisting of several rolling mills, two pickling and annealing lines, and several slitting, cutting and processing lines. The contract was split up in an engineering part which came into force in December. The supply contract for the equipment will probably follow in 2005, after receiving all necessary approvals from the Chinese authorities.

Research and Development

In 2004, R&D activities focused on product improvements to further strengthen the competitive advantage of processes offered to customers.

The mixed acid recovery system has been optimized to increase the nitric-acid recovery rate, as well as the water balance between stainless steel pickling lines and acid recovery plants.

A previously started project on alternative corrosion-resistant coatings has been continued, with special focus on zinc/chromium- and zinc/magnesium-coatings to reduce the zinc-layer thickness for improved laser weldability in the automotive industry.

Implementation of the IDEAS simulation software was successfully started by creating a static mass balance model of the acid recovery plant.

The filter systems for 20-high rolling mills have been further improved and are now offered as standardized product. The roll and strip cooling systems of 4-high and 6-high rolling mills have been optimized for improved flatness of the produced strip.

New advanced coater technology has been successfully installed and commissioned for a line of the Austrian steel producer voestalpine. With this technology, Andritz once again underscores its leading position in high-precision color coating.

Annealing and pickling line/Furnace

This furnace supplied by Andritz affiliate Thermtec is part of the annealing and pickling line for cold-rolled strip delivered to Shanghai Krupp Stainless Steel, China. Production: approx. 290,000 t/y of stainless steel; strip widths: 800–1,340 mm; strip thicknesses: 0.3–3.0 mm.

BUSINESS AREA MANAGERS




From left to right:
Luc Gilbert Vélizy, France
Olaf Jansen Graz, Austria
Johannes Kappel Graz, Austria
Armin Vonplon Wohlen, Switzerland

ENVIRONMENT AND PROCESS

Decanters
These six D7LL decanters were supplied to Sungai Semenyih, Kuala Lumpur, Malaysia, one of the largest drinking water treatment plants in Southeast Asia. Sungai Semenyih uses the decanters to treat the drinking water sludge as a result of the rising ecological awareness of the Malaysian government.


ANDRITZ
ANDRITZ

PROFILE

The products of the Environment and Process Business Area cover a comprehensive range of technologies and services for mechanical and thermal solid/liquid separation.

The Business Area is a global leader in this field and offers comprehensive support from design to manufacture of key components for sludge thickening, dewatering, drying, and incineration as well as erection and start-up of turnkey plants, including automation and safety engineering. The installed base of more than 10,000 centrifuges is serviced from nine dedicated service centers in Europe, the USA, and Asia.

Customers are offered a wide range of thermal dryers, decanters, rotating filters, belt presses, and filter presses to serve major industries such as coal and mineral processing, chemical/petrochemical, and food processing.

For the industrial and municipal water and wastewater treatment markets, the Business Area offers a large range of screens, sieves, and sand filters. For the treatment of sludges, the product range encompasses gravity and rotary thickeners, decanters, belt and filter presses as well as belt, drum, and fluidized bed dryers.

The Business Area operates through its headquarters, Andritz AG, in Austria and the following affiliates: Andritz-Ruthner, Inc., Andritz Bird Inc., and Andritz Filter Press, USA; Andritz Separation GmbH and Andritz Filtrationstechnik GmbH, Germany; Andritz Fließbett Systeme GmbH, Germany; Andritz S.A.S., France; Andritz Ingeniería S.A., Spain; Andritz Technologies Ltd., China; Andritz Separation Industria e Comércio de Equipamentos de Filtracâo Ltda. and Andritz Brasil Ltda., Brazil; Andritz Separation Private Limited, India; Andritz Ltd., Great Britain; Andritz Jochman s.r.o, Slovakia; Andritz Pty Ltd., Australia; Andritz Singapore Pte. Ltd., Singapore; and Andritz 3Sys AG, Switzerland. Production and service facilities for machines and components are located in Graz, Austria; Châteauroux, France; Cologne, Germany; Singapore; Foshan, China; Den Helder, Netherlands; Pittsburg, Texas; Scott Depot, West Virgina; Houston, Texas; Lakeland, Florida, all USA; Pomerode, Brazil; Spišská Nová Ves, Slovakia; Chennai, India; and Saskatoon, Saskatchewan, Canada.

Market development

Overall, the market for sewage sludge treatment developed satisfactorily during 2004, however with a marked difference between dewatering and drying. While the centrifuge market showed solid project activity throughout the year, the project situation for thermal sludge treatment systems didn't recover until the Fourth Quarter.

For industrial applications, project activity was very brisk due to the boom in the petrochemical, mining, mineral, and palm oil industries. Due to the broader product range as a result of the acquisitions of Bird Machine and NETZSCH Filtration, the Business Area was able to secure high bookings in this area.

The municipal dewatering market remained moderate in North America and Western Europe. Project activity in the municipal market in Eastern Europe, Russia, and other CIS countries gradually picked up during 2004, although below expectations. Certain Asian markets, especially China, showed increased growth.

KEY FIGURES ENVIRONMENT AND PROCESS

MEUR	2004	2003	2002	2001
Sales	217.9	110.4	122.8	135.3
Order Intake	200.7	110.2	147.7	140.6
Order Backlog as of 31.12.	138.3	113.8	122.6	99.7
EBITDA	12.6	3.3	2.8	9.0
EBITDA margin	5.8%	3.0%	2.3%	6.7%
EBITA	9.9	1.5	1.0	7.2
EBITA margin	4.5%	1.4%	0.8%	5.3%
Capital investments	7.9	1.5	1.9	1.9
Employees as of 31.12.	926	428	439	435

Project activities for sewage sludge drying plants focused on North America and Western Europe. A new EU directive banning the disposal of sewage sludge to landfills is starting to have a positive influence on the demand for advanced treatment technologies such as thermal drying and incineration. Major projects are underway in Eastern and Southern European countries. Also, the North American market for dryers has improved.

Business development

In 2004, the Environment and Process Business Area broadened its product range and technology knowledge through the acquisition of Bird Machine, the NETZSCH Filtration business, and the fluidized bed drying systems Business Area of VA TECH WABAG. As a result, the Business Area is now one of the world's leading suppliers of industrial and municipal dewatering and drying technologies.

The acquisition of Bird Machine from Baker Hughes, Inc. in the USA added a full range of R&B filter presses, Bird KHD/Humboldt solid and screen bowl centrifuges, and special Bird Humboldt Young Filters to the product portfolio of the Business Area.

The NETZSCH Filtration business added process knowledge for fully automated filter presses as well as for the palm oil processes to the product portfolio. In addition, NETZSCH Filtration has an excellent market presence in Southeast Asia and South America, which will be used to sell other products of the Business Area.

The acquisition of VA TECH WABAG's fluidized bed drying systems further enhances the comprehensive range of drying technologies. The Business Area is the global market leader in bio-solids drying. Through this acquisition, the Business Area expanded its activities into the chemicals and food industry markets.

Sales of the Business Area increased significantly in 2004. As a result of organic growth and the acquisition of Bird Machine, NETZSCH Filtration, and VA TECH WABAG's fluidized bed drying systems Business Area (all three companies were not included in last year's financial statement), Sales almost doubled to 217.9 MEUR (2003: 110.4 MEUR).

Sales of Bird Machine, NETZSCH Filtration, and VA TECH WABAG's fluidized bed drying systems Business Area together amounted to approximately 93 MEUR in 2004.

In 2004, Andritz again confirmed its leading position as a supplier of centrifuges for sewage sludge treatment, reaching another record number of centrifuges sold.

As a result of increased Sales and positive Earnings contributions from the newly acquired companies, EBITA increased to 9.9 MEUR (2003: 1.5 MEUR). EBITA margin improved significantly from 1.4% in 2003 to 4.5% in 2004.

Development of the Business Area's Order Intake was mainly influenced by the newly acquired companies, adding approximately 94 MEUR to the Business Area's total Order Intake of 200.7 MEUR (2003: 110.2 MEUR).

Major orders

- Large orders were obtained for fine coal dewatering via centrifuges, filter presses, and hyperbaric filters for Iran and Russia, as well as for filter presses for titanium dioxide plants in the Ukraine.
- For a Russian cement factory, Andritz will deliver five large filter presses to convert the mill from a wet to a semi-wet process in order to increase production.
- The boom in the petrochemical industry led to the receipt of a significant number of orders for PTA, PVC, HDPE, and melamine processing centrifuges in China, Brazil, and the USA.
- The municipality of Bremen ordered Andritz centrifuges for the dewatering of municipal sludge.
- Long-term service contracts for multiple centrifuge installations were signed with the City of New York, the City of Singapore, as well as with Haliburton.
- The Business Area booked major orders for municipal sludge dryers from Pierce County, Washington; Bonita Springs, Florida; Winston-Salem, North Carolina; and Encina, California, all in the USA; Schwenk Zement AG, Germany; the City of Strasbourg, France; and the City of YeoSu, South Korea.

Research and Development

The R&D focus for dryers was to further develop the range of Belt Drying Systems (BDS). New sizes were developed and an entire new design based on a full concrete casing was successfully introduced to the market with three orders received at the end of 2004.

The new drive system for centrifuges has successfully proven its long-term reliability. Marketing started in the Second Half of 2004 and resulted in the sale of four centrifuges with the new system.

A medium-term program has started in order to rationalize and standardize the former Andritz, Bird, and Humboldt products. This program includes modernization of designs as required.

Research work continued in order to broaden the applications for centrifuges.

A value engineering program has been started to merge the filter press designs of Ritterhaus & Blecher and NETZSCH Filtration.

Drum drying
The drum drying plant (1 line, DDS 20) in Sandown, England turns digested sewage sludge into pasteurized granulate with a dry solids content of 92%. Evaporation capacity of the plant is 2,000 l/h.

FEED TECHNOLOGY

Feed expander
Andritz supplied two Sprout-Matador process lines (30 t/h) for Aarhusegnens Andel's highly advanced feed mill in Galten, Denmark. The feed expander (photo) is part of this delivery.

BUSINESS AREA MANAGER

Harald Heber
Esbjerg, Denmark

PROFILE

The Feed Technology Business Area is a global market leader for supplying machines and systems, pellet mill consumables, dies and rolls, and other services to the animal feed industry, the pet food industry, and the fish and shrimp feed industries. The Business Area also holds a leading position in fast-growing niche markets for wood fuel pelleting, pelleting of agricultural and industrial by-products, and household waste.

The Business Area has a central management and operates from three main sites:
- Esbjerg, Denmark: the center for new equipment and spare parts (R&D, engineering, production, and procurement of process equipment and parts).
- Geldrop, the Netherlands: the center for consumable parts (R&D, engineering, and production of replacement dies and rolls for pellet mills, and beaters/hammers for hammermills).
- Muncy, Pennsylvania, USA: the center for sales and service in North America (dedicated R&D, engineering, in-house manufacturing, and procurement entities for certain equipment and replacement parts).

The Business Area operates from ten regional sales and service offices. It is supported by a strong network of distributors and sub-suppliers.

Market development

The global animal feed market developed very moderately in 2004. Investment activities in large plant and expansion projects were mainly focused on Eastern Europe and South America. Large projects in North America and Western Europe, as well as Asia were few and slow moving. Asian investments were negatively affected by the avian influenza. Western European investments were mostly modernizations and technological upgrades in connection with production plant consolidations.

In the aquatic feed segment, project activity within warm water and marine species has increased. The salmon industry is still facing relatively low prices, leading to cautious investment activity in feed plants.

The project activity for plant expansions and greenfield projects with regional pet food producers was good throughout the year. Larger producers made few investments in process technology.

The market for environmentally-friendly biofuel pellets, mainly from wood, continued to develop favorably in Western Europe, strongly driven by power plants converting to “green” energy fuels. This has led to increasing investment activities in pelleting plants in the forestry regions of Northern and Eastern Europe, as well as in North America. Pelleting projects in support of improved combustion of waste from households and industries remained at a modest level throughout the year.

Business development

Due to the moderate market conditions and negative translation effects resulting from the strength of the Euro against the US dollar, Sales of the Business Area in 2004 increased only slightly to 99.6 MEUR (2003: 99.2 MEUR). Excluding exchange rate effects, Sales would have increased by approximately 2% compared to 2003.

Earnings developed unsatisfactorily. Due to costs of approximately 2.4 MEUR relating to the restructuring of the Business Area and translation effects as a result of the weak US dollar, EBITA dropped to 2.2 MEUR in 2004 (2003: 4.8 MEUR). The restructuring should result in annual Earnings improvements of 2.0 MEUR, starting from the middle of 2005.

The Business Area's largest-capacity feed pelleting lines installed in Asia and South America were successfully commissioned during the year.

Order Intake in 2004 decreased to 92.0 MEUR (2003: 102.0 MEUR). This is mainly due to the weak US dollar and the limited number of larger orders for complete systems.

Major orders

The Business Area secured a number of animal feed plant modernization and expansion projects in Eastern Europe and South America.

- A large number of orders for process machines – pellet mills, expanders, and other products – were received from integrated meat producers in these regions.
- An increasing number of orders for extrusion key machines were awarded from European pet food industries and producers of feed for warm water fish in Southern Europe and Asia.
- Larger orders for wood pelleting systems were received in Sweden, the USA, Russia, and Latvia.

Research and Development

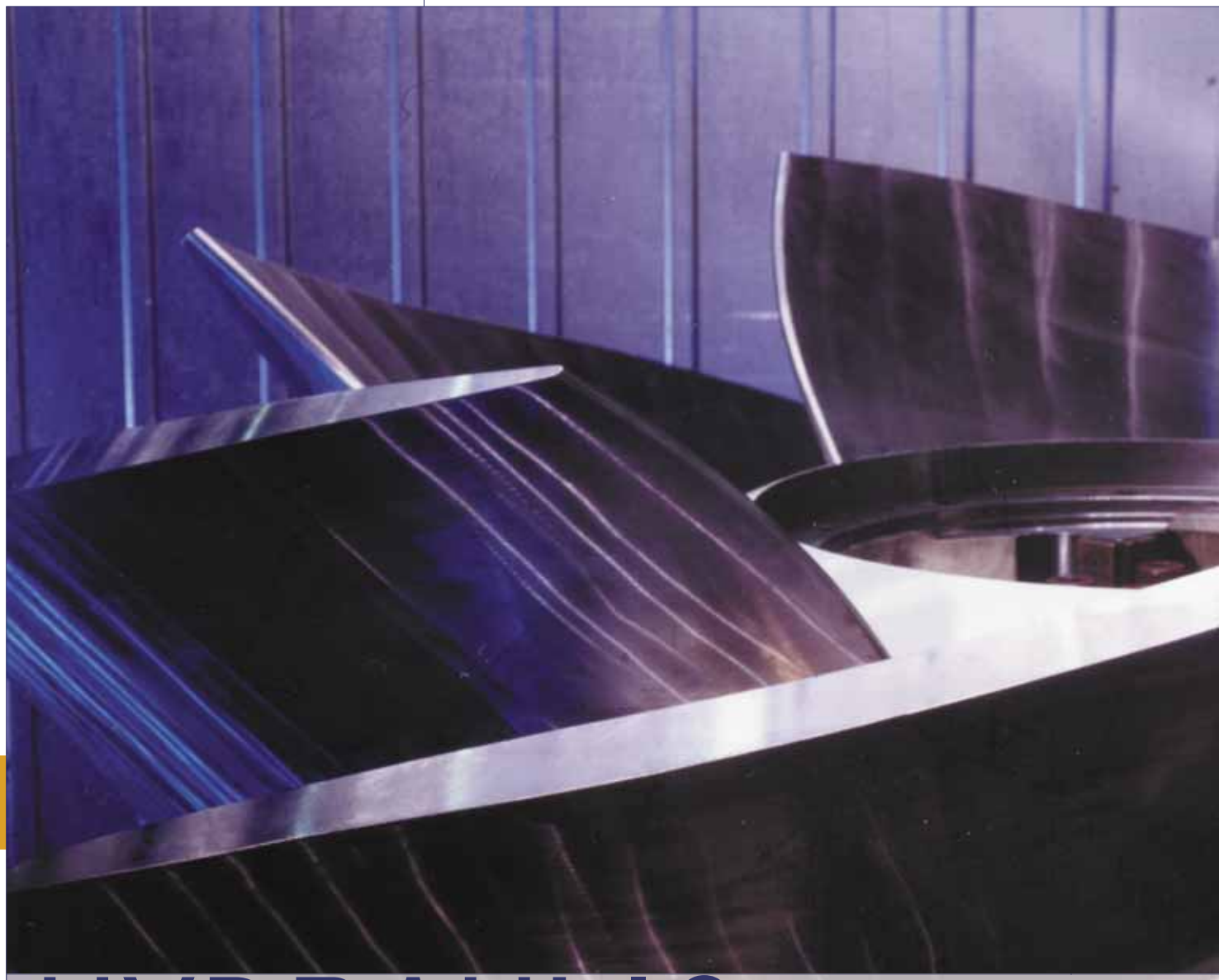
R&D activities focused on further developing existing products, simplifying maintenance of equipment, increasing the service intervals of products, and also standardization of products.

A new generation of pelleting line control systems was developed together with an updated version of SM 32 Supervisory Control and Data Acquisition (SCADA) software.

In the area of pellet mill consumables, improvements were made in the alloys used and heat treatment of parts due to the investment in new heat treatment furnace technologies.

KEY FIGURES FEED TECHNOLOGY

MEUR	2004	2003	2002	2001
Sales	99.6	99.2	108.4	107.0
Order Intake	92.0	102.0	104.7	112.6
Order Backlog as of 31.12.	16.0	24.5	23.5	27.6
EBITDA	5.1	7.4	6.1	4.7
EBITDA margin	5.1%	7.5%	5.6%	4.4%
EBITA	2.2	4.8	4.2	0.9
EBITA margin	2.2%	4.8%	3.9%	0.9%
Capital investments	1.6	6.6	5.4	6.7
Employees as of 31.12.	482	549	609	676



HYDRAULIC MACHINES/OTHER OPERATIONS

Pump impeller
Impeller for one of the pumps supplied by Andritz for the water supply plants of Hong Kong and Shenzen, China. The pumps are the largest units with adjustable vanes manufactured by Andritz to date (average impeller diameter: 1,950 mm).

BUSINESS AREA MANAGER

Manfred Wörgötter
Graz, Austria

PROFILE

→ The Hydraulic Machines/Other Operations Business Area encompasses the development, planning, and manufacture of water turbines, large-scale pumps for selected applications, pumps for the primary and secondary loops in nuclear power stations, centrifugal pumps for the pulp and paper industry, as well as space technology components. The main markets are Europe and Asia.

Market development

Market conditions in Austria for the Business Area's main product – water turbines – improved considerably in 2004 over previous years. There were several larger modernization, rebuild, and service projects as well as new investments. Project activity was also on the rise in the mini-power sector, involving projects below 10 MW.

In China, investment and project activities remained at a high level. There is a trend to increase the local portion of supplies for projects. On a number of promising turbine projects, Andritz cooperates with Chinese manufacturers acting as the supplier of engineering and key components.

Business development

Sales of the Hydraulic Machines/Other Operations Business Area developed favorably in 2004, increasing 36.9% to 43.8 MEUR (2003: 32.0 MEUR). This is mainly due to the high Order Backlog at the end of 2003 and the positive development of the Andritz-Kenflo joint venture in China.

EBITA increased to 3.8 MEUR (2003: 3.3 MEUR).

Order Intake of the Business Area reached a record level in 2004, surpassing the record set in 2003 by 57.4%. Order Intake was 58.7 MEUR, compared to 37.3 MEUR in 2003. Major orders for water turbines and stock pumps were the main drivers for this successful development. The 60:40 joint venture Andritz-Kenflo once again increased the number of stock pumps sold to paper mills, reaching a new record level.

In the area of turbines and pumps, the revision of Tanzmühle pump storage plant for the German utility company E.ON was completed on schedule and to the customer's full satisfaction. The storage plant was restarted in March. As a result, the Business Area was able to book several follow-up orders in this market segment.

The first orders were received from Switzerland for Pelton runners manufactured with a new technique (milled from a single forged piece), and for automation systems.

Sales of centrifugal pumps in Europe developed better than expected, especially in the German market. The Business Area has entered the Russian and Brazilian markets with centrifugal pumps, and the first results are quite positive.

In China, the 60:40 joint venture Andritz-Kenflo has further strengthened its market leadership, winning nearly all stock pump contracts awarded in 2004. In addition, the first ten pumps for flue gas desulphurization systems were sold in China, where this sector has been steadily growing over the past few years.

The services business in 2004 again proved to be a strong pillar of the Business Area's operations. Rebuilds and modernizations of water turbines and turbine governors, spare parts for nuclear power stations, and centrifugal pumps for

KEY FIGURES HYDRAULIC MACHINES/OTHERS

MEUR	2004	2003	2002	2001
Sales	43.8	32.0	29.3	26.0
Order Intake	58.7	37.3	28.3	28.6
Order Backlog as of 31.12.	40.7	27.2	21.5	22.6
EBITDA	5.5	3.2	7.4	2.3
EBITDA margin	12.6%	10.0%	25.3%	8.9%
EBITA	3.8	3.3	5.8	-0.1
EBITA margin	8.7%	10.3%	19.8%	n.sp.
Capital investments	2.4	1.7	2.6	0.9
Employees as of 31.12.	365	302	277	246

the pulp and paper industry accounted for a big portion of total Order Intake.

Major orders

- The Business Area received orders for engineering and the supply of key components for large bulb turbines at Chinese power stations.
- Verbund Austrian Hydropower (AHP) awarded an order to refurbish four Kaplan turbines at Aschach hydropower station to a cooperative venture formed by Andritz and Voith Siemens. These turbines were the largest of their kind in Europe when they were installed in 1964.
- Two pit turbines will be supplied and installed by the Business Area at Pichlern power station of Ennskraftwerke, Austria.
- A horizontal Pelton turbine will be supplied to the Ganeu power station, Austria. German E.ON awarded an order for the rehabilitation of Reisach pump storage plant in Germany.

Research and Development

The cooperation for many years with ASTRÖ (Institute for Hydraulic Research) concentrating on the advancement of hydraulic components continued in 2004. The development of top hydraulic components featuring efficiencies which are considerably superior to competitive equipment has essentially contributed to the successful sale of a new headbox pump.

Achievements in optimizing hydraulic equipment for turbines have been confirmed by several orders from different customers, most recently by the order for the Aschach power station.

A new test stand for Pelton equipment will soon be operational. This investment was made in connection with a focus on Pelton turbine development initiated two years ago.

Other development activities focused on centrifugal pumps for the pulp and paper industry, a field which is expected to grow substantially.

AUTOMATION

Automation equipment is a fast growing business segment of the Andritz Group. The main assignment of the Andritz Automation team is to focus internal and external competence and experience to support Andritz production technologies. Three hundred thirty (330) engineers at 23 Andritz sites worldwide are responsible for automation and the smooth running of Andritz technologies and products.

The integration of new companies generates additional competencies in automation. To ensure that the engineers are trained on the latest hardware technologies and software skills, employees attended seminars and training programs.

Research and Development

Andritz Automation works on automation solutions to improve processes and plants from a technical and economic point of view. R&D projects focus on advanced control strategies and special sensors for Andritz technologies to further improve the quality of products and the efficiency of the engineering processes.

In support of the Refiner Commander™, a new modular automation system for refiner control, the Refiner Protection System™ (RPS) was launched. The system increases the life of refiner plates. More than 15 units sold since the launch show the success of this innovative product.

Short start-up times and product changes during production require new control strategies of plants and machines. The Advanced Process Control development based on MPC (Model Predictive Control) is a main goal of Andritz's R&D activities.

Two Advanced Process Control projects, one for flatness control in rolling mills and the other in bleaching plants, are in the practical test phase. The proven experience of IDEAS Simulation and CyberMetrics enhances the overall competence in this field.

MIS (Multi-Ingredient Scan), a sensor platform which identifies quality parameters of fluids using spectography and provides controllers with input data from online measurements, has successfully finished the pilot tests on customer sites.

Business development

Andritz Automation will provide the engineering, medium- and low-voltage equipment, automation, simulation, installation, and start-up of the systems for CMPC's Santa Fe project in Chile.

Arkhangelsk Pulp and Paper mill in Russia ordered a complete low-voltage electrification and process control system.

Celulosa Arauco currently operates the world's largest debarking and chipping lines for eucalyptus at its Valdivia mill. Andritz delivered a dedicated control system to meet the high capacity demand and the challenging quality needs of the customer. Due to the success of this installation, Arauco chose Andritz as a supplier for their Itata project. The delivery includes a process control system and special electrical motors.

Andritz received further DCS (Dedicated Control System) orders for the P-RC™ APMP plants to be installed at Estonian Cell's mill in Kunda, Estonia and Zhongmao's mill in China.

Automation for pulp mills reached a record volume of new orders. These deliveries include total electrification, automation, and instrumentation for all major processes: fiberline, recovery, white liquor plant, and pulp drying. Deliveries of the RBS-Z20 (Recovery Boiler Safety System) were made to Zellstoff Stendal in Germany, SPC Ruzomberok in Slovakia, and Portucel Soporcel in Portugal. By the end of the year, three more orders were received.

An Advanced Process Control Model of the recovery boiler furnace was integrated into a simulator at UPM-Kymmene's Pietarsaari mill in Finland. Two additional deliveries were ordered by other customers during the year.

Andritz Automation's activities in the field of process simulation and staging have been very successful. At the Pietarsaari mill, an excellent start-up of the recovery boiler was achieved due to the fact that the control system was checked out with an IDEAS simulator prior to actual start-up.

Further deliveries for simulation include:

- Arauco, Itata, Chile: pulp mill simulator for recovery, recausticizing, lime kiln, and white liquor production areas.
- CMPC, Santa Fe, Chile: pulp mill simulator and simulation for all major areas.
- Shell Canada, Canada: steady-state models for project feasibility study of a major oil sands plant expansion.
- Enbridge Pipelines, Canada: control valve optimization studies and optimum control strategy to reduce costs for Trans-Canada pipelines.

Andritz has also strengthened its position as an automation integrator for steel strip processing and slitting lines in Asia. Data exchange with production control and ERP systems, in addition to electric drive equipment and Level 2 process control, was delivered for plants of WISCO in China and SEAH in South Korea. Andritz Advanced Process Control solutions were implemented in all stainless steel plants delivered by Andritz.

HUMAN RESOURCES

As of December 31, 2004, the Andritz Group had a total of 5,314 employees (2003: 4,771). This 11.4% increase, mainly due to the acquisition of Bird Machine, the NETZSCH Filtration business, VA TECH WABAG's fluidized bed drying systems Business Area, and Otto Kaiser, was partly offset by staff adjustments in some Business Areas.

Of the total, 1,205 are Andritz AG employees (2003: 1,173) and 4,109 work for other Andritz Group companies (2003: 3,598).

During 2004, the staff in the Chinese locations increased steadily as Andritz continued its strategy to establish a strong local organization in this fast-growing market.

All vacancies in managerial and other functions were filled with highly qualified candidates. To secure staffing for future projects, the Group has been actively recruiting for positions to be filled in 2005.

To attract well-educated personnel, the Group intensified its contacts with universities in Austria and Finland, and participated in job fairs organized by those universities.

Activities in 2004

During the year under review, the implementation of the Group-wide management training program was continued with success. Twenty-two employees from twelve different Andritz Group companies participated in the second module of the Andritz Management Challenge Program, organized in cooperation with the Management Centre of St. Gallen, Switzerland. Participants were impressed by the program and gave very good feedback. After some minor adjustments to the program, another session was conducted in October 2004, with 20 managers from ten different locations participating. Managers from new subsidiaries were invited to participate in order to assist with a quick and smooth integration in the post-acquisition phase.

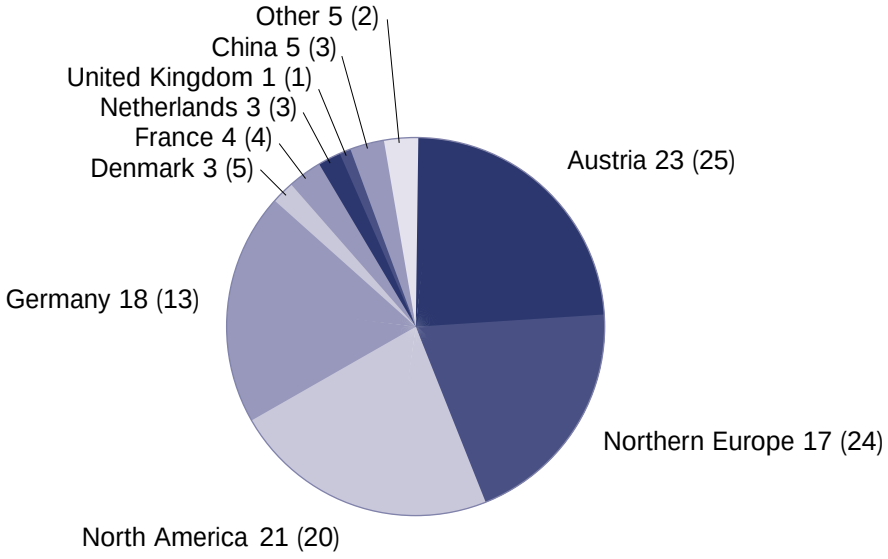
Approximately 25 employees participated in a Group-wide Conflict Resolution Management program.

In addition to Group-wide training activities, local training programs were held in all major Group companies.

Human Resources activities with a Group-wide impact were coordinated globally, with a focus on major projects involving employees from departments and Divisions in different geographic locations.

Human Resources activities were conducted in accordance with the Group's Quality Management system.

Employees by region 2004 (2003) [%]



MANUFACTURING AND SOURCING

The Andritz Group operates 15 manufacturing plants in Europe, North America, and China. These sites concentrate on the production of key components for Andritz equipment and systems.

A highly qualified labor force with long-term experience and state-of-the-art production systems ensure high product quality and reliable, on-schedule order execution.

Concentrating on key competencies

Key components are manufactured and assembled at Andritz's own workshops to ensure that customer requirements and contractual obligations are met. In-house manufacturing accounts for approximately 45% of the overall Andritz manufacturing volume. The remaining portion is sourced from qualified sub-suppliers who are subjected to continuous quality and progress monitoring.

Managing workload

Outsourcing is one tool Andritz uses to manage workload. In addition, a temporary workforce is utilized to cope with fluctuations. At several manufacturing sites, measures have been agreed upon with the works councils to implement more flexible working hours.

Shorter lead times and on-time production

Short lead times and on-time production are critical to success in the businesses Andritz manages. Continuous monitoring ensures that performance in these areas is maintained at a high level. In 2004, several projects were implemented to further reduce lead times at the manufacturing sites in Graz, Austria; Savonlinna, Finland; Regensburg, Germany; and Geldrop, Netherlands.

Major developments in 2004

Due to the high Order Intake for the Andritz Group in 2004, workload for the Andritz manufacturing facilities reached a record level. Workload was especially high at the sites in Graz, Austria; Savonlinna, Finland; Cologne, Germany; and the two sites in China.

Manufacturing facilities in Finland were reorganized. The workshops in Varkaus and Hollola were sold to partner companies who will continue to serve Andritz.

Comprehensive optimization measures were initiated at Andritz Fiedler, a specialist in manufacturing screen baskets for fiber screening. Andritz Fiedler production sites in Alpharetta, Georgia in the USA, and Plžen in the Czech Republic were closed and the screen basket manufacturing in Regensburg, Germany was modified to enable a continuous production flow. This led to a substantial increase in productivity and capacity and to an improvement in on-time performance.

The manufacturing facility in Cologne, Germany, acquired with the purchase of Bird Machine, was reorganized to specialize in manufacturing and servicing high-quality centrifuges for industrial applications.

Consumables production for pelleting equipment – previously handled by four manufacturing sites – was concentrated at a newly erected, state-of-the-art facility in Geldrop (Netherlands). Manufacturing has successfully started at this new facility, which is the world's largest production of replacement dies for pellet machines.

Andritz Technologies' new manufacturing center in Foshan, China has also started operations. In view of the rising order volume in this region, the production capacity of the center is being expanded.

With the acquisition of the assets of Otto Kaiser in the autumn of 2004 another manufacturing site was added to the Group. The facility in Bretten, Germany specializes in manufacturing and assembling large presses up to 360 tons.

BUSINESS PROCESS MANAGEMENT

The strong growth of the Andritz Group over the years has added a wide variety of organizational procedures and IT systems. This creates a challenge for inter-company integration of Business Areas, which is an increasingly important goal. In 2002, Andritz established a centralized function to focus on these issues and to standardize essential business processes where needed. This includes the implementation of the business processes within a common IT structure.

Need for a Group Enterprise Resource Planning (ERP) system

A detailed study within Andritz identified several different and local ERP systems in use. Most of those systems had been used for a number of years and do not fulfill the long-term requirements of the Andritz Group. Given the global activities of the Business Areas, the Andritz Group made the decision to change to a global ERP system.

ASAP – Andritz towards global SAP

Following the decision to establish one global ERP system and after choosing the vendor (SAP), a project was established under the name of ASAP (Andritz towards global SAP). The project was officially started at the end of the First Quarter of 2004.

Since then, about 50 team members have been working on the definition and harmonization of the ASAP Business Processes. The task has been to determine how the essential business processes – from sales and project execution to procurement, manufacturing, service, and finance – will be supported by SAP in the future.

Goals of the new ERP system

The main goal of the new Andritz Global ERP system is to support the business activities as efficiently as existing systems do today, with the added advantage of being able to function globally for all Andritz organizations. This global system will facilitate Group integration, common global business, integration of new acquisitions, and organizational flexibility.

The global ERP system will enable global resource sharing, reduction of inventories, pooling of functions (i.e. accounting, purchasing, etc.), automation of inter-company business, and improved financial overview and reporting. Risks – and therefore costs – for IT system operation are expected to decrease since there will be just one global system to be maintained and updated.

It is anticipated that the global ERP system will result in improved customer service, which will give Andritz a competitive advantage.

Major project steps

After defining the relevant business processes, the ASAP team began implementing them within the SAP system in June 2004. Approximately 80% of the processes were finalized in 2004.

At the end of 2004, the new ERP system had its first test – integrating all the related business transactions of an existing customer project, including service orders. The test was successful.

So as not to disrupt daily business more than absolutely necessary, the ERP system will be established step-wise over a period of six years. Each location is being staged for implementation based upon when their existing systems would be in need of replacement.

Beginning March 2005, the ASAP team will focus on Finland where outdated systems will be replaced and SAP will be implemented for about 420 users. This is the first rollout of the system. It is planned to begin implementation in China at the end of 2005 and move to North America, where most of the old systems will be replaced in the course of 2006.

QUALITY

"Do it right the first time" is what Andritz strives to achieve.

The high technical standards of Andritz products and systems require manufacturing standards of the highest level, systematic organization, well-defined business processes, and well-trained employees. Thorough knowledge of key technologies is a prerequisite for developing machines, plants, and processes that meet or even exceed customers' requirements and expectations.

Andritz Group manufacturing sites focus on key components and equipment whose design and manufacturing require special knowledge and experience. Other components are sourced from qualified sub-suppliers located either in the vicinity of our customers or close to an Andritz production site. Sub-suppliers are carefully chosen based on their ability to fulfill requirements with respect to quality, delivery time, and cost. Most sub-suppliers have long-term experience working with Andritz. They are a key factor in the cost leadership of the Andritz Group.

Major developments in 2004

The implementation of the business process approach – a focus in Quality Management activities in 2003 – was successfully certified. The essential business processes defined by Andritz are Product Management, R&D, Sales, Delivery, Service, Procurement, Manufacturing, Human Resources, and Improvement. Best Practices within the Group are applied to these processes and communicated to all. Training provides a common understanding of the necessary steps to manage the risks inherent in Andritz's business and to apply the quality standards defined in day-to-day work.

A further step in harmonizing the Andritz Group-wide Quality Management was undertaken during customization of the new Andritz ERP system. It is an essential advance in further improving product quality, as it provides the basis for a uniform approach at all Andritz sites. It will considerably facilitate the handling of large projects where several Divisions work together to serve one customer.

Workplace safety is a focus within the Andritz Group. Activities to ensure the safety of employees in-house and at customer sites are an integral part of the Quality Management system. Management of safety at work is organized according to management standard OHSAS 18001 and was successfully audited by an external company.

An intranet-based system for feedback and suggestions for improvement was installed at several sites after it had been successfully used by Andritz Oy and Andritz AG for some time. This tool helps the Group to improve on a wide range of levels, including manufacturing, standardization, and business processes.

ENVIRONMENTAL PROTECTION

The Andritz Group is committed to promoting environmental protection and conservation of natural resources. Andritz AG's official Declaration of Environmental Protection establishes the principles and objectives of its environmental policy. The Group also pursues a proactive information policy vis-à-vis the communities in the vicinity of the Group's production plants, the general public, and government authorities.

Andritz's manufacturing processes and the products it makes are designed to minimize the consumption of natural resources and energy in order to have minimum impact on the environment. This approach also reduces production and operating costs to the benefit of Andritz customers.

Uniform environmental protection guidelines are implemented at all Andritz production sites. Responsible managers within each Andritz facility are empowered to ensure that the guidelines are strictly adhered to.

As a commitment to continuous improvement, each year Andritz AG has the results of its environmental protection activities examined by a commission appointed by the City of Graz. In 2004, the Andritz site in Graz again received the "ÖKOPROFIT" certificate awarded by the City of Graz for special environmental achievements. Measures to further reduce energy consumption were continued in 2004, including improved thermal insulation in the workshops and the use of power-saving lighting. Also, the portion of goods shipped by rail was considerably increased, reducing truck traffic on the surrounding roads.

Andritz products for a cleaner environment

The **Pulp and Paper Business Area** offers processes, systems, and equipment that reduce waste, save energy, and minimize the environmental impact of its customers' operations.

Most mills have taken significant actions to reduce the environmental impact if bleaching is a part of their production processes. Andritz continues to be a technology leader in the development of bleaching processes which utilize alternatives to chlorine for reduced environmental impact. Andritz systems for dewatering (such as presses and filters) and water recycling (within the fiberline or during the papermaking process) within the mill reduce the effluent loads on nearby receiving waters.

In the chemical recovery area of a pulp mill, systems for black liquor evaporation, combustion, and white liquor production have a significant impact on the emissions from the mill.

Andritz black liquor evaporators produce reusable process water from the black liquor. The reuse of condensate reduces the COD load in effluent waters and the amount of fresh water required in the pulping/recovery process. Condensates generated within the black liquor evaporation process are segregated and collected within the Andritz system and methanol found in the condensate is "stripped" from the condensate for further processing. Andritz also provides methanol liquefaction equipment so that the liquefied methanol can then be used to replace fossil fuel in the lime kiln.

After extensive research and development work, the emissions from a state-of-the-art Andritz recovery boiler are minimal. For example, the SO_2 emissions approach zero when the black liquor is evaporated into high dry solids and a Vertical Air™ system is utilized in the recovery boiler.

Maximum electricity production and minimal greenhouse gas emissions are becoming important considerations for the increasingly energy- and environmentally-conscious pulp industry. The High Energy Recovery Boiler (HERB) concept, developed by Andritz, offers an effective way to

generate electricity from wood-based fuels (black liquor from the cooking process) while reducing emissions.

A new development, the Andritz LMD-Filter™ (special disc filter for separating, washing, and drying lime mud) offers superior washing results. It lowers the amount of sulphur residuals which enter the lime kiln and should result in lower sulphur emissions into the air.

There is a strong demand in the market to reduce water consumption. Andritz, as a market leader in large pulp drying machines, has developed machines with closed water loops so water can be reused. These machines also incorporate sub-systems for the collection of spill water and the reuse of cooling water such that the total amount of fresh water required can be reduced to an extremely low 1.5 m^3/ton of pulp.

In terms of true energy conservation, RTS™ mechanical pulping technology produces high-quality mechanical pulp at up to 30% lower specific energy consumption. This results in huge energy savings for paper producers with a major impact on reduction of greenhouse gas emissions. For an RTS™-TMP system with an annual production of 175,000 tons, energy savings can amount to 70,000 MWh a year. If an oil-fired power plant is utilized to provide electrical energy for the refiner, the savings are equivalent to 17,000 tons of oil per year. At the same time, the emissions of CO_2, a major contributor to greenhouse gases worldwide, are reduced by 48,000 tons per year. Thus, the RTS™-TMP system can make a major contribution to the objectives of the Kyoto protocol.

P-RC™ APMP is a chemi-mechanical pulping process that minimizes energy consumption and the consumption of bleaching chemicals. The high-consistency peroxide bleaching technology of Andritz (PHC) also minimizes the consumption of bleaching chemicals. By eliminating chlorine and sulphur-containing chemicals, the bio-degradability of process effluents is significantly improved.

Papermakers have the opportunity to save considerable energy and minimize effluents with the new Andritz FibreSolve™ LC and HC pulpers, as well as the CompaDis™ disperser system.

In **Rolling Mills and Strip Processing Lines**, many process materials are used that would be harmful to the environment if they were not properly recycled or disposed of. Andritz systems are designed to make maximum use of, and to recycle, such materials as rinse waters, rolling emulsions, and pickling acids. Evaporation is used in some processes to avoid the generation of wastewater. A process was developed for the complete recycling of the electrolyte (sodium sulphate) used in electrolytic pickling. In this recycling step, hexavalent chromium (formed during the pickling operation) is completely eliminated.

Sundwig, an Andritz affiliate company, developed, and has continually improved, “no-rinse coaters” over the years. The application of hexavalent chromium coating to the strip can now be carried out in a closed chemical fluid circuit which prevents contamination of the surrounding environment.

The **Environment and Process Business Area** supplies complete process lines which convert liquid sewage sludge into a fuel granulate. With a calorific value of approximately 11 to 13 MJ/t, this granulate can be used as a substitute for fossil fuels in heat and power generation systems, reducing CO_2 emissions.

The **Feed Technology Business Area** is a leading supplier of equipment for the production of environmentally-friendly, renewable fuels. Biofuel production is expanding beyond its established base in North America and Western Europe to new regions where there are surplus raw materials from forestry and other industries. Andritz equipment is being utilized to produce biofuel from wood, peat, and other agricultural by-products. In this way, highly valuable fuels are generated from surplus materials, which would otherwise have to be disposed of. Andritz also supplies waste pelleting equipment which can offer an environmentally-friendly alternative to landfills.

Hydropower is an essential renewable energy source which does not pollute the environment and produces no waste. Only 20% of the world’s hydropower potential has been developed so far. The **Hydraulic Machines Business Area** has been providing state-of-the-art equipment and comprehensive services to hydropower plants for more than 130 years.

CONSOLIDATED FINANCIAL STATEMENTS 2004 OF THE ANDRITZ GROUP ACCORDING TO IFRS

INDEPENDENT AUDITORS' REPORT

We have audited the accompanying consolidated financial statements of Andritz AG and subsidiaries as of December 31, 2004 prepared in accordance with International Financial Reporting Standards (IFRS) of the International Accounting Standards Board. These group financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these group financial statements based on our audit. The audits of the annual accounts of Group subsidiaries were partly carried out by other auditors. As far as these subsidiaries are concerned, our opinion is based solely on the report of the other auditors.

We conducted our audit in accordance with International Standards on Auditing (ISA) issued by the International Federation of Accountants (IFAC). Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit and the reports of the other auditors provide a reasonable basis for our opinion.

In our opinion the consolidated financial statements present fairly, in all material respects, the financial position of the Group as of December 31, 2004, and of the results of its operations and its cash flows for the year then ended in accordance with International Financial Reporting Standards.

We certify that the status report is in compliance with the consolidated financial statements and that the legal requirement for the exemption from the obligation to prepare consolidated financial statements in accordance with the Austrian Commercial Code are met.

Vienna, February 18, 2005

AUDITOR TREUHAND GMBH
Wirtschaftsprüfungs- und Steuerberatungsgesellschaft

Alfons STIMPFL-ABELE Walter MÜLLER
(Austrian) Certified Public Accountants

AUDITOR TREUHAND GMBH is a member of
Deloitte.

In case that the consolidated financial statements are disclosed or handed over to a third party in a version which differs from that certified by us, our prior approval is necessary if our audit opinion is included or our audit is mentioned.

CONSOLIDATED BALANCE SHEET

as of December 31, 2004 and 2003

	Notes	2004 (in TEUR)	2003 (in TEUR)
Assets			
Intangible assets		7,061	4,921
Goodwill		107,561	122,785
Property, plant and equipment		125,390	127,165
Shares in associated companies		2,102	3,022
Investments		12,321	2,340
Fixed and financial assets	**1.**	**254,435**	**260,233**
Deferred tax assets	**18.**	**21,854**	**18,876**
Inventories	**2.**	139,972	107,714
Advance payments made	**3.**	14,142	17,334
Trade accounts receivable	**4.**	201,763	216,702
Cost and earnings of projects under construction in excess of billings	**5.**	115,950	107,738
Other receivables	**6.**	63,314	60,510
Prepayments and deferred charges		4,920	4,224
Marketable securities		63,097	52,705
Cash and cash equivalents		273,939	120,876
Current assets		**877,097**	**687,803**
Total assets		**1,153,386**	**966,912**
Shareholders' equity and liabilities			
Share capital		94,510	94,510
Capital reserves		45,966	45,966
Retained earnings		129,436	92,008
Shareholders' equity		**269,912**	**232,484**
Minority interests		**7,169**	**6,616**
Bonds		100,000	100,000
Bank loans - non current		5,211	4,486
Provisions - non current	**9.**	77,800	72,969
Obligation under finance leases - non current		582	919
Non-current liabilities	**11.**	**183,593**	**178,374**
Liabilities for deferred taxes	**18.**	**58,693**	**50,546**
Bank loans - current		11,207	11,104
Obligations under finance leases - current		421	484
Bills of exchange		0	1,550
Trade accounts payable		132,970	104,580
Billings in excess of cost and earnings of projects under construction	**5.**	197,832	107,399
Advance payments received		49,564	30,765
Provisions - current	**9.**	81,823	77,459
Liabilities for current taxes		10,368	16,670
Other current liabilities	**12.**	149,834	148,881
Current liabilities		**634,019**	**498,892**
Total Shareholders' equity and liabilities		**1,153,386**	**966,912**

The following notes to the consolidated financial statements form an integral part of this consolidated balance sheet.

CONSOLIDATED INCOME STATEMENT

for the years ended December 31, 2004 and 2003

	Notes	2004 (in TEUR)	2003 (in TEUR)
Sales	**13.**	**1,481,347**	**1,224,990**
Changes in inventories of finished goods and work in progress		10,996	(3,517)
Capitalized cost of self-constructed assets		468	156
		1,492,811	1,221,629
Other operating income	**14.**	20,799	20,099
Cost of materials		(866,263)	(676,133)
Personnel expenses	**15.**	(322,706)	(304,797)
Other operating expenses	**16.**	(209,283)	(176,428)
Earnings before interest, taxes, depreciation and amortization (EBITDA)		**115,358**	**84,370**
Depreciation and amortization (without amortization of goodwill)		(22,539)	(21,237)
Earnings before interest, taxes and amortization of goodwill (EBITA)		**92,819**	**63,133**
Amortization of goodwill		(16,684)	(14,201)
Earnings before interest and taxes (EBIT)		**76,135**	**48,932**
Income/Expense from associated companies		(1,543)	(419)
Interest result		1,979	1,006
Other income from financing activities		657	(201)
Financial results	**17.**	**1,093**	**386**
Earnings before taxes (EBT)		**77,228**	**49,318**
Income taxes	**18.**	(22,830)	(18,801)
Net income		**54,398**	**30,517**
Share of profit due to minority interests		(1,027)	(1,389)
Net income excluding minority interests		**53,371**	**29,128**
Earnings per non par value share (in EUR)	**19.**	4.13	2.26
Proposed or paid dividend per non par value share (in EUR)		1.40	1.00
Weighted average number of non par value shares		12,917,037	12,871,600

The following notes to the consolidated financial statements form an integral part of this consolidated income statement.

CONSOLIDATED CASH FLOW STATEMENT

for the years ended December 31, 2004 and 2003

	2004 (in TEUR)	2003 (in TEUR)
Earnings before taxes (EBT)	**77,228**	**49,318**
Interest result	(1,979)	(1,006)
Depreciation, write-ups and amortization of fixed assets	38,922	35,410
Income/Expenses from investments in associated companies	1,543	419
Changes in accrued expenses	2,549	8,725
Results from the sale of fixed and financial assets	(3,359)	(62)
Other non-cash income/expenses	(2,566)	0
Taxes paid	(19,973)	(10,207)
Interest received	8,356	5,973
Interest paid	(6,397)	(5,992)
Gross cash flow	**94,324**	**82,578**
Changes in inventories	(17,659)	5,213
Changes in advance payments made	3,338	(14,175)
Changes in receivables, prepayments and deferred charges	22,298	(85,569)
Changes in short-term provisions and accruals	(3,169)	(5,837)
Changes in advance payments received	11,803	455
Changes in liabilities and deferred income	97,087	21,934
Cash flow from operating activities	**208,022**	**4,599**
Payments received for asset disposals	11,523	3,242
Payments made for investments in fixed tangible and intangible assets	(24,002)	(20,662)
Payments made for investments in financial assets	(9,750)	(167)
Cash flow due to purchase of minority interests and business aquistions	(5,215)	(13,943)
Payments made for short-term financial investments	(10,079)	(24,076)
Cash flow from investing activities	**(37,523)**	**(55,606)**
Changes in interest bearing borrowings	(3,642)	(311)
Dividends paid by Andritz AG	(12,889)	(11,543)
Dividends paid to minority shareholders	(372)	(659)
Payments concerning own shares	1,328	(844)
Payments made by associated companies	0	27
Cash flow from financing activities	**(15,575)**	**(13,330)**
Change in cash and cash equivalents	**154,924**	**(64,337)**
Changes in cash and cash equivalents resulting from exchange rate fluctuations	(1,861)	(2,916)
Cash and cash equivalents at the beginning of the period	**120,876**	**188,129**
Cash and cash equivalents at the end of the period	**273,939**	**120,876**

The following notes to the consolidated financial statements form an integral part of this consolidated cash flow statement.

CONSOLIDATED STATEMENT OF SHAREHOLDERS' EQUITY

for the years ended December 31, 2004 and 2003

(in TEUR)	Notes	Share capital	Capital reserves	Retained earnings	IAS 39 reserve	Currency translation adjustments	Total
Status as at 1 January 2003		**94,510**	**45,966**	**83,917**	**8,601**	**(10,057)**	**222,937**
Net income excluding minority interests				29,128			29,128
Dividend payments				(11,543)			(11,543)
Currency translation adjustments						(17,617)	(17,617)
Acquisition of own shares				(331)			(331)
Changes to IAS 39 reserve					9,910		9,910
Status as at 31 December 2003		**94,510**	**45,966**	**101,171**	**18,511**	**(27,674)**	**232,484**
Status as at 1 January 2004		**94,510**	**45,966**	**101,171**	**18,511**	**(27,674)**	**232,484**
Net income excluding minority interests				53,371			53,371
Dividend payments	**8.**			(12,889)			(12,889)
Currency translation adjustments	**8.**					(7,197)	(7,197)
Changes concerning own shares				1,583			1,583
Changes to IAS 39 reserve					2,138		2,138
Other changes				422			422
Status as at 31 December 2004		**94,510**	**45,966**	**143,658**	**20,649**	**(34,871)**	**269,912**

The following notes to the consolidated financial statements form an integral part of this consolidated statement of shareholders' equity.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

as of December 31, 2004 and 2003

A. General

Andritz AG ("Andritz") is incorporated under the laws of the Republic of Austria and is listed on the Vienna Stock Exchange since June 2001. The Andritz Group (the "Group") is a leading producer of high technology industrial machinery and operates in four main strategic business areas: Pulp and Paper, Rolling Mills and Strip Processing Lines, Environment and Process, and Feed Technology.

The average number of employees in the Group was 5,026 in 2004 and 4,597 in 2003. The registered office address of the Group is located at Stattegger Strasse 18, 8045 Graz, Austria.

The consolidated financial statements are the responsibility of the management and will be acknowledged by the Supervisory Board.

Various amounts and percentages set out in these consolidated financial statements have been rounded and accordingly may not total.

B. Summary of significant Accounting Policies

The principal accounting policies adopted in preparing the financial statements of Andritz are as follows:

a. General

The financial statements are prepared in accordance with the standards formulated by the International Accounting Standards Board (IASB) as well as the interpretations formulated by the International Financial Reporting Interpretations Committee (IFRIC). IFRS 2 Share-based Payment has been applied.

For these financial statements prepared in accordance with IFRS based on § 245a of Austrian Commercial Code the legal requirements are met for the exemption of the obligation of preparing group financial statements.

b. Reporting Currency

The Group financial statements are prepared in EURO.

c. Principles of Consolidation

The consolidated financial statements of the Group include Andritz and the companies that it controls. This control is normally evidenced when Andritz owns, either directly or indirectly, more than 50% of the voting rights of a company's share capital and is able to govern the financial and operating policies of an enterprise so as to benefit from its activities. The equity and net income attributable to minority shareholders' interests are shown separately in the balance sheets and income statements, respectively.

The purchase method of accounting is used for acquired businesses. Companies acquired or disposed of during the year are included or excluded, accordingly, in the consolidated financial statements from the date of acquisition or from the date of disposal. Joint ventures with equal voting rights are consolidated on a proportionate basis.

d. Major Differences between Austrian and IFRS Accounting Principles

Goodwill: In accordance with IAS 22, goodwill from capital consolidation is capitalized and amortized over the useful life. Any goodwill arising from business combinations on or after 31st March 2004 will be treated in accordance with IFRS 3. The Austrian Commercial Code allows a credit to reserves, with no effect on the income statement.

Construction contracts: According to Austrian accounting regulations, sales and profits are first realised upon takeover by the customer ("completed contract method"). Under IAS 11, order completion is accounted using the percentage of completion method in accordance with progress and pro rata profit realisation. The extent of completion is established by considering the ratio of accumulated costs to estimated total costs to complete each contract ("cost-to-cost method").

Deferred taxes: The Austrian Commercial Code requires the creation of deferred tax provisions for temporary differences if a tax liability is expected to arise when these differences are reversed. IFRS require the creation of deferred taxes for all temporary differences, which arise between financial statements prepared for tax purposes and IFRS financial statements, measured at actual or enacted tax rates. Deferred tax assets must also be recorded for unused loss carry forwards and unused tax credits, which are expected to be offset against taxable profits in the future.

Other provisions: In contrast to the Austrian Commercial Code, IFRS interprets the principle of prudence differently with respect to provisions. IFRS tends to place stricter requirements on the probability of an event occurring and on estimating the amount of the provisions. According to Austrian Commercial Code certain amounts reported as liabilities under IFRS would be normally shown as provisions.

Provisions for pensions: In keeping with the Austrian Commercial Code, provisions for pensions are calculated by an actuary. Under IFRS, provisions for pensions are calculated using the projected unit credit method, based on a discount rate determined by reference to market yields on high quality corporate bonds and an expected compensation increase.

Marketable securities: Austrian accounting principles require securities to be recorded at the lower of acquisition costs or market value. Under IFRS marketable securities available for sale are to be valued at fair values, and there is a choice for the treatment of changes in the fair value.

Foreign currency transactions: These two accounting systems require different treatments for unrealized profits arising from the valuation of foreign exchange items as of the balance sheet date. According to Austrian law, only unrealized losses are recorded, whereas IFRS also requires the recognition of unrealized profits of monetary items.

Non-current securities: In accordance with IFRS non-current securities of the Group are classified as "available for sale" and are valued at their quoted market price at the balance sheet date. The Austrian Commercial Code requires a valuation at acquisition costs or a lower market value if there is a sustainable decrease of monetary items.

Hedging: With the adoption of IAS 39, the Group has designated its forward exchange contracts as cash flow hedges and carries them at fair value. Changes in the fair value of a hedging instrument that qualifies as a highly effective cash-flow hedge are recognized directly in the hedging reserve in shareholders' equity. The Austrian Commercial Code does not require a valuation of hedging contracts at fair value as of the balance sheet date.

C. Acquisitions

In January 2004, the Company acquired certain assets of Bird Machine Company business from the US-based Baker Hughes Incorporated. Bird Machine is a global specialist in solid/liquid separation for industrial and municipal applications utilizing a broad range of centrifuges and filter presses. In August 2004, Andritz completed the acquisition of the Filtration Business Unit from international Netzsch Group, based in Germany. The Netzsch Filtration Business Unit supplies different types of dewatering units, in particular filter presses, for solid/liquid separation in industrial und municipal applications. The acquisition of the Fluidized Bed Drying Systems Business Area of VA TECH WABAG, Germany was completed in November 2004. Based in Ravensburg, Germany, the globally active Fluidized Bed Drying Systems Business Area is specialized in the development, production and erection of plants for granulation and drying of solutions, suspensions, and bulk materials. The total costs for these three acquisitions amounted to EUR 3,520 thousand of which Euro 1,366 thousand have been allocated to patents and know-how and the remaining goodwill amounted to EUR 1,344 thousand. The described acquisitions are all part of the Environment and Process Business Area.

In August 2004 the company acquired in the Pulp and Paper Business Area 51.1% of the shares of CyberMetrics Inc. in the USA, a specialist in on-line measurement of pulp quality and the remaining 50% of Voith Andritz Tissue L.L.C. in November 2004. The total costs of these acquisitions amounted to EUR 247 thousand with a related goodwill of EUR 1.080 thousand.

To expand the product portfolio in the Rolling Mills and Strip Processing Lines Business Area, Andritz has purchased certain assets and know-how of insolvent Otto Kaiser GmbH in Germany, a manufacturer of high-performance mechanical presses for steel strip. This transaction took place in September 2004. The total costs for these assets were EUR 3,987 thousand.

The acquired businesses have contributed EUR 95,257 thousand to sales and EUR 3,496 thousand to Earnings Before Interest, Taxes and Amortization of Goodwill (EBITA) of the Andritz Group since the date of acquisition. If the acquisitions had been at the beginning of the reporting period the Group's EBITA would have been EUR 96,738 thousand and the revenue from continuing operations would have been EUR 1,545,202 thousand.

Inter-company balances and transactions, including inter-company profits and unrealized profits and losses have been eliminated. The consolidated financial statements have been prepared using uniform accounting policies for like transactions and other events in similar circumstances.

D. Accounting and Valuation Principles

a. Intangible Assets

Intangible assets are accounted for at acquisition cost. After initial recognition, intangible assets are accounted for at cost less accumulated amortization and any accumulated impairment losses. Intangible assets are amortized on a straight-line basis over the best estimate of their useful lives. The amortization period and the amortization method are reviewed annually at each financial year-end.

Concessions, industrial rights and similar rights and values

Amounts paid for concessions, industrial rights and similar rights and values are capitalized and then amortized on a straight-line basis over the expected periods of benefit. The expected useful lives vary from 3 to 15 years.

Business Combinations and Goodwill

For business combinations occurring on or after 31 March 2004, IFRS 3 has been applied. According to this standard goodwill is measured as the residual cost of the business combination after recognizing the acquiree's identifiable, assets, liabilities and contingent liabilities. Any goodwill arising from business combinations is not amortized. Goodwill is tested for impairment in accordance with IAS 36 annually, or more frequently if events or changes in circumstances indicate that it might be impaired. In determining whether an impairment write-down is required, goodwill is allocated to the cash-generating units that are expected to benefit from the synergies of the combination and the recoverable amount is compared with its carrying amount.

After reassessment of the identification and the measurement of the acquirees's identifiable assets, liabilities and contingent liabilities and the measurement of cost of the combination, any negative goodwill is recognized in profit or loss immediately.

For any goodwill arising from business combinations effected before 31 March 2004 IFRS 3 has not been applied for the business year ended 31 December 2004. Goodwill arising from these combinations is carried at cost less accumulated amortization and accumulated impairment losses. The amortization is calculated on a straight-line basis over its useful life. The amortization period ranges from 7 to 15 years. The un-amortized balances are reviewed at each balance sheet date by assessing the probability of continuing future benefits. If there is an indication that goodwill may be impaired, the recoverable amount is determined for the cash-generating unit to which the goodwill belongs. If the carrying amount is higher than the recoverable amount, an impairment loss is recognized. Beginning with the business year 2005 according to transitional provisions of IFRS 3 the amortization will be discontinued and the carrying amount of accumulated depreciation will be eliminated against the carrying amount of goodwill. The impairment tests according to IAS 36 will be performed annually.

Goodwill and negative goodwill arising from business combinations effected before 1 January 1995 were charged or credited directly to equity.

b. Property, Plant and Equipment

Property, plant and equipment are stated at cost less accumulated depreciation and accumulated impairment losses. When assets are sold or retired, their cost and accumulated depreciation are eliminated from the accounts and any gain or loss resulting from their disposal is included in the income statement.

The initial cost of property, plant and equipment comprises its purchase price, including import duties and non-refundable purchase taxes and any directly attributable costs of bringing the asset to its working condition and location for its intended use. Expenditures incurred after the fixed assets have been put into operation, such as repairs and maintenance and overhaul costs, are normally charged to income in the period in which the costs are incurred. Depreciation is calculated on a straight-line basis over the following estimated useful lives:

Buildings	20-50 years
Machinery and technical equipment	4-10 years
Tools, office equipment and vehicles	3-10 years

The useful life and depreciation methods are reviewed periodically to ensure that the method and period of depreciation are consistent with the expected pattern of economic benefits from items of property, plant and equipment. Assets in the course of construction represent plant and properties under construction and are stated at cost. These include costs of construction, plant and equipment and other direct costs.

c. Financial Assets and Investments in Associated Companies

These long-term investments consist primarily of shares in associated companies and non-current securities. Investments in associated companies (generally investments of between 20 to 50% in a company's equity), where a significant influence is exercised by the Group, are accounted for by using the equity method. An assessment of investments in associates is performed when there is an indication that the asset has been impaired or the impairment losses recognized in prior years no longer exist.

Other non-current securities held on a long-term basis are classified as available-for-sale investments and valued at fair value. Changes of these fair values are recognized as gains or losses in the income statement.

d. Finished Goods, Work in Progress, Raw Materials

Inventories, including work in progress, are valued at the lower of cost and net realizable value, after provision for obsolete and slow moving items. Net realizable value is the selling price in the ordinary course of business, less the costs of completion, marketing and distribution. Cost is determined primarily on the basis of the FIFO method. For processed inventories, cost includes the applicable allocation of fixed and variable overhead costs. Unrealizable inventory has been fully written off. Contracts other than construction contracts are valued at production costs. For these contracts the revenue is recognized when the ownership of the goods is transferred ("completed contract method").

e. Construction Contracts

Receivables from construction contracts and the related sales are accounted for using the percentage of completion method. The construction contracts are determined by the terms of the individual contract, which are agreed at fixed prices. The extent of completion ("stage of completion") is established by the cost-to-cost method. Reliable estimates of the total costs and sales prices and the actual figures of the accumulated costs are available on a monthly basis. Estimated contract profits are recorded in earnings in proportion of recorded sales. In cost-to-cost method sales and profits are recorded after considering the ratio of accumulated costs to estimated total costs to complete each contract. Changes to total estimated contract costs and losses, if any, are recognized in the income statement of the period in which they are determined. For remaining technological and financial risks, which might occur during the remaining construction period, an individually assessed amount is included in the estimated contract costs. Impending losses out of the valuation of construction contracts are recognized at the time of occurrence. Impending losses are recognized when it is probable that the total contract costs will exceed the contract revenues. For possible customer warranty claims provisions are accounted for according to the profit realization. At the completion of a contract the remaining warranty risk is reassessed.

f. Trade Accounts Receiveable

Receivables are stated at face value, after allowances for doubtful accounts.

g. Marketable Securities

Marketable securities consist of governmental bonds and bonds of first-class banks that are traded in liquid markets. They are held for the purpose of investing in liquid funds and are not generally intended to be retained on a long-term basis. Marketable securities are stated at the market value. Adjustments in valuation are included in the income statement. Interest received on trading securities is reported as interest income. On a disposal of an investment, the difference between the net disposal proceeds and the carrying amount is included in the income statement.

h. Cash and Cash Equivalents

Cash includes cash in hand and cash at banks. Cash equivalents might include short-term deposits with non-banks with original maturities of three months or less and that are not subject to any risk of change in value.

i. Share Capital

Only ordinary shares exist and all shares are issued and have the same rights.

The share capital of Andritz AG amounts to EUR 94,510,000 divided into 13,000,000 shares of non par value. Based on the articles of association and with approval of the Supervisory Board, the Managing Board is authorized to increase the capital by up to EUR 25,445,000 through issuing up to 3,500,000 shares until 15 September 2005.

Based on the authorization of the shareholders' meeting and with approval from the Supervisory Board the Managing Board has decided a program for acquisition of own shares up to 650,000 shares between 16 May 2002 and 27 June 2003 within a price range of 10 to 35 Euro per share and extension of this program for acquisition of own shares up to 650,000 shares between 28 June 2003 and 27 June 2004 within a price range of 10 to 30 Euro. The program was cancelled at 30 March 2004. Based on a new authorization of the shareholders' meeting, held on 30 March 2004, and with approval from the Supervisory Board the Managing Board has decided a program for acquisition of own shares up to 1,300,000 shares between 5 April 2004 and 29 September 2005 within a price range of a lowest price of 10.00 Euro and a highest price, which must not exceed the average un-weighted closing price over the ten preceding trading days by more than 30%. In 2003 128,701 own shares have been acquired in several steps with an average price of EUR 22.75 per share and 94,600 own shares were resold in several steps with an average price of 27.44 per share. 50 own shares were used as a price in a lottery. At 31 December 2003 the Company held 110,948 own shares at a market value of EUR 4,210 thousand. In 2004 2,000 own shares have been acquired with an average price of EUR 36.93 per share and 66,750 own shares were resold with a price of EUR 21.00 per share to eligible executives of the Management Share Option Plan. 5,788 own shares have been transferred to employees of Andritz AG in the course of an employee participation program. At 31 December 2004 the Company held 40,410 own shares at a market value of EUR 2,267 thousand. It is planned to use these shares for delivery of shares within the framework of the Management Share Option Plan.

j. Capital Reserves

Capital Reserves are created in accordance with Austrian requirements and include share premium amounts.

k. Provisions

A provision is recognized when, and only when, an enterprise has a present obligation (legal or constructive) as a result of a past event and it is probable (i.e. more likely than not) that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation. Provisions are reviewed at each balance sheet date and adjusted to reflect the current best estimate. Where the effect of the time value of money is material, the amount of a provision is the present value of the expenditures expected to be required to settle the obligation.

I. Other Accounting and Valuation Principles

Financial instruments

Financial assets and financial liabilities carried on the balance sheet include cash and cash equivalents, marketable securities, trade and other accounts receivable and payable, long-term receivables, borrowings and investments. The accounting policies on recognition and measurement of these items are disclosed in the respective accounting policies found in these notes.

Financial instruments are classified as assets or liabilities in accordance with the substance of the contractual arrangement. Therefore interest, dividends, gains and losses relating to these financial instruments classified as an asset or a liability are reported as expense or income. Financial instruments are offset when the Group has a legally enforceable right to offset and intends to settle either on a net basis or to realize the asset and settle the liability simultaneously.

Hedging

The Group uses forward exchange contracts to mitigate exposure to foreign currency risk out of projects and regular business in foreign currency. According to the Group's hedging policy most forward contracts are used for highly probable future cash flows for these projects or regular sales and can therefore be classified as cash flow hedges. Changes in the fair value of a hedging instrument that qualifies as a highly effective cash flow hedge are recognized directly in the hedging reserve in shareholders' equity. If the hedged cash flow results in the recognition of an asset or a liability, all gains or losses previously recognized directly in equity are transferred from equity and included in the initial measurement of the cost or carrying value of the asset or liability. Otherwise, for all other cash flow hedges, gains and losses initially recognized in equity are transferred from hedging reserve to net profit or loss in the same period or periods during which the hedged firm commitment or forecast transaction affects the income statement. If a forward exchange contract is not classified as cash flow hedge the fair values respectively any changes of these contracts are reported as profit or loss in the income statement.

When the committed or forecast transaction is no longer expected to occur, any net cumulative gain or loss previously reported in equity is transferred to the income statement.

All investments in a foreign entity are long-term investments and presently a sale of such investments is not expected to occur in the foreseeable future. According to the Group's hedging policy there are no hedges of net investments in foreign currencies.

Derivative financial instruments

Major parts of derivative financial instruments are designated as hedging instruments. Fixed forward exchange rate contracts are used for hedging of currency risks and interest swaps are used for hedging of interest risk.

Research and development costs

Expenditures for research and development are charged against income in the period incurred because the criteria for capitalization (IAS 38) are not met. In 2004 EUR 21,114 thousand and in 2003 EUR 25,470 thousand have been recognized as an expense.

Revenue recognition (except for construction contracts)

Revenue is recognized when it is probable that the economic benefits associated with the transaction will flow to the enterprise and the amount of the revenue can be measured reliably. Sales are recognized net of sales taxes and discounts when delivery has taken place and transfer of risks and rewards has been completed.

Interest is recognized on a time proportion basis that reflects the effective interest rate of the asset. Dividends are recognized when the shareholders' right to receive payment is established.

Borrowing costs

Borrowing costs are generally expensed as incurred.

Impairment of assets

Property, plant and equipment and intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Whenever the carrying amount of an asset exceeds its recoverable amount (the higher of fair value less costs to sell and value in use), an impairment loss is recognized in income for items of property, plant and equipment and intangibles carried at cost. Recoverable amounts are estimated for individual assets or, if it is not possible, for the cash-generating unit.

m. Foreign currency

Foreign currency transactions

Foreign currency transactions are recorded in the reporting currency by applying to the foreign currency amount the exchange rate between the reporting currency and the foreign currency at the date of the transaction. Exchange rate differences arising on the settlement of monetary items at rates different from those at which they were initially recorded during the periods are recognized in the income statement in the period in which they arise.

Foreign entities

Foreign consolidated subsidiaries are regarded as foreign entities since they are financially, economically and organizationally autonomous. Their reporting currencies are their respective local currencies. Financial statements of foreign consolidated subsidiaries are translated at year-end exchange rates with respect to the balance sheet. Expense and revenue items are translated using the average exchange rates for the year. All resulting translation differences are included in a currency translation reserve in equity.

Any goodwill arising on the acquisition of a foreign entity is recorded using the exchange rate at the effective date of the transaction. Exchange differences arising on a monetary item that, in substance, forms part of the Group's net investment in a foreign entity are classified as equity in the consolidated financial statements until disposal of the net investment.

n. Employees Benefits

Defined benefit plans (provisions for pensions)

Some Group companies provide defined benefit pension plans for certain employees. The funds are valued every year by professionally qualified independent actuaries. The obligation and costs of pension benefits are determined using a projected unit credit method. The projected unit credit method considers each period of service as giving rise to an additional unit of benefit entitlement and measures each unit separately to build up the final obligation. Past service costs are recognized on a straight-line basis over the average period until the amended benefits become vested. Gains or losses on the curtailment or settlement of pension benefits are recognized when the curtailment or settlement occurs. Actuarial gains or losses are amortized based on the expected average remaining working lives of the employees. The pension obligation is measured at the present value of estimated future cash flows using different discount rates for different countries.

Other Group companies provide defined contribution plans for certain employees. The related costs are expensed as they occur.

Severance payments

In certain countries the Group is also obliged by law to pay termination indemnities in some cases of termination of employment. No termination indemnities are payable for voluntary termination at the request of the employee. Expenses related to termination indemnities are accrued.

o. Income Taxes

The income tax charge is based on profit for the year and considers deferred taxation. Deferred taxes are calculated using the balance sheet liability method. Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Deferred tax assets and liabilities are measured using the tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the balance sheet date. The measurement of deferred tax liabilities and deferred tax assets reflects the tax consequences that would follow from the manner in which the enterprise expects, at the balance sheet date, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are recognized regardless of when the timing difference is likely to reverse.

Deferred tax assets are recognized when it is probable that sufficient taxable profits will be available against which the deferred tax assets can be utilised. At each balance sheet date, the Group reassesses unrecognized deferred tax assets and the carrying amount of deferred tax assets. The enterprise recognizes a previously unrecognized deferred tax asset to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered. The Group conversely reduces the carrying amount of a deferred tax asset to the extent that it is no longer probable that sufficient taxable profit will be available to allow the benefit of part or all of that deferred tax asset to be utilized.

Deferred tax is charged or credited directly to equity if the tax relates to items that are credited or charged, in the same or a different period, directly to equity, including exchange differences arising on the translation of intercompany loans.

E. Segments

Business segments

For management purposes the Group is organized on a worldwide basis into four major operating businesses. The strategic business units are the basis upon which the Group reports its primary segment information. Financial information on business and geographical segments is presented in section I (see “segment information” below). There are no material inter-segment transactions. All consolidation entries are included in the relevant segment. According to the monthly reporting scheme, which is the basis for the primary segment information, all sales and all direct and indirect expenses (including overhead and administrative costs) are allocated to business segments.

F. Contingencies

Contingent liabilities are not recognized in the financial statements. They are disclosed unless the possibility of an outflow of resources embodying economic benefits is remote.

A contingent asset is not recognized in the financial statements but disclosed when an inflow of economic benefits is probable.

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Contingent liabilities are not recognized in the financial statements. They are disclosed unless the possibility of an outflow of resources embodying economic benefits is remote.

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G. Notes to the Balance Sheet

1. Changes in Fixed and Financial Assets

Acquisition or production costs

(in TEUR)	Balance as at 1 January 2004	Currency translation differences	Additions	Disposals	Changes due to business acquisitions	Transfers	Balance as at 31 December 2004
Intangible assets	**24,889**	**(473)**	**3,727**	**493**	**1,369**	**5**	**29,025**
Goodwill	**233,466**	**(7,225)**	**3,204**	**(0)**	**0**	**0**	**229,446**
Land and buildings	131,493	(1,410)	3,235	10,089	127	1,455	124,811
Technical equipment and machinery	136,098	(2,721)	11,172	11,353	1,267	214	134,676
Other equipment, factory and office equipment	63,783	(1,192)	9,605	7,194	671	511	66,184
Assets in course of construction	1,951	(26)	1,560	366	0	(2,180)	939
Advance payments on tangible assets	50	0	69	42	0	0	77
Total property, plant and equipment	**333,375**	**(5,350)**	**25,641**	**29,044**	**2,065**	**0**	**326,687**
Total intangible and tangible assets	**591,730**	**(13,048)**	**32,572**	**29,434**	**3,435**	**5**	**585,158**

Depreciation and amortization

(in TEUR)	Balance as at 1 January 2004	Currency translation differences	Depreciation and amortization for the year	Disposals	Changes due to business acquisitions	Transfers	Balance as at 31 December 2004
Intangible assets	**19,968**	**(454)**	**2,875**	**425**	**0**	**0**	**21,964**
Goodwill	**110,681**	**(5,481)**	**16,684**	**0**	**0**	**0**	**121,884**
Land and buildings	56,280	(787)	3,072	4,425	0	39	54,180
Technical equipment and machinery	103,177	(1,960)	8,093	10,149	3	(414)	98,750
Other equipment, factory and office equipment	46,753	(984)	8,470	6,330	76	382	48,367
Assets in course of construction	0	0	29	29	0	0	0
Advance payments on tangible assets	0	0	0	0	0	0	0
Total property, plant and equipment	**206,210**	**(3,731)**	**19,664**	**20,932**	**79**	**7**	**201,297**
Total intangible and tangible assets	**336,859**	**(9,665)**	**39,223**	**21,358**	**79**	**7**	**345,145**

Net book value

(in TEUR)	Costs as at 31 December 2004	Accumulated depreciation	Net book value as at 31 December 2004	Net book value as at 31 December 2003
Intangible assets	29,025	21,964	7,061	4,921
Goodwill	**229,446**	**121,884**	**107,561**	**122,785**
Land and buildings	124,811	54,180	70,631	75,213
Technical equipment and machinery	134,676	98,750	35,926	32,921
Other equipment, factory and office equipment	66,184	48,367	17,818	17,030
Assets in course of construction	939	0	939	1,951
Advance payments on tangible assets	77	0	77	50
Total property, plant and equipment	**326,687**	**201,297**	**125,390**	**127,165**
Total intangible and tangible assets	**585,158**	**345,145**	**240,012**	**254,871**

Finance leases

The net book value for technical equipment and machinery includes an amount of EUR 1,074 thousand (2003 EUR 1,426 thousand) and the net book value for other equipment, factory and office equipment includes an amount of EUR 211 thousand (2003 EUR 256 thousand) in respect of assets held under finance lease. The total of minimum lease payments at balance sheet date amounts to EUR 1,088 thousand (2003 EUR 1,555 thousand). The leasing contracts have remaining terms from 7 up to 49 months.

Impairment loss

In 2004 the goodwills arising from the acquisition of Acutest and the furnace business from Selas met the tests for impairment because the businesses did not develop according to plan. The impairment loss for these goodwills amounted to EUR 2,955 thousand, of which EUR 1,294 thousand are related to the Pulp and Paper Business Area and the remaining value is related to the Rolling Mills and Strip Processing Lines Business Area. For participation in associated companies an impairment loss of EUR 1,041 thousand has been reported, which is related to the Pulp and Paper Business Area.

Goodwill

(in TEUR)	2004	2003
Andritz Ahlstrom	32,367	37,630
Acquisition of Andritz AG	59,596	65,555
Other	15,598	19,600
	107,561	**122,785**

2. Inventories

(in TEUR)	2004	2003
Finished goods	46,054	35,585
Work in progress	66,395	50,781
Raw materials	27,523	21,348
	139,972	**107,714**

The shown inventories are valued at cost.

3. Advance Payments Made

The advance payments made and presented in the balance sheet relate to open purchase orders for contracts.

4. Trade Accounts Receivable

(in TEUR)	2004	2003
Accounts receivable	207,635	219,023
Allowance for doubtful accounts	(5,872)	(2,321)
	201,763	**216,702**

5. Construction Contracts

(in TEUR)	2004	2003
Contract revenue recognized as sales in the period	944,988	767,380
Contract costs incurred and recognized profits (less recognized losses) to date	1,344,997	1,063,683
Advances received and progress billings	1,426,880	1,063,344
Amount of retentions	1,233	1,242

The billings in excess of costs and earnings of projects under construction represent, primarily, payments from customers for work, which is not performed yet.

6. Other Receivables

(in TEUR)	2004	2003
Receivables from associated companies	746	410
Financial instruments carried at fair value	32,836	31,581
Other	29,732	28,519
	63,314	**60,510**

7. Statement of Receivables

2004

(in TEUR)	Total	Thereof remaining term under 1 year	Thereof remaining term over 1 year
Trade accounts receivable	201,763	201,280	483
Cost and earnings of projects under construction in excess of billings	115,950	115,396	554
Other receivables	63,314	62,169	1,145
	381,027	**378,845**	**2,182**

2003

(in TEUR)	Total	Thereof remaining term under 1 year	Thereof remaining term over 1 year
Trade accounts receivable	216,702	216,672	30
Cost and earnings of projects under construction in excess of billings	107,738	107,738	0
Other receivables	60,510	59,418	1,092
	384,950	**383,828**	**1,122**

8. Retained Earnings

Dividends

For 2004 a dividend of EUR 1.40 per outstanding share is proposed by the Managing Board. The dividend for 2003 of EUR 12,889 thousand which is equal to EUR 1.00 per share was proposed by the Managing Board and was resolved at the 97th ordinary shareholders' meeting on 30 March 2004. The dividend was paid to the shareholders on 8 April 2004.

On 16 February 2005 the Managing Board authorized the consolidated financial statements for the year ended 31 December 2004 according to IFRS. On 16 February 2004 the management authorized the consolidated financial statements for the year ended 31 December 2003 according to IFRS to be issued to its Supervisory Board. The Supervisory Board is made up solely of non-executives and includes representatives of employees. The consolidated financial statements were presented for information purposes only to the Supervisory Board and subsequently acknowledged by the meeting of shareholders. The Supervisory Board and the meeting of shareholders acknowledged the consolidated financial statements.

Currency translation adjustment

Equity and shareholder loans in foreign currency are not hedged against currency risks because the investments are considered to be permanent and the conversion to the reporting currency is not planned. Exceptions are made for planned disposal of investments or planned repayments of shareholder loans.

9. Provisions

(in TEUR)	Balance as at 1 January 2004	Currency translation differences	Changes due to business acquisitions	Reclassification	Use	Reversal	Addition	Balance as at 31 December 2004
Provisions for severance payments	25,221	0	0	0	141	21	4,292	29,351
Provisions for pensions	28,593	(101)	950	0	1,260	6,024	5,022	27,180
Other non-current provisions	19,155	(334)	539	(1,773)	1,260	5,404	10,346	21,269
Non-current provisions	**72,969**	**(435)**	**1,489**	**(1,773)**	**2,661**	**11,449**	**19,660**	**77,800**
Current provisions	**77,459**	**(707)**	**4,374**	**2,382**	**18,894**	**16,643**	**33,852**	**81,823**

Other non-current and current provisions consist primarily of order related provisions (2004: EUR 93,554 thousand; 2003: EUR 80,004 thousand) for warranties, contingencies and impending losses.

10. Employee Benefit Obligations

Defined benefit plan for pensions

Some Group companies in Austria, USA, Finland, Germany and Sweden provide defined benefit pension plans for some classes of employees. Provisions for pension obligations are established for benefits payable in the form of retirement, disability and surviving dependant pensions. The benefits offered vary according to the legal, fiscal and economic conditions of each country. Benefits are dependent on years of service and in some cases on the respective employee's compensation.

The following table reconciles the funded status of defined benefit plans to the amounts recognized in the balance sheet:

(in TEUR)	2004	2003
Present value of funded defined benefit obligations	19,637	22,087
Fair value of plan assets	(10,891)	(8,266)
	8,746	**13,821**
Present value of unfunded defined benefit obligations	19,145	16,516
Unrecognized actuarial gains/losses	(711)	(1,744)
Net liability in balance sheet	**27,180**	**28,593**

Pension expense is comprised of the following:

(in TEUR)	2004	2003
Current service costs	1,240	965
Interest expense on obligations	1,591	886
Expected return on plan assets	(79)	(7)
Net actuarial gains/losses recognised	4,085	(143)
Past service costs	(0)	7,720
Effect of any curtailment or settlement	(8,672)	(10)
	(1,835)	9,411
Payments to defined contribution plans	12,334	12,755
	10,499	**22,166**

Principal actuarial assumptions used to determine pension obligations as of 31 December were as follows:

(in per cent)	2004	2003
Discount rate	5.00%	5.75%
Wage and salary increases	3.00%	3.00%
Retirement benefit increases	2.50%	2.50%

Severance payments

(in TEUR)	2004	2003
Present value of unfunded defined benefit obligations	29,351	25,221
Net liability in balance sheet	**29,351**	**25,221**

Severance expense is comprised of the following:

(in TEUR)	2004	2003
Current service costs	1,392	1,473
Interest expense on obligations	1,358	1,466
Net actuarial gains/losses recognised	2,728	(2,354)
	5,478	585
Payments to defined contribution plans	73	21
	5,551	**606**

Principal actuarial assumptions used to determine severance obligations as of 31 December were the same as used for pension obligations.

Management share option plan

A selected group of executives employed by the Group as at 1 June 2001 were eligible to participate in a Management Share Option Plan in connection with the Initial Public Offering. Each eligible executive who has subscribed shares having an aggregate subscription value calculated at the Offer Price (21 EUR per share) of at least 20,000 EUR (each such subscription a "Private Investment") is eligible for a special remuneration in the form of option rights. These option rights can be exercised provided that the average price of the shares during two separate assessment periods exceeds a certain percentage of the Offer Price. The first assessment period will run for a period of three months preceding the second anniversary of the initial listing of the shares on the Vienna Stock Exchange, whereas the second assessment period will run for a period of three months preceding the third anniversary of the initial listing of the shares on the Vienna Stock Exchange. If the average market value of the shares exceeds the Offer Price by 15% in the first assessment period (Option 1) or by 20% in the second assessment period (Option 2), the eligible executive will be entitled to purchase up to a maximum of 1,500, 2,500 and 5,000 shares with respect to Option 1 or Option 2 at the Offer Price depending on the seniority of the relevant executive, provided that the relevant executive can prove uninterrupted ownership of his Private Investment until the end of the assessment period. The options can be exercised only once and are not transferable. Option 1 could not be exercised, however exercise of Option 2 was possible, as the average market value of the shares in the second assessment period exceeded the Offer Price by more than 20%. The options can only be exercised at given times. Each participant may subscribe up to 50% of the number of shares stated in the Average Price Notice immediately after exercise of the option and payment of the prorata subscription price, the relevant participant can subscribe up to the remaining 25% of the shares set out in the notice on the exercise of the option. At the end of a six month term from the exercise of the option and payment of the remaining subscription price, the relevant participant can subscribe up to the remaining 25% of the shares set out in the notice on the exercise of the option.

Due to legal requirements, executives in the United States were not allowed to make a Private Investment but were granted option rights. Out of 105,500 options outstanding on 31 December 2003 66,750 options have been exercised in 2004; the weighted, average market share price at the time of exercise amounted to EUR 40,70. 22,250 options were useable on 31 December 2004 and were exercised in January 2005. The 16,500 remaining options lapsed in 2004. Andritz provided these shares by using the repurchased own shares.

The 97th Annual General Meeting of Shareholders on 30 March 2004 resolved a Share Option Program for Managers and Members of the Managing Board. The number of options granted to the different Manager varies, depending on the area of responsibility, between 1,500, 2,500 and 5,000 shares for Managers, to 10,000 for Board Members and 12,500 for the CEO. The options are to be drawn from the pool of shares bought back under the corporate share buy-back program. One share option entitles to the purchase of one share. In order to exercise a share option, eligible persons must be in active employment of Andritz AG or one of its affiliates from 1 May 2004 until before each date of exercise of an option. Another requirement is that Managers must have invested at least 20,000 EUR in Andritz shares from their own resources, and the Members of the Managing Board at least 40,000 EUR.

The exercise price of the option is the un-weighted average closing price of Andritz shares in the four calendar weeks following the 97th Annual General Meeting of Shareholders on 30 March 2004 and amounts to 37.53 EUR. Option can be exercised between 1 May 2006 and 30 April 2008 (=period of exercise) provided that the average unweighted closing price of the Andritz share over twenty consecutive trading days within the period from 1 May 2006 and 30 April 2007 is at least 15% above the exercise price and the earnings per share in business year 2005 (based

on the total number of shares listed) or the earnings per share in business year 2006 (based on the total number of shares listed) are at least 15 % above the earnings per share in business year 2003 (based on the total number of shares listed) or that the average unweighted closing price of the Andritz share over twenty consecutive trading days within the period from 1 May 2007 and 30 April 2008 is at least 20% above the exercise price and the earnings per share in business year 2006 (based on the total number of shares listed) or the earnings per share in business year 2007 (based on the total number of shares listed) are at least 20 % above the earnings per share in business year 2003 (based on the total number of shares listed).

If the conditions of exercise are met, 50% of the options can be exercised immediately, 25% after three months and the remaining 25% after a further three months. Share options can only be exercised by way of written notification to the company. The share options are not transferable. The shares purchased under the Share Option Program are not subject to a ban on sales over a certain period.

The total of options granted in 2004 amounts to 174,500, which is equal to the total of outstanding options on 31 December 2004. The fair value of the options at the time of granting amounts to EUR 1,220 thousand, thereof EUR 356 thousand has been reported as proportionate expense in 2004. The calculation of the fair value is based on the Black-Scholes Option Pricing Model. The share price at the time of granting the options is the closing price of the Andritz share on 17 May 2004 and amounts to EUR 37.05. The exercise price of EUR 37.53 was calculated in accordance to the rules of the option program. For the lifetime of the options a period of two years was assumed. The expected dividend yield was fixed with 3%, a discount rate of 5% was used. The expected volatility was calculated on the basis of the historical development of the share price of the Andritz share during the 30 months preceding the granting date of the options. Further parameters of granting the options were not used.

11. Statement of Liabilities

2004

(in TEUR)	Remaining term between 1 and 5 years	Remaining term over 5 years	Total non-current liabilities
Bonds	100,000	0	100,000
Bank loans	2,575	2,636	5,211
Obligations under finance lease	582	0	582
	103,157	2,636	105,793
Provisions non-current			77,800
			183,593

2003

(in TEUR)	Remaining term between 1 and 5 years	Remaining term over 5 years	Total non-current liabilities
Bonds	100,000	0	100,000
Bank loans	1,919	2,567	4,486
Obligations under finance lease	919	0	919
	102,838	2,567	105,405
Provisions non-current			72,969
			178,374

The interest bearing borrowings consist primarily of current bank loans at floating interest rates and fixed rates.

Property, plant and equipment amounting to EUR 3,414 thousand and EUR 17,781 thousand as at 31 December 2004 and 2003, respectively, has been pledged as security for long-term debt.

12. Other Liabilities

(in TEUR)	2004	2003
Payables to associated companies	125	297
Other personnel related costs	44,410	40,164
Other order related costs	44,471	51,726
Deferred income	3,515	1,093
Other	57,313	55,601
	149,834	**148,881**

H. Notes to the Consolidated Income Statement

13. Sales

(in TEUR)	2004	2003
Contract revenue recognised as sales in the period	944,988	767,380
Other	536,359	457,610
	1,481,347	**1,224,990**

14. Other Operating Income

(in TEUR)	2004	2003
Profit on disposal of fixed assets excluding financial assets	3,691	371
Exchange rate gains	9,390	9,919
Rental income	1,582	1,584
Other	6,136	8,225
	20,799	**20,099**

15. Personnel Expenses

(in TEUR)	2004	2003
Wages	59,050	53,516
Salaries	197,267	181,676
Pension expenses	10,499	22,166
Severance expenses	5,551	606
Social security and payroll related duties	37,601	35,171
Other social payments	12,738	11,662
	322,706	**304,797**

16. Other Operating Expenses

(in TEUR)	2004	2003
Exchange rate losses	14,821	6,647
Sales expenses	89,503	76,740
Administration expenses	23,826	23,877
Other	81,133	69,164
	209,283	**176,428**

17. Financial Results

(in TEUR)	2004	2003
Income / expenses from associated companies	(1,543)	(419)
Other interest and similar income	8,454	6,469
Interest and similar expenses	(6,475)	(5,463)
Interest result	1,979	1,006
Income / expenses from investments	64	95
Adjustments of financial assets	304	83
Profit/losses on disposal of short-term securities	(4)	(43)
Adjustment to market value of short-term securities	293	(336)
Other income / expenses from financing activities	657	(201)
	1,093	**386**

18. Income Taxes

(in TEUR)	2004	2003
Current tax expense	(18,187)	(20,810)
Deferred tax income relating to the origination and reversal of temporary differences	(4,643)	2,009
	(22,830)	**(18,801)**

Changes in the deferred income tax account consist of the following:

(in TEUR)	2004	2003
Deferred tax assets	18,876	17,696
Liabilities for deferred taxes	(50,546)	(45,803)
Balance as at 31 December, as previously stated	(31,670)	(28,107)
Deferred tax expense relating to the origination and reversal of temporary differences		
income statement charge	(280)	4,040
charged to equity	(4,889)	(7,603)
	(36,839)	**(31,670)**
thereof		
Deferred tax assets	21,854	18,876
Liabilities for deferred taxes	(58,693)	(50,546)

The reconciliation of the effective tax rate to the tax rate used is as follows:

(in TEUR)	2004	2003
Earnings before taxes (EBT)	77,228	49,318
Tax at the applicable tax rate (34% in 2004 and 2003)	(26,257)	(16,768)
Non-deductable amortization of goodwill	(5,673)	(4,828)
Tax effect of		
adjustment of using new taxes	9,762	(425)
other changes	(662)	3,220
	(22,830)	(18,801)
Current income tax	18,187	20,810
Changes in deferred taxes charged to the income statement	**(4,643)**	**2,009**

Income tax effects related to tax rate changes are the result of the decrease of Austrian tax rate from 34% to 25% from 2005 on.

Deferred tax assets and liabilities for deferred taxes as at 31 December 2004 and 2003 are the result of the following temporary valuation and accounting differences between book values in the IFRS consolidated financial statements and the relevant tax bases:

	2004 Deferred tax		2003 Deferred tax	
(in TEUR)	Asset	Liability	Asset	Liability
Intangible assets	1,575	(435)	1,390	(1,146)
Tangible assets	2,634	(8,405)	1,416	(10,064)
Financial assets	193	(46)	5	(33)
Inventories	121,636	(3,132)	137,554	(441)
Receivables	6,476	(19,826)	509	(26,251)
Short-term securities and shares	0	(89)	0	(113)
Other assets	338	(268)	0	(6)
	132,852	**(32,201)**	**140,874**	**(38,054)**
Provisions	16,584	(23,159)	20,026	(29,735)
Liabilities	4,520	(128,287)	8,159	(123,172)
Deferred income	10,075	0	7,996	(141)
	31,179	**(151,446)**	**36,181**	**(153,048)**
Tax loss carry-forwards	7,539	0	5,495	0
Deferred tax assets / liabilities	171,570	(183,647)	182,550	(191,102)
Valuation allowance for deferred tax assets	(14,060)	0	(12,959)	0
Other deferred taxes from consolidation	(1,425)	0	(615)	0
IAS 39 reserve	0	(9,277)	0	(9,544)
Offset within legal tax units and jurisdiction	(134,231)	134,231	(150,100)	150,100
Net deferred tax assets and liabilities	**21,854**	**(58,693)**	**18,876**	**(50,546)**

19. Earnings per Share

Basic earnings per share (see Consolidated Income Statement) are calculated by dividing the net profit for the period attributable to ordinary shareholders by the weighted average number of ordinary shares outstanding during the period.

I. Segment Information

Segment information is prepared on the following basis:

Business segments
The Andritz Group conducts the majority of its business activities in the following areas:

a. Pulp and Paper (P+P)
b. Rolling Mills and Strip Processing Lines (WB)
c. Environment and Process (EP)
d. Feed Technology (FT)

All other minor business activities are included in "Other".

Geographical segments
The Group's activities are conducted predominantly in Europe, North America and Asia.

2004
Business segment data

(in TEUR)	P + P	WB	EP	FT	Other and transition	Total
Sales	884,652	235,356	217,941	99,588	43,810	1,481,347
Segment result before amortization of goodwill	64,812	12,141	9,916	2,204	3,746	92,819
Total assets	392,170	75,460	156,511	59,376	469,869	1,153,386
Total liabilities	433,786	102,197	96,227	21,897	22,198	876,305
Capital expenditure	14,304	3,192	7,879	1,622	2,371	29,368
Depreciation and amortization of tangible and intangible fixed assets	13,055	2,152	2,682	2,880	1,770	22,539
Share of net profit / loss of associates	(1,601)	0	58	0	0	(1,543)
Investment in associates	1,428	0	674	0	0	2,102

Geographical segment data

(in TEUR)	Europe	North America	Asia	Rest of the world and consolidation	Total
External sales	587,839	248,105	442,802	202,601	1,481,347
Total assets	1,356,505	220,957	35,086	(459,162)	1,153,386
Capital expenditure	20,298	6,449	2,031	590	29,368

2003
Business segment data

(in TEUR)	P + P	WB	EP	FT	Other and transition	Total
Sales	810,276	173,142	110,353	99,177	32,042	1,224,990
Segment result before amortization of goodwill	49,135	4,413	1,485	4,801	3,299	63,133
Total assets	444,333	65,418	87,272	68,631	301,258	966,912
Total liabilities	384,590	67,943	47,007	25,991	202,281	727,812
Capital expenditure	9,301	1,419	1,545	6,637	1,647	20,549
Depreciation and amortization of tangible and intangible fixed assets	14,763	2,171	1,828	2,626	(151)	21,237
Share of net profit / loss of associates	(419)	0	0	0	0	(419)
Investment in associates	3,022	0	0	0	0	3,022

Geographical segment data

(in TEUR)	Europe	North America	Asia	Rest of the world and con-solidation	Total
External sales	645,049	259,729	236,738	83,474	1,224,990
Total assets	1,170,450	178,547	18,533	(400,618)	966,912
Capital expenditure	15,829	2,232	2,237	251	20,549

J. Notes to Cash Flow Statements

Cash flows from acquisition of subsidiaries

	Business area			Total	Total
(in TEUR)	P+P	WB	EP	2004	2003
Cash and cash equivalent	(1,028)	0	(1,511)	(2,539)	(4,449)
Receivables	(836)	0	(20,235)	(21,071)	(6,886)
Inventories	(186)	(2,500)	(13,898)	(16,584)	(5,170)
Property, plant and equipment	(34)	(1,450)	(8,060)	(9,544)	(14,027)
Financial assets	0	0	(613)	(613)	(160)
Financial debt	0	0	2,834	2,834	9,553
Accounts payable and accrued expenses	2,775	0	39,307	42,082	11,673
Net assets / liabilities acquired	691	(3,950)	(2,176)	(5,435)	(9,466)
Cash and cash equivalent	1,028	0	1,511	2,539	4,449
Goodwill	(1,080)	(37)	(1,344)	(2,461)	(8,678)
Changes in minority interests	142	0	0	142	(248)
Net cash flow	**781**	**(3,987)**	**(2,009)**	**(5,215)**	**(13,943)**

K. Financial Instruments

a. Foreign Exchange Risk Management

The Group mostly enters into fixed forward foreign exchange contracts in managing its foreign exchange risk resulting from cash flows from current business activities. Transaction risk is calculated in each foreign currency and includes currency denominated assets and liabilities and certain off-balance sheet items such as highly probable future cash flows for firm commitments and highly probable purchases and sales. The currency risks of the Group occur due to the fact that the Group operates and has production and sales in different countries worldwide. The Group has designated the major part of its forward exchange contracts as cash flow hedges and carries them at fair value.

b. Liquidity Risks

The group's policy is to maintain sufficient cash and cash equivalents or have available funding through an adequate amount of credit facilities to meet its commitments. Any excess cash is invested mostly in listed securities which are actively traded.

c. Credit Risks

Credit risks, or the risk of counterparties defaulting, are controlled by the application of credit approvals, limits and monitoring procedures. Where appropriate, the corporation obtains guarantees from governmental export agencies or similar private institutions to reduce the risk of a counterpart defaulting. Credit risk associated with the investment of liquid funds and securities is limited by the fact that the Group works only with financial partners who can demonstrate sound creditworthiness. For some financial assets and financial liabilities the Group has a legally enforceable right to set off. These amounts are only reported on a net basis. For all existing risks, valuation allowances are included, so that the Managing Board believes that no other credit risk will occur.

d. Interest Risk

In June 2002 the company has issued a bond for a nominal value of MEUR 100 with a repayment period of 6 years and nominal interest rate of 6% p.a. For this bond an interest swap has been used to hedge the risk from the fixed interest rate of the bond. By this interest swap the fixed interest rate has been changed for the whole repayment period to a variable interest rate based on 1 month's Euribor.

The Managing Board believes that the exposure to interest rate risk of remaining financial assets and liabilities is negligible. Consequently, additional derivative instruments for hedging of these interest risks are not used within the Group.

The weighted average effective interest rates at the balance sheet date were as follows:

	2004	2003
Cash on current accounts	1.4%	0.9%
Short term deposits	2.2%	4.1%
Securities, short term	3.5%	3.9%
Securities, long term	2.7%	3.1%
Overdraft on current accounts	2.3%	3.0%
Short term loans	3.5%	4.1%
Long term loans	5.0%	5.0%
Bond	3.2%	3.2%

e. Fair Value of Financial Instruments

Fair value estimation

The fair value of forward foreign exchange contracts is determined using forward exchange market rates at the balance sheet date.

At the balance sheet date, the fair values of forward contracts designated as cash flow hedges were as follows:

(in TEUR)	Remaining period not exceeding 1 year	Remaining period more than 1 year	Total 2004	Total 2003
US dollars	22,010	1,747	23,757	24,110
Swedish crowns	(17)	0	(17)	30
Singapore dollars	5,573	3,116	8,689	7,511
Other currencies	407	0	407	(70)
	27,973	4,863	**32,836**	**31,581**

Fair values of forward contracts designated as cash flow hedges are included directly in equity.

(in TEUR)	2004	2003
Forward contracts with positive fair values	37,815	33,175
Forward contracts with negative fair values	(4,979)	(1,594)
	32,836	**31,581**

The fair value of the interest swap was EUR 9,666 thousand as of end at 2004 (EUR 9,019 thousand as of end of 2003).

The Group's principal financial instruments not carried at fair value are trade receivables, finance instruments and other current assets, trade and other payables, bank overdrafts, long-term borrowings.

Cash and cash equivalents, current investments and other non-current financial assets

The carrying amount of cash and other financial assets approximates fair value due to the relatively short-term maturity of these financial instruments.

Non-current and current securities

The fair values of publicly traded instruments are stated based on quoted market prices. For all other instruments for which there are no quoted market prices, a reasonable estimate of fair value has been calculated based on the expected cash flows or the underlying net asset base for each investment. Non-current securities of the Group are classified as "available for sale" and are valued at their quoted market price at the balance sheet date.

Receivables and payables

The historical cost carrying amounts of receivables and payables which are all subject to normal trade credit terms correspond basically to their fair values.

Short-term borrowings

The carrying amount approximates fair value because of the short period to maturity of those instruments.

Long-term borrowings

The fair value of the long-term debts is based on the current rates available for debt with the same maturity profile. The fair value of non-current borrowings and other payables with variable interest rates approximates their carrying amounts.

The carrying amount is equal to the estimated fair value of the Group's financial instruments. The interest risk of the bond has been hedged by an interest swap. Management believes that the exposure to interest rate risk of the remaining financial assets and liabilities is negligible.

IAS 39-Reserve

The table below shows the movements in the hedging reserve in equity in respect to gains and losses on forward contracts designated as cash flow hedges during the period.

(in TEUR)	2004	2003
Balance as at 1 January	**18,511**	**8,601**
Movements in the period:		
Gains and losses from changes in fair value	14,635	20,972
Deferred income taxes thereon	(4,096)	(7,119)
Transfers to income statement	(12,764)	(5,974)
Deferred income taxes thereon	4,363	2,031
Balance as at 31 December	**20,649**	**18,511**

L. Leases

The Group and its subsidiaries have entered into various operating lease agreements for machinery, offices and other facilities as lessees. Lease terms do not contain restrictions on the Group's activities concerning dividends, additional debt or further leasing. Rent expense amounts to EUR 13,656 thousand in 2004 and EUR 11,420 thousand in 2003 respectively.

Future lease payments under non-cancelable operating lease are as follows:

(in TEUR)	2004	2003
Next year	4,260	3,174
1 year to 5 years	8,587	11,147
After 5 years	4,203	20
	17,050	**14,341**

M. Commitments

Commitments arising from contracts for expenditure on property, plant and equipment are only in the normal course of business. For 2004 these commitments amount to EUR 3,026 thousand and for 2003 to EUR 494 thousand.

N. Contingent Liabilities

a. Litigation

Various legal actions and claims are pending or may be asserted in the future against Group companies from litigations and claims incidental to the ordinary course of business. These mainly include product liability claims and contractual and intellectual property disputes. Related risks have been analysed as to likelihood of occurrence. Although the outcome of these matters cannot always be ascertained with precision, the Managing Board believes that the outcome of these legal actions and claims, individually or in the aggregate, will not have a material adverse effect on the Company's business, liquidity, result of operations or financial position.

As of December 31, 2004, Andritz Inc., as subsidiary of the Company, was one of many defendants in a total of approximately 85 asbestos cases in the US. Nearly all of these cases involve claims by multiple plaintiffs against multiple defendants. In aggregate the cases involve a total of approximately 19,500 plaintiffs. Andritz Inc. does not believe it should be found liable in connection with any of these claims and plans to vigorously defend each claim. As the vast majority of claims against Andritz Inc. have not as yet been stated with specificity it is not possible for Andritz Inc. to assess the full extent of its potential exposure to asbestos litigation, which could be significant. Andritz Inc. has not had a judgment of liability rendered against it in connection with an asbestos claim. During the last years, approximately 22 asbestos cases and about 4,150 claims against Andritz have been dismissed, and one claim has been resolved

mutually without Andritz incurring any significant liability or expense. It is possible that the final adjudication or settlement of such proceedings could have a material adverse effect on the Company's business, results of operations and financial condition. The Group believes it has several potential sources of recovery including insurance and/or contractual indemnities from the previous owners of the relevant businesses of Andritz Inc. Whether any indemnities and/or insurance will apply depends on the particular facts of each plaintiff's claim. Because the claims against Andritz in most cases have not as yet been stated with specificity and for the reasons set forth below, it is not possible for the Group to assess the amount of its expected recovery. Moreover, certain indemnitors or insurers have contested and others may contest the applicability of the indemnity or insurance in question, and there can be no assurance that the Group will prevail in any dispute relating to the applicability of such insurance or indemnity to existing or future claims against a Group company.

b. Other Contingencies

(in TEUR)	2004	2003
Outstanding bank guarantees concerning contracts with customers	217,219	172,333
Other contingencies	10,660	6,621

According to several contracts the customer is entitled to hold retention until the end of the warranty period. In order to redeem these retentions bank guarantees were submitted to the customer. In addition, other bank and company guarantees were issued as guarantees for advance and progress payments from customers. The management believes that the provisions for warranties and the shown liabilities are sufficient. No additional financial outflows from these guarantees are expected. In some cases Andritz has similar retention agreements with suppliers. In order to settle these retentions Andritz receives bank guarantees from the suppliers.

0. Related Party Transactions

Only minor business relations exist with the shareholders.
The shareholders are:

Free Float	72%
Certus Beteiligungs-GmbH	26%
Management	2%

Emoluments of the Managing Board

A provision of EUR 4,185 thousand in 2004 (EUR 4,012 thousand in 2003) has been recorded for pensions of former members of the Managing Board and their dependants; the current year expense for these pensions amounted to EUR 524 thousand for 2004 (EUR 140 thousand for 2003).

Directors' total remuneration for 2004 amounted to EUR 4,135 thousand (thereof EUR 2,891 thousand for profit related bonuses) and for 2003 to EUR 3,633 thousand.

P. List of Consolidated Subsidiaries

Material Affiliated Companies	Place of Incorporation	Ownership Interest direct	Ownership Interest indirect
Andritz Denmark A/S	Esbjerg/Denmark	100%	
Sprout-Matador A/S	Esbjerg/Denmark		100%
Andritz (USA), Inc.	Arlington/Texas (USA)	100%	
Andritz Inc.	Muncy/Pennsylvania (USA)		100%
Andritz-Ruthner, Inc.	Arlington/Texas (USA)		100%
Andritz Bird Inc.	Houston/Texas		100%
Andritz S.A.S.	Velizy/France	100%	
Andritz Selas S.A.S.	Gennevilliers/France		100%
Andritz Ingenieria S.A.	Madrid/Spain	100%	
Andritz GmbH	Hemer/Germany	100%	
Sundwig GmbH	Hemer/Germany		75%
Andritz Fiedler GmbH & Co KG	Regensburg/Germany		100%
Andritz Separation GmbH	Cologne/Germany		100%
Andritz Fliessbettsysteme GmbH	Ravensburg/Germany	100%	
Andritz Kaiser GmbH	Bretten-Gölshausen/Germany		100%
Andritz Filtrationstechnik GmbH	Selb/Germany		100%
Andritz Oy	Helsinki/Finland	100%	
Savonlinna Works Oy	Savonlinna/Finland		100%
Andritz Ltd./Ltèe.	Montreal/Canada	100%	
Andritz Fiber Drying Ltd.	Lachine/Canada		100%
Andritz AB	Örnsköldsvik/Sweden	100%	
Andritz Fiber Drying AB	Växjö/Sweden		100%
Andritz Ltd.	Chesterfield/UK	100%	
Andritz-Kenflo Foshan Pump Co. Ltd.	Foshan/China	60%	
Andritz Technologies Ltd.	Foshan/China	100%	
Andritz Dies & Rolls B.V.	Geldrop/Netherlands	100%	
Andritz Brasil Ltda.	Curitiba/Brazil	100%	

Graz, February 16, 2005

Wolfgang Leitner Markku Hänninen Franz Hofmann Friedrich Papst Bernhard Rebernik

REPORT OF THE SUPERVISORY BOARD

The Supervisory Board was regularly informed by the Managing Board both verbally and in writing of the status of the Company, its development, and major business transactions. The transactions that were subject to approval by the Supervisory Board were investigated and reviewed together with the Managing Board.

Gregor Böhm withdrew from the Supervisory Board in 2004. At the 97th Annual General Meeting, Klaus Ritter was elected as a new member of the Supervisory Board.

The Financial Statement of Andritz AG and the Consolidated Financial Statements as of December 31, 2004, as well as the Status Reports for 2004, were audited (also including the accounts) by Auditor Wirtschaftsprüfungs- und Steuerberatungsgesellschaft m.b.H, Vienna, who had been appointed as auditors by the Meeting of Shareholders and who certified the Financial Statements.

The Supervisory Board examined the Financial Statements certified by the Auditors, as well as the proposed appropriation of profit and the report of the Managing Board, and concurs with the result of the Audit.

The Supervisory Board approved the Financial Statements, which are herewith adopted in compliance with Article 125 paragraph 2 of the Corporation Act.

Kurt Stiassny
Chairman of the Supervisory Board

Graz, March 2005

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Air-dried pulp
Pulp is described technically as air-dried when its moisture content is in equilibrium with the ambient atmosphere. Commercially, pulp is usually described as air-dried when the moisture content of the pulp is 10%.

Annealing
Process in which metal is heated, retained at a suitable temperature, then cooled rapidly or slowly to reduce internal stress. As a result, the metal becomes softer and more workable, particularly in cold processes.

APMP/P-RC™
Alkaline Peroxide Mechanical Pulping is a refining process preceded by multi-stage impregnation with alkaline peroxide bleach liquors. The wood chips are compressed and destructured prior to addition of the bleach liquors. APMP systems can operate without a post bleach plant since bleaching takes place up front in the process. P-RC™ APMP is a technology that distributes chemicals between the impregnation steps and a small interstage bleach tower located between the primary and secondary refining stages. "P-RC" stands for Preconditioning-Refiner Chemical.

BCTMP
Bleached Chemi-Thermo Mechanical Pulping. The prefix "B" indicates that a post bleach plant, most commonly alkaline peroxide, follows the CTMP pulping step.

Black liquor
Mixture of spent cooking chemicals and dissolved wood material remaining after sulphate cooking. Black liquor is recovered during pulp washing, concentrated by evaporation, and burned in the recovery boiler to regenerate the cooking chemicals and also produce energy for the mill.

Brownstock
The pulp obtained directly from the cooking process, before intercellular materials and cooking liquors have been removed.

Cellulose
The primary constituent of pulp. Chemically, cellulose is a long-chained carbohydrate consisting of repeating chains of a single simple sugar, glucose.

Chemical pulp
A generic term which describes pulp produced by chemical (as opposed to mechanical) processes. These chemical processes include kraft (sulphate) and sulphite processes.

Chemical recovery
In chemical pulping, the collection, recovery, and regeneration of cooking chemicals so that they can be utilized again in the process.

Chipping
A process in a woodroom area in which the debarked logs are converted into chips for pulping or refining processes. Chipping is typically done by horizontally or gravity-fed disc chippers.

CrescentFormer
Sheet forming section in a tissue machine, with the pulp suspension jet-out of the headbox flowing between a felt and a wire both moving at the same speed.

CTMP
Chemi-Thermo Mechanical Pulping is a pressurized refining process which is preceded by the addition of sulphite in a single impregnation stage. The refining pressure for CTMP is usually lower than for TMP since the sulphite treatment lowers the softening temperature of the wood lignin. By altering the parameters of the process (chemical concentration, temperature, etc.) it is possible to customize the pulp for particular end uses. CTMP may be bleached, in which case it is known as BCTMP.

Deinking
A process in which most of the ink, filler, and other extraneous material is removed from printed and/or unprinted recovered paper. The result is a pulp which can be used in the manufacture of new paper, including tissue, printing, writing, and office papers.

Delignification
Removal of lignin from wood fibers (cellulose and hemi-cellulose). This is performed primarily in the cooking process and further carried out in the washing and bleaching process. In bleaching, ECF pulp mills use chlorine compounds (chlorine dioxide) for this process, although it can be achieved with oxygen, hydrogen peroxide, or ozone (which do not create organochlorines).

Digester
A pressure vessel, typically cylindrical used to treat wood chips or other cellulosic materials with chemicals under elevated pressure and temperature, so as to produce pulp for papermaking.

DIP
Deinked Pulp. Pulp produced from deinked wastepaper, like old newsprint and old magazines. Most DIP is used in integrated paper mills, but some is sold on the market, in which case it is usually dried or wet-lapped.

Dispersion
A process stage in the treatment of recycled fibers. Several process stages are needed to remove the impurities (e.g. glue, ink) from the fibers. It is impossible, however, to eliminate all impurities. Dispersing reduces these particles to such a small size that they are no longer detrimental to paper quality.

ECF
Elemental Chlorine-Free pulp. Pulp bleached without the use of any elemental chlorine. However, chlorine compounds (e.g. chlorine dioxide) may be used in the bleaching process.

EPC
Engineer-Procure-Construct. A project delivery where one supplier assumes total responsibility for product and project engineering, equipment and construction procurement, and on-site construction.

Extrusion
A continuous process in which animal feed components are cooked under pressure in a combination of frictional and steam heat in order to expand the resulting product and convert it into feed granulate. This process is very common in production of pet food, fish feed, and cereals.

Fiberline
The machines and process systems involved in converting wood chips into pulp. Process steps can include cooking, washing, screening, knot separation, refining, and, if required, bleaching.

Grade
A class or level of quality of pulp or paper which is distinguished from other pulps or paper on the basis of its use, appearance, quality, manufacturing history, raw materials, or a combination of these factors.

Green liquor
Aqueous solution of the smelt resulting from the burning of thickened waste liquor in the recovery boiler. Mainly consists of sodium carbonate and sodium sulphide.

GSM
Grams per Square Meter, or g/m^2. A measure of the basis weight of paper and board, or its grammage.

Hammermill
Machine used for pulverizing raw materials for various applications including animal feed and preconditioning for refining applications; the raw materials are hammered by a series of steel hammers. The pulverized material exits through a screen plate with apertures. The size of the apertures and hammers, including the number of hammers, can be changed to achieve desired results.

HC
High Consistency. Pulp suspension with a consistency of 18–40%.

Headbox
Located at the wet end of a paper machine, the headbox delivers a uniform jet of paper slurry (furnish or stock) having essentially the same width as the paper web to be produced. The word is derived from earlier days when the hydrostatic head within the box was sufficient to deliver a jet velocity matching the speed of the forming fabric. Today, the pressure within a modern headbox is maintained by pumps and controls.

Hexenuronic acid
Acid formed during chemical pulping that reacts with several bleaching chemicals, thus increasing their consumption. The elimination of hexenuronic acid reduces the need for bleaching chemicals and lowers the production costs of bleached pulp. It also helps to keep the pulp's brightness longer.

Kraft pulp
The Kraft process is the world's predominant chemical pulping process because of the strength of pulp it produces. The process involves cooking (digesting) wood chips in an alkaline solution, where the active cooking agent is a mixture of sodium hydroxide and sodium sulphide. The dis-

solved lignin is later removed, leaving behind the cellulose fibers. The term “kraft” is interchangeable with “sulphate” and is derived from a German word which means “strong.”

LC
Low Consistency. Pulp suspension with a consistency of 1–6%.

Lignin
One of the three main constituents of wood, along with cellulose and hemi-cellulose. Lignin acts as the cementing agent in wood, binding the cellulose fibers together.

Lime kiln
A long, slowly rotating kiln used to reburn lime mud (calcium carbonate) to form calcium oxide, which can be re-used in causticization.

LMD-Filter™
The LMD-Filter™ is a lime mud precoat filter designed to achieve optimum dry solids with excellent washing efficiency for lime mud. The filter ensures efficient lime kiln operation at low heat consumption. “LMD” stands for “Lime Mud Drying.”

LMD lime kiln
A rotary kiln with an external dryer for lime mud. LMD stands for “Lime Mud Drying.”

Market pulp
Pulp produced from wood, and sold on the open market, as opposed to that which is produced for internal consumption by an integrated paper mill or affiliated mill.

MC
Medium Consistency. Pulp suspension with a consistency of 6–18%.

MDF
Medium Density Fiberboard. Board made of mechanical pulp from the refiner process.

Mechanical pulp
A generic term describing pulps produced by a mechanical (as opposed to a chemical) process. Also known as “high-yield” pulp as the processes utilize a higher proportion of the wood raw material than the chemical processes. There are a large number of mechanical pulping processes including GWD, PGW, RMP, TMP, CTMP, APMP, CMP, etc. Mechanical pulps are produced using either grinders or refiners. Mechanical pulps are used principally in the production of newsprint, magazine papers, printing papers, specialty papers, tissue, toweling, paperboard, and wallboard.

NBSK
Northern Bleached Softwood Kraft. The industry’s benchmark grade of pulp for pricing and inventory data. Produced primarily in Canada and the Nordic countries. Some NBSK is also produced in the Northwestern USA and Russia.

NCG
Non-Condensable Gas. Odorous discharges from mill processes that in previous years were vented to the atmosphere. Today, NCGs are collected and disposed of to meet environmental regulations and to stop the nuisance role these gases play with surrounding communities.

NO_x
Nitrogen Oxide. A major component of gaseous emissions from a boiler or lime kiln.

Norscan
A term describing the group of five countries which have historically been the world’s principal producers of market pulp – Canada, USA, Sweden, Finland, and Norway.

Pickling
Process for chemical treatment of oxidized steel, applied to obtain a clean metallic surface. Here, the steel is dipped into a hot bath of diluted sulphuric or hydrochloric acid.

PrimeLine™
The PrimeLine™ tissue machine system is fully modularized for the production of customized tissue grades. It includes the PrimeFlow™ headbox, PrimeForm™ former, the PrimePress™ or TissueFlex™ shoe press, PrimeDry™ T-rib Yankee, EquiDry™ Yankee hood, PrimeReel™, and PrimeControl™ automation system. Each PrimeLine™ component is selected for specific quality requirements from standard tissue grades to super-soft tissue products.

Recausticizing
A process by which green liquor from sulphate pulping is converted to white liquor, thus allowing the cooking chemicals to be re-used. In causticization, sodium carbonate of green liquor is converted to sodium hydroxide by using calcium oxide. Lime mud, which is formed in causticization reactions, is reburnt in the lime kiln.

Recovery boiler
In kraft pulping, a special boiler where the black liquor from the cooking process is burned, after concentrating it in an evaporation process. The residual carbon is burned and the inorganic sodium salts are melted and recovered.

Recycled fiber
Fiber derived from wastepaper which has been recycled.

Recycled paper
Paper which has been made partly or wholly from recycled fiber.

Refiner
Machine used to grind pulp between two discs. Refiners can operate at low consistency or at higher consistencies. At low consistencies the material is fed to the refiner using a pump. At higher consistency levels conveying devices are used. Other refiner types are used for breaking down wood chips into fibers.

Rolling mill
Plant in which steel strip is formed between two rolls rotating at the same speed in opposite directions.

RTS™
Retention time, Temperature, Speed refining. A TMP process, which produces better quality mechanical pulp at lower energy consumption. Improved fiber properties are obtained by rapid heat treatment of the fibers at higher temperatures, while optical properties are preserved due to the low retention time. The process is operated at higher refiner disc speeds, most commonly 2,300 rpm.

Sludge
Waste created during the biological process of treating effluent from a manufacturing or municipal wastewater process.

Stock pump
Special centrifugal pump for water and fiber suspensions.

TAD
Through-Air Drying. Process for tissue drying with the paper web running over a perforated drum where hot air is blown through the web.

TCF
Totally Chlorine Free. Pulp bleached without the use of chlorine or chlorinated chemical compounds.

Tissue
A general term indicating a class of papers which include grades such as toilet, facial, napkin, towels, wipes, and special sanitary papers. Desirable characteristics in these types of tissue papers are softness, strength, and freedom from lint. Tissue papers are divided into three major categories: At-Home (or Consumer), Away-from-Home (or Commercial & Industrial), and Specialty.

TMP
Thermo-Mechanical Pulping is a refining process in which wood chips are refined in a pressurized refiner. The process can involve from one to three refining stages in the mainline; however, two stages are most common. The higher temperatures help soften the chips, which results in higher pulp strength compared to atmospherically refined pulps (RMP). TMP relies on mechanical energy rather than chemicals to convert wood into pulp. TMP pulps are most commonly used in newsprint and magazine papers.

Virgin fibers
The raw material for making paper, produced either chemically or mechanically by removing the cellulose fibers from the structure of the wood or from other materials, such as used/recycled rags, bagasse, and straw.

Wet end
Section at the beginning of a paper or pulp dewatering machine. At the wet end, the pulp enters the machine and the bulk of the water is removed by dewatering, suction, and press rolls in order to obtain a paper web that can be fed through a drying section.

White liquor
A strongly alkaline solution used in the cooking (digesting) process. Mainly consists of sodium hydroxide and sodium sulphide.

FINANCIAL GLOSSARY

ATX
Austrian Traded Index.
Price index calculated by the Vienna Stock Exchange, containing the most actively traded shares on the Vienna Stock Exchange. The ATX comprises approx. 20 shares, weighted in the index according to market capitalization.

ATX Prime
Price index calculated by the Vienna Stock Exchange and containing all the shares of the ATX Prime Market segment.

Authorized capital
Authorization by resolution of the shareholders' meeting allowing the managing board to increase the share capital by a maximum of 50% within five years by issuing new shares.

Chart
Graph showing the daily, weekly or monthly prices for a particular share for a certain period.

Continuous trading
Continuous handling of all orders where price and quantity requested match up. Transactions can be concluded at any time during the opening hours of the stock exchange.

Dividend
That part of a company's profits paid out to the shareholders. The amount of the dividend is proposed by the managing board of a company and approved in a resolution by the shareholders' meeting.

EBIT(D)A
Earnings before Interests, Taxes, (Depreciation), and Amortization of goodwill.
This earnings measure is of particular interest in cases where companies have large amounts of fixed assets which are subject to heavy depreciation charges or in the case where a company has a large amount of acquired intangible assets on its books and is thus subject to large amortization. EBITDA is a good measure of comparing companies within industries.

EBIT
Earnings before Interests and Taxes.
The EBIT is part of the profit and loss accounts; also often called "operating profit."

Ex-dividend
The price of the share is lowered by the amount of the dividend paid a few days before the day a dividend is paid out.

Free float
Portion of a company's shares that is held by a large number of private and institutional investors.

IFRS
International Financial Reporting Standards.
IFRS are international accounting standards intended to guarantee better comparability of annual accounts presented by companies from different countries.

IPO
Initial Public Offering.
Admission of a company to list its shares on the stock exchange by selling company shares to the public.

Investor Relations
Interface between the company and the financial community. An Investor Relations department should regularly provide transparent, comprehensive and up-to-date information on developments within the company to shareholders, financial analysts and investors.

ISIN
International Securities Identification Number.
Individual identification number of a security enabling computerized international registration of a security.

Market capitalization
The market price of a listed company. This is calculated by multiplying the current share price by the number of company shares.

MEUR
Million Euros

No par value share
Share with no par value and which refers to a certain interest in the company without stating a fixed amount.

Par value
Face value of a security. This is the amount the shareholder has contributed to the nominal share capital of the company. The par value gives no indication of the actual value of the share.

Prime market
Market segment of the Vienna Stock Exchange which contains stocks that are admitted to listing on the Official Market or Semi-Official Market and meet special additional listing criteria.

Roadshow
The management of a listed company presents the company's activities, strategies and long-term prospects to national and international institutional investors and retail shareholders.

Share
Certificate that represents a certain stake in the nominal capital of a stock company.

Shareholders' meeting
Body of a stock company which usually meets at least once a year and takes resolutions on important company matters according to company law.

Share capital increase
Increase in the nominal capital of a stock company. Equity capital is paid into the company.

SPO
Secondary Public Offering.
Selling of further shares of a company that is already publicly listed.

Volatility
Measure of the average fluctuation of a share price over a certain period. In statistics, the volatility is equal to the standard deviation.

WBI
Wiener Börse Index (Vienna Stock Exchange Index).
The WBI contains all shares listed on the Official Market and the Semi-Official Market. The WBI as overall index reflects the development of the Austrian stock market as a whole.

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