# CLOBAL DESTINATONS 

Annual Report 2005

## KEY FIGURES 2001-2005 OF THE ANDRITZ GROUP (IFRS)

## Financial Figures in MEUR

|  | 2005 | 2004 | 2003 | 2002 | 2001 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Order Intake | 1,975 | 1,837 | 1,394 | 1,300 | 1,121 |
| Order Backlog as of 31.12. | 1,696 | 1,439 | 1,054 | 904 | 740 |
| Sales | 1,744 | 1,481 | 1,225 | 1,110 | 1,319 |
| EBITDA ${ }^{1}$ | 131 | 115 | 84 | 81 | 95 |
| EBITA ${ }^{2}$ | 107 | 93 | 63 | 59 | 68 |
| Operating Result (EBIT) | 107 | 76 | 49 | 45 | 55 |
| Earnings before Taxes (EBT) | 110 | 77 | 49 | 46 | 60 |
| Net Income | 80 | 54 | 31 | 28 | 37 |
| Cash flow from Operating Activities | 237 | 208 | 5 | 76 | 72 |
| Capital Expenditure ${ }^{\text {3) }}$ | 27 | 29 | 21 | 23 | 24 |
| Employees as of 31.12. (excluding apprentices) | 5,943 | 5,314 | 4,771 | 4,601 | 4,545 |
|  |  |  |  |  |  |
| Fixed assets | 308 | 276 | 279 | 293 | 317 |
| Current assets | 1,083 | 877 | 688 | 617 | 625 |
| Equity ${ }^{4}$ | 329 | 277 | 239 | 229 | 240 |
| Provisions | 190 | 160 | 150 | 145 | 159 |
| Liabilities | 873 | 717 | 577 | 536 | 544 |
| Balance sheet total | 1,391 | 1,153 | 967 | 910 | 942 |
|  |  |  |  |  |  |
| EBITDA margin (\%) | 7.5 | 7.8 | 6.9 | 7.3 | 7.2 |
| EBITA margin (\%) | 6.1 | 6.3 | 5.1 | 5.3 | 5.2 |
| EBIT margin (\%) | 6.1 | 5.1 | 4.0 | 4.1 | 4.2 |
| Net Income/Sales (\%) | 4.6 | 3.6 | 2.5 | 2.5 | 2.8 |
| ROE (\%) ${ }^{5}$ | 24.3 | 19.5 | 13.0 | 12.2 | 15.4 |
| Equity Ratio (\%) | 23.6 | 24.0 | 24.7 | 25.2 | 25.5 |
| EV'/EBITDA | 6.3 | 4.4 | 5.2 | 2.4 | 2.1 |
| Depreciation/Sales (\%) | 1.4 | 1.5 | 1.7 | 2.0 | 2.0 |
| Amortization/Sales (\%) | 0.0 | 1.1 | 1.2 | 1.2 | 1.0 |

## Stock Exchange related Figures

|  |  | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 2}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Earnings per share (EUR) | $\mathbf{2 0 0 1}$ |  |  |  |  |
| Dividend per share (EUR) | 6.13 | 4.13 | 2.26 | 2.04 | 2.82 |
| Payout ratio (\%) | 2.07 | 1.4 | 1.0 | 0.9 | 0.9 |
| Equity attributable to shareholders per share (EUR) | 32.6 | 34.3 | 44.2 | 44.1 | 31.9 |
| Market Capitalization as of end of period (MEUR) | 25.0 | 20.7 | 18.0 | 17.2 | 19.3 |
| Share price at year-end (EUR) | $1,207.1$ | 729.3 | 493.4 | 298.9 | 276.9 |
| Highest closing price (EUR) | 92.85 | 56.10 | 37.95 | 22.99 | 21.30 |
| Lowest closing price (EUR) | 92.85 | 56.50 | 37.95 | 28.00 | 23.50 |

## 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: Total shareholders‘ equity incl. minority interests
[5] ROE (Return On Equity): Net Income/Equity
[6] Enterprise Value: Market capitalization based on year-end closing price minus net liquidity [7] Proposal to the Annual General Meeting

Financial Calendar 2006
02.03.2006 Results for 2005
29.03.2006 Annual General Meeting
03.04.2006 Ex-dividend
07.04.2006 Dividend payment
05.05.2006 First Quarter of 2006
04.08.2006 First Half of 2006
07.11.2006 First Three Quarters of 2006

## Europe

Austria
Graz (Headquarters of the Andritz Group) Vienna
Gzech Republic
Hradec Králové

## Denmark Esbjerg

## Finland

Helsinki
Hollola

## Hollola Kotka

 Savonlinคa Tampere Varkaus
## France

 Châteauroux Gennevilliers Haguenau Saint Martin Le Beau Scorbé-Clairvaux Vélizy-Villacoublay
## Germany

Bretten-Gölshausen
Cologne
Hemer-Sundwig
Kirchineim/Teck
Krefeld
Mettmann
Ravensburg
Regensburg
Selb
Senden

## Great Britain

Belper
Hull
Staffordshire

## Netherlands

Den Helder
Geldrop
Rotterdam

## Poland

Warsaw

## Romania

Bukarest
Cisnadie

## Russia

Moscow
St. Petersburg

## Slovakia

Humenné
Spisiská Nová Ves

## Spain <br> Barcelona

Madrid

## Sweden

Hedemora
Karlstad
Örnsköldsvik
Stockholm
Vallentuna
Växjö

## Switzerland



# CLOBAL DESTINAIONS 

## Vision

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

## 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 stee industry, solid/liquid separation, and animal feed production. Headquartered in Graz, Austria, the Group has about 5,900 employees worldwide. It manufactures and sells its products and services globally.

The Group is regarded as a technology leader in each of its Business Areas, with full-line capabilities in critical process areas. In addition, Andritz offers comprehensive services including the supply of replacement parts, the manufacture of engineered wear products, and the provision of technica support services, which help customers optimize production and reduce overall costs.

## Brat|

## Growing economy and an emerging force

 in the global pulp and paper industryArea
Population
Most populated city
$8,511,965 \mathrm{~km}$
186,112,794
São Paulo,
approx. 11 million inhabitants

## Key economic data

GDP (purchasing power parity)
GDP (official exchange rate)
GDP real growth rate
GDP per capita
(purchasing power parity) Inflation (consumer prices) Unemployment rate
Source: CIA World Factbook 2005
$\$ 005.6$ billon
$\$ 605.6$ billion
2.6\%
\$8,500
6.8\% 9.9\%




# GWE DEPEND UPON ANDRITZ TECHNOLOGY." 

Interview with Renato Guéron

President of Veracel Celulose S.A., Brazil

Through a series of strategic acquisitions, Andritz has transformed itself from a vendor of specialized equipment to a full-line supplier of pulping and chemical recovery solutions. Andritz delivered the complete fiberline (including the drying plant) for Veracel Celulose's greenfield mill in Brazil. We spoke with Renato Guéron, President of Veracel, about the role of technology and the relationship with Andritz.

## Experience

I've been involved in the pulp and paper industry since graduating with a degree in Pulp \& Paper Technology from the University of Maine, USA in 1968. I've worked in engineering, project management, operations, and I am now Chief Executive of Veracel.

## Process improvements

Throughout my career, the technology has continued to evolve. Brazil has continuously followed the best available technologies. Perhaps that is why the industry in Brazil is so effective. The most notable improvements have been in the environmental performance of the mills. Yet, we have not had to sacrifice yield (more usable fiber out of a tree and into the pulp) or quality (higher brightness and strength).

## Project management improvements

The advent of EPC (engineer-procure-construct) in this industry has been a tremendous boom. Before coming to Veracel, I worked at Aracruz, where we were among the
first to take the "risk" of doing an EPC project (an Andritz recovery boiler). Now, I think the risk would be in not doing it EPC. We are improving upon the EPC concept every time we do a project. Suppliers are much more interested in EPC and behaving as partners. Andritz guarantees schedule, cost, and performance for an entire process area. It makes our job of managing the project considerably easier and reduces our risk exposure.

## Single line advantages and risks

There was a time when no mill would take the risk of having one large piece of equipment - there was built-in redundancy with at least two of everything. The thinking was, "If we have only one, we have nothing." Times have changed. Suppliers like Andritz now have the technology and competence to make complete lines. Since we want to save money by making lower cost investments, we chose the single-line concept. If we now have only one, we have everything we want. This mill depends upon Andritz technology to make pulp. There is no backup position.

## The Veracel start-up

Our start-up was excellent. Our production is ahead of plan - we're producing more pulp than we thought we would at this point. More importantly, the quality of the pulp has been exceptional. One of the very important start-up tools was the Andritz dynamic simulator. I don't see any possibility for a new, big mill to be installed in the future without the use of a simulator. I would think that the simulator paid for itself within the first few days
of operation. Veracel construction was completed in 17 months and six months later we are consistently achieving design capacity. It's very important to start the return on investment quickly. Every day is important.

## Perfect partner

We gave out awards after the start-up and selected two perfect partners for this project. One was the Andritz consortium for the drying machine. The team had outstanding performance in meeting our schedules and always maintained a proactive attitude if a potential problem developed. We've had very good cooperation.



## SUSTAINABLE VERACEL

## Interview with Antônio Sergio Alipio <br> \author{ Forest Director of Veracel Celulose S.A Braz 

}As the largest single-line bleached eucalyptus pulp mill in the world, Veracel is a technological achievement. Veracel generated thousands of jobs during its construction, has created thousands of permanent jobs, and has brought significant improvements to the local infrastructure, healthcare, and education.

Veracel's forest management practices are also second to none. The company has committed to sustainable development of its resources, preservation, and enhancement of the environment, and sustainable social benefits for the surrounding communities.

Veracel took the initiative to create the largest nature conservation area in Northeastern Brazil (6,000 ha known as Veracruz Station). Veracruz Station has been named to the United Nations Educational, Scientific and Cultural Organization's (UNESCO) list of World Natural Heritage Reserves.

A key person responsible for maintaining and protecting these resources and ecosystems is Antônio Sergio Alipio, Forest Director of Veracel. We had the opportunity to speak with him about Veracel's commitment to sustainable development. To follow are his comments:

## Can you provide us with some background about the Veracel project?

The Veracel project was originally launched in 1991 as a forest project. The decision to build the mill was made in 2003 and construction started the same year. The mill became operational in May 2005. It has the capacity to produce 900,000 tons of bleached ECF eucalyptus pulp per year, exclusively from sustainable forest plantations using 3.2 million cubic meters of wood.

What is required for sustainable development of your business?
Sustainable development has at least three characteristics: economic, environmental, and social. The key is to keep these things in balance. When Veracel generates a profit, it also generates the resources for reducing environmental impact and improving living standards of the local people.

Environmental performance means creating more value with less ecological impact. It drives us to use our resources in the most productive way. When we avoid, recover or eliminate waste, we become more efficient and more competitive.

In the area of social progress, what activities is Veracel involved with?
We are part of a local society, a Brazilian society, and are therefore serious about ensuring that our actions have a positive impact on the social and economic well-being of local communities.

We have invested 21 million Real (8 million Euros) in education, health, and urban infrastructure improvements that benefit the local communities. We renovated workers' housing, several hospitals, and health clinics in the area. We invested in medical equipment plus six mobile dental care clinics. We built, restored and expanded schools.

We established an ecological park in nearby Eunápolis, and we support the whale-monitoring program along the coast in Bahia.

We also maintain a non-profit institute (The Veracel Institute) to support the education and healthcare projects in the surrounding municipalities. We are particularly proud of the education projects "To Be a Child" and "Lit tle Seeds", which benefit 1,350 children between 4 to 15 years old in five local municipalities.

Among other efforts, our company supports the cultivation of honey and piassava in areas close to our plantations. We have trained a group of Pataxó Indians to cultivate certain Atlantic rainforest species. Our intention is that they will establish local plant nurseries and replant their seedlings in natural forest areas. Or, they can use the plants to craft their own art products.

In addition, we support local small producers of door and window frames and of fruit packaging boxes by providing them with eucalyptus at nominal prices.

## What are the main points about <br> \section*{the Veracel forest?}

Veracel owns 172,982 ha of land in the State of Bahia. We did not convert Atlantic rainforests to eucalyptus plantations. Of our total land, 74,440 ha ( $43 \%$ ) are eucalyptus plantations. All of our plantations are planted on land previously used basically for pasture.

Plantation areas consist of a mosaic of eucalyptus and native forest formations. Areas that are not a part of the plantations are being rehabilitated to become Atlantic rainforest. This involves the planting of over 300 native Atlantic rainforest tree species, primarily endangered hardwoods. Since 1994, more than three million plants have been cultivated for reforestation of natural forests.

In order to maintain the landscape in the municipalities, the maximum share of our plantations is restricted to $15-20 \%$ ( $15 \%$ for coastal municipalities and $20 \%$ inland) of the land area. Today, our plantations make up approximately $5 \%$ of the land area of the ten surrounding municipalities. In order to maintain the landscape in the coastal area, no plantations are established within 10 km of the Atlantic Ocean.

Economically, we have a competitive advantage with our eucalyptus plantations. Brazil has some of the most productive forests in the world, and Bahia has the most
productive in Brazil. The climate here is ideal - warm and sunny, yet with nearly daily rainfall. Here in Bahia, we harvest about 50 cubic meters of wood on average per ha/year - about ten times more than in Finland. A eucalyptus tree in Bahia grows to about 30 meters in length and 20 centimeters in diameter in seven years.

## What are the main points of your forest management policy?

My 2,400 forestry workers, and the third parties we work with, know that we are serious about our sustainable forestry policies. These policies were designed to comply with the strict requirements of internationally recognized certification programs.

For example, our plantations are established on unforested sites or lands previously converted for other purposes than tree production. The rights of indigenous peoples are respected by not establishing plantations on their territories. No one has been forced to resettle because of the activities of Veracel.

We do not plant any invasive tree species that may threaten biological diversity in the surrounding natural forests. Soil and water resources are effectively protected. We leave the logging residue (bark, branches, and tree tops) in the forest. This minimizes the leaching of nutrients from the soil and provides organic material for natural processes. We also use tracked harvesters in order to decrease pressure on the soil.

We also provide a very high level of occupational health and safety for our workers.

## Tell us about the Atlantic rainforest program.

The Atlantic coast rainforest, or Mata Atlantica as we call it in Brazil, contains one of the world's richest ecosystems. At its best, 450 different species of trees can be found in a single hectare.

Unfortunately, this native vegetation has dramatically been reduced over the past decades. Deforestation in this region has taken place mainly since the 1940's, and particularly in the 1970's. Forests located on flat or moderate terrain were converted primarily to grasslands for cattle grazing.

The conservation and rehabilitation of the Atlantic rainforest is a nationwide effort. In our nursery, we cultivate seedlings from 300 different species of vegetation that appear naturally in the Atlantic rainforest. In total, we pro-
duce about 600,000 seedlings a year. These seedlings are planted in such a way to create mosaic landscapes. We focus on connecting the native forests which grow in scattered patches on our land to develop cohesive corridors for plants and animals.

## How do your plantations impact the local people?

First, our forests provide about 2,400 jobs in the area. Second, by replanting cattle grazing land, we are bringing vegetation back into a deforested area. Third, we are providing opportunities for surrounding landowners, farmers, and entrepreneurs.

This area of Bahia is relatively poor. Other than Veracel, there is no major industry in the area. The median annual income for an adult outside the mill is 4,810 Real (1,845 Euros).

In 2003, we began a tree farming program for local farmers. When it is fully functioning, our aim is to procure about 20\% of our fiber requirements from these private sources. This corresponds to 23,000 ha of eucalyptus planted within the tree farms. We hope to reach our target by 2008.

Veracel provides the eucalyptus cuttings, the technology, and the funding for the farmers. Tree farmers receive an upfront payment from us covering the costs of establishing the plantations. At harvesting time, the payments will be deducted from the income generated by selling the wood.

Tree farmers have to fulfill all the legal requirements for legal reserves and permanent preservation areas in cases where the land needs to be rehabilitated. The same technical and environmental criteria that we maintain for company plantations apply to tree farms.

## What are your goals with regard

## to forest certification?

Our forest management and harvesting operations are certified by CERFLOR (the Brazilian standard for planted forests) and ISO 14001. Next year, we plan to apply for international certification from the Forest Stewardship Council (FSC). The CERFLOR standard is very close to the FSC standard.

CERFLOR is now undergoing the endorsement process from the Program for Endorsement of Forest Certification schemes (PEFC), which is the other international forest certification system commonly used in the world.

Antônio Sergio Alipio
"Sustainability drives us to use our resources in the most productive way. When we avoid, recover or eliminate waste, we become more


Area
Population
Most populated city

Key economic data
GDP (purchasing power parity) GDP (official exchange rate) GDP real growth rate GDP per capita
(purchasing power parity) \$6,200
Inflation rate (consumer prices) 1.9\%
Unemployment rate
(Official registered unemployment in urban areas in 2004.
2005 estimated overall unemployment: 20\%)
Source: CIA World Factbook 2005

Fast-growing economy and growing affiluence increase demand for high-quality stainless steel


## Gerhard Mairhofer

General Manager of Shanghai Krupp Stainless (SKS), China
"Andritz is a very reliable partner and offers the best combination of technology and price."



# 〔ANDRTZ OFFERS HIGH VALUE FOR MONEY." 

Interview with Gerhard Mairhofer

General Manager of Shanghai Krupp Stainless (SKS), China

Shanghai Krupp Stainless (SKS), a joint venture between ThyssenKrupp Stainless of Germany and Baosteel of China, is one of the leading manufacturers of stainless steel products in China. Stainless steel is a vital component for industries such as automotive, for the construction of buildings, and for household appliances; its demand has been showing double-digit growth in China over the past years.

Due to the very successful development of the first stage of the plant erected by Andritz in 2001, SKS decided to increase capacity of the mill and, in 2003, selected Andritz to supply two cold rolling mills, and an annealing and pickling line for coldrolled strip. In 2004, SKS placed another order with Andritz for a hot-strip annealing and pickling line to complete stage two of the plant extension. Gerhard Mairhofer, General Manager of SKS, gives his views about the industry and Andritz's role at SKS.

## Background

My first job when I graduated was with Voest Alpine AG in Austria. I worked for many years with the company's materials handling technologies in Linz. Later, I spent seven years as the Chief Representative in China for Krupp Fördertechnik and came to SKS as General Manager in 1998. In 2001, the City of Shanghai honored me with the Golden Magnolia, an award for foreign experts who contribute to the development of the city. In 2003, I was named as an Honorary Citizen of Shanghai.

## Continuous technology improvements

## in the industry

Krupp was one of the pioneers in stainless steel development, dating back to 1912. The largest technical advances in the industry have been the Sendzimir mill (development beginning in the 1930's) and continuous casting (from the mid 1980's). Up to today, there has been continuous improvement of production and processes. At some time, the physical frontiers will be reached. The biggest advancements today are in the area of computerbased monitoring and control - which has considerably increased our efficiency and quality control.

## Product progress

It was not a natural thing for Chinese customers to import stainless steel. Logistics were difficult and the delivery times were long. And, before SKS, there was no bright annealed stainless steel being produced. SKS was the first in China to produce the bright annealed product. So, Chinese customers could now buy German-quality steel right away. The focus is on household appliances (washing machines, cooking products, industrial kitchens, etc.) and architectural applications (decorations in high-rise buildings, lift doors, etc.)

The demand for bright annealed stainless steel is enormous, e.g., for industrial kitchens in fast food restaurants, kitchen equipment and washing machines for homes, and all the appliances to meet the demand of the growing middle class in China.

## Customers want it fast

The most important thing to our Chinese customers is fast delivery. Nowhere are delivery times as short! A customer will typically place the order on the first day of the month and expect to have the goods by the $30^{\text {th }}$. These requirements challenge us enormously. Automated production planning systems and flexibility in manufacturing are key to our success.

Of course, the traditional quality characteristics - good surface finish, excellent flatness, and precise cutting are also expected.

## Why Andritz?

The main reason we selected Andritz was "value for money." They offered the best combination of technology and price. Technology is most important - then comes the price.

Full-line capabilities also play an important role. For example, with the annealing and pickling line, everything was supplied from under one roof - Andritz. We engage in rather detailed discussions with potential suppliers about the automated control, supply of the cutting equipment, hydraulics, etc. We have to know that the supplier has all the details in hand and has worked with large producers like us.

What really counts for us is that our suppliers respond to our wishes, are willing to discuss their products and technology in detail, and that the equipment helps us meet our customers' quality and delivery requirements.

## Andritz performance

We know Andritz very well because German based Andritz Sundwig (majority owned by Andritz) has been a supplier to us for decades. SKS has had good cooperation with Andritz since we began operations here in China.

The ramp-up of the Andritz equipment was excellent. Kudos to the local team. The first equipment has operated here since November 2001. We are satisfied with its performance.

Now we are looking forward to the start-up of the hotstrip annealing and pickling line, which will be ready for operation in the summer of 2006.

## What's next?

The focus will be on consolidating our existing cold rolling capacities. The Chinese market will continue to grow. The competition is tough here, but SKS is the clear quality leader.

## France

## Increased environmental protection improves quality of life for citizens

"Andritz has worked with us every step of the way. I am impressed with the level of support, the technology, and the knowledge of the people.



# 600,000 CUBIC METERS OF WASTEWATER PER DAY 

Interview with Claude Lopez<br>Project Director for Degrémont, France

SIAPP (Syndicat Interdépartemental pour l'Assainissement de l'Agglomération Parisienne), a major French collective responsible for wastewater management, recently expanded its Valenton plant ( 20 km south of Paris) to process $600,000 \mathrm{~m}^{3}$ per day of wastewater to high environmental standards before returning it to the Seine. Degrémont, the water treatment plant specialist, was awarded the contract for designing and building the new sludge treatment facility. Andritz supplied the dewatering, drying and pelletizing equipment for this massive project. We spoke with Claude Lopez, Project Director for Degrémont, about this project and Andritz's contribution.

## Experience

I have worked for Degrémont as Director of this project for the past three years, but I have over 20 years of experience in project management. My degree is in elec-tro-mechanical engineering from Montpellier University. Before joining Degrémont, I was a sludge specialist for another company, managing some very large projects. I also worked for Elf Aquitaine, the French oil and gas company.

## The Valenton project

In simple terms, the project is to build and operate a wastewater plant and a sludge handling plant which takes $600,000 \mathrm{~m}^{3}$ of wastewater per day, removes the pollutants from the water, and returns the clean water to the River Seine. In addition, we are doing this in an incredibly fuel-efficient way. Plus, we are adding value to some of the sludge "waste" so that it can be used for agricultural purposes.

French wastewater authority SIAPP awarded us the contract for this project in December 2002. Degrémont is responsible for the overall plant, but Andritz is a specialist in the sludge drying area - which is a very critical technology - and we look to them for this expertise. We selected Andritz as a supplier/partner beforehand and they did a very good job of helping us prepare the process design and quotation.

Civil construction began in June 2003. Construction of the Andritz portion began in January 2004. The first testing of the drying system on sludge was completed in November 2005. Our commitment is to have the first drying line operational by the end of January, the second line in February, and the final line by mid-March 2006. When all three lines are running, the capacity is 200 tons of dried sludge per day.

## Energy-efficiency

This plant will be the most energy-efficient of its kind in Europe - and perhaps the world - when it is fully operational. Only $27 \%$ of the total energy required will be purchased (natural gas). The remainder comes from using biogas from the existing digesting process and from recovering/reusing the heat generated by the pyrolizing plant. This level of efficiency is really quite remarkable.

## Andritz technology

Andritz is a well-known and well-respected supplier in France, and around the world. On this project, they are contributing three important technologies: sludge dewatering through five large decanter centrifuges, sludge drying through three triple-pass drum drying lines, and a pelletizing system to turn the very small particles of dried sludge (dust) into the proper size granules.

The Andritz technology dewaters the sludge (from 5\% to $27 \%$ dry solid content) and then dries it. By contract, we must process the sludge to a specific dryness range (minimum 90\% dry solid content) and a specific granule size ( $2-5 \mathrm{~mm}$ in diameter). These are relatively tight specs and we need the Andritz technology to help us adhere to our contractual commitments.

## Andritz support

This is the first time I have worked with Andritz on a project. They have met all their schedule commitments. For example, the dryer drums are so large that they had to be delivered first so that the building could be constructed around them. Imagine what this would have done to our overall schedule if Degrémont could not depend on Andritz to deliver on time. Andritz has worked with us on this project every step of the way - from design to manufacturing to construction to start-up. I have been impressed by the level of support and the knowledge of the people.

## Adding value

Andritz's drying technology opens the door to add value to the sludge to avoid sending it all to landfill. For example, Valenton is the first plant we have ever built where we will produce agricultural fertilizer from the sludge on-site. We will begin by producing 5,000 tons of fertilizer and have the ability to expand in the future. The dried sludge can also be used as an energy source (for biomass boilers and cement plants).

## Future plans

After this project, I return to my home in the south of France to be a regional director of projects for Degrémont. I'm looking forward to re-joining my family after three years of commuting by high-speed train from my home to Paris. And, I am looking forward to working with Andritz on future projects.

## Latyia

## Young, emerging country of the European Union capitalizing on exports and biomass energy

| Area | $64,589 \mathrm{~km}^{2}$ |
| :--- | :--- |
| Population | $2,290,237$ |
| Most populated city | Riga, |

approx. 1 million inhabitants

Key economic data
GDP (purchasing power parity) GDP (official exchange rate) GDP real growth rate GDP per capita
(purchasing power parity
Inflation rate (consumer prices)
Unemployment rate
Source: CIA World Factbook 2005
\$ 12,800
\$ 29.4 billion
\$ 14.9 billion
7.8\%
5.9\%
8.8\%
"Technically, Andritz is excellent. Equally important is the reputation of the company and the quality of service.


# PELLET POWER 

## Interview with Gatis Deksnis

Chairman of the Board of Baltic Bioenergy Group (BBG), Latvia

Biofuel is a renewable energy source which is used to replace some fossil fuels. Burning biofuel does not increase carbon dioxide in the Earth's atmosphere. Gatis Deksnis is Chairman of the Board of Baltic Bioenergy Group (BBG), one of the largest producers of wood pellets in the Baltic countries. BBG owns plants in Latvia and Estonia which produce 250,000 tons of wood pellets each year. BBG's products are shipped to customers in the United Kingdom, continental Europe, and the Baltic region to reduce the effect of greenhouse gases.

## Background

My background is in investment banking, so I am always looking for projects to develop. I got into the biofuel business in the early 1990's when a friend of mine installed machinery for making wood briquettes (compressed sawdust used as fuel). How we got started is interesting, I think.

## Biofuel beginnings

This was at the time when the Soviet Union was breaking up. Riga, Latvia, and Kobe, Japan became sister cities. As a gesture of friendship, the Japanese sent three briquette machines to Latvia. Unfortunately, all the documents describing how to operate and maintain the machines were lost, so no one installed the machines.

A friend of mine decided to give it a try. He managed to install the machines and get them operating, but he was poorly capitalized. A group of us raised the capital to get the business started and keep it going. So, that's how I got into the biofuel business. You can say that my training was on-the-job.

## A different market then

Keep in mind that the biofuel market in the 1990's was completely different than now. Sawmills paid us to take their sawdust "waste" away. We got our raw material for free and could sell the briquettes for 50 US dollars per ton.

Compare that to today, where sawdust is our largest cost, and we have reached the limits of what Latvian sawmills can produce (about 400,000 tons a year). We have to expand outside our borders if we want to grow.

## Fast learning curve

We moved quickly from briquettes (6,000 tons per year) at our first company into the production of wood pellets. We bid for and acquired a pelletizing company in Latvia (owned by a Danish company) in 2001. That company owned three Sprout Matador pelletizing lines (manufactured in Denmark). This was my first experience with the Andritz Sprout-Matador products.

Then, we decided to build a new plant, Gaujas Granulas, near the seaport in Riga. The three Andritz machines were moved to Gaujas Granulas, and three new ones were added in 2004. Today, Gaujas Granulas is the largest and most modern producer of pellets in the Baltic States, with a capacity of 120,000 tons per year.

In 2005, we expanded outside Latvia with the acquisition of a company in Estonia. We also own a portion of a new production facility, Kurzemes Granulas, in Ventspils, Latvia, which started up in July 2005 and has two new Andritz pelletizing lines.

Today, we have 17 pelletizing machines, 11 of them from Andritz, with the ability to produce 250,000 tons per year of wood pellets.

## Why Andritz?

In my opinion, the machines from Andritz are the Mercedes Benz of pelletizing equipment. We own competitive equipment as well, so we know from experience. In terms of investment cost per ton of product, the Andritz machine is the lowest.

When we look at investment opportunities today, we look at buying or building plants with a minimum of three
pelletizing lines. Fewer than three lines are not economical because we have to purchase a cooler, hammer mill, dryer, automation equipment, and other auxiliaries anyway. So, there are advantages to having three pelletizing lines in the plant in terms of investment cost per ton of production.

Technically, Andritz does some things better than its competition. For example, the cooling rotors give us more stable production and lower costs. But, equally important is the reputation of the company and the quality of service.

We chose Andritz Sprout-Matador because they are the most reliable and deliver the best performance. We have eight years of experience operating Andritz equipment and we know what to expect. The machines consistently press out three tons of product each hour. Installation and start-up is done quickly, and our operators know how to optimize the lines.

## What is the future?

Our business is about getting energy from wood - and to extract that energy at the lowest cost possible. Our customers purchase the heating value of green energy. We pelletize it to make it easier to store and transport. We're always looking for new and better solutions.


Renewable energy resources
are up and coming

| Area | $357,021 \mathrm{~km}^{2}$ |
| :--- | :--- |
| Population | $82,431,390$ |
| Most populated city | Berlin, |
|  | approx. 3.5 million inhabitants |

Key economic data GDP (purchasing power parity) GDP (official exchange rate) GDP real growth rate

GDP per capita

(purchasing power parity) \$29,700
Inflation rate (consumer prices) 2.0\%
Unemployment rate
$\$ 2.5$ trillion
$\$ 2.8$ trillion
$0.8 \%$



0
In 2005, Andritz successfully concluded the reconstruction of E.ON Wasserkraft's pumped storage plant at Reisach. It contains three machine sets with an output capacity of 105 MW.


# 'WE CAN RELY ON ANDRITZ TECHNOLOGY AND SUPPORT." 

Interview with Dr. Dominik Godde

Managing Director of E.ON Wasserkraft, Germany


#### Abstract

E.ON Wasserkraft (EWK), with its headquarters in Landshut, Germany, operates more than 130 hydropower stations producing 9 TWh of electrical energy per year - thus making it the largest German operator of run-of-river power stations. Since the construction of new hydropower stations in Germany is limited due to environmental and economic hurdles, the emphasis has shifted to modernizing and rehabilitating existing stations. In 2005, Andritz successfully completed the modernization of the EWK pumped storage power plant Reisach. Dr. Dominik Godde, Managing Director of EWK, talks about the role of hydropower and Andritz's performance at Reisach.


## Background

My background is in the construction industry. Before joining EWK, I was the Chief Executive of a branch responsible for construction of power plants and hydro projects for Hochtief AG, one of the world's largest construction companies. I joined E.ON in 2004 as Managing Director of E.ON Wasserkraft.

## Customer requirements

Our customers require "quality power" supply from EWK. Quality means high reliability, low costs, and the ability to meet their demand requirements - even during peak demands. We accomplish this by producing the baseload power with our run-of-river power stations and the peak power with our pumped storage power plants. To meet our customers' demands, we need high availability of the technical equipment in our stations.

## Pumped storage power plants

Pumped storage power plants give us flexibility in meeting power demands. During times of high power consumption, the water from a reservoir is fed through our turbines. During off-peak times, the water is pumped back to the higher level basin. This enables primary and secondary control of power production and ensures stability of the European power grid.

## The Reisach power plant

The Reisach station was started up in 1955 with two machine sets, and a third was added in 1961. The plant's rated output in turbine operation mode is 105 MW , and in pump operation mode it is 81 MW . Each horizontal machine set consists of a Francis spiral turbine with a high-pressure spherical shutoff valve, a two-stage dou-ble-flow storage pump, and a Pelton starting turbine with toothed wheel coupling for rapid changeovers to pumped storage operation.

## Refurbishments and upgrades

The mechanical equipment is designed to have a very long life. Refurbishment occurs very infrequently - every 12 to 20 years - primarily to decrease maintenance expenses. Refurbishment also aims at increasing plant safety (e.g. improving bearing lubrication, replacing guide vane shear pins, etc.). The most recent refurbishment of the pumped storage set R2 was in 1986.

Upgrades normally involve the changing out of components which are near to the end of their life-time - especially electronic control equipment. This enables the equipment to operate safely while unattended. In 199394, the entire Reisach automation and control room equipment was upgraded to the state-of-the-art.

## Why Andritz?

We were familiar with Andritz as a manufacturer of large bulb turbines. Our contacts with Austrian power station operators, and the knowledge that Andritz was actively moving into the service business, led to our getting in touch with the company. We investigated their capabilities and references and started inviting them in 2001 to bid on our projects. We placed our first order with Andritz in 2003 for repair work on a pumped storage set and shutoff valves at Tanzmühle. In 2004, Andritz got the order for refurbishing the R2 pumped storage set at Reisach.

## Andritz performance

We found Andritz to be a very flexible company, with competent technical staff. The technicians were involved early in the bidding phase to answer our questions and to convince us of their professional skills.

While Andritz had three teams (technical, manufacturing, and erection) executing the project, this fact was never obvious to us. We had a single point of contact right from the start. This avoided duplication of effort and loss of information.

The quality of the workmanship was very high. Andritz suggested to machine two turbine covers on their lathe. This helped to avoid any alignment errors and eliminated extensive measurement work. Their documentation of the machine component handling has been outstanding.

We discussed all the important milestones together and they contributed to a trouble-free installation - in spite of the very challenging time schedule.

The start-up was very smooth. Interlocking of the project phases was completely without problems. This is noteworthy because the machine controls and mechanical protection devices were part of another project.

## Safety

Worker safety is a very important aspect for EWK. The common goal of EWK and Andritz was to finish the project without any accidents. We achieved this thanks to the excellent communication and cooperation between the Andritz team and the EWK team.

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# LETTER FROM THE MANAGING BOARD 

## Ladies and Gentlemen, Dear Shareholders,

2005 was another successful year for the Andritz Group. Sales and Net Income, Order Intake, and Order Backlog reached new record levels, topping the very good numbers achieved in 2004.

Despite unchanged fierce competition, we won a numbber of major orders, enabling us to further expand our leading position in many areas.

In the Pulp and Paper Business Area, we succeeded in further consolidating our market position, especially because of the very successful installation of the pulp mill at Veracel, Brazil, which started up in May 2005 ahead of schedule and since then has won recognition by international experts and customers. The successful Veracel start-up was one major reason why we received two very important orders for greenfield pulp mills in 2005: for Metsä-Botnia we will supply the entire process equipment for a new pulp mill in Uruguay, and for Suzano Baha SuI we will deliver woodyard and fiberline for the new pulp line to be built at the Mucuri mill, Brazil. Another inportant milestone for the Pulp and Paper Business Area was the acquisition of the majority stake in the Paper Division of Küsters in November 2005. Küsters' successful dewatering and finishing technology opens up a wide potential for service and rebuilds in the pulp and paper industries. In the area of tissue machines, the first TAD tissue machine with innovative Andritz technology was successfully put into operation. The quality of the tissue produced is excellent.

In the steel sector, we also extended our global market position, especially in China. Major orders were won as well in India and Europe, increasing the Order Intake of the Rolling Mills and Strip Processing Lines Business Area to a record level in 2005.

The Environment and Process Business Area concluded the past business year with a record Order Intake. One of the decisive factors was the very good development of the companies purchased in 2004 (Bird Machine, NETZSCH Filtration, and VA TECH WABAG's Fluidized Bed Drying Systems). Order Intake, Sales, and Earnings of these companies developed much better than originally expected, thus contributing positively to the Business Area's excellent performance in 2005. We have a strong commitment to these newly-acquired companies. The long-term goal is to further expand the business ac-
tivities of these companies, thus giving the former owners the confidence that their companies will continue to thrive and grow as part of Andritz.

A further strengthening factor was the acquisition of Lenser Filtration, a company specializing in the manufacture of filter elements. This purchase provides Andritz with capabilities to offer its filter press customers complete solutions under one roof. Environment and Process now has an extensive product range and the sufficient size to continue its growth, mainly organically.

In the Feed Technology Business Area, the restructuring measures introduced in 2004 to improve profitability were successfully concluded. As a result, a significant improvement of Earnings and a 10\% organic growth in Order Intake were achieved in 2005. Our goal for 2006 is to make an evaluation of further growth potentials in this Business Area. Apart from potential acquisitions, the focus will be placed on further organic growth, with the regional expansion and introduction of new products as main factors. We also see many possibilities in biomass systems, especially wood pellet systems.

In 2005, we also strengthened our competitive position in the automation area. By acquiring Universal Dynamics Group (UDG), we significantly broadened our product range for the pulp and paper industries. UDG offers the innovative software product BrainWave ${ }^{\circledR}$ - a predictive control system to optimize processes during operation - ideally complementing the software tools of IDEAS Simulation, which are used to simulate complete processes before start-up of the mills. The result is a very fast and smooth start-up. Andritz Automation software and services have been successfully used or will be used for many greenfield pulp mills in Brazil, Uruguay, Chile, Japan, Finland, and China. On a medium to long-term basis, we plan to also offer these software tools to our customers in the Rolling Mills and Strip Processing Lines and the Environment and Process Business Areas.

From today's point of view, we expect project activity to remain satisfactory in 2006 for all our relevant industries, with competition, however, to remain very tough. In the Pulp and Paper Business Area, one or two greenfield pulp mills might be decided in the southern hemisphere, as well as some capacity enlargements and modernizatons of existing mills. We also expect good project activ-
ty in the northern hemisphere, mostly outside of North America. In the steel sector, the capital investments are likely to remain focused on China, although the general level of project activity will decrease in comparison with the very high level achieved in 2005. Also, project activity in India is expected to increase.

For 2006, it is our goal to continue our strategy to acquire companies with complementary products and technologies. We still see a number of opportunities for completing our product offering for each of our Business Areas. Research and Development will also remain an essential focus, as we want to secure and extend our technology expertise and competitive position for each area. The target is to offer products that increase our customers' profitability and satisfaction, while fulfilling the most stringent environmental standards.

The latter plays a very important role with regard to our declared goal for sustainability, where we are concentrating our activities on the further development of our technologies, with the goal to even better fulfill and understand the developing needs of our customers. This results in essential technological contributions to our customers' success. Due to standardization of the core processes, Andritz equipment basically fulfills the same environmental requirements no matter where it is delivered. Meeting these requirements is an absolute must, because most of our buyer regions, including the socalled emerging nations, have implemented comprehensive environmental regulations such as mandatory environmental impact studies.

A consequence of Andritz's global success with customers is the fact that thousands of jobs in the company itself and with its sub-suppliers are secured, and the number of jobs is constantly increasing, also in countries with emerging economies. A further effect is the transfer of technology and management experience to the typically ambitious and well-educated workforce in these countries.

The Managing Board of Andritz AG wants to thank all employees for their contributions and performance during the past year. The Board also wishes to thank all Andritz customers, business partners, and shareholders for the confidence placed in us. For 2006, we will do our utmost to continue the success of the Company.

The Managing Board Graz, March 2006



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

## Stable, long-term management

## Managing Board

Wolfgang Leitner<br>(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 at Vianova

Markku Hänninen



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



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



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



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 Appointed Members

Kurt Stiassny<br>(Chairman of the Supervisory Board)



Chief Executive Officer of UIAG; Chairman of the Supervisory Board of Andritz AG since 1999, and elected until the Annual General Meeting of Andritz AG in 2010.
Other functions: Member of the Supervisory Board of Palfinger AG.

Stock companies with major shareholdings: Chairman of the Supervisory Board of Bene AG.

Hellwig Torggler
(Deputy Chairman of the Supervisory Board)


Attorney-at-law and senior partner of Schönherr Rechtsanwälte GmbH; Deputy Chairman of the Supervisory Board of Andritz since 2004; Member of the Supervisory Board of Andritz AG since 2000, and elected until the Annual General Meeting of Andritz AG in 2009.

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.

## Peter Mitterbauer



Chairman of the Managing Board of MIBA AG; Member of the Supervisory Board of Andritz AG since 2003, and elected until the Annual General Meeting of Andritz AG in 2010.
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 ViennaAG, OberbankAG, ErsteÖsterreichische Spar-Casse Privatstiftung, Telekom Austria AG and VA Technologie AG.

## Christian Nowotny



Professor at the University of Economics in Vienna; Member of the Supervisory Board of Andritz AG since 1999, and elected until the Annual General Meeting of Andritz AG in 2009.
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 Verwer-tungs-Gesellschaft m.b.H., and Stahl- und Walzwerk Marienhütte Ges.m.b.H.; Member of the Supervisory Board of Andritz AG since 2004, and elected until the Annual General Meeting of Andritz AG in 2009.

## Delegated Members

## 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

# HIGHLIGHTS 2005 

## Several large orders and important strategic acquisitions

## February

## First large order from India for stainless steel strip production <br> Andritz receives an order from Jindal Stainless Steel Ltd in New Delhi, the largest stainless steel strip manufac turer in India, to supply a continuous annealing and pickling line for cold-rolled stainless steel strip.

## April <br> Complete fiberline for Marusumi Paper

Andritz is selected to deliver a new pulp fiberline and chemical recovery systems for Marusumi Paper's Ohe mill on Shikoku Island. Andritz will deliver the project on an EPC basis.

## May

Main process equipment
for pulp mill in Uruguay for pulp mill in Uruguay
Oy Metsä-Botnia Ab and Andritz Oy sign a letter of intent under which Andritz will supply the main process equipment for Botnia's pulp mill currently being built in Uruguay. The agreement encompasses a fiberline - from wood handling to pulp drying - as well as a chemical recovery system.

## June

## Acquisition of Lenser Filtration

Andritz signs an agreement to purchase 100\% of Lenser Filtration GmbH + Co. KG in Senden, Germany. Lenser is one of the leading global manufacturers of filter elements from thermoplastic materials for solid/liquid separation in filter presses. This acquisition enables Andritz to offer complete filter press solutions to customers.

## July

Heavy-duty hot-dip galvanizing system for voestalpine Stahl
In connection with the Linz 2010 project, Andritz receives an order from voestalpine Stahl GmbH for the supply of a heavy-duty hot-dip galvanizing system. The award of this major order to Andritz again emphasizes the long and successful cooperation of the two companies. An option for the supply of a second, almost identical system is also signed.

## Complete stainless steel plant for China

Andritz receives an order from JIUQUAN Iron \& Steel Co. Ltd., China for the supply of a complete plant for the manufacture of cold-rolled stainless steel strip. Andritz Group is in charge of engineering, supply of the key components, and supervision of installation and start-up of the various parts of the plant.

## October

## Large order from China

Andritz receives follow-up orders from the Taigang Group for the further expansion of Taiyuan Iron and Steel Co. Ltd., Taiyuan/Shanxi, China. For these orders Andritz will supply a stainless steel cold-strip annealing and pickling line, a 20-high rolling mill, and an S6-high reversing mill.

## November

## Woodyard and complete fiberline for pulp mill in Brazil

Andritz and Suzano Bahi Sul Papel e Celulose S.A. ("Suzano") sign a letter of intent under which Andritz will supply the woodyard and the fiberline (washing, screening, bleaching) for a new pulp line of Suzano to be built at the Mucuri mill in the state of Bahia, Brazil.

## Andritz acquires majority stake in Paper Business Area of Küsters

Andritz announced to acquire a $60 \%$ stake in the Paper Business Area of Eduard Küsters Maschinenfabrik GmbH \& Co. KG, Germany. Küsters, which is active in the areas of Paper, Nonwoven, and Textiles, was taken over by German-based Jagenberg AG in the summer of 2005 from family ownership. The Paper and Nonwoven Business Areas will be integrated into a joint company (Andritz 60\%, Jagenberg 40\%), with Andritz assuming the industrial leadership.

## Andritz to supply greenfield mechanical pulping system to Vietnam

Andritz received an order from Tracodi, Vietnam for construction of a greenfield mill for producing market mechanical pulp. Kenaf, from agriculture, will be the only raw material used, thus renewable resources will be processed using environmentally-friendly technology. The project will create 30,000 new jobs in the Long An Province, South Vietnam, thus making a significant contribution to the improvement of living conditions in this region.

## December

## Recovery boiler to SCA

SCA Packaging Obbola AB, Sweden ordered a new recovery boiler. The technology concept and features of the recovery boiler to be delivered by Andritz will meet SCA's targets to further reduce emissions and to maximize electricity production.

# Focus on growth and profitability 

The overall strategic goal of the Andritz Group is to further consolidate its strong market position in each of its Business Areas in order to become the leading supplier of production systems and processes in all the markets in which it operates. Andritz is a growth company, and thus, all strategic corporate measures and decisions are focused on continued growth and increased profitability of the Group, achieved by better fulfilling the customers' needs.

## Growth

Since 1990 Andritz Group's Sales have grown by more than 10\% p.a. This growth has been based on the following strategic goals:

## Focus on existing markets and customers

The Group serves long-term growing markets. Pulp, paper and steel consumption grow in step with gross domestic product expansion on average per year. Within each of these markets, Andritz will continue to focus on the fast growing segments, e.g. stainless steel or tissue, which have grown over proportionally over the last few years. As a leading supplier of plants, machines, and systems to all major customers in these markets, Andritz is in the position to benefit from the growth of these markets.

## R\&D and complementary acquisitions

Andritz will continue to invest in the development of new products and processes, often in cooperation with customers, in order to consolidate or expand its competitive position. The main goal is to stay a technological leader in all Business Areas and to continuously expand this edge by launching new products that are cost-efficient, reliable, and will increase productivity for the customers. It is a declared goal of the Group to invest a sizeable amount of money in R\&D activities.

On average, approximately 3\% of the Group's Sales have been spent for R\&D over the last years. In addition, pilot plants are run and operated along with customers. In total, approximately 200 people work in the Group's research centers to develop new processes and products.

Andritz will also continue to seek opportunities to acquire companies and businesses that complement its existing range of products and services. The goal is to offer customers full-line capabilities with regard to products and services in all Business Areas. This allows Andritz to design, supply and substantially service all production lines, equipment, and processes required by its customers.

Quick integration of the newly-acquired companies, technology transfers between these companies, and the sharing of functional resources are among the main goals in order to achieve optimum synergies.

Andritz has a very strong long-term commitment to the companies it acquires. The main goal is to further expand these companies, thus giving the former owners - frequently families with decades of history with the company - the confidence to know that their former company will continue to thrive within the Andritz Group.

## Global presence

In all of its Business Areas, the Andritz Group serves leading international companies with global reach. Fast support and service, together with local expertise, are, therefore, main requirements for Andritz to optimally satisfy the customers' needs. As a consequence, Andritz has established a well organized global organization with presence in all major geographic market areas.

It is the declared goal to further 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. By establishing company sites in such countries, Andritz - besides benefiting from highlyspecialized local expertise - also contributes to the buildup or further development of technical competence in these countries. Since 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.

## Service business

The Service business plays an integral part of Andritz's product offerings to its customers. It covers not only the sale of spare parts, but also of wear parts, whose technical features have a great influence on the quality of the customers' end product and the reliability and profitability of the plants and processes. The product portfolio in Services also encompasses daily maintenance, which is offered from single services to full-service contracts. In
partnership with the customers' own maintenance personnel, Andritz efficiently maintains the machines, production lines, and complete plants.

Service sales of Andritz, which account for approximately $30 \%$ of Andritz's total Group Sales, have grown significantly during the last few years. Andritz will continue to grow its service capabilities in order to support its customers in reaching their defined production and profitability goals. For Andritz, further growth of the Services business will result in balancing out potential cyclical swings of the capital business. 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.

## Profitability

Besides achieving long-term Sales growth through organic expansion and complementary acquisitions, continuous increase of profitability is also one of the main strategic goals of Andritz. Better fulfillment of customer needs for economic production systems, technological leadership, and continuous efficiency improvement should enable Andritz to further improve profitability in spite of a very competitive environment.

## ANDRITZ SHARE

## Outperformance of ATX since IPO



Since the IPO in 2001, the Andritz share has significantly outperformed the ATX.

## Share price development

The price of the Andritz share developed very favorably in 2005 . It increased by $62.8 \%$, thus outperforming the ATX, which rose by $49.6 \%$ during the same period. Since the IPO in June 2001, the Andritz share price has risen by more than $340 \%$. The highest closing price of Andritz during 2005 was 92.85 Euros (29.12.2005); the lowest was 56.59 Euros.

## Trading volume

In 2005, the average daily trading volume of Andritz shares at the Vienna Stock Exchange was 83,993 shares (2004: 70,744 shares). The highest trading volume was recorded on 31.5 .2005 ( 645,250 shares); the lowest on 27.12.2005 ( 8,218 shares).

## Shareholder structure of Andritz

Andritz has a very stable shareholder structure. Approximately $26 \%$ of the shares are owned by Certus Beteiligungs-GmbH, which is wholly owned by Custos Privatstifung and whose Managing Director is Wolfgang Leitner, CEO of Andritz. Other Managing Board members, executives and employees of the Andritz Group hold approximately $2 \%$ of the shares. The remaining free float of approximately $72 \%$ is mainly owned by institutional investors from Great Britain, USA, Austria, Germany, and Switzerland. The share of retail investors is approximately $5 \%$ of the free float.

## Stock exchange figures

|  | 2005 | 2004 | 2003 | 2002 | 2001 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Highest closing price (EUR) | 92.85 | 56.50 | 37.95 | 28.00 | 23.50 |
| Lowest closing price (EUR) | 56.59 | 35.00 | 21.00 | 19.40 | 20.52 |
| Closing price at year-end (EUR) | 92.85 | 56.10 | 37.95 | 22.99 | 21.30 |
| Market capitalization as of 31.12. (MEUR) | 1,207.1 | 729.3 | 493.4 | 298.9 | 276.9 |
| Performance | +62.8\% | +52.5\% | +65.0\% | +7.9\% | +3.8\% |
| ATX weighting as of 31.12. (\%) | 1.8200 | 1.7656 | 2.3250 | 0.6992 |  |
| Average daily number of shares traded | 83,993 | 70,744 | 45,410 | 13,255 | 19,802 |

Source: Vienna Stock Exchange

## Share buy-back/sale program

On March 30, 2005, 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 ap proximately 60 Andritz Group executives, including the Members of the Managing Board of Andritz.

As of December 31, 2005, the number of own shares held by the Company amounted to 225,202 . 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.


Shareholder structure of Andritz (as of 31.12.2005)

## Investor Relations

In the financial community, Andritz is known for its proactive and transparent information policy vis-à-vis all relevant stakeholders of the Company. In 2005, Andritz - for the fourth time in a row - was awarded for its outstanding performance in the area of Investor Relations. Andritz was ranked third in the important category of "Investor Relations Online". Assessment criteria include actuality and scope of information provided on the companies' websites, transparency of information policy, and technical features (e.g. charting tools, etc.) offered to users. Each year, the Austrian Association for Financial Analysis and Asset Management (ÖVFA) and the Austrian business magazine GEWINN award prices for special achievements in Investor Relations.

In 2005, Andritz staged several road shows in Austria and other important financial centers, such as London, Edinburgh, Milan, New York, Denver, Austin, San Francisco, Boston, Toronto, Montreal, Zürich, Paris, and Frankfurt. In total over 140 individual one-on-one meetings with institutional shareholders and financial analysts were held. Andritz also presented at various investor conferences, such as JPMorgan's Capital Goods Conference in London, England, Bank Austria's Austrian Investor Conference in Kitzbühel, Austria and the Small and Mid Cap Conference of Deutsche Bank in London, England.

The third "Andritz Investor Days", held in October 2005 in Edinburgh, Scotland, focused on the Environment and Process Business Area. A record number of analysts, journalists, and institutional investors attended this seminar.

## Analyst coverage

In early January 2006, UBS initiated the coverage on Andritz. In total, eight banks and investment companies publish reports on Andritz on a regular basis. They are: Bank Austria/Creditanstalt, Berenberg Bank, Deutsche Bank, Erste Bank, JPMorgan, Kaupthing Sofi, UBS, and Raiffeisen Centrobank.

## Contact

## Andritz Investor Relations

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## 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 | none |
| Free Float | approximately $72 \%$ |
| Stock Exchange | Vienna (Prime Market) |
| Ticker Symbols | Reuters: ANDR.VI; Bloomberg: ANDR, AV |
| Stock Exchange Indices | ATX, ATXPrime, WBI |

## STATUS REPORT

## - Significant increase of Sales and Earnings <br> - Order Intake at record level

## General economic conditions

In 2005, the global economy showed a solid, but regionally varied development. While the economies in the USA and Asia continued to develop very strongly, Euroland's economic activities were once again relatively modest.

The U.S. economy showed robust growth throughout the whole year. As a result of this positive economic development and due to the strong increase in crude oil prices, the Federal Reserve Board (FED) increased key interest rates in several steps to 4.25\% during the reporting period. Damages resulting from the various hurricanes had no major impact on the U.S. economy.

In Euroland, economic development once again remained moderate in 2005. Stagnant domestic demand due to political and structural problems in some EU member states and high energy prices were the main burdening factors.

In Asia, economic growth remained very robust with China continuing its strong economic upturn. The economy in Japan also showed signs of sustained economic upturn.
Sources: OECD, WIFO, OeNB, RZB, Volksbank

## Business development

## Change in consolidated companies/acquisitions

The following companies were included for the first time in the Group's financial accounts for 2005: Lenser Filtration (manufacturer of filter elements for solid/liquid separation in filter presses), Universal Dynamics Group (automation services and software company), and Lynson AB (manufacturer of grinding machines for the steel industry).

In November 2005, Andritz announced to acquire a 60\% stake in the Paper and Nonwoven Business Areas of Eduard Küsters Maschinenfabrik GmbH \& Co. KG, Germany. Forty percent of the joint company will be held by Jagenberg, owner of Küsters since summer 2005. Andritz will assume the industrial leadership of the joint company, which is expected to be included in the Group's financial accounts during the First Quarter of 2006.

## Sales at record level

Sales of the Andritz Group in 2005 reached another record high. As a result of the high Order Backlog as of the end of 2004 and the successful development of the companies acquired during the last few years, Group Sales increased by 17.8\% to 1,744.3 MEUR (2004: 1,481.3 MEUR). In particular, the Rolling Mills and Strip Processing Lines and Environment and Process Business Areas increased their Sales significantly compared to 2004.

First-time consolidated companies contributed approximately 19.6 MEUR to the Group's total Sales in 2005. Organic Sales growth of the Group, therefore, was approximately $16.4 \%$.


## Record Order Intake and Order Backlog

Order Intake of the Andritz Group showed another strong development in 2005, reaching a new record high. At 1,974.6 MEUR, it surpassed the very high level achieved last year (1,837.0 MEUR) by 7.5\%. In particular, the Rolling Mills and Strip Processing Lines and the Environment and Process Business Areas showed a very high growth of Order Intake. Order Intake of the Pulp and Paper Business Area was down compared to the very high level in 2004, which was influenced by the receipt of a very large order for supply of a new pulp mill to Chile.

Order Intake of first-time consolidated companies amounted to approximately 20.0 MEUR in 2005.

The Group's Order Backlog also reached a new record amount. At 1,695.6 MEUR, it was significantly up compared to the end of 2004 (31.12.2004: 1,439.2 MEUR), providing a solid basis for the business development in the coming Quarters.


Order Intake of the Andritz Group (MEUR)


## Significant increase in Earnings

As a result of Sales growth and continued cost optimizations, Earnings before Interest, Taxes, and Amortization of Goodwill (EBITA) increased to 107.0 MEUR during 2005 (2004: 92.8 MEUR). The EBITA margin, at 6.1\%, was slightly lower than in 2004 (6.3\%). Due to the application of IFRS 3, which prohibits the amortization of goodwill from 2005, Earnings before Interest and Taxes (EBIT) surged over proportionally to 106.7 MEUR (2004: 76.1 MEUR). The financial result, at 3.4 MEUR, also increased compared to 2004 (0.5 MEUR).

This was due to higher income from interest as a consequence of the higher average cash level in 2005. The tax rate in 2005 , at $27.0 \%$, was positively influenced by a one-off tax gain resulting from the resolution of the provision for severance payment in connection with the Austrian tax reform.

Net Income amounted to 80.2 MEUR (2004: 54.0 MEUR)

## Key financial figures of the Andritz Group

| MEUR | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ | Change in \% |
| :--- | ---: | ---: | ---: |
| Sales | $\mathbf{1 , 7 4 4 . 3}$ | $1,481.3$ | $+17.8 \%$ |
| EBITDA | $\mathbf{1 3 0 . 9}$ | 115.4 | $+13.4 \%$ |
| EBIT | $\mathbf{1 0 6 . 7}$ | 76.1 | $+40.2 \%$ |
| Earnings before Taxes | $\mathbf{1 1 0 . 0}$ | 76.6 | $+43.6 \%$ |
| Net Income after Taxes | $\mathbf{8 0 . 2}$ | 54.0 | $+48.5 \%$ |

## Net worth position and capital structure

The balance sheet total as of 31.12 .2005 rose by $20.6 \%$ compared to the end of 2004, primarily as a result of increased order processing, leading to an increase in net working capital.

At 383.9 MEUR, net liquidity (cash and cash equivalents minus interest-bearing financial liabilities) as of 31.12.2005 increased significantly compared to the reference date of last year (31.12.2004: 219.6 MEUR). The equity ratio as of 31.12 .2005 was $23.6 \%$ (31.12.2004: 24.0\%).

## Key financial ratios

|  | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | ---: | ---: | ---: |
| Equity ratio (in \%) | $\mathbf{2 3 . 6}$ | 24.0 |
| Net liquidity (in MEUR) | 383.9 | 219.6 |
| Capital employed ${ }^{11}$ (in MEUR) | $\mathbf{2 1 . 1}$ | 131.9 |
| Gearing ${ }^{2 \text { ( }}$ (in \%) | $\mathbf{- 1 1 6 . 8}$ | -79.3 |

1) Capital employed: Net working capital plus fixed assets
2) Gearing: (Interest-bearing liabilities minus cash and cash equivalents)
divided by Shareholders‘Equity including Minority Interests

## Balance sheet total 2005: 1,391.3 MEUR

Assets

| 286.1 MEUR | 611.2 MEUR | 494.0 MEUR |
| :--- | :--- | :--- |
| Long-term assets: $21 \%$ | Short-term assets: $44 \%$ | Cash and cash equivalents: $35 \%$ |

Shareholders' Equity and Liabilities

| 328.8 MEUR | 110.1 MEUR | 137.1 MEUR | 815.3 MEUR |
| :---: | :---: | :---: | :---: |
| Shareholders' Equity incl. Minority Interests: $24 \%$ | Financial liabilities: 8\% | Other long-term liabilities: 10\% | Short-term liabilities: 58\% |

## Risk management and treasury

As a global company serving a variety of different markets and customers, the Group is subject to certain general and industry-specific risks. These risks mainly relate to the industries the Group serves (e.g., uncertainty of future contracts, volatility of incoming orders, customer concentration, etc.), the Group's business (e.g. currency exposure, competitive position, legal proceedings, etc.), and to major orders (e.g., payment risks, liabilities and performance of projects, cost overruns, etc.). 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 monitoring and management of financial risks are integral parts of Andritz's Group-wide accounting and controlling activities. Continuous controlling and regular reporting should secure to identify major risks at an early stage and to take counter-measures, if necessary.

For most of the orders, the risk of payment failure by customers is reduced by bank guarantees and export insurances. Risks for deliveries in countries with medium to high political risks typically are also insured. Interest and exchange rate risks are limited and controlled by using derivative financial instruments, in particular forward exchange contracts and swaps. Net currency exposure of orders in non-Euro currencies, mainly US dollars, Brit ish pounds, and Swedish crowns, is hedged by forward contracts. Cash flow risks are minimized by the Group's cash management system which controls cash in- and outflows of all relevant Andritz affiliates. It also monitors the Group's cash pooling activities in order to optimize net financing income.

## Capex and Cash flow

Investments in tangible and intangible assets, which amounted to 26.7 MEUR in 2005 (2004: 29.4 MEUR), encompassed the implementation of a new pilot plant for complete systems for recycling wastepaper in Graz, the construction of new buildings for Andritz affiliates in Brazil and China, as well as modernizations of some machines and systems at some of the Group's production sites.

Cash flow from operating activities amounted to 237.3 MEUR, up compared to last year (2004: 208.0 MEUR). For further detailed information about the cash flow please see the consolidated cash flow statement of the consolidated financial statement 2005.

## Effects from exchange rates

Changes in exchange rates are hedged by forward rate contracts.

## Non-financial performance indicators

## Manufacturing

Workload in most of the Andritz production sites was very high during 2005. Despite the high volume of orders, all projects were handled and processed within the specified times. Temporary workers and outsourcing were used to cope with peaks in workload. At several production sites, steps to increase competitiveness have been successfully introduced. This encompassed, among other things, improved production processes and material flows, and further automation of manufacturing processes.

## Human Resources

Continuous training and further development of working skills of all Andritz employees once again were the main goals of Human Resources activities in 2005. All relevant vacancies within the Andritz Group were well filled with highly qualified candidates. Recruiting activities are ongoing to secure future staff requirements and to support internal growth of the Andritz Group.

## Environmenal issues

Efforts on environmental protection and the economical use of natural resources once again played an important role in Andritz's business activities in 2005. Minimizing the use of media and the impact of production on the environment are the main goals. At all major sites of the Andritz Group, the focus of environmental efforts in 2005 was placed on further optimization of the waste management systems and measures to save even more energy. For example, at the Graz production site, the amount of industrial waste was reduced by another $10 \%$, and electricity consumption was further optimized. Regular training for Andritz's personnel ensures that all employees are aware of the importance of protecting the environment in their daily work.

## Research and Development

In 2005, the Andritz Group invested approximately 27.1 MEUR in Research and Development (2004:21.1 MEUR). Approximately 200 people work in the Group's research centers in the USA, Austria, Finland, and France to develop new processes and equipment and to expand Andritz's technological leadership.

The Divisions of the Pulp and Paper Business Area have focused their R\&D programs primarily on improving fiber quality, increasing energy efficiency, lowering the investment cost per ton, lowering maintenance costs, and promoting sustainability through reduced environmental impact.

The trend today is towards large, single-line mills to reduce both capital and operating costs. All Andritz Divisions are actively developing larger scale equipment and systems for pulp mills with capacities of 4,000 tons per day. Sophisticated simulation programs and specialized preventative process controls are used to support these efforts.

The main focus in wood processing is on field testing new developments in chip sampling and analysis, providing information about the chip quality to pulp mill operators. In chemical pulping, one focus is on adapting and improving processes for southern hemisphere applications. In addition, new developments of the Drum Displacer ${ }^{\text {TM }}$ (DD) washer should further expand its competitive advantage.

For chemical recovery applications, further development of black liquor crystallizing technology is underway to reduce frequency of service procedures. Developments for recovery boilers are focused on producing even more power from biofuel (black liquor), which also eliminates the release of greenhouse gases into the atmosphere. A new arrangement of heat transfer surfaces in the upper furnace of the recovery boiler will enable more effective utilization of flue gas heat to produce more valuable steam in the boiler.

A new lime kiln burner has been developed and is now operating successfully. The burner produces lower nitric oxide levels than existing technology. A new concept for lime mud drying has been developed and a patent has been applied for. The new technology should enable customers to increase the capacity of existing kilns with lime mud dryers, or reduce the size of a new lime kiln for a given capacity.

For mechanical pulping processes, technologies have been developed to process alternative raw materials such as different species of pine and a variety of hardwoods (eucalyptus, acacia, birch, maple, kenaf). New pre-treatment and high-consistency refining technologies were developed to allow the use of alternative wood species in the RTS-TMP process. Customer requirements include sophisticated process control. The new Bleach Commander ${ }^{\text {TM }}$ uses modeling and predictive control strategies to better control the bleaching process in mechanical pulp lines.

In pulp drying, R\&D activities focused on single drying lines with capacities of 4,000 tons per day based upon successful Twin Wire Former technology. This design capacity has currently been reached on the Division's full-scale pilot machine. In addition, development is underway to continually improve the machinery's uptime through easy/fast sheet threading and process condition monitoring.

In the Rolling Mills and Strip Processing Lines Business Area, R\&D activities focused on control standardization especially for the HCl (Hydrochloric acid) recovery plants showing superior oxide qualities, as well as on process improvements for alternative corrosion-resistant coatings for the automotive industry.

Fulfilling the demand of the automotive industry to improve laser weldability of corrosion protected steel sheet, the research work for coatings focused on zinc alloys using electro-galvanizing, and PVD (Physical Vapor Deposition) or CVD (Chemical Vapor Deposition) technologies.

One other important step to improve strip quality during cold rolling was the redesign of the flatness control system. The new flatness roll with closed surface and improved sensor application assures highest surface quality also for sensitive strip surfaces avoiding any imprints. Using predictive control technologies, Andritz contributes state-of-the-art technology to the market resulting in superior tolerances and quality.

The Environment and Process Business Area focused its R\&D activities for dryers on the further development of belt drying systems. New sizes were developed and an entire new design based on a full concrete casing was successfully introduced to the market. In dewatering, research continued in order to broaden the applications for centrifuges and rotating filters. The new drive system for centrifuges successfully proved its long-term reliability. This technology will now be transferred to other centrifuge sizes.

Feed Technology's R\&D activities were focused on the further development of the high-end capacity pellet mills of the Business Area's product family to support the requirements of industrial customers for large feed factories. Other activities were focused on the development of a new product family of long-term conditioners. The aim is to enhance product sterilization, following the increased needs of governmental regulations to guarantee sterile feed production. Within the biofuel area, development projects with the target to optimize production efficiency of wood pelleting plants are underway.

## Outlook

Leading economic researchers expect the global economy to continue to grow in 2006. While the USA and Southeast Asia, especially China, should remain the key growth drivers of this global economic expansion, Euroland's economy is expected to develop only moderately in 2006.

In pulp and paper, project activity will remain concentrated on South America and Asia, where several greenfield pulp mills and major modernization projects are currently being evaluated. For Europe and North America, only selective investments are expected.

In the area of Rolling Mills and Strip Processing Lines, investment activities will continue to focus on China. Project activity will concentrate on production equipment and plants for high-quality steel, and on downstream production equipment to produce stainless steel products. In China, demand for such products, which are, for example, used for applications in the automotive and household appliance industries, grows at double-digit rates each year. In addition, the goal of China to modernize and consolidate its domestic steel industry by 2010 will support long-term demand for steel production equipment. Increased project activity is also expected for India.

For Environment and Process, high project activity for both sludge dewatering and drying equipment should continue. Increased stringent environmental regulations, especially in Europe, will remain the key growth drivers in the future. In the area of mining, the current global shortage of raw materials, such as coal, iron ore, and other minerals should lead to increased investments in solid/liquid separation equipment.

Given the very high Order Backlog as of the end of 2005 and the solid expectations for the global economy and Andritz's relevant markets, Andritz expects Sales and Net Earnings in 2006 to increase compared to 2005. However, a potential or unexpected major economic downturn of the global economy might have a negative effect on the financial development of Andritz in 2006.

# CORPORATE RISKS 

Proven active risk management for many years


#### Abstract

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 towards 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 effected 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.

## Safety and 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 were, used for industrial purposes, and disposal of waste at disposal sites has been arranged. It is possible that in the future the Group may be subject to liabilities relating to the investigation and clean-up of contaminated areas.

In addition, the Group provides several systems that involve the use of dangerous and hazardous chemicals and materials and provides installation and other services on industrial sites containing dangerous and hazardous chemicals and materials. In the event of a spill of these hazardous materials, accident or explosion involving such chemicals or materials, the Group could be responsible for property damage, personal injury, environmental remedies, and/or have to assume other liabilities arising out of such spill, accident, or explosion.

## 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 nonEuro 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 main strategic pillars 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 normal 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 is 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, 2005 Andritz Inc., a subsidiary of the Andritz Group, is one of many defendants in a total of 49 asbestos cases in the USA. In aggregate, the cases involve 12,999 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 page 108 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 are 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, among other things, 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.

## EPC/turn-key contract risks

In a growing number of the Group's projects, Andritz has responsibility for plant-wide engineering and/or construction, in addition to the supply of Andritz equipment systems. These turn-key or EPC contracts involve the risks discussed above, but also involve risks relating to greater on-site responsibilities, including environmental matters, local labor conditions and construction, and installation risks. Additionally, the Group is exposed to risks inherent in managing the third parties that perform construction, installation, and engineering services on these projects. The Group has put risk management procedures in place, including insurance programs, contract policies, and project management discipline to reduce these EPC-related risks.

## 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.

## CORPORATE GOVERNANCE

## Compliance with newly revised Code


#### Abstract

Andritz endorses compliance with the Austrian Corporate Governance Code, which was initially introduced in September 2002 and revised in early 2006. It regards the Code as an essential means to implement responsible management and control of Andritz, which is directed towards 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 newly revised Code.

Besides the mandatory " $L$ " Rules, which refer to legal requirements, Andritz explains the requirements of and the deviations to the Code's "C" Rules as follows:")

## Rule 30

The members of the Managing Board are entitled to receive pension scheme benefits. In addition to a retirement pension, these include benefits in the event of occupational disability, as well as pension payments for dependents following the death of the beneficiary. The retirement pension is normally paid from a certain age provided that the employment contract has already been terminated by this date. The administration has been transferred to a pension fund; in the event that the employment contract is terminated prematurely, contributions made up to this point shall still be vested. The pension amount to which the beneficiary is entitled is not subject to an escalation clause before any benefits become payable, but will be adjusted annually thereafter. Each member of the Managing Board shall, upon termination of his/her function and concurrent termination of employment, be entitled to severance payments in the meaning of Article 23 of the Austrian Employees Act.

## Rule 34

The information and reporting obligations of the Managing Board as well as the setting up of various committees are stipulated in the Company's Articles of Association, which are available on the Andritz AG website.

## 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 39

The Supervisory Board of Andritz AG shall nominate committees depending on the prevailing situation and necessities. These committees can be composed of all members of the Supervisory Board.

## Rule 41

The Supervisory Board of Andritz AG does not have a separate nomination committee. The Supervisory Board of Andritz AG is composed of experts from different fields, who hold constructive sessions at regular intervals to discuss, inter alia, the filling of vacant Managing Board positions and the planning of succession.

## Rule 43

The Supervisory Board of Andritz AG does not have a separate remuneration committee. The Supervisory Board of Andritz AG is composed of experts from different fields, who hold constructive sessions at regular intervals to discuss, inter alia, the remuneration of the Managing Board and employment contracts.

## Rule 49

Schönherr Rechtsanwälte GmbH provides legal advice to Andritz. Hellwig Torggler, Deputy Chairman of Andritz AG's Supervisory Board, is an attorney-at-law and senior partner of Schönherr Rechtsanwälte GmbH. The fees that have been paid to Schönherr Rechtsanwälte in 2005 are to be considered as minor.

## Rule 51

The remuneration of the Supervisory Board is paid to the Chairman, Deputy Chairman, and the Members of the Supervisory Board at the ratio of 2:1.5:1.

## Rule 53

With regard to independence criteria, the Supervisory Board of Andritz AG follows the guidelines of annex 1 of the Corporate Governance Code. According to these guidelines, all members of the Andritz Supervisory Board, with the exception of Hellwig Torggler, can be seen as independent.

## Rule 54

The free float of Andritz is over 70\%. No member of Andritz AG's Supervisory Board owns more than 10\% of the company. With regard to the independence criteria of the Supervisory Board members, please see explanations to Rule 53.

## Rule 57

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

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.

# BUSINIESS AREAS OF THE ANDRIZ CROUP 

The business activities of the Andritz Group focus on the following Business Areas:

- Pulp and Paper
- Rolling Mills and Strip Processing Lines
- Environment and Process
- Feed Technology
- Hydraulic Machines/Other Operations


## PULP AND PAPER

Highlights 2005

- Solid project activity for both greenfield pulp mills and modernization/refurbishments of existing mills
- Very successful start-up of Veracel pulp mill
- Receipt of several important reference orders



Business Area Managers


## Profile

The Pulp and Paper Business Area is a leading global supplier of systems, equipment, and services for the production of pulp, paper, and Medium Density Fiberboard (MDF). The Business Area also supplies wood handling systems for the Oriented Strand Board (OSB) industry.

The Business Area's technology is employed for the production of chemical, mechanical and recycled pulp. The successful acquisition of complementary product areas over the last decade enables the Business Area to supply complete processing lines from log handling to fiber preparation to the drying, sheeting, and baling of pulp, including chemical recovery and sludge handling.

The Business Area also supplies stock preparation and paper machine approach systems, refining systems, tissue machines, and machine ventilation/drying systems for paper, tissue and board applications.

Service activities include engineered wear products (refiner plates, screen baskets, rotors, agitators, chipper knives, etc.), as well as complementary technical services. The most recent acquisitions extend the Business Area's expertise in specialized sensors, process control, 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 the supply of complete installations on an EPC basis.

## Market development

In 2005, project activity for pulp mill equipment was at a satisfactory level for both greenfield mills and modernization/refurbishments of existing mills. Investments in new pulp mills were again focused on the southern hemisphere (Latin America and Asia), where some new projects were awarded and planning for several others was begun. In Europe and North America, project activity focused on selective modernizations and capacity expansions.

Pulp prices developed relatively stable during 2005. The average price for Northern Bleached Softwood Kraft (NBSK), at approximately 610 US dollars per ton, remained about the same as in 2004. Solid price increases in the First Quarter were offset by weaker demand, especially from European and Chinese paper mills, during the Second Quarter. The shutdown of some Finnish pulp mills during May and June 2005 - caused by the dispute between the Finnish Forest Industries Federation and the Finnish Paper Workers' Union about the new collective labor agreement - led to a slight support of NBSK prices.

The prices for short-fiber pulp (birch and eucalyptus) increased from 520 to 600 US dollars per ton during the First Half and remained in a range between 580 and 600 US dollars per ton during the Second Half of 2005.

## Business development

Sales of the Business Area developed very favorably. As a result of increased work on the high Order Backlog at the end of 2004, Sales surged to 1,032.9 MEUR, an increase of $16.8 \%$ compared to 2004 (884.6 MEUR).

EBITA, however, decreased slightly to 63.6 MEUR (2004: 64.8 MEUR). This decline is mainly due to both the execution of some large orders, which typically have slightly lower margins, as well as competitive pressures and partial project cost-overruns in some of the Business Area's Divisions.

The Business Area's Order Intake, at 1,017.0 MEUR, declined by $16.6 \%$ compared to the previous year (2004: 1,218.9 MEUR). The main reason for this decline is the very high level achieved last year, which was influenced by the receipt of a large order worth over 300 MEUR.

During May, the Veracel greenfield market pulp mill in Brazil started up very successfully and ahead of schedule. Andritz provided the complete fiberline - from digester to finished bales of market pulp - and the white liquor plant. Design capacity for the mill is $900,000 \mathrm{t} / \mathrm{a}$. Included in the delivery is Andritz's TurboFeed ${ }^{\circledR}$ chip feeding technology, a Downflow Lo-Solids ${ }^{\circledR}$ continuous cooking system, a new CombiScreen ${ }^{\text {TM }}$ combined knotter/screening unit, the largest Andritz high-efficiency DD Washers in operation, and the largest pulp dewatering and drying system in Latin America ( 9.338 m working width). The whole line produced $3,468 \mathrm{t} / \mathrm{d}$ just months after start-up, exceeding its design capacity of $3,000 \mathrm{t} / \mathrm{d}$.

## Major orders

A new drying machine, supplied by the Pulp Drying Sys tems Division to Jiang Lin Pulp Mill, China also started up successfully. The flash dryer supplied to M-real's Kaskinen mill, Finland and the dryer upgrade at Zellstoff Pöls AG, Austria also started up successfully.

The new 5.55 m wide tissue machine for Shandong Hengan Paper Co. Ltd., China started up very successfully. This CrescentFormer machine for high-quality tissue paper has a production capacity of $60,000 \mathrm{t} / \mathrm{a}$.

The new fiber preparation pilot plant in Graz, Austria was officially opened at the end of April 2005. With the new pilot plant, Andritz will be able to perform customer trials and R\&D development work on complete systems. The plant, which can be used for both single machines and system trials, is suitable for treatment of many different raw materials, such as recycled fibers, old corrugated containers, and virgin fibers.

In spring 2006, Estonian Cell, one of the most modern high-yield hardwood mechanical pulp mills in the world, incorporating the latest technology in mechanical pulping, was in its final stages of completion. Andritz supplied the technologies and process equipment for the mill, which is expected to start up ahead of schedule. A detailed project description of Estonian Cell can be found on page 53 of this report.

- Andritz will supply all the major process equipment for Oy Metsä-Botnia Ab's new pulp mill to be built near Fray Bentos, western Uruguay. The scope of supply encompasses a large single-line production system from wood handling to pulp drying, as well as the chemical recovery systems (evaporation plant, recovery boiler, and white liquor plant). The value of the order is over 200 MEUR. The mill will produce one million tons of eucalyptus pulp per year. The Andritz equipment represents the industry's latest technology and will ensure minimal environmental impact, cost-effective production, and the highest quality pulp.

The International Finance Corporation (IFC), the private sector financing arm of the World Bank, is currently evaluating to provide financing for the project. An impact study of the World Bank to assess the social and environmental impacts of the pulp mill showed favorable results, thus confirming Botnia's own study. A final decision by the World Bank is expected during the First Quarter of 2006.

Both parties also signed a long-term maintenance contract for the mill. Andritz, in cooperation with MetsäBotnia, will be responsible for maintenance planning and implementation, as well as the complete maintenance operations after the start-up of the mill.

- Marusumi Paper, one of Japan's major integrated newsprint producers, selected Andritz to deliver a new 700 t/d fiberline and the chemical recovery systems for its Ohe mill. The value of the order is approximately 100 MEUR.

Andritz will deliver the project on an EPC basis. The scope of delivery includes a continuous digester, brownstock washing, oxygen delignification, screening, bleaching, evaporation, and a white liquor plant, including white liquor oxidation. The fiberline will operate on both hardwood and softwood to meet the raw material requirements of Marusumi's paper machines. The six-effect evaporator will be the first complete evaporator plant to be supplied by Andritz in Japan. $\rightarrow$

Key figures Pulp and Paper

| MEUR | 2005 | 2004 | 2003 | 2002 | 2001 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sales | 1,032.9 | 884.6 | 810.3 | 672.2 | 883.0 |
| Order Intake | 1,017.0 | 1,218.9 | 857.3 | 843.3 | 642.8 |
| Order Backlog as of 31.12. | 950.4 | 951.1 | 622.7 | 582.0 | 431.5 |
| EBITDA | 76.1 | 77.9 | 63.9 | 53.5 | 69.8 |
| EBITDA margin | 7.4\% | 8.8\% | 7.9\% | 8.0\% | 7.9\% |
| EBITA | 63.6 | 64.8 | 49.1 | 39.2 | 53.9 |
| EBITA margin | 6.2\% | 7.3\% | 6.1\% | 5.8\% | 6.1\% |
| Capital investments | 13.6 | 14.3 | 9.3 | 11.5 | 10.8 |
| Employees as of 31.12. | 3,018 | 2,805 | 2,959 | 2,634 | 2,626 |

## In addition to these large, multi-Division orders, the following significant orders were booked by the Divisions:

The Wood Processing Division will supply a three-line woodyard on an EPC basis for Suzano Bahia Sul's new pulp mill to be built in Brazil. The woodyard capacity corresponds to 1.2 million tons annual pulp production. The Division received an order from Martco for portal cranes to be delivered to Louisiana, USA. Andritz wood handling systems are becoming the standard for new, high-capacity OSB plants. The Division also received a significant order from Grant Forest Products for portal cranes and debarking lines for two greenfield OSB plants in South Carolina, USA. International Paper ordered a complete debarking system with de-icing and LogScan ${ }^{T M}$ automation system to increase wood cleanliness for its Bucksport groundwood mill, USA. JSC Arkhangelsk Pulp and Paper Mill, Russia extended its earlier woodyard order to add a conveying system for chips and bark.

The Recovery Division will supply a new High Energy Recovery Boiler (HERB) to SCA Packaging Obbola AB, Sweden. The technology concept and features of the recovery boiler to be delivered by Andritz will meet SCA's targets to further reduce emissions and to maximize power production, doubling the electricity generated at the plant.

International Paper do Brasil's Mogi-Guacu mill, Brazil, Nettingsdorfer Papierfabrik AG's mill in Haid bei Ansfelden, Austria, and Australian Paper Limited's Maryvale mill, Australia have ordered recovery boiler retrofits. Tamil Nadu Newsprint and Papers Limited, Kagithapuram, India placed an order for a new recovery boiler through Andritz's joint venture in India, Enmas-Andritz. SmurfitStone Container in South Carolina, USA ordered a new EPC seven-effect evaporation plant. April Desa PangkaIan Kerinci, Indonesia ordered a new evaporation plant which will produce high dry solids liquor. Incorporated in the delivery will be two concentrators to upgrade the existing evaporation plants to produce $80 \%$ dry solids. M-real selected the Division to upgrade the evaporation plant at the Husum mill, Sweden, and VCP's Jacarei mill, Brazil ordered an upgrade of its evaporation plant.

The Chemical Systems Division will supply the white liquor plant at CENIBRA's Belo Oriente mill in Brazil. A new technology LMD-FilterTM is being installed at Sappi Fine Paper North America's Somerset mill, USA. This represents the latest technology for lime mud dewatering. The Division was awarded a significant order for a white liquor plant (recausticizing plant, excluding green liquor handling and lime kiln) by Zellstoff Pöls AG, Austria. The Division's market presence in India was further strengthened with the orders for two new lime kilns.

The Fiberline Division will supply systems for washing, oxygen delignification, screening, and bleaching to Sirpur Paper Mills, India. The systems will produce pulp from mixed hardwoods and bamboo. This is the second large order from the Indian market in 2005. The Division also received three orders from Brazil to upgrade cooking systems: Votorantim Celulose e Papel's mill at Jacarei, CENIBRA's mill at Ipatinga, and Aracruz Celulose's Fiberline B. All three upgrades include the yieldenhancing Lo-Solids ${ }^{\circledR}$ cooking technology as the main technical component. The upgrade at Jacarei will create the world's largest capacity single-line cooking system ( $3,740 \mathrm{t} / \mathrm{d}$ ). Also in Brazil, the Division will supply the washing, screening, oxygen delignification and bleaching systems on an EPC basis to Bahia Sul Celulose's Mucuri mill. The capacity of the line, which will include the largest DD washers Andritz has ever built, is 3,160 t/d. The Division will supply Australian Paper's Maryvale mill, Australia with the major equipment and services for a cooking system modernization (Lo-Solids ${ }^{\circledR}$ cooking) and new systems for brownstock screening and washing, oxygen delignification, and bleaching.

The Pulp Mill Services Division received numerous orders for services to improve customers' overall efficiency. The Division signed a large contract with Metsä-Botnia to work as partners for maintenance planning and execution of a new pulp mill being built in Uruguay.

The Division engaged in several significant fiberline modernization projects: upgrading of an atmospheric diffuser for llim Group's Ust llimsk mill, Russia and of the digester feed system for Stora Enso's Norrsundet mill, Sweden. One of the biggest orders from Japan was received from Chuetsu's Nomachi mill for upgrading its ECF bleaching line. UPM's Kaukas mill, Finland ordered a large package of services encompassing fiberline, evaporation, recovery boiler, and recausticizing equipment. This order demonstrates Andritz's capability to perform mill-wide shutdown services for its customers.

The Fiber Preparation Systems Division received orders for components for the deinking line, paper machine approach system, and sludge dewatering system from Guangzhou Paper, China. The pulping equipment is designed for $1,200 \mathrm{t} / \mathrm{d}$ capacity. The deinked pulp will provide the furnish for a new newsprint machine. Orchids Paper Products, USA placed an order for a recycling paper line and approach flow system upgrade for tissue production.

The Division received major orders for OCC systems from An Binh Paper, Vietnam and Middle East Paper, Saudi Arabia. In addition, the Division received orders from Shandong Huatai, China for pulping and sludge dewatering systems for the new PM12 deinking line. UMKA AD Fabrika Kartona, Serbia and Montenegro ordered an upgrade for its existing recycled fiberline that supplies an eight-layer board machine. Andritz will also rebuild a board machine at the mill to increase capacity by $50 \%$. JSC JTI Yelets, Russia ordered equipment for a tobacco processing plant. The Fiber Preparation Systems Division has built up a strong local team in China to sell and execute local projects for deinking, approach systems, and OCC recycled fiber systems using the local manufacturing resources at Andritz Technologies China.

The Mechanical Pulping Division signed the largest contract in its history with Tracodi Corp., Vietnam to supply a complete chemi-mechanical pulp production line - from raw material received to finished packed pulp bale. The line will be based upon Andritz's P-RC ${ }^{\text {TM }}$ APMP technology. This will be the first time that kenaf will be used as a raw material for mechanical pulping. The scope of supply also includes auxiliary systems such as instrumentation, process control, and wastewater treatment.

Solikamsk OAO, Russia has contracted with Andritz to rebuild its TMP line to increase capacity and improve the pulp quality. In addition, the Division received an order to supply bleach plant equipment to Norske Skog's Boyer mill, Australia. The new bleaching line will meet the high brightness required for improved newsprint grades. Orders for single machines and bleach plant upgrades were received from SCA Laakirchen, Austria and MD Albbruck Myllykoski, Germany. Nippon Paper's Iwanuma mill, Japan ordered a new RTS ${ }^{\text {TM }}$ high-speed refiner to reduce energy consumption while producing high consistency pulp.

For the MDF industry, the Mechanical Pulping Systems Division upgraded the existing pressurized refining system of Kunz Faserplattenwerk Baruth, Germany, which created the world's largest single-stage production line (over $1,300 \mathrm{t} / \mathrm{d}$ ). The Division sold MDF pressurized refining systems to Fibraplac Chapas de MDF, Brazil and Neopan Bartar, Iran. A high-capacity pressurized refining system was sold to Yildiz Sunta MDF, Turkey. In addition, the Division received two orders from Chinese MDF producers and two orders for upgrades of existing pressurized refining systems from Egger, Germany for its plants in Wismar and Brilon. The Division will also supply a plant to convert waste plastics into a valuable raw material which can be used in the fiberboard industry. This will be the first of its kind in the world, and a completely new technology.

The Pulp Drying Systems Division received an order for a pulp drying plant from Guizhou Chitianhua Paper Industry, China, which will be the third market pulp drying plant from Andritz in China. The Division also received orders from Carter Holt Harvey, New Zealand for a Twin Wire Press to replace older equipment and provide extra capacity. Andritz will supply a slab press, baling line, and flash drying system to Phuong Nam, Vietnam utilizing the latest technology in bale forming and drying developed by Andritz. Contracts were also received for the extension of a Fläkt dryer at Weyerhaeuser's Port Wentworth mill, USA and for another customer in North America. Pulp Drying Systems will upgrade a drying system and deliver a new screening plant for Zellstoff Pöls AG, Austria, which will replace the existing cleaner system to achieve better pulp cleanliness with lower energy consumption. In addition, the Division will modernize a pulp machine - originally supplied by Andritz - for Indah Kiat's Perawang mill, Indonesia, adding a capacity of $150 \mathrm{t} / \mathrm{d}$, and the baling line for M-real's Kemsley mill, UK. Also, an order was received for a production upgrade of a Fläkt dryer for CENIBRA, Brazil.

The Tissue Machines Division received an order for a new TAD machine from Procter \& Gamble's (P\&G) Green Bay mill, USA. The tissue and towel machine is part of a capacity expansion at the mill. P\&G also selected Andritz to upgrade the dry end of a tissue machine at its Neuss mill, Germany. This is the third contract with P\&G for a machine modernization at Neuss within a year.

The Paper Mill Services Division focused its efforts on automation systems and the development of programs combining parts deliveries and annual service contracts to improve the equipment availability and overall production efficiency of customers' plants. The Division received orders for upgrades of refiner protection systems from Norske Skog mills in Walsum, Germany and Halden, Norway. These systems provide higher availability and improved stability of refining operations.

The screen basket business developed very successfully. Major orders, including corporate contracts, were received from Rock Tenn, USA, Polesine, Italy, and Swiecie, Poland, and from several Chinese mills. The refiner plates business was very successful in spite of some mill closures, particularly in North America. The introduction of plates for conical refiners led to a number of orders. A recycled fiber pulper for Polesine, Italy was rebuilt to improve pulping efficiency at higher production levels. This confirms the expertise of the Division for pulper rebuilds. Several major upgrades of dewatering equipment were completed during the year to increase production rate and reduce energy consumption. Upgrades were performed in Norway, Canada, China, Great Britain, Switzerland, Austria, and Brazil. The Division modernized the mechanical pulping line at Perlen Papier, Switzerland to increase capacity for PM4. UPM Lappeenranta, Finland and Kathadin Pulp, Canada utilized the Division's services for large-scale refurbishment of their mechanical pulping lines.


Andritz supplied the technology and process equipment for the mechanical pulp mill of Estonian Cell. The photo shows the 90 m chip conveyor bridge from the chip silo to the process building.

# ESTONIAN CELL <br> High-Yield, High-Quality Pulp in Estonia 

## Andritz supplied to Estonian Cell a complete mechanical pulp mill - from woodyard to finished pulp bales.

Extensive environmental impact studies, and creation of several hundred new jobs.

The new Estonian Cell pulp mill is based near Kunda, Estonia, about 100 km east of Tallinn. Andritz supplied the technology and process equipment for the mechanical pulp mill of Estonian Cell - from woodyard, chip handling, impregnation, refining, bleaching, dewatering, and drying to finished pulp bales. The mill uses the advanced and well-proven Andritz P-RC ${ }^{\text {™ }}$ APMP technology, which lowers operating costs and improves pulp quality due to reduced energy consumption (20-30\%) at similar chemical charges. It also improves the bio-degradability of effluents (no sulphur compounds) and leads to better mechanical characteristics of the pulp.

Estonian Cell is designed to produce 140,000 t/a of high quality market pulp. The main focus markets are Western Europe and Scandinavia. The bleached pulp from aspen fiber is ideal for papermaking applications ranging from printing and writing grades to paperboard and tissue.

Abundant hardwood resources, especially aspen, in Estonia and attractive energy and labor costs were the driving forces to promote the idea of building a pulp mill in that region. All state-owned forests in Estonia (1 million ha or $40 \%$ of all forested land in the country) have been certified by the Forestry Stewardship Council (FSC) since 2002. The mill provides employment for approximately 75 full-time people and created several hundred new jobs in the surrounding area (support services, outsourced services, etc.).

Before the mill was built, an extensive environmental impact study had been carried out for the Estonian authorities. The resulting permit covered the environmental performance of the entire plant (emissions to air, effluent to water, generation of wastes, noise) and followed the European Union's recommendation for the best available technologies.

The general contractor for the project is German RWE Industrie-Lösungen GmbH , which signed a sub-contract for supply of the main process equipment with Andritz in April 2004. Erection works started in March 2005. Andritz completed classroom training for Estonian Cell's operations and maintenance personnel in autumn 2005. The operators did hands-on training at an Andritz P-RC ${ }^{\text {TM }}$ APMP mill in China.

This project once again confirms Andritz's position as the global leader in hardwood mechanical pulping. During 2005, several similar Andritz lines started production and others are currently under construction.

The Estonian Cell project is financed by Larvik Cell AS of Norway, the European Bank for Reconstruction and Development, and the Heinzel Group of Austria. Heinzel will also be responsible for marketing and selling Estonian Cell's market pulp.

## Research <br> and Development

The Divisions have focused their R\&D programs primarily on improving fiber quality while lowering investment, operating and maintenance costs, and also reducing environmental impact of the equipment and processes.

The trend today is towards 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.

## The Divisions' R\&D programs in detail are as follows:

## Wood Processing

The main focus was on large-scale field-testing new developments at customer locations. The new chip sampling system was started up and automatically produced representative chip samples for the analyzer. This provides chip quality information for use by pulp mill operators.

Full-scale tests of debarking behavior of tropical hardwoods were carried out in southern Europe. The tests generated important information about the correct debarking parameters. Tests of a new method for removing loose bark from hardwoods were successful. In North America, a new monitoring and diagnostics package for portal cranes, which will improve the overall efficiency of the equipment, was developed.

## Fiberline

Developments are continuing in the program to reduce customers' overall costs while maintaining equipment performance and availability. The adaptation and improvement of process and equipment solutions for southern hemisphere applications are also progressing. These developments are not only related to scale-up of the production capacity for extremely large mills, but also to the development of cost-competitive solutions for small and medium-size mills.

New developments of the Drum Displacer ${ }^{\text {TM }}$ (DD) Washer show remarkable progress with regard to washing efficiency and capacity. The best proof for these improvements is visible in the start-up curves and chemical consumption figures of recent deliveries. The next generation of MC equipment is under intensive development with the goal of system simplification and energy savings.

In the area of modeling and simulation development, the first Advanced Control Systems (ACS) were sold to VCP in Brazil and CMPC in Chile to optimize the digester operations. Development work continues to include the remaining fiberline process areas.

## Recovery

Further development of black liquor crystallizing technology is underway to extend the time between concentrator washouts and to improve evaporator availability.

The first Ash Re-Crystallization (ARC) system for chloride and potassium removal was successfully commissioned at the Portucel Soporcel Group mill in Portugal. During the start-up, a new computer model for simulating the ARC process and leaching processes was tested.

Research has been conducted on evaporator materials. Electro-chemical testing of the corrosion resistance of different materials has been performed in a mill environment. In addition, through heat transfer material research, the Division has found more cost-effective materials for evaporators. Development of manufacturing and welding procedures for lamellas is an important part of the research. The study is being conducted in cooperation with technical universities and material producers.

Developments for recovery boilers are focused on producing more power from biofuel (black liquor), which also eliminates the release of greenhouse gases into the atmosphere. A new arrangement of heat transfer surfaces in the upper furnace of the recovery boiler is implemented in three new recovery boilers now under construction. This will enable more effective utilization of flue gas heat to produce higher pressure steam in the boiler.

## Chemical Systems

A new lime kiln burner has been developed, and is now successfully operating at a mill in Finland. The burner produces lower nitrogen oxide levels than existing technology.

A centrifuge for green liquor dregs handling is being marketed. It offers advantages for mills which carefully manage non-process element removal in the lime circulation.

A new concept for lime mud drying has been developed and a patent has been applied for. The new technology should enable customers to increase the capacity of existing kilns with lime mud dryers or reduce the size of a new lime kiln for a given capacity.

The first LMD-FilterTM for lime mud dewatering and washing has exceeded performance expectations. Two units are in operation and seven units were sold. Developments are continuing to design larger sizes of all major equipment in the white liquor plant ( $4,000 \mathrm{t} / \mathrm{d}$ pulp production and $14,000 \mathrm{~m}^{3} / \mathrm{d}$ white liquor production).

## Pulp Mill Services

Life cycle management and optimization have been the Division's focus areas during the last few years.

For the woodyard, a service has been developed to optimize chipping operations efficiency and control. The offering is a combination of equipment (HQ-Plus ${ }^{\top \mathrm{M}}$ chipper knife system), service, and automation (Acutest ${ }^{\oplus}$ condition monitoring and the new chip sampler/analyzer).

In the chemical recovery area, cast air nozzles, minihoods, and smelt shattering systems in the recovery boiler improve equipment availability and extend the time between shutdowns.

A new product group, Automation \& Diagnostics, is responsible for developing and managing automation technology - including condition monitoring, simulation, process control, and optimization.

## Fiber Preparation Systems

In the Fiber Preparation Systems Division, Andritz can now perform full-line production trials and testing for recycled fiber applications in its Graz pilot plant. The plant is capable of receiving customer raw materials, processing the fibers (including deinking if necessary), and producing the final pulp. Future research work will concentrate on different aspects of residuals (sludge/rejects) and water handling technologies to further reduce environmental impact.

## Mechanical Pulping

Technologies and equipment to process alternative raw materials (different species of pine, a variety of hardwoods, and annual plants) have been developed.

In chemi-mechanical pulping, development has concentrated on mill-scale optimization of the advanced P-RC ${ }^{\text {TM }}$ APMP process. 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 use of alternative wood species in the RTS ${ }^{\text {TM }}$ TMP process. Pulps of very high quality have been produced with these processes and specific energy consumption has been reduced by 20-30\% compared to standard TMP.

Major drivers in equipment development are productivity improvements and increased production capacities. Following these requirements, new machine sizes with larger capacities were introduced to the market. Availability and ease of maintenance for refiners and dewatering machines have been improved. New methods to increase replacement intervals of refiner plates have been successfully introduced.

Customer requirements include sophisticated process control. The new Andritz Bleach Commander ${ }^{\text {TM }}$ 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.

## Pulp Drying

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 production of $4,000 \mathrm{t} / \mathrm{d}$ based upon successful Twin Wire Former technology. The related specific design capacity was reached on the Division's full-scale pilot machine. 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 for the entire sheet drying line has been developed. This is used for operator training and DCS checkout prior to start-up. This simulation approach ensures fast production rampups after the line is started. The simulator also contributes to continuous optimization of the plant.

Work on the new slab press was completed, giving Andritz full-line capabilities for mechanical market pulp mills. The first commercial installations of this press were at Estonian Cell, Estonia and Phuong Nam, Vietnam.

## Tissue Machines

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 tissue or TAD plant. Operators can virtually run the future paper production line and change settings in a safe, virtual environment.

The shoe press technology has been proven in 13 tissue machine installations around the world. One of its latest features is "machine direction" shoe movement. This additional functionality results in gaining more bulk or achieving higher post-press dryness, giving the operator more flexibility. Record speeds of over $1,900 \mathrm{~m} / \mathrm{min}$ have been achieved with a shoe press.

A further development of the reel concentrated on the improvement of the centerwind. A centerwind reel is mainly used in TAD machines to retain the volume and water absorption properties for bulky heavyweight tissue and towel grades. The new PrimeReel ${ }^{T M}$ 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 transfer in the area between the creping doctor at the Yankee cylinder and the reel is critical to runability. The PrimeRun ${ }^{\text {TM }}$ system of sheet transfer components ensures better runability, especially with lightweight tissue at high machine speeds.

## Paper Mill Services

A new wedge wire basket with the brand name BarTec ${ }^{T M}$ was successfully introduced, with a focus on optimization of the screen basket production process and the application of new profile types and wires to ensure highest quality and maximum stability.

Building on the LemaxX Spiral ${ }^{\top M}$ success in Andritz/ Durametal's core Double-Disc refiner plate business, the low consistency product line is now pursuing growth in the conical refiner plate market. The first field trials of LemaxX Spiral $C^{T M}$, the latest development for the high performance, value-added conical market, have proved very successful; product launch is expected during 2006.

Development programs were designed for Bauer Double Disc Refiners in order to address the seal and bearing problems of those machines. They are a guideless and trammable rebuild kit for the Twin 60 to ensure parallel plate gap over the service life, and a Keraloy hard facing product to increase service life of compression plug screws (MSD, chip press, etc.).

The modern Refiner Protection System (RPS) developed from Andritz was upgraded with additional security functions. Furthermore, it was improved in a way to enable the condition monitoring with this system.

New SCP wear shoes for both the high pressure and the low pressure zones were developed, targeting increased lifetime and thus reducing maintenance costs on screw presses. The new wear shoes are available for all Andritz and competition screw presses.

## 056

# ROLLING MILLS AND STRIP PROCESSING LINES 

Highlights 2005

- High project activity for steel and stainless steel equipment particularly in China
- Record Order Intake
- Market position further expanded



## 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 worldwide, 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.

## Market development

In 2005, project activity for steel and stainless steel equipment was again very strong in China (including Taiwanese and Korean investments in China), where many projects for carbon steel and stainless steel plants were decided. In Europe and India, investment interest from stainless steel and carbon steel producers was also on the rise, with some selective investments made. Only one large project was awarded in North America.

According to preliminary figures, world production of crude steel in 2005 increased by approximately 3-4\% compared to 2004. Production growth was very strong in China, where demand for both carbon and stainless steel products remained high throughout the year. China, which accounted for more than $30 \%$ of the global crude steel production in 2005, became a net exporter of carbon steel in 2005.

Global production of stainless steel was approximately 5-6\% higher compared to 2004. In China, strong investments in new capacities for stainless steel production continued during 2005, with the result that the aggregate capacity of existing lines and lines that will come on stream in the future almost reached the level of domestic demand.
Sources: ISSF, IIS|

## Business development

In 2005, Sales of the Business Area increased to 275.9 MEUR, a solid increase of $17.2 \%$ compared to 2004. EBITA and profitability also developed very favorably. At 15.9 MEUR, EBITA was $31.4 \%$ higher than in 2004, leading to an increase in EBITA margin to $5.8 \%$ (2004: 5.1\%)

Order Intake, at 444.8 MEUR, increased by 66.8\% compared to 2004 (266.7 MEUR), thus reaching a new record level. By winning several important reference orders, the Business Area was able to expand its market position as one of the world's leading equipment suppliers for rolling mills and strip processing lines to the steel industry, especially in China. The latter accounted for approximately $49.7 \%$ of the Business Area's total Order Intake in 2005.

## Major orders

- Jindal Stainless Steel Ltd., the largest stainless steel strip manufacturer in India, ordered a continuous annealing and pickling line for cold rolled stainless steel strip. Annual capacity of the line will be 250,000 tons. In addition, Jindal ordered a 20-high cold rolling mill together with two roll grinding machines and placed an order for revamping its hot annealing and pickling line.
- For Voest Stahl Service Center, Linz, Austria the Business Area will supply a multi-blanking line. A specific feature of the plant, which will be put in operation in early 2006, is its potential of simultaneously cutting four strips placed alongside each other into plates.
- For JIUQUAN Iron \& Steel Co. Ltd., China the Business Area will supply a complete plant for the manufacture of cold rolled stainless steel strip with an annual capacity of approximately 600,000 tons. Start-up of the plant is planned for the First Quarter of 2007. The order value is approximately 110 MEUR and comprises several lines for annealing, pickling, and finishing of the strip, which will be cold rolled on several cold rolling mills also supplied by Andritz. With the receipt of this largescale contract, the Andritz Group further extends its market leadership as a supplier of plants for processing stainless steel strip.
- In connection with the Linz 2010 project Andritz received an order from voestalpine Stahl GmbH, Austria for the supply of a heavy-duty hot-dip galvanizing line, a strip inspection line, and an acid regeneration plant. The product quality and the production capacity of $450,000 \mathrm{t}$ /a are focused on manufacturing new highstrength steels for the car industry. The value of the order is approximately 65 MEUR, and the system is scheduled to start-up in the First Quarter of 2007.


## Research and Development

- The Business Area will supply a combined steel and stainless steel plate trimming, leveling and cut-tolength line to Taiyuan Iron and Steel Company Ltd. (TISCO), China. It is one of the largest of its kind and will produce heavy plates mostly for bridge constructions and the machinery industry. In addition to this order, TISCO entrusted Andritz with several orders for cold rolling mills (S6-high and 20-high) which are unique in terms of width ( $2,100 \mathrm{~mm}$ ) and product mix, as well as a cold annealing and pickling line of the same width. With these orders amounting to more than 100 MEUR, TISCO will be the largest producer of wide cold rolled stainless steel sheets and plates in the world.
- Donghuk, a Korean steel company, ordered a 6-high cold rolling mill for carbon steel, which is the second cold rolling mill for carbon steel supplied by Andritz to a Korean steel company after entering this market in 2004.
- Due to the high reliability and performance combined with a very competitive price, several orders were received for Andritz's flatness measurement systems.

In 2005, R\&D activities focused on standardization and optimization of controls, especially for rolling mills and HCl (Hydrochloric acid) recovery plants, as well as on process improvements for levelling technologies and corrosion-resistant strip coatings for the automotive industry.

Fulfilling the demand of the automotive industry to improve laser weldability of corrosion-protected steel sheet, the research work for coatings focused on zinc alloys using electro-galvanizing, and PVD (Physical Vapor Deposition) or CVD (Chemical Vapor Deposition) technologies.

IDEAS simulation software is now in use for acid recovery plants in the steel industry. The development of a dynamic model allows operator training, control loop optimization, and equipment optimization.

A new, more accurate rolling pass schedule using Advanced Process Control (APC) has been developed ensuring precise calculation of the cold rolling process to optimize motor power and rolling speed. Combined with other improved design features, Andritz Sundwig rolling mills underscore their leading technology position in this field.

One other important step to improve strip quality during cold rolling was the redesign of the flatness control system. The new flatness roll with closed surface and improved sensor application assures the highest surface quality also for sensitive strip surfaces avoiding imprints. Using predictive control technologies, Andritz contributes state-of-the-art technology to the market, resulting in superior tolerances and quality.

A further development area focused on leveling technologies. The newest, high-precision leveler for automotive sheets was put into operation at Renault to full customer satisfaction. The newly developed leveler for very thick, high-strength steel strip is now in operation with excellent results. This has resulted in a new costefficient, multi-functional leveler to cover a wide range of strip thickness with only one machine.

Key figures Rolling Mills and Strip Processing Lines

| MEUR | 2005 | 2004 | 2003 | 2002 | 2001 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sales | 275.9 | 235.4 | 173.1 | 177.4 | 167.4 |
| Order Intake | 444.8 | 266.7 | 287.6 | 175.7 | 196.3 |
| Order Backlog as of 31.12. | 458.9 | 293.1 | 265.4 | 154.0 | 159.2 |
| EBITDA | 18.2 | 14.3 | 6.6 | 11.1 | 8.7 |
| EBITDA margin | 6.6\% | 6.1\% | 3.8\% | 6.3\% | 5.2\% |
| EBITA | 15.9 | 12.1 | 4.4 | 8.5 | 6.1 |
| EBITA margin | 5.8\% | 5.1\% | 2.5\% | 4.8\% | 3.7\% |
| Capital investments | 2.2 | 3.2 | 1.4 | 1.6 | 3.4 |
| Employees as of 31.12. | 749 | 736 | 533 | 642 | 562 |

## ENVIRONMENT AND PROCESS

Highlights 2005

- Solid project activity in both sludge dewatering and drying
- Acquisition of Lenser Filtration further strengthens product program
- Order Intake at record level




## Business Area Managers

Luc Gilbert
Vélizy, France

Werner Hölblinger
Graz, Austria

Johannes Kappel
Graz, Austria

Armin Vonplon
Wohlen, Switzerland


## Profile

The Environment and Process Business Area covers a comprehensive range of technologies, products, and services for mechanical and thermal solid/liquid separation for municipalities and major industries, such as coal and mineral processing, chemical/petrochemical, and food processing.

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 startup of turnkey plants, including automation and safety engineering.

The large installed base of Andritz products and systems, including more than 10,000 centrifuges and over 100 sludge drying plants worldwide, is serviced from dedicated Andritz service centers in Europe, the USA, and Asia.

## Market development

In 2005, the market for sewage sludge dewatering equipment showed a regionally varied development. In Europe, only a few new plants were built, and investments focused on replacements and capacity enlargements of existing plants. In North America, project activity remained at a satisfactory level. The main growth area was China, where the number of centrifuges sold by Andritz more than tripled compared to the previous year. Project activities in the dewatering of industrial sludge remained high, especially in the steel industry.

The demand for dewatering equipment for process applications remained at a high level for the key industries: chemicals, mining, minerals, and palm oil production. Due to the steadily increasing installed base, the demand for aftermarket products (spare part, rebuilds, and repairs) remained high. The investment level was high in most parts of the world.

The market for sewage sludge drying systems was very active, especially in the USA, but also in Europe. Increased environmental awareness and the EU landfill directive banning the disposal of sewage sludge were enforcing this development. With rising energy costs, industrial use of dried sludge as an alternative fuel source is becoming more attractive. Since dried sludge has nearly the same energy content as lignite, it can be used as alternative fuel in coal-fired power plants or cement plants, thus reducing costs for fuel. In addition, new technological concepts combining dewatering, drying, and incineration of municipal sludge have been developed to minimize energy costs.

Project activity in the field of drying technologies for industrial applications for the petrochemical, minerals, mining and food processing industries was also very brisk, especially in China, Southeast Asia, and Eastern Europe, and also partly in the USA.

## Business development

The Business Area's financial development was positively influenced by the successful performance of the companies acquired in 2004 (Bird Machine, NETZSCH Filtration, Fluidized Bed Drying Systems of VA TECH WABAG). All these companies developed above expectations and contributed positively to Order Intake, Sales, and Earnings during the reporting period. The main goal is to further expand these companies, thus giving the former owners the confidence that they will continue to thrive within the Andritz Group. As a result of this development and due to the processing of the high Order Backlog, Sales of the Business Area increased to 289.2 MEUR in 2005, up by 32.7\% compared to 2004.

EBITA, at 17.7 MEUR, almost doubled compared to 2004 (9.9 MEUR). The EBITA margin improved significantly from $4.5 \%$ in 2004 to $6.1 \%$ in 2005.

By acquiring Lenser Filtration, a leading manufacturer of filter elements for solid/liquid separation in filter presses, the Business Area significantly strengthened its product range. Andritz is now able to offer tailor-made dewatering solutions also for filter presses to meet customer requirements.

In 2005, Andritz again confirmed its leading position as a supplier of centrifuges for sewage sludge treatment, reaching another record number of centrifuges sold.

Order Intake of the Business Area surged to 340.1 MEUR, increasing by $69.5 \%$ compared to 2004. This was mainly due to both the solid development of the Order Intake for sewage sludge drying systems and the favorable performance of the newly-acquired companies.

## Major orders

## Thermal Process Technologies

- Andritz DDS drum drying systems were ordered by the municipalities of Tampa and Bonita Springs, both Florida, as well as Winston-Salem, North Carolina, and Encina, California, all USA.
- Anglian Water ordered a turn-key sludge dewatering and drying center for its Tilbury site, east of London, UK.
- The City of Houston, Texas, USA ordered a complete sludge drying plant (DDS).
- A BDS belt drying system was sold to the City of Dijon, France via Ondeo Degrémont.
- A fluid bed drying system (FDS) for sewage sludge was sold to Fuengirala, Malaga, Spain.
- A fluid bed dryer (FDS) for a special amino acid was sold to a plant in Amiens, France.


## Separation Technologies

- Alunorte, Brazil placed an order for five large hyperbaric filters to dewater bauxite slurry, which is pumped from a new mine to the existing aluminum plant. This will be the largest installation of pressure filters in the world.
- A total of nine large filter presses will be delivered to Krym Titan, Armjansk, Ukraine for the production of titanium dioxide.
- Eleven large filter presses were sold to the contracting company John Finlay, Australia for installation in various coal preparation plants in China.
- Yangzi, China will equip its new PTA plant with Andritz centrifuges (both atmospheric and pressurized) and drum filters
- Multi-year contracts to service installed centrifuges were received from the City of New York, USA and the municipality of Berlin, Germany.
- Syncrude, Canada ordered a total of 24 new scrolls for improved performance of the centrifuges in its tar sand processing plant.
- Eight large centrifuges were ordered to dewater municipal sludge in Atlanta, Georgia, USA.


## Research and Development

R\&D activities for dryers focused on the further development of belt drying systems. New sizes were developed and an entire new design based on a full concrete casing was successfully introduced to the market.

A further development of the belt drying system for drying bark, saw dust, and other types of biomass using waste heat from thermal processes was also started. The Andritz EcoDry system was further optimized.

The new drive system for centrifuges successfully proved its long-term reliability. This technology will now be transferred to other centrifuge sizes.

The medium-term program to rationalize and standardize the Andritz, Bird and Humboldt products continued. This included modernization of designs, cost reductions, and improvement of performance. Research work continued in order to broaden the applications for centrifuges and rotating filters.

The program to merge the filter press designs of Ritterhaus \& Blecher and NETZSCH Filtration in order to combine the advantages of both designs at optimum costs was almost completed.

## Key figures Environment and Process

| MEUR | 2005 | 2004 | 2003 | 2002 | 2001 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sales | 289.2 | 217.9 | 110.4 | 122.8 | 135.3 |
| Order Intake | 340.1 | 200.7 | 110.2 | 147.7 | 140.6 |
| Order Backlog as of 31.12. | 202.2 | 138.3 | 113.8 | 122.6 | 99.7 |
| EBITDA | 22.0 | 12.6 | 3.3 | 2.8 | 9.0 |
| EBITDA margin | 7.6\% | 5.8\% | 3.0\% | 2.3\% | 6.7\% |
| EBITA | 17.7 | 9.9 | 1.5 | 1.0 | 7.2 |
| EBITA margin | 6.1\% | 4.5\% | 1.4\% | 0.8\% | 5.3\% |
| Capital investments | 6.6 | 7.9 | 1.5 | 1.9 | 1.9 |
| Employees as of 31.12. | 1,213 | 926 | 428 | 439 | 435 |

## FEED <br> TECHNOLOGY

## Highlights 2005

- Solid project activity for animal feed production plants in Asia, South America, and Eastern Europe
- Strong demand for wood pelleting plants
- Increase in Order Intake and Earnings




## 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, such as 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 markets for wood fuel pelleting, pelleting of agricultural and industria by-products, and household waste.

The Business Area has three main sites: Esbjerg, Den mark; Geldrop, the Netherlands, and Muncy, PA, USA It operates from ten regional sales and service offices, and is supported by a strong network of distributors and sub-suppliers.

## Market development

In 2005, the animal feed industry in Asia, South America, and Eastern Europe showed good project activity. This trend was mainly driven by vertically integrated meat producers that are building up additional capacities and aiming to improve existing factories. New investment plans in Western Europe and North America remained at a modest level.

The aquatic feed segment also developed positively during 2005, with project activity mainly focused on Asia, the Mediterranean region, and Central and South America.

Capacity expansions within the renewable energy market segment in Europe, as well as in North America, continued on a very active level in the wood pelleting industry. Increased wood pellet plant activities were also observed in the emerging markets of Russia and South America. Also, the waste pellets industry in Central Europe showed reasonable activity.

## Business development

The Business Area's positive financial development in 2005 was greatly influenced by the effects of the successful restructuring measures implemented in 2004. As a result, Earnings and Profitability improved substantially compared to 2004.

Despite lower Sales, which decreased to 93.6 MEUR (2004: 99.6 MEUR) as a result of the low Order Back$\log$ as of the end of 2004, EBITA, at 7.2 MEUR, more than tripled compared to 2004 (2.2 MEUR). Profitability (EBITA margin) surged to $7.7 \%$ (2004: 2.2\%),

Order Intake of the Business Area developed favorably, rising to 101.2 MEUR in 2005. This is an increase of 10\% compared to 2004 (92.0 MEUR), providing a solid basis for Sales in the coming Quarters.

In 2005, the Business Area further enhanced its manufacturing capabilities. It acquired the majority of shares of a machining and fabrication company in Slovakia, and started manufacturing of strategic products for the Asian market at Andritz Technologies China in Foshan, China.

The main goals for 2006 will be further organic growth and the evaluation of further steps to expand the Business Area. Besides potential acquisitions, the focus will be based on the development of new products and further regional expansion.

## Major orders

## Production plants for animal feed

- Charoen Pokphand, Thailand placed a follow-up order for the largest feed processing line in Asia, which was delivered and commissioned in 2004. It will also supply key equipment for a new feed mill of this customer.
- The Business Area received a large order for animal feed equipment for a new plant built by Sadia, Brazil, as well as orders from the same customer for expanding existing feed processing plants.
- Several orders for animal feed plant expansions were won in Central and South America and in Eastern Europe.
- New animal feed processing plants and aquatic feed extrusion lines will be supplied to various customers in the Mediterranean region and in South America.


## Plants for production of biofuels

- For a customer in Belgium, the Business Area will supply the wood pelleting line for a large greenfield biofuel power plant.
- Several orders were also received for new wood pelleting plants in Scandinavia and Russia, and additional lines for North American wood pelleting plants.
- Orders for plants for renewable fuels - wood powder grinding - for a Western European power plant were secured.
- Orders for waste pelleting equipment were secured from Germany and the Netherlands.


## Research and Development

Following the increased needs of governmental regulations to guarantee sterile feed production, a new product family of long-term conditioners was developed. The aim was to improve the results on product sterilization.

To support the requirements of industrial customers in the animal feed business, high-end capacity pellet mills for large feed factories have been developed, thus further completing the Andritz product range.

## Key figures Feed Technology

| MEUR | 2005 | 2004 | 2003 | 2002 | 2001 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sales | 93.6 | 99.6 | 99.2 | 108.4 | 107.0 |
| Order Intake | 101.2 | 92.0 | 102.0 | 104.7 | 112.6 |
| Order Backlog as of 31.12. | 23.6 | 16.0 | 24.5 | 23.5 | 27.6 |
| EBITDA | 9.8 | 5.1 | 7.4 | 6.1 | 4.7 |
| EBITDA margin | 10.5\% | 5.1\% | 7.5\% | 5.6\% | 4.4\% |
| EBITA | 7.2 | 2.2 | 4.8 | 4.2 | 0.9 |
| EBITA margin | 7.7\% | 2.2\% | 4.8\% | 3.9\% | 0.9\% |
| Capital investments | 0.9 | 1.6 | 6.6 | 5.4 | 6.7 |
| Employees as of 31.12. | 489 | 482 | 549 | 609 | 676 |

# HYDRAULIC MACHINES/ OTHER OPERATIONS 

Highlights 2005

- Project activity for turbines and large-scale pumps focused mainly on China
- Record Order Intake
- Successful development of Andritz's operations in China




## 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

In 2005, project activity for turbines and large-scale pumps was mainly focused on Asia. In China, particularly, there was considerable interest in capital investments.

In Europe, the investment activity of the power generating industry was also very high. Besides upgrading projects for existing plants, there was also increased project activity for constructing new plants, especially smallsized power stations. The centrifugal pumps market in China, where Andritz is the clear market leader, continued to be very active.

## Business development

The Business Area's financial performance in 2005 was very solid. Due to the processing of the high Order Back$\log$ as of the end of 2004 Sales increased by $20.3 \%$ to 52.7 MEUR (2004: 43.8 MEUR). EBITA decreased to 2.6 MEUR (2004: 3.8 MEUR).

Order Intake in 2005 reached another record level. Due to major orders for water turbines and stock pumps, it surged to 71.5 MEUR, surpassing the record set in 2004 (58.7 MEUR) by 21.8\%. Andritz's operations in China continued to develop very successfully; the number of stock pumps sold to pulp and paper mills reached another record level.

## Major orders

- Andritz is to supply the electromechanical equipment for a new hydroelectric power station to Salzburg AG, Austria.
- E.ON Wasserkraft, Germany placed an order for revision and repair work at the Reisach 3 pumped storage plant.
- Münchner Stadtwerke, Germany entrusted Andritz with revision and repair work at the Leitzachwerk pumped storage plant.
- Brigl und Bergmeister GmbH, Austria ordered a machine set with automation equipment for the water power station in the Niklasdorf mill.
- The Business Area will supply approximately 300 process pumps for one of the world's largest pulp mills. This is the first order the Business Area ever received from a South American customer.
- A customer from Sudan placed an order for two pumping stations comprising the electromechanical equipment for 20 large-scale pump sets.


## Research <br> and Development

Development of new hydraulics and optimization of existing hydraulic components is based on the cooperation with ASTRÖ, an independent laboratory for hydraulic machinery, utilizing state-of-the-art computer-aided tools and trial stands.

The development of top hydraulic components featuring efficiencies which are considerably superior to competitive equipment essentially contributed to the first sales of a new pump series.

Hydraulic development focusing on Pelton turbines continued. A new test stand was commissioned in the reporting period.

Other development activities focused on special pumps and components for treatment of medium consistency media for the pulp and paper industry, a field which is expected to grow substantially.

## Key figures Hydraulic Machines/ Other Operations

| MEUR | 2005 | 2004 | 2003 | 2002 | 2001 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sales | 52.7 | 43.8 | 32.0 | 29.3 | 26.0 |
| Order Intake | 71.5 | 58.7 | 37.3 | 28.3 | 28.6 |
| Order Backlog as of 31.12. | 60.5 | 40.7 | 27.2 | 21.5 | 22.6 |
| EBITDA | 4.8 | 5.5 | 3.2 | 7.4 | 2.3 |
| EBITDA margin | 9.1\% | 12.6\% | 10.0\% | 25.3\% | 8.9\% |
| EBITA | 2.6 | 3.8 | 3.3 | 5.8 | -0.1 |
| EBITA margin | 4.9\% | 8.7\% | 10.3\% | 19.8\% | n.sp. |
| Capital investments | 3.4 | 2.4 | 1.7 | 2.6 | 0.9 |
| Employees as of 31.12. | 474 | 365 | 302 | 277 | 246 |

Andritz Technologies China, Foshan, has developed very successfully. In 2005 production was more than doubled compared to the previous year.


# ANDRITZ AUTOMATION <br> <br> BrainWave ${ }^{\circledR}$ further strengthens product range 

 <br> <br> BrainWave ${ }^{\circledR}$ further strengthens product range}


#### Abstract

The Automation departments within the Andritz Group Business Areas, along with the two fully owned Andritz affiliates Universal Dynamics Group and IDEAS Simulation \& Control form the Andritz Automation Global Network. Approximately 500 engineers at 25 sites worldwide focus on the development and implementation of automation solutions for Andritz systems and plants, including service support.


Andritz Automation continuously works on automation solutions to improve the processes and plants technically and economically in order to raise the value for the customers. The focus is on process simulation, Advanced Process Control (APC), special sensor development, and further enhancement of efficient engineering tools.

## Newly developed products

During 2005, several new products for various applications were developed.

In order to run processes on an optimized level, Andritz Automation developed and designed the Andritz Control Expert solution (ACE ${ }^{\text {TM }}$ ) for all relevant process areas of a pulp mill. ACE ${ }^{T M}$ is a process supervisory and monitoring system using the unique BrainWave ${ }^{\circledR}$ technology as the common regulatory controller base. BrainWave ${ }^{\oplus}$ is an adaptive, model based and predictive controller, which accurately forecasts process responses and accounts for multiple objectives. It predicts and prevents disturbances before a process is pushed off target.

For the products of the Rolling Mills and Strip Processing Lines Business Area, the Andritz Line Master series (ALM ${ }^{\top M}$ ) was developed and has been installed in all new processing lines. These APC solutions are especially built to continuously optimize the processes of all kinds of stainless steel annealing and pickling lines, and other heat treatment furnaces and pickling processes.

Andritz Sundwig developed an APC system on the basis of a Model Predictive Control (MPC) for the flatness control of cold rolling mills. Based on an integrated model, the controller predicts the future process behavior and thus raises customer product quality and plant productivity. This new controller has already been implemented successfully in many plants.

Intelligent and complex machine and plant control requires accurate online measured process data. The sensor platform MIS (Multi-Ingredient Scan) was developed to measure various properties of fluid media, such as pulp consistency, ash content, and sludge consistency. The laboratory and site tests of the prototype were very successful; the first industrial installation will be implemented in 2006.

To shorten the planning time and to improve the engineering quality, a continuous optimizing and implementation process on the engineering tools used is in progress.

## Business development

In 2005, Andritz acquired Universal Dynamics Group (UDG), an automation services and software company with headquarters in Richmond (Vancouver), BC, Canada. This new acquisition strengthens the capabilities of the Andritz Automation Group in the North American market.

In addition to the engineering services, UDG also markets the software product BrainWave ${ }^{\circledR}$, which is a PCbased advanced controller that allows customers to optimally control various processes. The BrainWave ${ }^{\circledR}$ controller is unique because it uses a patented technology to create mathematical models of the process while it runs. This type of MPC results in tremendous savings for customers due to increased quality, higher production rates, better operability, and lower energy and raw material costs. General Electric successfully implemented BrainWave ${ }^{\circledR}$ in a number of its polymer plants. BrainWave ${ }^{\oplus}$ has already proven its effectiveness in over 1,000 applications.

## Important orders

Andritz Automation will provide the engineering, low voltage equipment, process simulation, automation, installation, and start-up of the systems for Metsä-Botnia's pulp mill project in Uruguay.

For the Chitianhua pulp mill in China, Andritz Automation will provide the project's basic engineering and supply the complete baling line automation system BaleMatic ${ }^{\text {TM }}$.

For an Andritz TAD tissue paper machine to be supplied to Procter \& Gamble, USA Andritz Automation will provide the control system (PrimeControl ${ }^{T M}$ ) for the complete machine. The most advanced PrimeControl ${ }^{T M}$ system was started up successfully for a tissue plant of ICT, Spain.

A chip sampling system was added to the first online chip size analyzer, ChipScan™. It was installed at the UPM Wisaforest mill, Finland to supply chip quality information to improve the production process.

BaleTrack ${ }^{\text {TM }}$, a newly developed automation tool within the Andritz baling line automation package BaleMatic ${ }^{\text {TM }}$, was successfully introduced to the pulp mills of Mondi Richards Bay, South Africa and Veracel, Brazil. BaleTrack ${ }^{\top M}$ collects all quality relevant parameters of a pulp bale and tracks this information from the cutter/layboy to the entire baling line. It transfers this data to customers dispatching and ERP systems to be used for the millwide information system and quality control system.

For the complete stainless steel plant of JISCO, China Andritz Automation will supply all necessary technological control systems including mathematical models to ensure a high quality standard. For the production lines of JINDAL Stainless Ltd., India, Dongkuk, Korea, and Vacuumschmelze Hanau, Germany Andritz will supply the complete drive and automation equipment including instrumentation. Level 2 automation modules for rolling mills and processing lines, according to ISO/IEC 62264 for adaptive pass program calculation and optimization, were also integrated parts of the deliveries.

For the world's largest sludge drying plant, the Changi wastewater plant in Singapore, Andritz Automation delivered the whole automation, electrification, and engineering, which included instrumentation and software development.

IDEAS Simulation received orders for simulation of the pulp mills of Santa Fe 2 CMPC, Chile, Metsä-Botnia, Uruguay, Suzano Bahia Sul, Brazil, and Marusumi Paper, Japan. Several orders were awarded in the mining industry area.

# HUMAN RESOURCES 

## Technical Careers Program developed

All major Andritz Human Resources (HR) activities are coordinated globally and are conducted in accordance with the Group's quality management system. Besides global training activities, HR managers from different regions share their experiences in regular conference calls and discuss relevant tasks and goals. Continuous training of all employees is the major goal of Andritz HR. In total, the Andritz Group spent more than two million Euros for internal and external training courses in 2005.

## Number of employees

As of December 31, 2005, the Andritz Group had a total of 5,943 employees (2004: 5,314). This increase of $11.8 \%$ compared to 2004 is mainly due to the acquisitions of Lenser Filtration and Universal Dynamics Group, and also due to continued staff increases at the Andritz affiliates in China, which have shown a very successful development during the past years.

## Employees by region 2005 (2004) in \%



## Activities in 2005

All relevant vacancies within the Andritz Group were well filled with highly qualified candidates. Recruiting activities are ongoing to secure future staff requirements and to support internal growth of the Andritz Group.

In order to support personnel marketing activities and to attract highly qualified graduates, Andritz Human Resources continued to intensify its contacts with universities in Austria and Finland, and participated in several job fairs organized by these universities.

The Group-wide management training program for future executives of the Andritz Group was continued with success. Employees from fifteen different Andritz Divisions, departments, and Group companies from nine different countries participated in the first module of the "Andritz Management Challenge Program 2005/2006". This international mix was very beneficial to improving intercultural awareness and Group-wide cooperation. Module 2 of this program is scheduled for the spring of 2006.

Additional modules under the Management Challenge Program were tailored together with Management Zentrum St. Gallen, Switzerland. These modules will offer topics to improve and strengthen leadership skills mainly for graduates of the first module of the Management Challenge Program.

The qualification structure of the staff remained nearly unchanged. During the reporting year, HR conducted employee surveys in some Group Divisions to obtain information on job satisfaction and working environment, yielding mostly favorable replies. Many vacancies were filled with female candidates. To enable employees to reconcile job and family requirements, Andritz encourages authorities to provide sufficient nursery facilities near its offices.

To retain experienced technical experts and to attract and recruit new highly-qualified technicians, a Groupwide "technical careers program" is being developed. In all main Andritz locations interviews have been conducted with technical employees to obtain their personal requests and expectations with regard to their professional career, current working environment, etc. Based on the result of these interviews an action plan will be developed and implemented during the next few months.

## Incentive strategy

The annual compensation of management staff is based on different components. On top of a competitive basic compensation, all members of the Executive Board, all Divisional Heads, most of the Managing Directors of subsidiaries, and many Heads of departments are entitled to a specific incentive system. Annual incentives are based on fulfillment of clear targets set for each business year. Targets are linked to profit of the Divisions or overall business entities, Order Intake, and personal goals. Such goals refer to market and product development, HR-related management tasks, etc.

Practically all employees in the different entities are included in local incentive plans. Based on income tax benefits, Austrian employees were offered Andritz shares instead of cash incentives. A significant number of employees availed themselves of this opportunity, thus showing a very high commitment towards Andritz.

Approximately 60 managers and executives of the Andritz Group (including the members of the Managing Board) take part in a stock option program, which was launched in 2004. As a prerequisite for the participation in the stock option program, the managers had to invest up to 40,000 Euros of their own money in Andritz shares. Exercise of the options is based on both the performance of the Andritz share price and the development of Earnings per share of the Andritz Group.

# MANUFACTURING AND PROCUREMENT 

## State-of-the-art manufacturing standards and global procurement

## Manufacturing

The Andritz Group operates approximately 30 manufacturing and service plants in Europe, North America, South America, and Asia. These sites produce and assemble the key components for Andritz equipment and systems. In total, Andritz employs approximately 2,500 employees in manufacturing worldwide. This highly qualified workforce with long-term experience and state-of-the-art production systems ensure high product quality and reliable, on-schedule order execution.

## Manufacturing strategy

In order to remain successful and competitive on the global markets, Andritz operates manufacturing sites all over the world. All process-relevant and complex key components for Andritz plants and machines are manufactured and assembled at Andritz's own workshops in Europe and North America. Simple components are sourced from qualified suppliers, who are subjected to regular quality checks and on-time-performance monitoring.

## Capacity management and on-time delivery

Optimal capacity utilization is an essential success criterion in industrial plant engineering. Outsourcing of simple machine parts is one tool Andritz uses to manage workload, as is flexibility of working times and utilization of a temporary workforce. At construction sites in foreign countries, Andritz calls on the services of local qualified erection companies, which work under close direction of Andritz's own personnel.

Short lead times and over 95\% on-time production are both critical to Andritz's success. With professional project management, achievement of contractual milestones is ensured over the entire process chain.

## Global Service Network

Andritz installed a global network of service points in order to serve the customers as best possible after their systems have gone online. This includes twelve specialized service sites and a number of others that are integrated in Andritz production sites.

## Major developments in 2005

Despite the heavy workload in all of Andritz's manufacturing locations, on-time performance of deliveries and high quality of manufactured products was secured.

The workshop at Andritz Technologies China, which was set up at the beginning of 2004, was able to double the output of the previous year and thereby exceeded the planned volume substantially. Plans are underway to further increase capacities in China.

To further strengthen the competitiveness of the workshops in Europe and North America, several pilot projects were started that aim at achieving top-of-the-class manufacturing excellence. First results show improved work-flow and working conditions, lower inventory levels, shorter lead times, improved on-time performance and efficiency.

In Brazil, a workshop mainly for products of the Separation Technologies Division (Environment and Process Business Area) was set up to produce and supply equipment for the South American market. Andritz affiliate Sprout-Matador, Denmark, entered into a 60:40 joint venture with a manufacturing company in Eastern Slovakia.

## Procurement

The fast growth of the Andritz Group over the last few years has brought a lot of challenges for the Andritz procurement departments. The procurement policy of Andritz focuses on markets, suppliers, procurement processes, and resources. It aims to achieve optimum synergies within the Group's different locations and to improve efficiency in the procurement supply-chain.

The procurement function of the Andritz Group is decentralized and performed individually by different project, manufacturing and service locations. The coordination and cooperation activities within this decentralized structure are ensured by the global procurement organization. The goal is to achieve substantial cost savings by pooling of demand, benchmarking, and negotiation of group-wide contracts. For specific regions (e.g., China), the regional sourcing/subcontracting activities are coordinated and supported by special, regional purchasing organizations.

The main purpose of the procurement organization is to secure the supply of all goods and services required for running the business processes. These goods and services are to be purchased at the most favorable terms and conditions, are to meet our quality standards and have to be available at a specific date. In addition, procurement is to contribute to strengthening Andritz's competitive position through systematic cost reductions (process costs and procurement costs).

The most important countries for purchases of the Andritz Group are Finland, Austria, Germany, USA, Brazil, and China. The biggest production sites of Andritz are also located in these countries.

The importance of countries for procurement varies very quickly due to required local contents especially for EPC contracts. This fact challenges all procurement organizations in analyzing new procurement markets and in handling new suppliers and the local supply.

## QUALITY

## "Do it right the first time" <br> is what Andritz strives to achieve

The high technical standards of Andritz products and systems require manufacturing standards of the highest level, a systematic organization, welldefined 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, typically, either in the vicinity of Andritz's 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 2005

A focus of the Andritz quality management activities in 2005 was to install and further develop quality assurance systems in two major markets, China and South America. Andritz Technology China, one of the fastest growing branches of the Andritz Group, was prepared for ISO 9001 certification. Emphasis was on the international product quality level in Andritz's own manufacturing and in the sourcing in China. In South America, the quality organization was further strengthened to ensure customer satisfaction.

To facilitate global engineering, large efforts were undertaken in the further standardization of Andritz products. In order to better serve its global customers, Andritz developed a tool that allows the selection of the correct material across national borders. This database of equivalent materials used in major markets is implemented in the global Andritz ERP system. Quality inspection plans were also revised and localized to reflect the different environments.

The intranet-based system for feedback and suggestions for improvement was installed at practically all sites of the Andritz Group after it had been successfully used by the Andritz organizations in Austria and Finland for a long period of time. This tool helps the Group to improve on a wide range of levels, including manufacturing, standardization, and business processes.

Recently acquired companies were supported to improve in risk assessment and safety issues with respect to legal requirements.

# SUSTAINABILITY AND ENVIRONMENTAL PROTECTION <br> Andritz technologies fulfill highest environmental standards worldwide 


#### Abstract

Sustainability and environmental protection are integral parts of Andritz's corporate policy. The principles are reflected in the daily work of Andritz employees as well as in the management principles and systems.


Andritz is committed to sustainable development - meeting the needs of the present without compromising the ability of future generations to fulfill their goals. There are three fundamental pillars for sustainable development: economic growth, ecological balance, and social progress. Only businesses living up to their economic, environmental and social responsibilities can be sustainable.

Sustainability is an important strategic success factor. By offering customers state-of-the-art technologies and efficient solutions which minimize waste and environmental pollution, Andritz contributes to environmental protection and the conservation of natural resources. Sustainable thinking is, therefore, an important element in Andritz's R\&D programs.

The Company's actions regarding sustainability were recognized by the inclusion of Andritz in the VOENIX sustainability index. This index, created by the Austrian VBV-Pensionskasse AG, names the companies listed on the Vienna Stock Exchange that are leaders in social and ecological sustainability.

## Andritz helps to achieve ecological balance and economic growth through the following:

- Collaborating with customers and research institutions to better understand the requirements for sustainability and aligning Andritz's business processes with these requirements.
- Developing products that reduce or eliminate waste from manufacturing processes.
- Developing products which move from costly end-ofpipe solutions to approaches that prevent pollution in the first place.
- Operating its business in a socially responsible manner.
- Giving preference to suppliers that share these commitments to economic, environmental and social stewardship.

Andritz is committed to working with customers on a continuous improvement basis to promote sustainable management of the Earth's natural resources. The following are some examples of Andritz's activities targeted on and contributing to sustainable development in the economic, social and environmental areas:

## Economic sustainability

## Corporate Governance

Andritz complies with the newly revised Austrian Corporate Governance Code and aims to meet its provisions. It regards the Code as an essential means to implement responsible management and control of Andritz.

## Risk Management

As a globally operating Group, Andritz is subject to certain general as well as industry-specific risks. Andritz has made it a priority to leverage measures of active risk management related to the nature of industries and businesses in which the company engages. A management steering committee focuses on the identification of major risks and the implementation of counter-measures if necessary.

## Quality Management

The Quality Management System practiced at Andritz is one of the core elements of success. The objective is perfectly summarized under the motto "Do it right the first time." The definition of quality at Andritz is not limited to the products but extends to workplace safety and business process management. The quality of suppliers is continuously monitored. Continuous improvement and optimization in every key area is a core principle for Andritz and integrated in the specific continuous goalsetting processes.

## Environmental sustainability

The Andritz Group is committed to promoting environmental protection and conserving natural resources. Due to the standardization of the core processes, all plants and systems delivered to different Andritz customers around the world comply with the highest environmental standards. This is essential as most countries have implemented comprehensive and stringent environmental constraints, such as mandatory environmental impact assessments.

In the Pulp \& Paper Business Area, for example, the effective use of resources is one of the basic conditions for sustainable production. Andritz developments in yield improvement, reduction of chemical consumption in bleaching, water savings, waste recycling, and energy efficiency contribute markedly to sustainability. For example, the process of making pulp and paper requires large volumes of water. In the last 20 years, technologies developed by Andritz have reduced the amount of water required to produce a ton of pulp or paper by $60 \%$. Another example is the recycling of chemicals. Andritz systems help customers recover and reuse up to 99\% of the chemicals used in making pulp. This protects the environment and leads to essential cost savings for the customers.

In 2004, Andritz successfully completed the chemical recovery plant - one of the world's largest - at UPMKymmene's Wisaforest mill, Finland. In spite of the fact that pulp production at the mill increased by about 200,000 t/a, fossil carbon dioxide emissions were reduced to being almost non-existent, and the electricity generated from black liquor combustion (by-products of the pulping process) satisfies the requirements of all production plants in the mill area. Thus, the technologies developed by Andritz help customers to further reduce emissions and to maximize electricity production.

In the Rolling Mills and Strip Processing Lines Business Area, several processes have been developed which reduce or even eliminate emissions of substances harmful to the environment. Andritz systems are designed to maximize the use of, and to recycle, such materials as rinse waters, rolling emulsions, and pickling acids. For example, Andritz developed a special process for recycling the electrolyte used in electrolytic pickling. The process eliminates the hexavalent chromium formed during the pickling operation. The development of the "no-rinse" coater enables the application of chemicals to the steel strip to be carried out in a closed chemical fluid circuit, thus preventing contamination of the environment.

The Environment and Process Business Area supplies complete process lines which convert liquid sewage sludge into granulate. With a calorific value of approximately 10 to $13 \mathrm{MJ} / \mathrm{kg}$, this granulate can be used as a substitute for fossil fuels in heat and power generation systems, reducing $\mathrm{CO}_{2}$ emissions. With its own optimization of the combined drying / incineration process of using dried granulate as fossil fuel and the energy generated in the incineration process as heat for the drying process, a self-sustaining reduction of $\mathrm{CO}_{2}$ is achieved.

The Feed Technology Business Area is the world market leader for plants and systems for the production of environmentally-friendly biofuel pellets out of renewable fuel materials. Andritz equipment is used to produce biofuel pellets from wood, peat, and 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 pelleting equipment for industrial and household waste, which offers an en-vironmentally-friendly alternative to fossil fuels in heating power plants.

The Hydraulic Machines Business Area has been providing hydropower plants with modern equipment and extensive services for more than 130 years now. Hydropower is the leading source of renewable energy, supplying the world with about one-fifth of its electricity. It is clean, leaves behind no waste and, unlike the combustion of fossil fuel, neither emits pollutants nor dangerous greenhouse gases.

## Social sustainability

## Health and Safety

Employees' health and safety at work are major concerns for Andritz. The Company sets numerous measures for the protection of the staff, not only to maintain the human resources but also to live up to the social responsibility vis-à-vis the individual person.

## Investing in people

Andritz strongly believes that corporate success depends upon the Company's staff. Consequently, Human Resources management is a top priority. Andritz management invests significant efforts and funds in the development and wellbeing of employees. A new management training program ("Management Challenge") has been implemented in the Group with great success. International and local courses offer training in areas such as leadership skills, change project management, and conflict resolution.

## Information policy and education

Andritz takes pride in its efforts for the environment. Accordingly, an active information policy ensures that communications and dialogues with the authorities, stakeholders, neighboring citizens, and the general public are based on transparency and trust. One example of Andritz's information activities is the annual "Waste Management Report" for the Graz site. The aspects of ecology are an integral element of the training and education programs for the Andritz staff.

Staff involvement is another success factor for Andritz. Employees are encouraged to contribute their knowledge and experience. One instrument is the "Suggestion for Improvement" area in the Andritz intranet implemented at a number of sites.

A major challenge for Andritz has been the integration of newly-acquired companies. Great importance is placed upon measures to integrate leadership staff and employees in such cases.

Cooperation with the various works councils is another principle for Andritz. All relevant issues are being resolved in close collaboration with the worker representatives.

Andritz also substantially invests in the attraction of highly qualified personnel. The cooperation with universities is one activity to support the recruiting efforts.

## MPRNT

## Andritz AG

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## For information please contact:

Dr. Michael Buchbauer
Corporate Communications/Investors Relations

Report of the Supervisory Board of Andritz AG

## REPORT OF THE SUPERVSORY BOARD OF ANDRITZ AG


#### Abstract

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 ap proval by the Supervisory Board were investigated and reviewed together with the Managing Board.


Heiner Rutt withdrew from the Supervisory Board in 2005. On expiry of their Supervisory Board mandates Kurt Stiassny and Peter Mitterbauer were re-appointed as members of the Supervisory Board for the maximum duration according to the stipulations in the Articles of Association.

The Financial Statement of Andritz AG and the Consolidated Financial Statements as of December 31, 2005, as well as the Status Reports for 2005, were audited (also including the accounts) by Auditor Wirtschaftsprü-fungs- 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 Statement, which is herewith adopted in compliance with Article 125 paragraph 2 of the Corporation Act.

# CONSOLDAIED FINANCIAL STAIEMENIS 2005 OF THE ANDRIZ CROUP 

- Independent Auditors' Report
- Consolidated Balance Sheet
- Consolidated Income Statement
- Consolidated Cash Flow Statement
- Consolidated Statement of Shareholders' Equity
- Notes to the Consolidated Financial Statements

Consolidated Financial Statements 2005 of the Andritz Group

## INDEPENDENT AUDITORS' REPORT

We have audited the consolidated financial statements of Andritz AG, Graz for the fiscal year from January 1, 2005 to December 31, 2005. Management is responsible for the preparation and the content of the consolidated financial statements in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU and for the preparation of the management report in accordance with Austrian regulations. Our responsibility is to express an opinion on these consolidated financial statements based on our audit and to state whether the management report is in accordance with the consolidated financial statements.

We conducted our audit in accordance with Austrian Standards on Auditing and the applicable Austrian laws and regulations and 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 whether the consolidated financial statements are free from material misstatement and whether we can state that the management report is in accordance with the consolidated financial statements. In determining the audit procedures we considered our knowledge of the business activity, the economic and legal environment of the group and expectations about potential errors. An audit involves procedures to obtain evidence about amounts and disclosures in the consolidated financial statements predominantly on a sample basis. 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 provides a reasonable basis for our opinion.

Our audit has not led to any objections. In our opinion the consolidated financial statements are in accordance with legal requirements and present fairly, in all material respects the financial position of the company as of December 31, 2005 and of the results of its operations and its cash flows for the fiscal year from January 1, 2005 to December 31, 2005 in accordance with IFRS as adopted by the EU. The management report is in accordance with the consolidated financial statements.

Vienna, February 17, 2006

AUDITOR TREUHAND GMBH
Wirtschaftsprüfungs- und Steuerberatungsgesellschaft

Walter MÜLLER Michael SCHOBER
(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, 2005 |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Notes | $\begin{array}{r} 2005 \\ \text { (in TEUR) } \end{array}$ | $\begin{array}{r} 2004 \\ \text { (in TEUR) } \\ \hline \end{array}$ |
| Assets |  |  |  |
| Intangible assets |  | 8,745 | 7,061 |
| Goodwill |  | 120,683 | 107,561 |
| Property, plant and equipment |  | 140,538 | 125,390 |
| Shares in associated companies |  | 2,319 | 2,102 |
| Investments |  | 13,828 | 12,321 |
| Fixed and financial assets | 1. | 286,113 | 254,435 |
| Deferred tax assets | 17. | 21,845 | 21,854 |
| Inventories | 2. | 198,788 | 139,972 |
| Advance payments made | 3. | 21,265 | 14,142 |
| Trade accounts receivable | 4. | 237,180 | 201,763 |
| Cost and earnings of projects under construction in excess of billings | 5. | 80,532 | 115,950 |
| Other receivables | 6. | 46,148 | 63,314 |
| Prepayments and deferred charges |  | 5,378 | 4,920 |
| Marketable securities |  | 75,257 | 63,097 |
| Cash and cash equivalents |  | 418,785 | 273,939 |
| Current assets |  | 1,083,333 | 877,097 |
| Total assets |  | 1,391,291 | 1,153,386 |

Shareholders' equity and liabilities

| Share capital |  | 94,510 | 94,510 |
| :---: | :---: | :---: | :---: |
| Capital reserves |  | 45,966 | 45,966 |
| Retained earnings | 7. | 179,941 | 129,436 |
| Equity attributable to shareholders of the parent company |  | 320,417 | 269,912 |
| Minority interests |  | 8,335 | 7,169 |
| Total shareholders' equity |  | 328,752 | 277,081 |
| Bonds |  | 100,000 | 100,000 |
| Bank loans - non current |  | 6,200 | 5,211 |
| Provisions - non current | 8./9. | 92,105 | 77,800 |
| Obligation under finance leases - non current |  | 198 | 582 |
| Non-current liabilities | 10. | 198,503 | 183,593 |
| Liabilities for deferred taxes | 17. | 45,036 | 58,693 |
| Bank loans - current |  | 3,361 | 11,207 |
| Obligations under finance leases - current |  | 384 | 421 |
| Trade accounts payable |  | 151,398 | 132,970 |
| Billings in excess of cost and earnings of projects under construction | 5. | 250,609 | 197,832 |
| Advance payments received |  | 103,827 | 49,564 |
| Provisions - current | 8. | 97,773 | 81,823 |
| Liabilities for current taxes |  | 20,643 | 10,368 |
| Other current liabilities | 11. | 191,005 | 149,834 |
| Current liabilities |  | 819,000 | 634,019 |
| Total Shareholders' equity and liabilities |  | 1,391,291 | 1,153,386 |

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

## CONSOLIDATED INCOME STATEMENT



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

## Consolidated Cash Flow Statement for the year ended December 31, 2005

|  | $\begin{array}{r} 2005 \\ \text { (in TEUR) } \end{array}$ | $\begin{array}{r} 2004 \\ \text { (in TEUR) } \end{array}$ |
| :---: | :---: | :---: |
| Earnings before taxes (EBT) | 110,024 | 76,631 |
| Interest result | $(3,216)$ | $(1,979)$ |
| Depreciation, write-ups and amortization of fixed assets | 24,253 | 39,226 |
| Income/Expense from associated companies | (147) | 1,543 |
| Changes in non-current provisions | 13,127 | 2,549 |
| Results from the sale of fixed and financial assets | $(1,359)$ | $(3,359)$ |
| Other non-cash income/expenses | 8,767 | $(2,273)$ |
| Taxes paid | $(23,127)$ | $(19,973)$ |
| Interest received | 10,754 | 8,356 |
| Interest paid | $(7,443)$ | $(6,397)$ |
| Gross cash flow | 131,633 | 94,324 |
|  |  |  |
| Changes in inventories | $(44,950)$ | $(17,659)$ |
| Changes in advance payments made | $(6,696)$ | 3,338 |
| Changes in receivables, prepayments and deferred charges | 25,934 | 22,298 |
| Changes in current provisions | 12,659 | $(3,169)$ |
| Changes in advance payments received | 48,231 | 11,803 |
| Changes in liabilities and deferred income | 70,459 | 97,087 |
| Cash flow from operating activities | 237,270 | 208,022 |
|  |  |  |
| Payments received for asset disposals | 2,631 | 11,523 |
| Payments made for investments in fixed tangible and intangible assets | $(26,760)$ | $(24,002)$ |
| Payments made for investments in financial assets | $(1,491)$ | $(9,750)$ |
| Cash flow due to purchase of minority interests and business acquisitions | $(20,568)$ | $(5,215)$ |
| Payments made for short-term financial investments | $(8,578)$ | $(10,079)$ |
| Cash flow from investing activities | $(54,766)$ | $(37,523)$ |
|  |  |  |
| Changes in interest bearing borrowings | $(14,285)$ | $(3,642)$ |
| Dividends paid by Andritz AG | $(18,013)$ | $(12,889)$ |
| Dividends paid to minority shareholders | (618) | (372) |
| Payments concerning own shares | $(13,020)$ | 1,328 |
| Cash flow from financing activities | $(45,936)$ | $(15,575)$ |
|  |  |  |
| Change in cash and cash equivalents | 136,568 | 154,924 |
|  |  |  |
| Changes in cash and cash equivalents resulting from exchange rate fluctuations | 8,278 | $(1,861)$ |
| Cash and cash equivalents at the beginning of the period | 273,939 | 120,876 |
| Cash and cash equivalents at the end of the period | 418,785 | 273,939 |

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

## CONSOLIDATED STATEMENT OF SHAREHOLDERS' EQUITY

Consolidated Statement of Shareholders' Equity for the year ended December 31, 2005

|  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |

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, 2005

## A. General

Andritz AG ("Andritz") is incorporated under the laws of the Republic of Austria and has been 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 5,632 in 2005 and 5,026 in 2004. 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 Standards formulated by the International Accounting Standards Board (IASB) that are accepted by the European Union as well as the Interpretations formulated by the International Financial Reporting Interpretations Committee (IFRIC). In the current year Andritz has adopted all of the new Standards and Interpretations that are relevant to its operations and that are effective for accounting periods beginning on 1 January 2005. The adoption of these new and revised Standards and Interpretations has resulted in changes to the accounting policies in the following areas:

[^0]The transition regulations outlined in the different standards have been applied; due to the provisions included in IAS 39 adjustments to the prior year values of Consolidated Income Statement, Consolidated Cash Flow Statement, presentation of the Consolidated Statement of Shareholders' Equity and the Notes to the Consolidated Financial Statements have been made.

For these financial statements prepared in accordance with IFRS based on § 245a of the 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 sheet and income statement, 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: Goodwill from capital consolidation as well as any goodwill arising from business combinations 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 realized 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 realization. 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 assets and liabilities 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.

Provisions for pensions: Differences may arise at application of the so called corridor method or at initial recognition of actuarial gains or losses with equity. Basically Austrian Commercial law allows the application of the principles of IAS 19.

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 changes in the fair value are recognized directly in equity.

Notes to the Consolidated Financial Statements as of December 31, 2005

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 noncurrent 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 March 2005 the Company acquired 100\% of the Universal Dynamics Group with locations in Canada and USA. Universal Dynamics Group provides engineered solutions for industry, focusing on process optimization and productivity improvement, to complement the pulp \& paper business area.

To expand the product portfolio in the business area Rolling Mills and Strip Processing Lines Andritz has purchased $73.96 \%$ of the Swedish roll grinder manufacturer Lynson AB. This transaction took place in June 2005.

In addition to the Environment and Process business area Andritz acquired 100\% of the German Lenser Group in August 2005, with further sites in France, Rumania and Malaysia. Lenser is specialized in manufacturing filter elements.

The total costs of these three acquisitions amounted to EUR 22,690 thousand of which in the first-time consolidation EUR 2,151 thousand have been allocated to intangible assets. The remaining goodwill amounted to EUR 8,219 thousand.

The acquired businesses have contributed EUR 19,601 thousand to sales and EUR 2,140 thousand to earnings before interest, taxes and amortization (EBITA) of the Andritz Group since the date of acquisition. If the acquisitions would have been at the beginning of the reporting period the Group's EBITA would have been EUR 108,490 thousand and the revenue from continuing operations would have been EUR 1,763,968 thousand.

Inter-company balances and transactions, including in-ter-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 valuesAmounts 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 and goodwills IFRS 3 was 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. From 2005 on any goodwill arising from business combinations is no longer 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 business combination. If the carrying amount exceeds the value in use that is calculated by using a Discounted Cash Flow (DCF) calculation - based on future cash flows projected by the Managing Board - an impairment loss is recognized. An impairment loss recognized for goodwill will not be reversed in a subsequent period. The discount rate used for DCF calculation is based on an interest rate, which represents actual assessment of possible changes of exchange rates as well as specific risks of an asset. In Euroland a discount rate of 8.68\% is used.

At acquisition date substantial goodwills were allocated to existent cash-generating units of Andritz AG (1999) as well as to the pulp mill division acquired by the Andritz-Ahlstrom Group (2000/2001).

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.

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 initially recognized at acquisition costs inclusive transaction costs and are classified as available-for-sale investments. In subsequent periods other non-current securities held on a long-term basis are valued at fair value. Changes of these fair values are recognized as gains or losses directly in equity, until the security is disposed of or is determined to be impaired, at which time the cumulative gain or loss previously recognized in equity is included in profit or loss of the period. Interest on these non-current securities is recognized directly in the income statement in the period they occur in.

## 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 Receivable

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 initially recognized at acquisition costs inclusive transaction costs and are classified as available-for-sale investments. In subsequent periods marketable securities are valued at fair value. Changes of these fair values are recognized as gains or losses directly in equity, until the security is disposed of or is determined to be impaired, at which time the cumulative gain or loss previously recognized in equity is included in profit or loss of the period. Interest on the marketable securities is recognized directly in the income statement of the period they occur in.

## h. Cash and Cash Equivalents

Cash includes cash in hand and cash at banks. Cash equivalents might include short-term deposits with nonbanks 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 shareholders' meetings, held on 6 September 2000 and 19 March 2001 the Managing Board was authorized to issue 6,500,000 shares until 15 September 2005. Based on this authorization the Managing Board has issued 3,000,000 shares.

Based on authorizations of the shareholders' meetings, held on 30 March 2004 and 30 March 2005, 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 and has decided a further program for acquisition of own shares up to $1,300,000$ shares between 1 October 2005 and 31 March 2007. The price range of both programs is a lowest price of 10 Euro and a highest price, which must not exceed the average unweighted closing price over the ten preceding trading days by more than $30 \%$. In 2004 2,000 own shares were acquired with an average price of 36.93 Euro per share and 66,750 own shares were resold with a price of 21 Euro per share to eligible executives of the Management Share Option Plan. 5,788 own shares were transferred to employees of the Andritz AG in 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. In 2005 210,711 own shares were acquired with an average price of 65.21 Euro per share and 22,250 own shares were resold with a price of 21 Euro per share to eligible executives of the Management Share Option Plan. 3,699 own shares were transferred to employees of the Andritz AG in course of an employee participation program. At 31 December 2005 the Company held 225,202 own shares at a market value of EUR 20,910 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. Retained Earnings

Retained earnings include retained income, IAS 39 reserve and currency translation adjustments.

## I. Provisions

A provision is recognized when, and only when, the 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.

## m. Other Accounting and Valuation Principles

## Estimations for Construction Contracts

The accounting for construction contracts is based on estimations for costs and recoverable earnings. Although these estimations are based on all information available on balance sheet date, changes after the balance are possible. These changes could lead to adjustments of assets as well may influence earnings in subsequent periods.

## 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 assets and financial liabilities are recognized in the consolidated balance sheet, if the Group qualifies as a party to the contract concerning the contract regulations of the financial instrument.

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 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 regularly 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. 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 does not qualify as a 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 invest ments 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. Derivative financial instruments are valued at their fair value on the balance sheet date and are recognized as other receivables respectively other liabilities.

## 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 2005 EUR 27,148 thousand and in 2004 EUR 21,114 thousand were 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.

## n. 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 organisationally 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.

From 2005 on any goodwill arising on the acquisition of a foreign entity is allocated to the acquired entity and is recorded using the exchange rate effective on balance sheet date.

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.

## o. Employee 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. For the majority of the pension plans actuarial gains or losses are included directly in the income statement of the period. For some pension plans 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. 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 of the pension plans are included directly in the income statement of the period. The pension obligation is measured at the present value of estimated future cash flows using different discount rates for different countries.

## p. 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 amount of assets and liabilities for financial reporting purposes and the amount 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 utilised.

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 inter-company 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.

## G. Notes to the Consolidated Balance Sheet

## 1. Changes in intangible and tangible assets

## Acquisition or production costs

| 2005 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (in TEUR) | Balance as at 1 January 2005 | Currency translation differences | Additions | Disposals | Changes due to business acquisitions | Transfers | Balance as at 31 December 2005 |
| Intangible assets | 29,025 | 816 | 2,436 | 8,827 | 2,151 | 0 | 25,601 |
| Goodwill | 110,516 | 5,286 | 0 | 0 | 8,219 | 0 | 124,021 |
| Land and buildings | 124,811 | 2,846 | 1,611 | 265 | 3,510 | 3 | 132,516 |
| Technical equipment and machinery | 134,676 | 5,773 | 6,295 | 692 | 4,160 | 243 | 150,455 |
| Other equipment, factory and office equipment | 66,184 | 3,188 | 12,224 | 8,408 | 739 | 273 | 74,200 |
| Assets in course of construction | 939 | 181 | 3,645 | 96 | 283 | (536) | 4,416 |
| Advance payments on tangible assets | 77 | 3 | 523 | 63 | 0 | (17) | 523 |
| Total property, plant and equipment | 326,687 | 11,991 | 24,298 | 9,524 | 8,692 | (34) | 362,110 |
|  |  |  |  |  |  |  |  |
| Total intangible and tangible assets | 466,228 | 18,093 | 26,734 | 18,351 | 19,062 | (34) | 511,732 |

2004

| (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 | $(1,411)$ | 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 | 29,537 | 3,435 | 5 | 585,158 |

## Depreciation and amortization

## 2005

| (in TEUR) | Balance as at 1 January 2005 | Currency translation differences | Depreciation and amortization for the year | Disposals | Changes due to business acquisitions | Transfers | Balance as at 31 December 2005 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Intangible assets | 21,964 | 708 | 2,879 | 8,695 | 0 | 0 | 16,856 |
| Goodwill | 2,955 | 0 | 383 | 0 | 0 | 0 | 3,338 |
| Land and buildings | 54,180 | 1,586 | 3,286 | 113 | 0 | 0 | 58,939 |
| Technical equipment and machinery | 98,750 | 4,075 | 7,993 | 442 | 0 | (143) | 110,233 |
| Other equipment, factory and office equipment | 48,367 | 2,173 | 9,700 | 7,959 | 0 | 109 | 52,390 |
| Assets in course of construction | 0 | 0 | 10 | 0 | 0 | 0 | 10 |
| Advance payments on tangible assets | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total property, plant and equipment | 201,297 | 7,834 | 20,989 | 8,514 | 0 | (34) | 221,572 |
| Total intangible and tangible assets | 226,216 | 8,542 | 24,251 | 17,209 | 0 | (34) | 241,766 |

## 2004

| (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 <br> 31 December 2005 | Accumulated depreciation | Net book value as at 31 December 2005 | Net book value as at 31 December 2004 |
| :---: | :---: | :---: | :---: | :---: |
| Intangible assets | 25,601 | 16,856 | 8,745 | 7,061 |
| Goodwill | 124,021 | 3,338 | 120,683 | 107,561 |
| Land and buildings | 132,516 | 58,939 | 73,577 | 70,631 |
| Technical equipment and machinery | 150,455 | 110,233 | 40,222 | 35,926 |
| Other equipment, factory and office equipment | 74,200 | 52,390 | 21,810 | 17,818 |
| Assets in course of construction | 4,416 | 10 | 4,406 | 939 |
| Advance payments on tangible assets | 523 | 0 | 523 | 77 |
| Total property, plant and equipment | 362,110 | 221,572 | 140,538 | 125,390 |
|  |  |  |  |  |
| Total intangible and tangible assets | 511,732 | 241,766 | 269,966 | 240,012 |

## Finance leases

The net book value for technical equipment and machinery includes an amount of EUR 772 thousand (2004: EUR 1,074 thousand) and the net book value for other equipment, factory and office equipment includes an amount of EUR 73 thousand (2004: EUR 211 thousand) in respect of assets held under finance lease. The total of minimum lease payments at balance sheet date amounts to EUR 582 thousand (2004: EUR 1,088 thousand). The leasing contracts have remaining terms from 2 up to 38 months.

Goodwill

| (in TEUR) | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | ---: | ---: |
|  |  |  |
| Andritz Ahlstrom | 35,540 | 32,367 |
| Acquisition of Andritz AG | 59,596 | 59,596 |
| Other | 25,547 | 15,598 |
|  | $\mathbf{1 2 0 , 6 8 3}$ | $\mathbf{1 0 7 , 5 6 1}$ |

In 2005 the goodwill arising from the acquisition of CyberMetrics Inc. met the tests for impairment because the business did not develop according to plan. The impairment loss for this goodwill amounted to EUR 383 thousand and is related to the pulp and paper business. It was included in the income statement under Impairment.

## Shares in associated Companies

Accumulated assets of material associated companies included in the consolidated balance sheet as of December 31, 2005 amount to EUR 30,842 thousand. Total liabilities amount to EUR 25,930 thousand, and accumulated net income amounts to EUR 1,275 thousand.

For participation in associated companies an impairment loss of EUR 452 thousand has been reported in the income statement as Income from associated companies, it is related to the pulp and paper business area.

## 2. Inventories

| (in TEUR) | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | ---: | ---: |
|  |  |  |
| Finished goods | 54,286 | 46,054 |
| Work in progress | 108,189 | 66,395 |
| Raw materials | 36,313 | 27,523 |
|  | $\mathbf{1 9 8 , 7 8 8}$ | $\mathbf{1 3 9 , 9 7 2}$ |

The write-down of inventory for obsolete and slowmoving items included as expense in the income statement amounts to EUR 2,571 thousand.

## 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) | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | ---: | ---: |
|  |  |  |
| Accounts receivable | 242,310 | 207,635 |
| Allowance for doubtful accounts | $(5,130)$ | $(5,872)$ |
|  | $\mathbf{2 3 7 , 1 8 0}$ | $\mathbf{2 0 1 , 7 6 3}$ |

The Managing Board considers that the carrying amount
of trade receivables corresponds with their fair value.

## 5. Construction Contracts

| (in TEUR) | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | ---: | ---: | ---: |
|  |  |  |
| Contract revenue recognized as sales in the period | $1,070,884$ | 944,988 |
| Contract costs incurred and recognized profits (less recognized losses) to date | $1,666,753$ | $1,344,997$ |
| Advances received and progress billings | $1,836,831$ | $1,426,880$ |
| Amount of retentions | 348 | 1,233 |

"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) | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | ---: | ---: |
|  |  |  |
| Receivables from associated companies | 2,120 | $\mathbf{7 4 6}$ |
| Financial instruments carried at fair value | 0 | 32,836 |
| Receivables from value-added tax | 20,193 | 10,117 |
| Receivables from prepaid income taxes | 7,166 | 3,471 |
| Receivables from other taxes and charges | 1,052 | $\mathbf{1 , 8 0 0}$ |
| Other receivables | 15,617 | $\mathbf{1 4 , 3 4 4}$ |
|  | $\mathbf{4 6 , 1 4 8}$ | $\mathbf{6 3 , 3 1 4}$ |

The Managing Board considers that the carrying amount of other receivables corresponds with their fair value.

## 7. Retained Earnings

## Dividends

For 2005 a dividend of EUR 2.00 per outstanding share is proposed by the Managing Board. The dividend for 2004 of EUR 18,013 thousand which is equal to EUR 1.40 per share was proposed by the Managing Board and was resolved at the $98^{\text {th }}$ ordinary shareholders' meeting on 30 March 2005. The dividend was paid to the shareholders on 8 April 2005.

On 17 February 2006 the Managing Board authorized the consolidated financial statements for the year ended 31 December 2005 according to IFRS. On 16 February 2005 the Management authorized the consolidated financial statements for the year ended 31 December 2004 according to IFRS to be issued to its Supervisory

Board. The Supervisory Board is made up solely of nonexecutives 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.

## 8. 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 (2005: EUR 119,392 thousand; 2004: EUR 93,554 thousand) for warranties, contingencies and impending losses.

## 9. 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 amount recognized in the balance sheet:

| (in TEUR) | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | ---: | ---: |
|  |  |  |
| Present value of funded defined benefit obligations | 26,463 | 19,637 |
| Fair value of plan assets | $(12,661)$ | $(10,891)$ |
|  | $\mathbf{1 3 , 8 0 2}$ | $\mathbf{8 , 7 4 6}$ |
| Present value of unfunded defined benefit obligations |  |  |
| Unrecognized actuarial gains/losses | 15,948 | 19,145 |
| Net liability in balance sheet | $(1,258)$ | $(711)$ |

Pension expense is comprised of the following:

| (in TEUR) | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | ---: | ---: |
|  |  |  |
| Current service costs | 955 | 1,240 |
| Interest expense on obligations | 1,445 | 1,591 |
| Expected return on plan assets | $(220)$ | $(79)$ |
| Net actuarial gains/losses recognized | 1,466 | 4,085 |
| Past service costs | 0 | $(739)$ |
| Effect of any curtailment or settlement | 2,907 | $(8,672)$ |
|  | $1,835)$ |  |
| Payments to defined contribution plans | 11,136 | 12,334 |
|  | $\mathbf{1 4 , 0 4 3}$ | $\mathbf{1 0 , 4 9 9}$ |

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

| (in per cent) | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | :--- | :--- | :--- |
|  |  |  |
| Discount rate | $4.50 \%$ | $5.00 \%$ |
| Wage and salary increases | $3.00 \%$ | $3.00 \%$ |
| Retirement benefit increases | $2.50 \%$ | $2.50 \%$ |
| Expected return on plan assets | $5.25 \%$ | $5.25 \%$ |

Notes to the Consolidated Financial Statements as of December 31, 2005

## Severance payments

| (in TEUR) | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | ---: | ---: |
|  | 33,850 | 29,351 |
| Present value of unfunded defined benefit obligations | $\mathbf{3 3 , 8 5 0}$ | $\mathbf{2 9 , 3 5 1}$ |
| Net liability in balance sheet |  |  |

Severance expense is comprised of the following:

| (in TEUR) | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | ---: | ---: |
| Current service costs |  |  |
| Interest expense on obligations | 1,406 | $\mathbf{1 , 3 9 2}$ |
| Net actuarial gains/losses recognized | 1,404 | 1,358 |
|  | 3,329 | 2,728 |
| Payments to defined contribution plans | 6,139 | 5,478 |
|  | 294 | $\mathbf{7 3}$ |

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

## Management share option plan

A selected group of executives employed by the Group as of 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, but 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 pro-rata 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. The remaining 22,250 options outstanding on 31 December 2004 were exercised in 2005; the weighted, average market share price at the time of exercise amounted to 55.89 EUR. Andritz provided these shares by using the repurchased own shares.

The $97^{\text {th }}$ Annual General Meeting of Shareholders on 30 March 2004 resolved a Share Option Program for Man-
agers and Members of the Managing Board. The number of options granted to the different Managers 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 unweighted average closing price of Andritz shares in the four calendar weeks following the $97^{\text {th }}$ Annual General Meeting of Shareholders on 30 March 2004 and amounts to 37.53 EUR.

Options 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 to 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 to 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 options granted in 2004 amount to 174,500, thereof 173,875 options were outstanding on $31 \mathrm{De}-$ cember 2005. The fair value of the options at the time of granting amounts to EUR 1,220 thousand, thereof 610 EUR thousand were reported as proportionate expense
in 2005. 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.

## 10. Statement of Liabilities

| 2005 | Remaining <br> term between <br> 1 and 5 years | Remaining <br> term over <br> $\mathbf{5}$ years | Total <br> non-current <br> liabilities |
| :--- | ---: | ---: | ---: | ---: |
| (in TEUR) |  |  |  |
|  | 100,000 | 0 | 100,000 |
| Bonds | 3,652 | 2,548 | 6,200 |
| Bank loans | 198 | 0 | 198 |
| Obligations under finance lease | 103,850 | 2,548 | 106,398 |
| Provisions non-current |  |  | 92,105 |


| 2004 | Remaining <br> term between <br> $\mathbf{1}$ and 5 years | Remaining <br> term over <br> $\mathbf{5}$ years | Total <br> non-current <br> liabilities |
| :--- | ---: | ---: | ---: | ---: |
| (in TEUR) |  |  |  |
|  | 100,000 | 0 | 100,000 |
| Bonds | 2,575 | 2,636 | 5,211 |
| Bank loans | 582 | 0 | 582 |
| Obligations under finance lease | 103,157 | 2,636 | 105,793 |
|  |  |  | $\mathbf{7 7 , 8 0 0}$ |
| Provisions non-current |  |  | $\mathbf{1 8 3 , 5 9 3}$ |

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

Property, plant and equipment amounting to EUR 4,573 thousand and EUR 3,414 thousand as at 31 December 2005 and 2004, respectively, has been pledged as security for long-term debt.

The Managing Board considers that the carrying amount of liabilities corresponds with their fair value.

## 11. Other Liabilities

| (in TEUR) | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | ---: | ---: |
|  |  |  |
| Payables to associated companies | 650 | $\mathbf{1 2 5}$ |
| Personnel related costs | 48,392 | 44,410 |
| Outstanding invoices for order related costs | 70,037 | 44,471 |
| Deferred income | 2,830 | 3,515 |
| Financial instruments carried at fair value | 6,413 | 0 |
| Liabilities from value-added tax | 10,817 | 6,164 |
| Liabilities from commissions | 5,320 | 4,892 |
| Other | 46,546 | 46,257 |
|  | $\mathbf{1 9 1 , 0 0 5}$ | $\mathbf{1 4 9 , 8 3 4}$ |

The Managing Board considers that the carrying amount
of other liabilities corresponds with their fair value.

## H. Notes to the Consolidated Income Statement

## 12. Sales

| (in TEUR) | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | ---: | ---: |
| Contract revenue recognized as sales in the period |  |  |
| Revenue recognized due to after-sales service | $1,070,884$ | 944,988 |
| Other | 430,741 | 392,500 |
|  | 242,670 | 143,859 |

## 13. Other Operating Income

| (in TEUR) | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | ---: | ---: |
| Profit on disposal of fixed assets excluding financial assets |  |  |
| Exchange rate gains | 1,652 | 3,691 |
| Rental income | 17,864 | 9,390 |
| Other | 1,414 | 1,582 |
|  | 5,429 | 6,136 |

## 14. Personnel Expenses

| (in TEUR) | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | ---: | ---: |
| Wages |  |  |
| Salaries | 61,662 | 59,050 |
| Pension expenses | 225,261 | 197,267 |
| Severance expenses | 14,043 | $\mathbf{1 0 , 4 9 9}$ |
| Social security and payroll related duties | 6,433 | 5,551 |
| Other social payments | 43,500 | $\mathbf{3 7 , 6 0 1}$ |
|  | 12,656 | $\mathbf{1 2 , 7 3 8}$ |

## 15. Other Operating Expenses

| (in TEUR) | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | ---: | ---: |
| Exchange rate losses |  |  |
| Sales expenses | 13,108 | $\mathbf{1 4 , 8 2 1}$ |
| Administrative expenses | 106,410 | 89,503 |
| Other | 22,039 | 23,826 |
|  | 95,807 | 81,133 |

## 16. Financial Results

| (in TEUR) | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | ---: | ---: |
| Income / expenses from associated companies |  |  |
|  | 147 | $(1,543)$ |
| Other interest and similar income | 11,273 | 8,454 |
| Interest and similar expenses | $(8,057)$ | $(6,475)$ |
| Interest result | 3,216 | 1,979 |
|  |  |  |
| Other income / expenses from financing activities | $\mathbf{1 1}$ | 6,374 |
|  | $\mathbf{4 3 6}$ |  |

## 17. Income Taxes

| (in TEUR) | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | ---: | ---: |
|  |  |  |
| Current tax expense | $(30,170)$ | $(18,187)$ |
| Changes in deferred taxes charged to the income statement | 384 | $(4,494)$ |

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

| (in TEUR) | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | ---: | ---: |
|  |  |  |
| Deferred tax assets | 21,854 | 18,876 |
| Liabilities for deferred taxes | $(58,693)$ | $(50,546)$ |
| Balance as at 31 December, as previously stated | $(36,839)$ | $(31,670)$ |


| Deferred tax relating to the origination and reversal of temporary differences |  |  |
| :--- | ---: | ---: |
| income statement charge | 384 | $(4,494)$ |
| charged to equity | 13,264 | $(675)$ |
|  | $\mathbf{( 2 3 , 1 9 1 )}$ | $\mathbf{( 3 6 , 8 3 9 )}$ |
| thereof | 21,845 | 21,854 |
| Deferred tax assets | $(45,036)$ | $(58,693)$ |
| Liabilities for deferred taxes |  |  |

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

| (in TEUR) | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | ---: | ---: |
|  |  |  |
| Earnings before taxes (EBT) | 110,024 | 76,631 |
| Tax at the applicable tax rate (25\% in 2005 and 34\% in 2004) | $(27,506)$ | $(26,055)$ |
| Non-deductable amortization of goodwill | $(146)$ | $(5,673)$ |
| Tax effect of | $(246)$ | 9,762 |
| adjustment of using new tax rates | $(1,888)$ | $(715)$ |
| other changes | $(29,786)$ | $(22,681)$ |
|  |  |  |
|  | $(30,170)$ | $(18,187)$ |
| Current tax expense | $\mathbf{3 8 4}$ | $\mathbf{( 4 . 4 9 4 )}$ |
| Changes in deferred taxes charged to the income statement |  |  |

The tax rate reduction from $34 \%$ to $25 \%$ results from a change in Austrian tax law, which is effective for business years ending in 2005 or later.

Deferred tax assets and liabilities for deferred taxes as at 31 December 2005 and 2004 are the result of the following temporary valuation differences between book values in the IFRS consolidated financial statements and the relevant tax bases:

|  | 2005 |  | 2004 |  |
| :--- | ---: | ---: | ---: | ---: |
| (in TEUR) | Deferred tax | Deferred tax |  |  |
|  | Assets | Liabilities | Assets | Liabilities |
| Intangible assets |  |  |  |  |
| Property, plant and equipment | 2,031 | $(713)$ | 1,575 | $(435)$ |
| Financial assets | 2,841 | $(8,963)$ | 2,634 | $(8,405)$ |
| Inventories | 5 | $(106)$ | 193 | $(46)$ |
| Receivables | 227,167 | $(507)$ | 121,636 | $(3,132)$ |
| Marketable securities and shares | 2,458 | $(21,966)$ | 6,476 | $(19,826)$ |
| Other assets | 0 | $(195)$ | 0 | $(89)$ |
|  | 0 | $(16)$ | 338 | $(268)$ |
| Provisions | $\mathbf{2 3 4 , 5 0 2}$ | $\mathbf{( 3 2 , 4 6 6 )}$ | $\mathbf{1 3 2 , 8 5 2}$ | $\mathbf{( 3 2 , 2 0 1 )}$ |
| Liabilities | 29,921 | $(35,816)$ | 16,584 | $(23,159)$ |
| Deferred income | 3,766 | $(221,190)$ | 4,520 | $(128,287)$ |
|  | 5,685 | 0 | 10,075 | 0 |
| Tax loss carry-forwards | $\mathbf{3 9 , 3 7 2}$ | $\mathbf{( 2 5 7 , 0 0 6 )}$ | $\mathbf{3 1 , 1 7 9}$ | $\mathbf{( 1 5 1 , 4 4 6 )}$ |
| Deferred tax assets / liabilities | 7,198 | 0 | 7,539 | 0 |
| Valuation allowance for deferred tax assets | 281,072 | $(289,472)$ | 171,570 | $(183,647)$ |
| Other deferred taxes from consolidation | $(16,514)$ | 0 | $(14,060)$ | 0 |
| Other | 0 | 0 | $(1,425)$ | 0 |
| Offset within legal tax units and jurisdiction | 1,723 | 0 | 0 | $(9,277)$ |
| Net deferred tax assets and liabilities | $(244,436)$ | 244,436 | $(134,231)$ | 134,231 |

## 18. 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)

Diluted basic earnings per share are calculated by dividing the net profit for the period attributable to shareholders of the parent company by the weighted average number of shares with consideration of non par value share options.

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

## Geographical segments

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

2005
Business segment data

| (in TEUR) | $\mathrm{P}+\mathrm{P}$ | WB | EP | FT | Other and transition | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sales | 1,032,876 | 275,939 | 289,209 | 93,627 | 52,644 | 1,744,295 |
| Segment result before amortization of goodwill | 63,601 | 15,887 | 17,685 | 7,242 | 2,618 | 107,033 |
| Total assets | 450,117 | 79,277 | 202,957 | 63,070 | 595,870 | 1,391,291 |
| Total liabilities | 566,005 | 129,555 | 116,646 | 28,661 | 221,672 | 1,062,539 |
| Capital expenditure | 13,561 | 2,171 | 6,659 | 932 | 3,411 | 26,734 |
| Depreciation and amortization of tangible and intangible fixed assets | 12,502 | 2,283 | 4,310 | 2,527 | 2,246 | 23,868 |
| Share of net profit / loss of associates | (64) | 0 | 211 | 0 | 0 | 147 |
| Investment in associates | 1,313 | 0 | 884 | 122 | 0 | 2,319 |

## Geographical segment data

| (in TEUR) | Europe | North <br> America | Asia | Rest of the world and consolidation | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| External sales | 583,309 | 299,204 | 447,259 | 414,523 | 1,744,295 |
| Total assets | 1,520,810 | 284,705 | 83,996 | $(498,220)$ | 1,391,291 |
| Capital expenditure | 16,810 | 2,771 | 3,400 | 3,753 | 26,734 |

2004

## Business segment data

| (in TEUR) |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |

Geographical segment data

|  |  |  | Rest of the <br> world and <br> (in TEUR) | North <br> America |
| :--- | ---: | ---: | ---: | ---: |
|  | Europe |  |  |  |
| Asia consolidation |  |  |  |  |

## J. Notes to the Consolidated Cash Flow Statements

Cash flows from acquisition
of subsidiaries*

| (in TEUR) | Business area |  |  | Total | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | P+P | WB | EP | 2005 | 2004 |
| Cash and cash equivalent | $(1,495)$ | 0 | (626) | $(2,121)$ | $(2,539)$ |
| Receivables | $(2,051)$ | $(1,558)$ | $(8,192)$ | $(11,801)$ | $(21,071)$ |
| Inventories | (86) | (20) | $(5,260)$ | $(5,366)$ | $(16,584)$ |
| Intangible assets | $(1,455)$ | (537) | (105) | $(2,097)$ | $(1,860)$ |
| Property, plant and equipment | (260) | (128) | $(8,385)$ | $(8,773)$ | $(7,684)$ |
| Financial assets | 0 | (26) | (1) | (27) | (613) |
| Financial debt | 2,383 | 1,158 | 6,097 | 9,638 | 2,834 |
| Accounts payable and accrued expenses | 0 | 407 | 5,213 | 5,620 | 42,082 |
| Net assets / liabilities acquired | $(2,964)$ | (704) | $(11,259)$ | $(14,927)$ | $(5,435)$ |
| Cash and cash equivalent | 1,495 | 0 | 626 | 2,121 | 2,539 |
| Goodwill | $(6,576)$ | $(1,256)$ | (113) | $(7,945)$ | $(2,461)$ |
| Changes in minority interests | 0 | 183 | 0 | 183 | 142 |
| Net cash flow | $(8,045)$ | $(1,777)$ | $(10,746)$ | $(20,568)$ | $(5,215)$ |

[^1]
## K. Financial Instruments

## a. Risk Management

As a global company serving a variety of different markets and customers, the Group is subject to certain general and industry-specific risks. These risks mainly relate to the industries the Group serves (e.g., uncertainty of future contracts, volatility of incoming orders, customer concentration, etc.), the Group's business (e.g. currency exposure, competitive position, legal proceedings, etc.), and to major orders (e.g., payment risks, liabilities and performance of projects, cost overruns, etc.).

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 monitoring and management of financial risks are integral parts of Andritz's Group-wide accounting and controlling activities. Continuous controlling and regular reporting should secure to identify major risks at an early stage and to take counter-measures, if necessary.

For most of the orders, the risk of payment failure by customers is reduced by bank guarantees and export insurances. Risks for deliveries in countries with medium to high political risks typically are also insured. Interest and exchange rate risks are limited and controlled by using derivative financial instruments, in particular forward exchange contracts and swaps.

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's operations,
productions and markets are located in various countries. The Group has designated the major part of its forward exchange contracts as cash flow hedges and carries them at fair value. The remaining period of most of the cash flow hedges does not exceed one year.

Cash flow risks are minimized by the Group's cash management system which controls cash in- and outflows of all relevant Andritz affiliates. It also monitors the Group's cash pooling activities in order to optimize net financing income.

## b. Liquidity Risks

Due to Group-wide finance and liquidity planning Andritz maintains sufficient cash and cash equivalents or has 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. Furthermore there is no existent concentration of default risk due to high diversification of contract parties.

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 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 were used to hedge the risk from the fixed interest rate of the bond. The interest swap changes the fixed interest rate for the whole period to a variable interest rate based on 1 month's Euribor. By this, the risk of a changing interest rate concerning the cash flows is existent. The fair value of the bond is hedged.

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 interest rates at the balance sheet date were as follows:

20052004

| Cash on current accounts | $1.5 \%$ | $1.4 \%$ |
| :--- | :--- | :--- |
| Short term deposits | $2.2 \%$ | $2.2 \%$ |
| Securities, short term | $3.5 \%$ | $3.5 \%$ |
| Securities, long term | $2.5 \%$ | $2.7 \%$ |
|  |  |  |
| Overdraft on current accounts | $3.3 \%$ | $2.3 \%$ |
| Short term loans | $3.3 \%$ | $3.5 \%$ |
| Long term loans | $4.5 \%$ | $5.0 \%$ |
| Bond | $3.2 \%$ | $3.2 \%$ |

## e. Fair Value of Financial Instruments

## Fair value calculation

The fair value of forward foreign exchange contracts is At the balance sheet date, the fair values of forward condetermined using forward exchange market rates at the tracts designated as cash flow hedges were as follows: balance sheet date.

| (in TEUR) | Remaining period |  | Total 2005 | Total 2004 |
| :---: | :---: | :---: | :---: | :---: |
|  | not exceeding 1 year | more than 1 year |  |  |
| US dollars | $(6,817)$ | $(1,959)$ | $(8,776)$ | 23,757 |
| Swedish crowns | 14 | 1 | 15 | (17) |
| Singapore dollars | 0 | 3,141 | 3,141 | 8,689 |
| Other currencies | (129) | (664) | (793) | 407 |
|  | $(6,932)$ | 519 | $(6,413)$ | 32,836 |

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

| (in TEUR) | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | ---: | ---: |
| Forward contracts with positive fair values |  |  |
| Forward contracts with negative fair values | 4,886 | 37,815 |
|  | $(11,299)$ | $(4,979)$ |

The change in fair values of forward contracts from in total positive to in total negative fair values was mostly due to the change in fair values of forward contracts to hedge cash flows in US dollars because of the rise of the US dollar against the Euro.

The fair value of the interest swap was EUR 4,024 thousand as of end of 2005 (EUR 6,216 thousand as of end of 2004).

## Cash and cash equivalents,

## current and 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 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 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 interest 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 IAS 39 reserve in equity:

| (in TEUR) | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | ---: | ---: |
| Balance as at 1 January | $\mathbf{2 1 , 0 9 7}$ | $\mathbf{1 8 , 5 1 1}$ |
|  |  |  |
| Movements in the period: | $(11,744)$ | 14,635 |
| Gains and losses from changes in fair value | 3,641 | $(4,096)$ |
| Deferred income taxes thereon | $(23,737)$ | $(12,764)$ |
| Transfers to income statement | 7,358 | 4,363 |
| Deferred income taxes thereon | 314 | 597 |
| Change in fair value of financial assets | $(101)$ | $(149)$ |
| Deferred income taxes thereon | $\mathbf{( 3 , 1 7 2 )}$ | $\mathbf{2 1 , 0 9 7}$ |
| Balance as at 31 December |  |  |

## L. Leases

The Group has entered into various operating lease agreements for machinery, offices and other facilities as lessee. Lease terms do not contain restrictions on the Group's activities concerning dividends, additional
debt or further leasing. Rent expense amounts to EUR 15,763 thousand in 2005 and EUR 13,656 thousand in 2004 respectively.

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

| (in TEUR) | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | ---: | ---: |
|  |  |  |
| Next year | 5,780 | 4,260 |
| 1 year to 5 years | 11,940 | 8,587 |
| After 5 years | 2,444 | 4,203 |
|  | $\mathbf{2 0 , 1 6 4}$ | $\mathbf{1 7 , 0 5 0}$ |

## M. Commitments

Commitments arising from contracts for expenditure on property, plant and equipment are only in the normal course of business. As of December 31, 2005 these commitments amounted to EUR 1,810 thousand (2004: EUR 3,026 thousand).

## N. Contingent Liabilities

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, 2005, Andritz Inc., as subsidiary of the Company, was one of many defendants in a total of approximately 49 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 12,999 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. Approximately 62 asbestos cases and about 10,873 claims against Andritz have been dismissed, and one claim has been resolved 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.

## O. Related Party Transactions

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

| Free Float | $72 \%$ |
| :--- | ---: |
| Certus Beteiligungs-GmbH | $26 \%$ |
| Management | $2 \%$ |

Transactions with associated companies and not consolidated companies were not material.

## Emoluments of the Managing Board

A provision of EUR 4,428 thousand in 2005 (EUR 4,185 thousand in 2004) was recorded for pensions of former Members of the Managing Board and their dependants; the current year expense for these pensions amounted to EUR 548 thousand for 2005 (EUR 524 thousand for 2004).

The following expenses were recognized for the Managing Board:

| (in TEUR) | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ |
| :--- | ---: | ---: |
|  |  |  |
| Short-term benefits | 7,613 | 6,307 |
| Post-employment benefits | 1,641 | 713 |
| Share-based expenses | 184 | 107 |
|  | $\mathbf{9 , 4 3 8}$ | $\mathbf{7 , 1 2 7}$ |

The compensation for the Supervisory Board in 2005 amounted to EUR 45 thousand (2004: EUR 45 thousand).

## P. List of Consolidated Subsidiaries

|  |  | Ownership Interest |  |
| :---: | :---: | :---: | :---: |
| Material Affiliated Companies | Place of Incorporation | direct | 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 (USA) |  | 100\% |
| Andritz S.A.S. | Vélizy/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 | 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\% |
| Lenser Filtration GmbH \& Co KG | Senden/Germany |  | 100\% |
| Andritz Oy | Helsinki/Finland | 100\% |  |
| Savonlinna Works Oy | Savonlinna/Finland |  | 100\% |
| Andritz Ltd./Ltée. | Montreal/Canada | 100\% |  |
| Andritz Fiber Drying Ltd. | Lachine/Canada |  | 100\% |
| Universal Dynamics Group Ltd. | Richmond/Canada |  | 100\% |
| Andritz AB | Örnsköldsvik/Sweden | 100\% |  |
| Andritz Fiber Drying AB | Växjö/Sweden |  | 100\% |
| Andritz Ltd. | Staffordshire/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 17, 2006
Wolfgang Leitner Markku Hänninen Franz Hofmann Friedrich Papst Bernhard Rebernik

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[^2] The required merger control procedures are currently being followed.

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[^3]
# TECHNICAL GLOSSARY 

## From Annealing across LMD-Filter ${ }^{\text {TM }}$ up to White liquor.

## 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 ${ }^{\text {TM }}$

Alkaline Peroxide Mechanical Pulping
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 ${ }^{\text {TM }}$ 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.

## Approach flow system

Feeding system that provides stable feeding conditions for the following paper/board machine.

## ARC

Ash Recrystallization
Process in which chloride is removed from fly ash in a recovery boiler plant.

## 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.

## 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 woodyard 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.

## CVD

Chemical Vapour Deposition
A coating process, which generally uses a gas-phase precursor to deposit thin films on the surface of a substrate. Metal-organic precursors can be used to deposit corrosion resistant coatings on metals surfaces.

## Deinking

A process in which most of the ink, filler, and other extraneous material are 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. 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 organo-chlorines).

## 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.

## Distributed Control System (DCS)

DCS is used in industrial applications to monitor and control distributed equipment with remote human intervention, for example a pulp mill.

## 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.

## Flash dryer

Thermal dryer in which pulp is carried pneumatically while the material is dried. In many cases the drying is carried out in two stages.

## Green liquor

Aqueous solutions of the smelt resulting from the burning of thickening waste liquor in the recovery boiler. Mainly consists of sodium carbonate and sodium sulphide.

## Hammer mill

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.

## Lime kiln

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

## LMD-Filter ${ }^{\text {TM }}$

The LMD-Filter ${ }^{\text {TM }}$ 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.

## 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 pulp 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. Mechanical pulp is produced using either grinders or refiners. They are principally used in the production of newsprint, magazine papers, printing papers, specialty papers, tissue, towelling, 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 in Russia.

## OCC system

System for preparation of Old Corrugated Containers.

## 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.

## PrimeReel ${ }^{\text {TM }}$ Centerwind

The centerwind reel accurately controls the nip pressure at very low loads to retain the bulk of sensitive tissue and towel grades. It increases productivity by winding larger diameter rolls and reduces paper losses by controlling the nip and torque throughout the entire process.

## PrimeRun ${ }^{\text {TM }}$

The sheet stabilization system improves productivity by efficiently transporting the web from the Yankee to the reel. The active and passive stabilizers convey the web without deteriorating the paper properties and can remove dust from the sheet and local area.

## PVD

## Physical Vapour Deposition

A coating process used to deposit various materials onto various surfaces in a vacuum chamber. The coating material first has to be evaporated and is then condensed on the cold surface of the substrate.

## 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 recausticizing, sodium carbonate of green liquor is converted to sodium hydroxide by using calcium oxide. Lime mud, which is formed in recausticizing reactions, is reburnt in the lime kiln.

## Recovery boiler

An important process step in the production of kraft pulp. 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 paper

Paper partly or wholly made 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.

## RTS ${ }^{\text {TM }}$

Retention time, Temperature, Speed refining A TMP process producing 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 $2,300 \mathrm{rpm}$.

## Slab press

Equipment used to press flash dried pulp into bales then fed to the baling line.

## 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.

## TMP

Thermo-Mechanical Pulping
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.

## White liquor

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

## From ATX across EBIT(D)A up to WBI.

## 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 approximately 20 shares, weighted in the index according to market capitalization and free float.

## 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.

## Corporate governance code

The corporate governance code represents a set of rules for the responsible management and control of a company.

## 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 Interest, 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 Interest 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 the 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 drawn up by the International Accounting Standards Board (IASB). Complying with IFRS should enable investors and other relevant stakeholders to better compare 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

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

## MEUR

Million Euros

## Net liquidity

Cash and cash equivalents minus interest bearing financial liabilities.

## No par value share

Share with no par value, referring 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.

## Road show

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.

## Stock option program

A company grants options to a defined group of executives for the purchase of shares of the company, which may be exercised at an agreed price after agreed performance criteria are met.

## 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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[^0]:    - Goodwill (IFRS 3)
    - Conversion of goodwill (IAS 21)
    - Non-current securities (IAS 39)
    - Marketable securities (IAS 39)

[^1]:    * Converted by exchange rates as per dates of transaction

[^2]:    *) In November 2005, Andritz agreed to purchase a 60\% stake in the Paper and Nonwoven business divisions of Eduard Küsters Maschinenfabrik GmbH \& Co. KG from Jagenberg AG

[^3]:    *) In November 2005, Andritz agreed to purchase a 60\% stake in the Paper and Nonwoven
    business divisions of Eduard Küsters Maschinenfabrik GmbH \& Co. KG from Jagenberg AG
    The required merger control procedures are currently being followed.

