ANDRITZ FINANCIAL REPORT
2018

FIN-ANCIAL REPORT

ANDRITZ

KEY FINANCIAL FIGURES OF THE ANDRITZ GROUP

	Unit	2018	2017	2016	2015	2014
Order intake	MEUR	6,646.2	5,579.5	5,568.8	6,017.7	6,101.0
Order backlog (as of end of period)	MEUR	7,084.3	6,383.0	6,789.2	7,324.2	7,510.6
Sales	MEUR	6,031.5	5,889.1	6,039.0	6,377.2	5,859.3
Return on sales	%	5.3	6.8	6.4	5.8	5.0
EBITDA	MEUR	498.0	541.7	542.4	534.7	472.0
EBITA[1)]	MEUR	394.3	444.0	442.1	429.0	379.5
Earnings Before Interest and Taxes (EBIT)	MEUR	321.6	399.3	385.8	369.1	295.7
Earnings Before Taxes (EBT)	MEUR	304.2	400.6	398.4	376.4	299.4
Net income (including non-controlling interests)	MEUR	219.7	265.6	274.8	270.4	210.0
Net income (without non-controlling interests)	MEUR	222.0	263.0	274.6	267.7	210.9
Cash flow from operating activities	MEUR	7.8	246.5	366.6	179.4	342.1
Capital expenditure	MEUR	137.0	116.8	119.5	101.4	106.5
Free cash flow	MEUR	-129.2	129.7	263.7	85.0	245.8
Free cash flow per share	EUR	-1.2	1.2	2.5	0.8	2.4
Employees (as of end of period; without apprentices)	-	29,096	25,566	25,162	24,508	24,853
Non-current assets	MEUR	2,629.5	1,860.8	1,913.7	1,844.7	2,007.4
Current assets	MEUR	4,289.1	4,404.5	4,284.9	3,933.3	3,987.8
Total shareholders' equity	MEUR	1,330.8	1,325.4	1,344.2	1,215.6	1,038.3
Provisions	MEUR	1,017.7	1,066.1	1,118.9	1,130.4	1,056.2
Liabilities	MEUR	4,570.1	3,873.8	3,735.5	3,432.0	3,900.7
Total assets	MEUR	6,918.6	6,265.3	6,198.6	5,778.0	5,995.2
Equity ratio	%	19.2	21.2	21.7	21.0	17.3
Return on equity	%	22.9	30.2	29.6	31.0	28.8
Return on investment	%	4.6	6.4	6.2	6.4	4.9
Liquid funds	MEUR	1,279.7	1,772.3	1,507.1	1,449.4	1,701.6
Net liquidity	MEUR	-129.5	908.0	945.3	984.0	1,065.1
Net debt	MEUR	568.1	-530.6	-550.2	-601.6	-659.4
Net working capital	MEUR	160.5	-121.0	-215.8	-182.1	-570.9
Capital employed	MEUR	1,665.6	801.9	772.2	736.7	387.0
Gearing	%	42.7	-40.0	-40.9	-49.5	-63.5
EBITDA margin	%	8.3	9.2	9.0	8.4	8.1
EBITA margin	%	6.5	7.5	7.3	6.7	6.5
EBIT margin	%	5.3	6.8	6.4	5.8	5.0
Net income/sales	%	3.6	4.5	4.6	4.2	3.6
ROE	%	16.5	20.0	20.4	22.2	20.2
EV/EBITDA	-	8.6	7.4	7.4	6.9	7.8
Depreciation and amortization/sales	%	2.7	2.3	2.4	2.4	2.9

1) Identifiable assets acquired in a business combination and recognized separately from goodwill amount to of 56.8 MEUR (2017:38.3 MEUR); impairment of goodwill amounts to 15.9 MEUR (2017:6.4 MEUR).
All figures according to IFRS. Due to the utilization of automatic calculation programs, differences can arise in the addition of rounded totals and percentages.

KEY FINANCIAL FIGURES OF THE BUSINESS AREAS

Hydro

	Unit	2018	2017	2016	2015	2014
Order intake	MEUR	1,445.8	1,317.2	1,500.3	1,718.7	1,816.7
Order backlog (as of end of period)	MEUR	2,667.9	2,921.8	3,269.6	3,640.9	3,708.6
Sales	MEUR	1,517.5	1,583.1	1,752.4	1,834.8	1,752.3
EBITDA	MEUR	142.4	154.1	167.2	183.6	177.2
EBITDA margin	%	9.4	9.7	9.5	10.0	10.1
EBITA	MEUR	113.8	123.0	127.6	145.3	144.8
EBITA margin	%	7.5	7.8	7.3	7.9	8.3
Capital expenditure	MEUR	57.9	36.3	26.1	27.4	39.4
Employees (as of end of period; without apprentices)	-	7,002	7,237	7,260	8,230	8,339

Pulp & Paper

	Unit	2018	2017	2016	2015	2014
Order intake	MEUR	2,571.9	2,033.4	1,919.5	2,263.9	1,995.7
Order backlog (as of end of period)	MEUR	2,421.1	1,787.0	1,803.3	1,998.6	1,875.4
Sales	MEUR	2,233.2	2,059.7	2,094.4	2,196.3	1,969.3
EBITDA	MEUR	258.4	221.5	207.7	214.8	127.6
EBITDA margin	%	11.6	10.8	9.9	9.8	6.5
EBITA	MEUR	222.1	194.9	182.2	190.9	102.9
EBITA margin	%	9.9	9.5	8.7	8.7	5.2
Capital expenditure	MEUR	33.8	42.1	34.1	21.1	28.1
Employees (as of end of period; without apprentices)	-	11,435	8,002	7,522	7,324	7,236

Metals

	Unit	2018	2017	2016	2015	2014
Order intake	MEUR	1,931.8	1,606.5	1,551.5	1,438.6	1,692.8
Order backlog (as of end of period)	MEUR	1,591.6	1,309.7	1,369.0	1,332.5	1,566.1
Sales	MEUR	1,635.1	1,643.5	1,598.4	1,718.1	1,550.4
EBITDA	MEUR	57.8	129.7	141.7	104.8	134.0
EBITDA margin	%	3.5	7.9	8.9	6.1	8.6
EBITA	MEUR	27.3	98.6	115.2	70.5	110.2
EBITA margin	%	1.7	6.0	7.2	4.1	7.1
Capital expenditure	MEUR	36.1	29.7	49.1	40.2	27.9
Employees (as of end of period; without apprentices)	-	7,818	7,573	7,608	6,160	6,432

Separation

	Unit	2018	2017	2016	2015	2014
Order intake	MEUR	696.7	622.4	597.5	596.5	595.8
Order backlog (as of end of period)	MEUR	403.7	364.5	347.3	352.2	360.5
Sales	MEUR	645.7	602.8	593.8	628.0	587.3
EBITDA	MEUR	39.4	36.4	25.8	31.5	33.2
EBITDA margin	%	6.1	6.0	4.3	5.0	5.7
EBITA	MEUR	31.1	27.5	17.1	22.3	21.6
EBITA margin	%	4.8	4.6	2.9	3.6	3.7
Capital expenditure	MEUR	9.2	8.7	10.2	12.7	11.1
Employees (as of end of period; without apprentices)	-	2,841	2,754	2,772	2,794	2,846

MANAGEMENT REPORT

GENERAL ECONOMIC CONDITIONS

2018 was characterized by a sustained, solid economic upswing in the world's main economic regions. However, there were increasing signs of an impending decline in economic growth during the second half of the year. The main reasons for this are the latent trade dispute between the USA and China as well as the United Kingdom leaving the European Union in the near future.

In the USA, the economy recorded robust growth of approximately 2.9% in the gross domestic product (GDP) in 2018. This was mainly driven by the US tax reform (corporation tax was reduced from 35 to 21%) that became effective at the beginning of the year and resulted in numerous corporate investments. Private consumption also benefited from tax cuts for households. The unemployment rate reached an unchanged low level of 3.9% at the end of the year. Due to this positive economic environment, the US Federal Reserve (FED) increased the key interest rate four times in 2018. The FED signaled further increases in interest rates in 2019 if the US economy continues its positive development.

The euro zone also saw good economic development (GDP growth in 2018: 1.8%). While the first six months were marked by strong growth, uncertainty regarding the trade dispute between the USA and China and the impending Brexit led to a tangible economic slowdown throughout Europe in the second half of the year. The European Central Bank (ECB) left the key interest rate at its record low of 0.0% in 2018, but has announced that it will stop the billion-euro bond purchase program if the economy continues to develop favorably.

The most important emerging markets also saw an unchanged, positive economic environment in the reporting period. China's GDP increased by 6.6% in 2018. The strong economic development in the first six months was contrasted by a slight weakening of the economy in the second half of the year. This is mainly due to the trade dispute between China and the USA. The Chinese government is planning to reduce the income taxes significantly in 2019 in order to prevent a further economic downturn. Brazil and Russia also saw slight economic growth. As a result of interest hikes in the USA, there were cash outflows from many countries in the emerging markets, causing some of their currencies to come under considerable pressure. In particular, those countries that finance their loans in US dollars (e.g. Argentina, Turkey) faced a sharp drop in the value of their currencies.

Source: Research reports by various banks, OECD

MARKET DEVELOPMENT

Hydro

Global investment and project activity for electromechanical equipment for hydropower plants again continued at subdued level during the 2018 business year, particularly in Europe. Individual projects were only awarded selectively during the reporting period, primarily in the emerging markets. Some new, larger hydropower projects are currently in the development or planning phase; selective award is only expected in the medium to long term. Satisfactory project activity was noted in the pumps sector.

Pulp & Paper

The international pulp market also saw positive development in the 2018 business year and thus continued its upward trend of the previous years. In view of the continuing high demand for pulp – driven above all by the high global consumption of tissue grades and board – accompanied by a stable supply, the price of short-fiber pulp (eucalyptus) increased from around 980 USD per ton at the beginning of the year to approximately 1,030 USD per ton at the end of 2018. The price of NBSK (Northern Bleached Softwood Kraft Pulp) long-fiber pulp also increased from around 1,000 USD per ton at the end of December 2017 to approximately 1,200 USD per ton at the end of December 2018. The market for pulping equipment showed good project activity during the reporting period. In addition to orders for modernization of existing pulp mills, an order to build a new greenfield pulp mill in South America was also awarded. Good project and investment activity was noted worldwide for power generating boilers, particularly in Asia (China, Japan).

Metals

In the Metals Forming sector (presses, press lines) for the automotive and automotive supplying industry, project and investment activity was satisfactory during the reporting period. Orders were awarded selectively by international and Chinese car manufacturers and their suppliers, both in the middle and higher price and quality segments. Project and investment activity in the market segment served by Yadon in the Chinese automotive supplying industry continued to see favorable development. Project activity for equipment for the production and processing of stainless and carbon steel strip was very high during the reporting period. The demand for stainless and carbon steel supported by the overall good global economic environment and the related higher capacity utilization at international steel producing companies led to numerous new and modernization projects, particularly in Asia, Europe, and North America. The intensity of competition on the equipment market remained challenging despite the good market environment.

Separation

The global markets for solid/liquid separation equipment continued their positive trend during the 2018 business year. In particular, the environmental (municipal and industrial sewage sludge dewatering and drying), mining, and chemical sectors showed good project activity. Investment activity in the food industry slightly improved from a low level. Solid project activity was noted in the feed technologies sector.

BUSINESS DEVELOPMENT

Change in the Consolidation Group

Information on the consolidation scope can be found in the notes to the consolidated financial statements, chapter C) Consolidation scope.

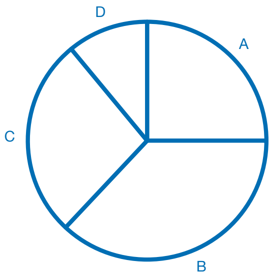
Sales

Sales of the ANDRITZ GROUP amounted to 6,031.5 MEUR in the 2018 business year and were thus slightly higher than the reference figure for the previous year (+2.4% versus 2017: 5,889.1 MEUR). First-time consolidated companies contributed approximately 149 MEUR to sales in the reporting year. Sales in the Hydro business area decreased (-4.1%) compared to the previous year, which was primarily due to the decline in order intake in the past few years and the resulting lower sales generation. Sales in the Pulp & Paper business area increased significantly (+8.4%) compared to the previous year. This increase is largely attributable to the service business, which recorded an increase in sales both organically and – as a result – because of the first-time consolidation of Xerium Technologies, Inc. in October 2018. The Separation business area also saw – due to the positive development of order intake in the past year – an increase in sales (+7.1%). Sales in the Metals business area were practically at the same level (-0.5%) compared to the previous year. The business areas' sales development at a glance:

	Unit	2018	2017	+/-
Hydro	MEUR	1,517.5	1,583.1	-4.1%
Pulp & Paper	MEUR	2,233.2	2,059.7	+8.4%
Metals	MEUR	1,635.1	1,643.5	-0.5%
Separation	MEUR	645.7	602.8	+7.1%

Sales by business area
2018 in %

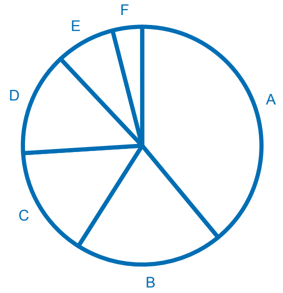
(2017)



A	**25**	(27)	Hydro
B	**37**	(35)	Pulp & Paper
C	**27**	(28)	Metals
D	**11**	(10)	Separation

Sales by region
2018 in %

(2017)



A	**39**	(37)	Europe
B	**20**	(21)	North America
C	**15**	(15)	China
D	**14**	(13)	Asia (without China)
E	**8**	(10)	South America
F	**4**	(4)	Africa, Australia

Share of service sales of Group and business area sales in %

	2018	2017
ANDRITZ GROUP	36	34
Hydro	28	29
Pulp & Paper	48	42
Metals	23	24
Separation	45	47

Order intake

The order intake of the Group saw a very favorable development during the 2018 business year and reached a record level of 6,646.2 MEUR (+19.1% versus 2017: 5,579.5 MEUR). First-time consolidated companies contributed approximately 147 MEUR to order intake in the reporting year. The business areas' development in detail:

- Hydro: In an unchanged moderate market environment, the order intake amounted to 1,445.8 MEUR and was thus 9.8% above the low reference figure for the previous year (2017: 1,317.2 MEUR).

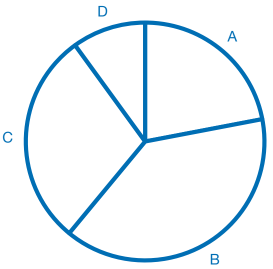
- Pulp & Paper: At 2,571.9 MEUR, the order intake reached a very high level and increased significantly compared to the previous year's reference period (+26.5% versus 2017: 2,033.4 MEUR). This strong increase is due to, among others, the large order from Arauco to supply major pulp technologies and key equipment for the MAPA project in Chile. The service business also developed very favorably, with Xerium Technologies, Inc. contributing approximately 100 MEUR to the order intake following its first-time consolidation in October 2018.

- Metals: Order intake saw a very satisfactory development and increased significantly to 1,931.8 MEUR (+20.2% versus 2017: 1,606.5 MEUR). This strong increase is primarily attributable to the Metals Processing sector, which booked some large and medium-sized orders in Asia, Europe and North America. Satisfactory development was noted in the Metals Forming sector for the automotive and automotive supplying industry, which was able to increase its order intake slightly compared to the previous year.

- Separation: Order intake amounted to 696.7 MEUR and was thus 11.9% higher than the level for the previous year's reference period (2017: 622.4 MEUR). While the solid/liquid separation sector was able to increase its order intake substantially compared to the previous year, the feed technologies sector saw a largely stable development.

Order intake by business area
2018 in %

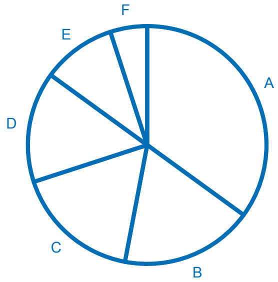
(2017)



A	**22** (24)	Hydro
B	**39** (36)	Pulp & Paper
C	**29** (29)	Metals
D	**10** (11)	Separation

Order intake by region
2018 in %

(2017)



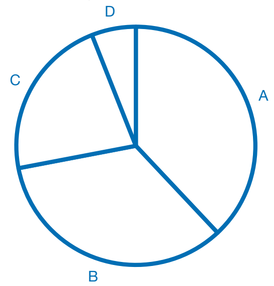
A	**35** (40)	Europe
B	**18** (16)	China
C	**17** (21)	North America
D	**15** (13)	Asia (without China)
E	**10** (7)	South America
F	**5** (3)	Africa, Australia

Order backlog

As of December 31, 2018, the order backlog of the ANDRITZ GROUP amounted to 7,084.3 MEUR (+11.0% versus December 31, 2017: 6,383.0 MEUR).

Order backlog by business area
as of December 31, 2018 in %

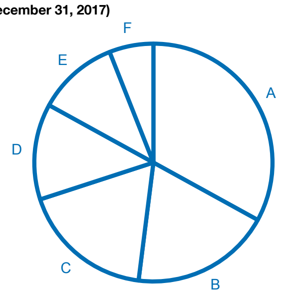
(December 31, 2017)



A	**38** (45)	Hydro
B	**34** (28)	Pulp & Paper
C	**22** (21)	Metals
D	**6** (6)	Separation

Order backlog by region
as of December 31, 2018 in %

(December 31, 2017)



A	**33** (37)	Europe
B	**19** (19)	Asia (without China)
C	**18** (15)	China
D	**13** (16)	North America
E	**11** (8)	South America
F	**6** (5)	Africa, Australia

Earnings

The EBITA of the Group amounted to 394.3 MEUR and was thus – despite a slight increase in sales – significantly below the figure for the previous year's reference period (-11.2% versus 2017: 444.0 MEUR), which included an extraordinary positive effect of approximately 25 MEUR mainly due to the sale of the Schuler Technical Center in

Tianjin, China. Earnings were negatively impacted by provisions amounting to around 20 MEUR for capacity restructuring measures in the Metals Forming sector and the Hydro business area as well as cost overruns on some projects in the Metals Processing sector. Profitability (EBITA margin) dropped substantially to 6.5% (2017: 7.5%).

The EBITA of the Group adjusted for the aforementioned provisions would have amounted to 415.0 MEUR (2017: 420.4 MEUR without extraordinary effect) and profitability to 6.9% (2017: 7.1% without extraordinary effect).

Development of profitability by business area:

- The EBITA margin in the Hydro business area reached a solid level of 7.5% (2017: 7.8%) in spite of a decline in sales.

- In the Pulp & Paper business area, profitability increased to a record level of 9.9% (2017: 9.5%). Both the capital and the service business noticed a very favorable development.

- The EBITA margin in the Metals business area dropped significantly to 1.7% (2017: 6.0%). This unsatisfactory development is – in addition to the provisions for restructuring measures in the Metals Forming sector as mentioned above – largely attributable to cost overruns on some projects as well as the execution of some lower-margin orders in the Metals Processing sector.

- In the Separation business area, the EBITA margin amounted to 4.8% (2017: 4.6%).

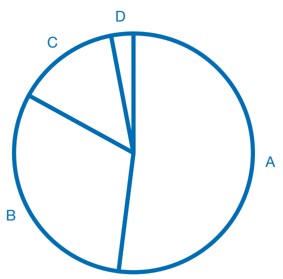
Consolidated income statement

(in MEUR)	2018	2017	+/-
Sales	**6,031.5**	**5,889.0**	**+2.4%**
Changes in inventories of finished goods, work in progress and capitalized cost of self-constructed assets	-1.5	38.6	-103.9%
Other operating income	89.3	188.4	-52.6%
Cost of materials	-2,987.7	-3,028.8	+1.4%
Personnel expenses	-1,787.0	-1,717.8	-4.0%
Other operating expenses	-846.6	-827.7	-2.3%
EBITDA	**498.0**	**541.7**	**-8.1%**
Depreciation, amortization, and impairment of intangible assets and of property, plant, and equipment	-160.5	-136.0	-18.0%
Impairment of goodwill	-15.9	-6.4	-148.4%
EBIT	**321.6**	**399.3**	**-19.5%**
Financial result	**-17.4**	**1.3**	**-1,438.5%**
EBT	**304.2**	**400.6**	**-24.1%**
Income taxes	-84.5	-135.0	+37.4%
NET INCOME	**219.7**	**265.6**	**-17.3%**
Thereof attributable to:			
Shareholders of the parent	222.0	263.0	-15.6%
Non-controlling interests	-2.3	2.6	-188.5%
Basic earnings per no-par value share (in EUR)	2.20	2.58	-14.7%

Allocation of expenses in %

Distribution of total expenses 2018 in %

(2017)



A **52** (53) Cost of materials
B **31** (30) Personnel expenses
C **14** (15) Other operating expenses
D **3** (2) Depreciation

51.7% of total operating expenses were attributable to material expenses in 2018 (2017: 53.0%). The material expenses to sales ratio amounted to 49.5% (2017: 51.4%). The share of personnel expenses, at 30.9%, was thus practically unchanged compared to the previous year's reference period (2017: 30.1%), the personnel expenses to sales ratio amounted to 29.6% (2017: 29.2%).

Other operating expenses amounted to 846.4 MEUR in the reporting period (2017: 827.7 MEUR) and mainly include sales expenses, travel expenses, repairs and maintenance, rents and lease expenses, as well as consulting expenses. Other operating income, at 89.3 MEUR, was significantly lower than for the previous year (2017: 188.4 MEUR) and mainly includes government grants, rental income, and profits on disposal of intangible assets and property, plant, and equipment (mainly attributable to the sale of Shanghai Schuler Presses Co. Ltd., China).

The depreciation and amortization of intangible assets and of property, plant, and equipment amounted to 160.6 MEUR in 2018 (2017: 136.0 MEUR). Thereof 58.6 MEUR (2017: 42.8 MEUR) are attributable to depreciation and amortization of intangible assets and 96.4 MEUR (2017: 86.7 MEUR) to depreciation and amortization of property, plant, and equipment.

In 2018, the Group's goodwill impairment amounted to 15.9 MEUR (2017: 6.4 MEUR), and the impairment charges for intangible and tangible assets were 5.6 MEUR (2017: 6.4 MEUR). The goodwill impairment relates to the Pulp & Paper and Metals business area, where the business did not develop as expected. Impairment of intangible and tangible assets mainly relates to plant, technical installations, and equipment.

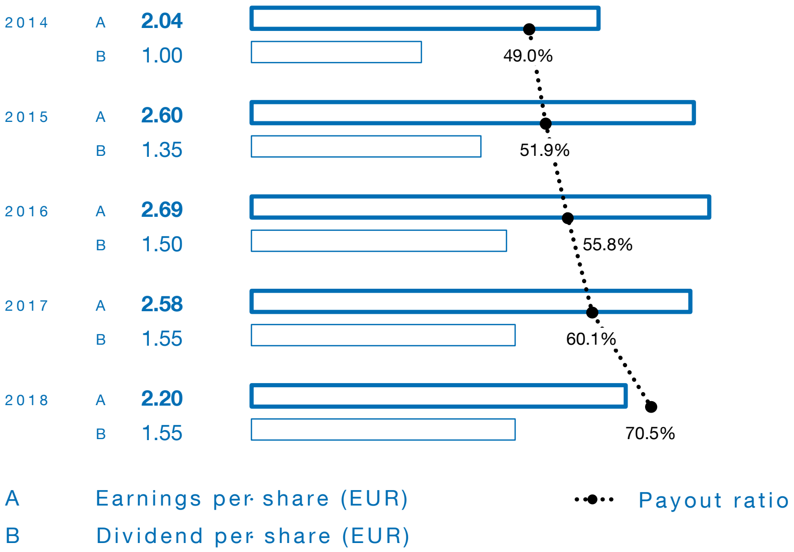
The financial result decreased significantly to -17.4 MEUR (2017: 1.3 MEUR). This substantial decline is mainly due to lower interest income as a consequence of lower average net liquidity and considerably lower interest rates in Brazil on an annual comparison. Furthermore, the issuance of Schuldscheindarlehen in June 2017 and August 2018 negatively affected the financial result. The decrease in other financial result comes from the valuation of accounts in foreign currencies (FX) on balance sheet date.

The tax rate decreased to 27.8% (2017: 33.7%) due to taxes for prior years (see also notes to the consolidated financial statements, chapter G) 8. Income taxes).

The net income (including non-controlling interests) amounted to 219.7 MEUR (-17.3% versus 2017: 265.6 MEUR). Thereof 222.0 MEUR (2017: 263.0 MEUR) are attributable to the shareholders of the parent company and -2.3 MEUR (2017: 2.7 MEUR) to non-controlling interests (see also notes to the consolidated financial statements, chapter I) 22. Equity).

The earnings per share decreased to 2.20 EUR (2017: 2.58 EUR). At the Annual General Meeting on March 27,°2019, the Executive Board will propose an unchanged dividend of 1.55 EURper share (2017:°1.55 EUR) for the 2018 business year. This is equal to a payout ratio of around 70.5% (2017: around 60.1%).

Earnings and dividend per share/payout ratio



Dividend for 2018: Proposal to the Annual General Meeting.

Treasury shares

As of December 31, 2018, the company held 3,023,498 treasury shares, i.e. 2.9% of the share capital, with a market value of 121.3 MEUR.

More information on treasury shares is available in the notes to the consolidated financial statements, chapter I) 22. Equity.

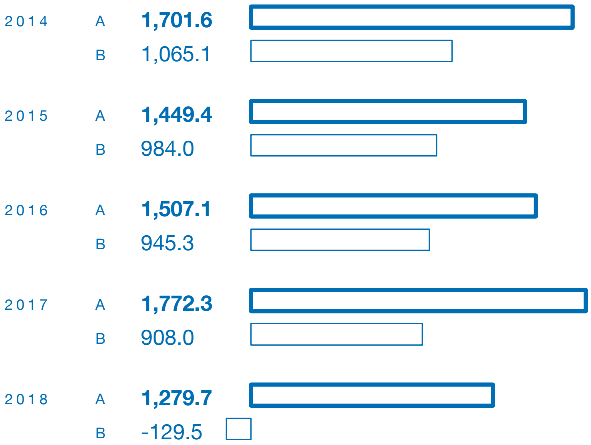
Net worth position and capital structure

Total assets increased to 6,918.6 MEUR (December 31, 2017: 6,265.3 MEUR) primarily due to the companies acquired during the business year. The equity ratio amounted to 19.2% (December 31, 2017: 21.2%).

Liquid funds amounted to 1,279.7 MEUR (December 31, 2017: 1,772.3 MEUR), while net liquidity dropped significantly to -129.5 MEUR (December 31, 2017: 908.0 MEUR). This substantial decline in net liquidity is largely due to payments for the purchase of acquisitions as well as early redemption of a high-interest bond held by Xerium Technologies, Inc.

In 2018, ANDRITZ AG issued a Schuldscheindarlehen with a volume of 500 MEUR in order to provide funds for corporate financing including refinancing and for acquisition financing.

Development of liquid funds and net liquidity



A Liquid funds (MEUR)
B Net liquidity (MEUR)

In addition to the high liquid funds, the ANDRITZ GROUP also had the following credit and surety lines for performance of contracts, down payments, guarantees, and so on, at its disposal:

- Credit lines: 217 MEUR, thereof 140 MEUR utilized
- Surety lines: 6,037 MEUR, thereof 2,730 MEUR utilized

Assets

A	Long-term assets: 38%	2,629.5 MEUR
B	Short-term assets: 45%	3,104.4 MEUR
C	Cash and cash equivalents and marketable securities: 17%	1,184.7 MEUR

Shareholders' equity and liabilities

A	Shareholders' equity incl. non-controlling interests: 19%	1,330.8 MEUR
B	Financial liabilities: 20%	1,412.6 MEUR
C	Other long-term liabilities: 13%	823.1 MEUR
D	Other short-term liabilities: 48%	3,352.1 MEUR

On the asset side, property, plant, and equipment (1,132.1 MEUR), goodwill (784.6 MEUR), and intangible assets (372.9 MEUR) were the most important items in non-current assets (2,629.5 MEUR). The most important items in the other current assets, amounting to 3,104.4 MEUR, are trade accounts receivable and contract assets in the amount of 1,760.5 MEUR as well as inventories (869.3 MEUR).

On the liabilities side, the other current liabilities (3,352.1 MEUR) mainly include contract liabilities from sales recognized over time in the amount of 1,003.5 MEUR, provisions (438.0 MEUR), and trade accounts payable (604.2 MEUR). The most important items in other liabilities (975.3 MEUR) are accruals and outstanding order-related costs (425.9 MEUR), as well as unused vacation and other personnel-related accruals (252.6 MEUR). Non-current liabilities, at 823.1 MEUR, largely contain provisions (579.7 MEUR) and deferred tax liabilities (184.4 MEUR).

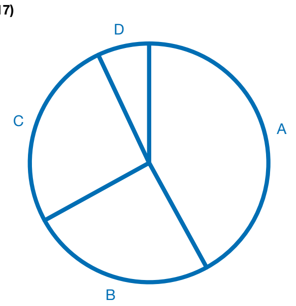
Further information on provisions is shown in the notes to the consolidated financial statements, chapter I) 23 Provisions.

Capital expenditure

Investments in tangible and intangible assets amounted to 137.0 MEUR in 2018 and were thus above the previous year's level (2017: 116.8 MEUR). The increase is mainly attributable to the acquisition of a production site in Brazil. Investments breakdown by business area as follows:

Capital expenditure by business area 2018 in %

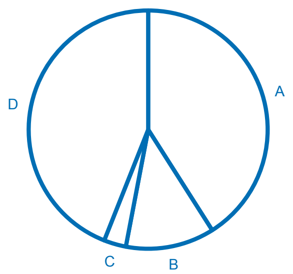
(2017)



A	**42**	(32)	Hydro
B	**25**	(36)	Pulp & Paper
C	**26**	(25)	Metals
D	**7**	(7)	Separation

Capital expenditure by category 2018 in %

(2017)



A	**41**	(40)	Manufacturing
B	**12**	(14)	IT
C	**3**	(15)	Research and Development
D	**44**	(31)	Others

As in previous years, investments mainly focused on workshop modernizations and selected extension projects. Investments in new facilities mainly included the new construction of the headquarters of ANDRITZ (China) Ltd. in Foshan, China, as well as the construction of a new plant of Yangzhou Metals Forming Machine Tool Co., Ltd., in Yangzhou, China.

Cash flow

The cash flow from operating activities, at 7.8 MEUR, was significantly lower than the previous year's reference figure (2017: 246.5 MEUR). The change is due to the decline in Gross cash flow (404.8 MEUR in 2018 versus 450.7 MEUR in 2017) as well as project related changes in net working capital (-278.7 MEUR in 2018 versus -43.7 MEUR in 2017).

The cash flow from investing activities amounted to -89.8 MEUR (2017: -544.0 MEUR). The major change mainly resulted from lower investments in current financial assets (-234.2 MEUR in 2018 versus -652.7 MEUR in 2017) as well as from higher payments received for investments and other current financial assets (514.6 MEUR in 2018 versus 151.2 MEUR in 2017). On the other hand there is a higher net cash flow from company acquisitions (-270.0 MEUR in 2018 versus -13.4 MEUR in 2017).

The cash flow from financing activities amounted to -112.2 MEUR (2017: 134.5 MEUR). The change mainly resulted from the early redemption of a high-interest corporate bond held by Xerium Technologies, Inc. (-427.6 MEUR). This contrasts payments received from issuance of Schuldscheindarlehen (500.0 MEUR in 2018 versus 400.0 MEUR in 2017).

Further important key figures at a glance

	Unit	2018	2017	2016	2015	2014
Return on sales	%	5.3	6.8	6.4	5.8	5.0
EBITDA	MEUR	498.0	541.7	542.4	534.7	472.0
Earnings Before Interest and Taxes (EBIT)	MEUR	321.6	399.3	385.8	369.1	295.7
Earnings Before Taxes (EBT)	MEUR	304.2	400.6	398.4	376.4	299.4
Net income (including non-controlling interests)	MEUR	219.7	265.6	274.8	270.4	210.0
Free cash flow	MEUR	-129.2	129.7	263.7	85.0	245.8
Free cash flow per share	EUR	-1.2	1.2	2.5	0.8	2.4
Return on equity	%	22.9	30.2	29.6	31.0	28.8
Return on investment	%	4.6	6.4	6.2	6.4	4.9
Net debt	MEUR	568.1	-530.6	-550.2	-601.6	-659.4
Net working capital	MEUR	160.5	-121.0	-215.8	-182.1	-570.9
Capital employed	MEUR	1,665.6	801.9	772.2	736.7	387.0
Gearing	%	42.7	-40.0	-40.9	-49.5	-63.5

Acquisitions

The acquisition of Xerium Technologies, Inc. was closed successfully in October 2018. The group, which has approximately 2,900 employees and 29 production facilities worldwide, is a global manufacturer and supplier of machine clothing and roll covers for paper, tissue, and board machines and expands the ANDRITZ product range in this segment.

In July 2018, ANDRITZ acquired a 70% stake in Diatec S.r.l., a leading manufacturer of machines for the production of baby diapers and hygiene products. The company is based in Collecorvino in the Pescara region, Italy. This acquisition supplements the ANDRITZ product portfolio in the Pulp & Paper business area.

ANDRITZ acquired ASKO, Inc., a family-owned company with headquarters in Homestead, Pennsylvania, USA, in September 2018. The company manufactures a wide range of knives, blades, liners, wear plates, and accessories for the metals producing, processing, and recycling industries. This acquisition supplements the ANDRITZ service portfolio for the metal industry.

ANDRITZ acquired Novimpianti Drying Technology S.r.l., a company owned by Novigroup S.r.l. and based in Lucca, Italy, during the business year. Novimpianti is a global supplier of engineered equipment and technical services for air and energy systems to the paper industry’s leading manufacturers. The closing of the transaction took place in June 2018.

The Schuler Group, which belongs to ANDRITZ, acquired Farina Presse, an Italian manufacturer of forging lines. With this mechanical engineering specialist based in Suello in northern Italy, the Schuler Group has completed its product portfolio in the forging and single-stroke press segment. The closing of the transaction took place in August 2018.

ANDRITZ acquired the Canadian company HMI, with headquarters in Boucherville, Québec. HMI focuses on repair and upgrade of shut-off valves and other equipment for hydropower stations. The closing of the transaction took place in November 2018.

Further information on acquisitions can be found in the notes to the consolidated financial statements, chapter D) Acquisitions.

RISK MANAGEMENT

The ANDRITZ GROUP is a globally-operating company serving a large variety of industrial markets and customers. As such, the Group is subject to a series of risks. The main, higher-level risks pursuant to Article 243 (1) of the Austrian Commercial Code (Unternehmensgesetzbuch - UGB) include:

- Risks relating to financial instruments
- Strategic risks
- Operational risks

The active risk management implemented by the ANDRITZ GROUP for many years now serves both to safeguard the company's existence in the long term as well as to increase its value, and is thus an essential success factor for the entire Group. For the purposes of value-oriented company management, risk management is an integral part of the business processes and extends over all strategic and operative levels.

The planning and controlling process within the entire ANDRITZ GROUP is an integral part of risk monitoring and control. Continuous controlling and regular reporting are intended to increase the likelihood of identifying major risks at an early stage and to allow countermeasures to be implemented if necessary. Still, there is no guarantee that the monitoring and risk control systems are sufficient and adequately effective.

The latent trade dispute between the USA and China (including import duties on steel and aluminum) has already had a subduing effect on the global economy according to estimates by international economic experts. Many forecasts assume that the negative effects will intensify in 2019. If the global economy thus continues to cool down significantly, this could also have a negative effect on business development at ANDRITZ. ANDRITZ has a strong local presence in the USA, with approximately 30 production and service locations and approximately 2,900 employees. All four business areas are represented in the USA. From today's perspective, the effects on ANDRITZ can be considered insignificant. However, if other regulatory measures are implemented that have negative consequences for non-American companies, the effects on ANDRITZ may well be substantial.

The interest rate hikes by the US Federal Reserve in 2018 together with the weak economy in many emerging markets led to a massive capital outflow from these markets. As a result, the currencies of most of these countries came under considerable pressure. Further interest rate hikes by the US Federal Reserve could lead to an extensive currency crisis in the emerging markets and thus also to a negative impact on the global economy. However, the volume of loans in foreign currency held by ANDRITZ subsidiaries in the emerging markets can be classified as very small.

The long-term economic impact of the United Kingdom (UK) leaving the European Union cannot be estimated yet. However, its influence is expected to be low by most economic experts. If economic growth in Europe dropped significantly as a result, this could have a negative impact on business development of the ANDRITZ GROUP because Europe is its most important economic region, accounting for an average of 35-40% of its total sales. However, the ANDRITZ GROUP's direct business volume in the UK can be classified as very small.

The ANDRITZ GROUP risks described below are monitored continuously. If any of these risks materializes, the Group will be prepared to react and to counteract as far as possible.

Risks relating to financial instruments

The principal financial risks include payment default, liquidity risks, and market risks, such as exchange rate risks, interest rate risks, and raw material price risks.

A detailed description of all financial risks of the ANDRITZ GROUP is provided in chapter L) Risk management – Risks relating to financial instruments, of the Notes to the Consolidated Financial Statements.

Strategic risks

Political risks

The countries in which the Group is active include some that are classified as politically risky or very risky. Terrorist activities or political changes could result in orders being suspended. Risks related to deliveries to countries with medium to high political risks are typically covered by comprehensive insurance. However, the prerequisites for full hedging of these risks are not always available. The measures and procedures in this respect are specified in the credit risk policy applying throughout the Group.

Regulatory risks

Regulatory risks include both tax risks as well as compliance risks.

The ANDRITZ group companies are subject to local tax laws in the respective countries and have to pay income taxes as well as other taxes. Changes in tax legislation and different interpretations of the regulations applying in each case can result in subsequent tax burdens. As a result, the tax rate can be exposed to either positive or negative fluctuations.

The ANDRITZ GROUP is subject to a variety of legal compliance risks, including compliance with anti-trust and anti-bribery laws, in Austria and other countries where the Group conducts business. The Group has established a Compliance Committee to control its compliance efforts and adopted a number of compliance policies, including policies prohibiting insider trading and violation of the applicable anti-trust and anti-bribery laws, as well as a global Code of Business Conduct and Ethics. While the Group attempts to make sure that such policies are observed, there can be no assurance that no violations will occur or have occurred. Any such violation could have a lasting adverse impact on the financial position and reputation of the Group and may also lead to the cancellation of existing orders.

Competitive position

The ANDRITZ GROUP does business in highly competitive markets in which only a few large suppliers bid for only a few large orders. In addition, there are many small companies competing locally that have a comparatively low cost base. The competitive situation or a possible change in the competition structure can have a negative effect on sales margins of the Group. There is no guarantee that the Group can also maintain its current market position in the future.

As the Group’s competitive position is also based on proprietary technology, the increase in product piracy and industrial espionage facilitated by the digital era and accompanying theft of intellectual property can also have an adverse effect on the Group’s competitive position. The Group protects its intellectual property wherever possible, but there can be no assurance that these efforts will always be successful.

Customer concentration

In many of the industries served by the ANDRITZ GROUP, there is a trend towards consolidation and mergers. This applies above all to the pulp and paper industry and also to the steel industry. Such consolidation may result in the Group having to negotiate with fewer companies in the future, but these companies have greater purchasing power. The dependence on key customers may increase, and this could have direct consequences on the Group’s business activities.

Volatility of incoming orders

Some customers and industries served by ANDRITZ are directly dependent on general economic developments and thus subject to frequent fluctuations in the demand for their products. This is especially true of the Pulp & Paper and the Metals business areas, but all business areas may be affected. The prices for equipment and products supplied by ANDRITZ in these segments are, in part, directly dependent on the prevailing relationship between supply and demand for the goods produced by such equipment and products of ANDRITZ. Possible price fluctuations can, therefore, have a direct influence on each customer's capital investment decisions, with subsequent impact on the Group's order intake. This may lead to some volatility in the development of the Group's order intake.

The Schuler Group, in which the ANDRITZ GROUP holds a majority stake, derives a large part of its sales from the automotive industry, which is generally exposed to severe cyclical swings. Thus, possible negative cyclical fluctuations can have a negative impact on the sales and earnings development of the Schuler Group and thus of the ANDRITZ GROUP.

Among other things, the Group's future performance depends on securing new contracts. It can be difficult to predict when an order for which the ANDRITZ GROUP has provided a quotation, will actually be awarded. Contract awards are often affected by events outside the control of the Group, such as prices, demand, general economic conditions, the granting of governmental approvals, and the securing of project financing. This uncertainty can cause difficulties in aligning the Group's fixed costs and predicted order volume.

In addition, natural disasters or pandemics could also have a negative effect on development of the order intake, the liquidity, and the financial structure of the Group.

Acquisition and integration of complementary business segments

One of the Group's main strategic goals is to become a full-line supplier in all of its business areas through organic growth and complementary acquisitions. In the course of implementing this strategy, the Group has acquired and integrated a number of companies with worldwide operations since 1990.

However, there is no guarantee that the Group will be successful in identifying and acquiring appropriate acquisition candidates in the future, or that suitable candidates and sufficient financing will be available. In the past, ANDRITZ was largely successful in integrating newly acquired companies. However, there is no guarantee that planned objectives and synergies can be realized for all acquisitions in the future (including the ongoing integration of the most recently acquired companies), or that the Group will not be exposed to new or legacy risks that have not been identified or accurately evaluated.

Procurement and manufacturing

The Procurement department regularly checks the important suppliers for the ANDRITZ GROUP in order to identify risk potentials (ability to deliver, quality management, financial situation, etc.) and risks at an early stage. This also applies to orders beyond a defined amount. In addition, capacities are checked and, if possible, a second supply option is reviewed.

In manufacturing, precise planning, high commitment, and flexible employees are essential factors to ensure short lead times and on-time production. Internally, ANDRITZ uses flextime contracts and, especially in Europe, a flexible contingent of temporary workforce to cope with cyclical fluctuations and peaks in workload. Also, the fluctuations in capacity utilization that are typical of project-related business are balanced better with a targeted make-or-buy strategy and best possible utilization of the company's own manufacturing capacities. At the same time, process-relevant key components for ANDRITZ plants and products are mainly manufactured and assembled in the Group's own workshops. Simple components, on the other hand, are largely purchased from qualified suppliers, who are subjected to regular checks on quality, on-time delivery, and compliance. The

ANDRITZ GROUP tries to balance out fluctuations in capacity utilization as flexibly as possible. However, there is no guarantee that ANDRITZ will always be able to compensate immediately for larger fluctuations in capacity utilization, and failure to do so could in turn have a negative impact on the earnings development of the Group.

Human resources

In Human Resources, special emphasis was again placed on developing and strengthening the necessary personnel resources in the past year. The corresponding measures largely include offering interesting career opportunities, incentive plans, and focused training programs. The ANDRITZ GROUP seeks to be an attractive employer for its employees and also tie them to the company in the long-term. High quality standards in the selection process guarantee that the most suitable candidates are recruited for the positions becoming vacant.

Digitalization

Based on extensive and long-term experience as a supplier of technologies and systems for various branches of industry, ANDRITZ offers a broad portfolio of intelligent, digital solutions that provide significant help to customers in achieving their production and corporate goals. These innovative digitization solutions that have been tested worldwide in many reference plants are combined under the technology brand Metris. Metris is based on three strategic pillars: Industrial IIoT with technology focus on smart sensors, big data and augmented reality, Smart services, and the Ventures sector. Metris technologies are the very latest state of the art, and they are subject to constant further development and can be fully tailored to individual customer requirements. ANDRITZ considers digitalization to be a vital growth sector for the future and hence will focus strongly on development of digital products and solutions, including data security, in the coming years. However, the speed at which digitalization is progressing also presents a risk if ANDRITZ does not succeed in mastering the challenges relating both to development of products and solutions and to internal processes with the necessary speed.

Capital market risks

Apart from company-related factors, development of the ANDRITZ share price is also dependent on price fluctuations on the international financial markets. Major price fluctuations and high volatility on major stock markets may have a negative effect on the ANDRITZ share price.

As a publicly listed company, ANDRITZ is regularly assessed by financial analysts and institutional investors. Analysts' recommendations to buy or sell ANDRITZ shares and subsequent investment decisions by shareholders may cause considerable fluctuations in the share price. ANDRITZ has consistently followed a policy of open and transparent information exchange with shareholders and the financial community to avoid unfounded fluctuations in its share price.

The high level (just under 70%) of public free float of ANDRITZ's total outstanding shares and its intensive investor relations activities have led to active trading in ANDRITZ shares on the Vienna Stock Exchange. There is no assurance, however, that active trading will be maintained in the future. If active trading was not maintained, the liquidity and market price of ANDRITZ shares would suffer adverse effects, and investors may not be able to sell their shares at what they perceive to be an acceptable price. In the absence of active trading or in the event of a major change in market capitalization, the ANDRITZ share could be removed from various international industrial and stock exchange indexes, for example the ATX, the leading index of the Vienna Stock Exchange, or other indexes. This could result in major changes in the price of the ANDRITZ share.

Operational risks

Project risks

In conjunction with the delivery of equipment and services supplied by ANDRITZ, the Group is under contractual obligation in many cases to provide performance guarantees and to meet certain deadlines. If the performance data stated are not achieved or if deadlines are not met, the Group may have to perform remedial work at its own expense or pay damages. If a guaranteed performance level is missed by a wide margin, deadlines are significantly exceeded, or the customer does not accept the plant for other reasons, the customer may have the right to terminate the agreement and return the subject of the contract to ANDRITZ for a full refund and recover damages. Such action could have a negative effect on the Group's financial development.

Many of ANDRITZ's projects are based on long-term, fixed price contracts. The sales and operating margins realized in a fixed price contract may vary from original estimates as a result of changes in costs (especially fluctuating material costs), particularly on projects that include engineering and/or construction of complete plants, and where labor services have to be bought from third parties.

As certain parts of the Group's supplies are outsourced, the Group may be forced to quote at a fixed price to the customers without knowing the exact cost of the parts purchased. While ANDRITZ makes estimates using empirical data and quotes from potential suppliers, these estimates may not always be completely accurate. As a result, the Group has experienced considerable losses on some projects in the past. Problems and losses of this kind may also occur in future in a way that would adversely affect the Group's financial development.

In individual projects, ANDRITZ also has responsibility for plant-wide engineering and/or installation and construction in addition to the supply of ANDRITZ equipment and systems. These contracts bear the risks discussed above, but also entail certain risks relating to greater on-site responsibilities, including environmental matters, local labor conditions as well as risks relating to geology, construction, and installation. Additionally, the Group is exposed to the risks inherent in managing the third parties providing construction, installation, and engineering services on these projects (such as strikes and other labor disruptions, which can lead to delays in start-up or failure to meet deadlines). The Group has put risk management procedures in place, including insurance programs, contract policies, and project management discipline, to reduce these EPC-related risks (EPC: Engineering, Procurement, Construction) as far as contracts allow. Nevertheless, there is no guarantee that these procedures are sufficient to prevent negative financial consequences. The Group has experienced significant losses on certain past projects in this regard, and similar difficulties and losses may occur in the future in a way that would adversely affect the Group's financial condition.

In many EPC and other projects, the ANDRITZ GROUP participates with third parties with whom it shares several joint liabilities. While the Group attempts to make sure that risks in such projects are properly allocated, there can be no assurance that this will always be successful. Moreover, the inability of one of the Group's consortium partners to fulfill its obligations on the project, including indemnity obligations to the Group, may have an adverse material impact on the financial results and the liquidity of the Group.

Limitations of liability

Liabilities arising out of the Group's contracts may include liabilities for customers' loss of profits and other liabilities that can vastly exceed the value of the contract in question. While the Group endeavors to include appropriate limitations of liability in its contracts, there can be no assurance that appropriate limitations will in fact be in place in all contracts or that such limitations will be enforceable under the applicable law.

Government contracts

A certain amount of the orders are placed by government entities. These projects can involve the performance, liability, and EPC/turnkey contract risks described above. Due to public bid requirements and local laws, it may not always be possible for the Group to obtain its desired contractual safeguards, and thus it may remain more exposed to such risks in connection with these projects.

Legal proceedings

In the course of its business, the ANDRITZ GROUP is party to numerous legal proceedings before both administrative and judicial courts and bodies as well as before arbitration tribunals. The substantial majority of such proceedings is of a nature considered typical of the Group's business, including contract and project disputes, product liability claims, and intellectual property litigation. Where appropriate, provisions are made to cover the expected outcome of proceedings to the extent that negative outcomes are likely and reliable estimates can be made. There is no guarantee, however, that these provisions will be sufficient. Given the amounts at stake in some of these disputes, a negative decision for ANDRITZ in one or several of these legal disputes may have a significant, adverse effect on the earnings and liquidity position of the Group.

In product liability, there are a number of cases alleging injuries and/or death resulting from exposure to asbestos. Details are available in the Notes to the Consolidated Financial Statements, chapter N) Contingent Liabilities.

Currencies

A substantial number of the ANDRITZ GROUP's subsidiaries are located outside the euro zone. Since ANDRITZ AG reports in euros, the company converts the financial statements of these companies into euros in the consolidated financial statement. In order to address translation-related foreign exchange risks, it is generally assumed for the purposes of risk management that investments in foreign companies are made in the long term and the results are reinvested continuously. The effects of fluctuations in exchange rate when converting net asset items into euros are included in currency translation adjustments in Group equity.

A significant portion of the Group's sales and costs is not settled in the respective functional currency of the company group, but in other currencies, above all in US dollars. The currencies in these countries are subject to fluctuations in exchange rates. Currency risks in connection with orders that are not invoiced in euros are minimized by derivatives, in particular forward contracts and swaps.

Although the Group attempts to hedge the net currency exposure of those orders not invoiced in the respective functional currency of the group company by forward contracts, currency fluctuations can result in the recognition of exchange rate losses in the Group's financial statements. Developments of exchange rates may also have both positive and negative 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 many competitors of ANDRITZ are also based in the euro zone. As some of ANDRITZ's major customers are based outside of the euro zone, changes in exchange rates could lead to delays in 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.

The change in the exchange rate of the euro against many other currencies could also have both a positive and a negative impact on the shareholders' equity as well as on the sales and earnings development of the ANDRITZ GROUP (translation effect).

Insurance

While the ANDRITZ GROUP maintains insurance programs to cover typical insurable risks related to its business, there can be no guarantee that this insurance can fully cover potential losses, that the insurers will be liable to pay damages, nor that the amount of the Group's insurance will be adequate. Moreover, the Group is involved in certain industries (for example the space and nuclear industries) for which risks are uninsurable or cannot be insured against in full, or where it is not always possible to comply with all of the conditions required to contract insurance. Any material liability not covered by insurance could have a substantial, adverse effect on the Group's financial condition.

Cyber security, hacker attacks

The increasing digitalization and networking of plants and machinery requires highly effective and efficient solutions to maintain data security. Unauthorized access to or copying of sensitive company data as well as insufficient system availability as a result of hacker attacks are substantial risks to which ANDRITZ is increasingly exposed. This may not only affect ANDRITZ's own systems, but also IIoT solutions installed by ANDRITZ at customers' premises. ANDRITZ counters cyber risks and potential hacker attacks by using the latest IT security technologies (for example firewall systems) and by stricter control of access rights. One focus lies on continuous further development of security measures. Cyber attacks should be detected at an early stage with the aid of an optimized IT infrastructure so that they can be repelled successfully. However, unauthorized access to and loss of sensitive and confidential data both at ANDRITZ and at its customers' premises as a result of cyber attacks cannot be ruled out, nor can any resulting enormous financial losses for which ANDRITZ may be held responsible.

Internal control and risk management system

ANDRITZ has a Group-wide internal control and steering system (ICS) whose main task is to identify nascent risks at an early stage and – if possible – to implement countermeasures promptly. This system is an important element of active corporate management. However, there is no guarantee that these monitoring and control systems are effective enough.

The Executive Board is responsible for implementing and monitoring the ICS for the accounting process and financial reporting. For this purpose, binding Group-wide regulations and guidelines/policies have been implemented for the major business risks and also for the financial reporting process.

The accounting department, which includes financial accounting, reports directly to the Executive Board. Organizational measures have been made to ensure as far as possible that the legal requirements to make complete, correct, timely, and orderly entries in the books and other records are met. The entire process from procurement to payment is subject to guidelines/policies that are intended to minimize any essential risks these processes may entail. These measures and rules include separation of functions, signature authorization matrices, and signatory powers for authorizing payments applying on a collective basis only and restricted to a small number of employees (dual control principle), as well as system-supported checks by the financial software in use (SAP).

By using a standardized, Group-wide financial reporting system, together with ad-hoc reporting on major events, the Group endeavors to ensure that the Executive Board is properly and promptly informed on all relevant issues. The Supervisory Board is informed in Supervisory Board meetings held at least once every quarter on the current business development, including operative planning and the medium-term strategy of the Group – for example in the event of acquisitions or restructuring – with direct and immediate information being provided to the Supervisory Board in special cases. In addition, the Chairman of the Supervisory Board receives a monthly report, including the key financial figures with comments. Internal control and risk management are among the topics dealt within audit committee meetings.

Internal Auditing, set up as an executive department reporting to the Executive Board, audits individual processes or Group companies according to an audit schedule defined for each year as well as conducting audits in special cases. It is active in reporting and assessing the audit results as an independent, internal department that is not bound by instructions from outside bodies.

The auditor of the Group's financial statements assesses risk management functionality in the ANDRITZ GROUP and reports on it to the Supervisory and the Executive Boards. Risk management functionality was checked and approved in 2018 by the auditor of the Group's financial statements.

Consolidated Corporate Governance report

The consolidated Corporate Governance report is available in the section "Consolidated Corporate Governance report" or on the ANDRITZ website andritz.com.

Significant events after the balance sheet date

There were no events of material significance after the balance sheet date.

CONSOLIDATED NON-FINANCIAL STATEMENT

The following section describes the non-financial performance indicators on social, employee, and environmental matters and in respect of human rights. Information on measures to combat bribery and corruption is available in the consolidated Corporate Governance report.

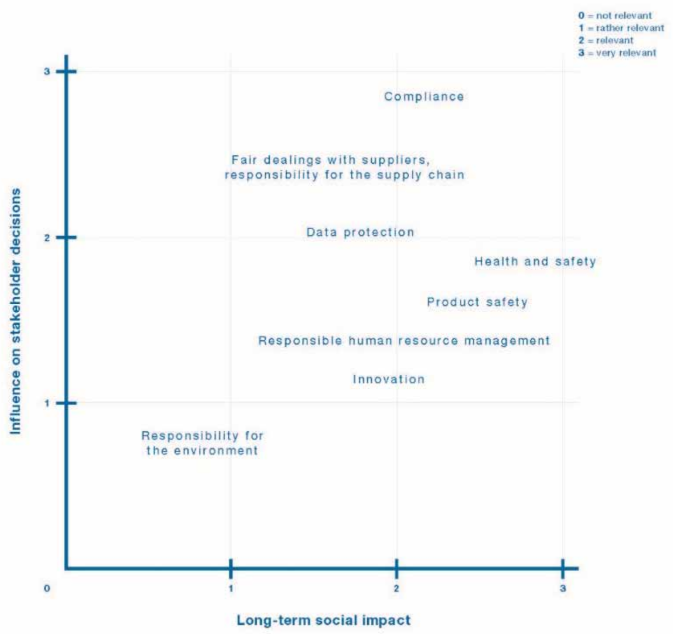
Materiality analysis

The ANDRITZ GROUP reports information relating to sustainability in accordance with the criteria of the Global Reporting Initiative (GRI Standards, Option: Core). A list of all Key Performance Indicators (KPIs) reported, including comments, is provided in the "GRI Index" chapter in the Notes to the Consolidated Financial Statements.

Several stakeholder surveys and interviews with relevant stakeholders have already been conducted in order to establish the main reporting topics and important fields of activity. The last survey was performed in the autumn of 2017 on an anonymous basis using an online questionnaire.

The most relevant topics for ANDRITZ are compliance and fair dealings with suppliers and business partners as well as accepting responsibility for the supply chain. Data protection, product safety and responsible HR management were rated as being relevant as were such topics as occupational health and safety and environmental responsibility. Thus, these topics also form the basis of the reporting content.

At a meeting of the ANDRITZ CSR team last summer, the relevant topics were re-assessed and categorized once again as still having the same significance. The discussion addressed the long-term social influence of the respective topics in general, as well as the influence that these topics could have on stakeholder decisions in connection with their business relations with ANDRITZ.



Significant changes to the organisation and its supply chain

The acquisition of Xerium Technologies, Inc. was closed successfully in October 2018. The group is a global manufacturer and supplier of machine clothing and roll covers for paper, tissue, and board machines and expands the ANDRITZ product range in this segment. It has approximately 2,900 employees and 29 production facilities worldwide. Whereas the number of employees has already been taken into account, the figures for global manufacturing will not be available until published in the 2019 report.

Non-financial risks

Risk management is an integral part of all business processes and extends over all strategic and operative levels. While the section on risk management describes the main general risks (pursuant to Section 243 (1) of the Austrian Business Code UGB, the non-financial risks described below (pursuant to Section 267a (3) line 5 UGB) relate to the essential concerns of the materiality analysis.

Non-financial risks can result for the company as well as for the company environment and stakeholders from the company's own business activities or from business relationships. They result not only from increasing customer demands, but also more and more from legal regulations that could result in financial penalties if not obeyed. This could lead to a loss of confidence on the part of customers or other stakeholders.

Human resources

The ANDRITZ GROUP seeks to be an attractive employer for its employees and also tie them to the company in the long-term. The company considers it important to provide a safe and healthy working environment for employees, applying the principle of equal treatment without any form of discrimination, harassment or retaliation. ANDRITZ respects the values and cultures of other nations and appreciates the differences in their way of thinking and backgrounds. However, it is impossible to exclude the possibility of some employees feeling that they have not been treated equally or have been treated unfairly. There are different means of lodging a complaint in such cases, for example to the local HR organizations, the Works Council, or using the online Whistleblower system.

Working conditions that are perceived to be unsatisfactory can lower the motivation and enthusiasm of employees and subsequently have a negative impact on productivity. Increasing sick leave and fluctuation rates caused by this can result in additional costs for ANDRITZ. Professional promotion and qualification of employees are an important concern at ANDRITZ, but can only be achieved when the employees are willing to take on these challenges personally. A lack of willingness to undertake further training can result in employees not being adequately qualified.

ANDRITZ could become less attractive as an employer if there are insufficient opportunities for further professional and personnel training for employees. As a result, the company makes every effort to take an interest in changes in the professional world and new demands by employees, particularly employees from the younger generations.

Supply chain management

Adherence to internationally applicable environmental and social standards is important, especially when working with suppliers from emerging economies. Possible violations (e.g. child labor, disregarding of safety regulations, underpayment, disposal of hazardous substances, etc.) not only harm ANDRITZ's own image, but also jeopardize its existing or future business relationships with customers. This could have a negative effect on order intake and/or on the Group's order backlog.

Thus, ANDRITZ endeavors to forge ahead with the implementation of internationally recognized environmental and social standards at suppliers' premises and also to check whether these standards are obeyed. A first important step was taken in developing a specific policy for suppliers on the basis of the general code of conduct. In China and India two auditors are monitoring the obey of these standards by local suppliers. Possible breaches of international regulations or the ANDRITZ Supplier Code of Conduct are investigated and penalized.

Environmental protection inside and outside the company

In the environment sector – and with special focus on manufacturing, the consumption and use of many different resources and materials have an impact on the development and diversity of ecological systems and thus on future living conditions. The proportion of energy costs in the overall costs is relatively low. However, climate change could increase energy consumption by ANDRITZ GROUP in the longer term due to a need for more heating or air conditioning. Higher taxation on fossil fuels or CO_2 emissions could also result in additional costs in the production sector. In the past few years, therefore, measures were taken with a view to increasing energy efficiency in manufacturing and these measures also resulted in cost savings. In this context, several locations introduced an environmental management system or already have certification (ISO 14001).

Manufacturing can also be affected by certain occurrences that ANDRITZ cannot control or influence. These include such natural phenomena as storms, flooding and avalanches, but also fires or explosions, which can cause a loss of manufacturing capacities and possible also entail other consequential damages.

The systems and plants supplied by ANDRITZ comply with the highest safety standards and fulfill the respective legal requirements of the countries in which they are installed. Nevertheless, maintenance errors or other unforeseen and uncontrollable occurrences could lead to serious injury or death – also involving a larger number of people – or to significant property damage if plants are not operated correctly, and ANDRITZ may ultimately be held liable for this.

The ANDRITZ GROUP also uses and generates hazardous substances in its manufacturing facilities. Many manufacturing facilities have waste management concepts that have been drawn up and are controlled by professionally qualified waste managers. They are also responsible for fulfillment of the general obligations for collection, transport, storage and treatment of waste. The dangerous waste generated during operations is stored in lockable areas until it is collected by the disposal company. Appropriate records are kept on quantities of hazardous and non-hazardous waste as well as waste oil. Nevertheless there is no guarantee that hazardous waste is disposed of according to the regulations and that environmental remediation is possible as a result. Sometimes hazardous chemicals and materials are also used during installation and other work on job sites. In the event of an accident, for example spillage of hazardous materials, a fire, or an explosion, the Group could be held liable for property damage, personal or fatal injury, and environmental remediation.

Work and travel safety

The work of ANDRITZ staff, not only on job sites, but also in production facilities, entails a number of safety risks. The Group can also be possibly held liable in the event of industrial accidents by ANDRITZ employees or by third parties working on behalf of ANDRITZ. Even if there are strict regulations in the internal rules and standards, it is impossible to prevent accidents entirely. That is why accident prevention has top priority.

A lack of planning and coordination of safety measures, no clearly defined responsibilities, non-compliance with site regulations, inadequate identification and analysis of risks, missing work permits and a lack of preparatory meetings are among the most frequent causes of accidents. It is the managers' task to instruct their staff properly, while the employees have a duty to apply the measures defined. Employees must report risks in the workplace and also take note of safety-critical incidents.

The cause of accidents is often a string of different factors and human influences. Incidents that could easily have led to an accident – so-called safety-critical incidents – should be taken as a warning sign and could lead to accidents if this sign is disregarded. That is why it is important to determine and eliminate the causes quickly. Risk analyses are compiled for all areas of our work. Here, we must not only consider static processes, but also dynamic ones (manipulation and moving of parts, e.g. on job sites).

A global Travel Risk Management Policy defines the key points of the travel safety program. In order to make foreign assignments by ANDRITZ employees as safe as possible, the Corporate Security Group Function continuously monitors the situation in risk countries to which employees are deployed and provides information on current developments to travelers and project managers.

A country portal that can also be accessed via a smartphone app offers country-specific information, country analyses, and practical tips on the topics of travel health care and safety as well as updates and analyses on current developments in a specific country. Travelers are also informed briefly of probable forthcoming occurrences (demonstrations, strikes, difficult weather conditions, airport closures, etc.) that may disrupt travel arrangements. The goal is to provide employees with as much information as possible on special risks and developments in a country so that they can make the best possible arrangements.

The ANDRITZ Medical and the ANDRITZ Security Travel Helplines are available 24/7 to provide help before, during, and after the trip in the event of emergencies. Travel medicine specialists, safety experts, and situation analysts available at the helpline numbers can answer general queries on the topic of safety when traveling as well as specific questions relating to the actual destination. In addition, they can recommend medical and other services familiar with the location at the travel destination. The primary objective is to offer staff comprehensive information and support to guarantee their safe return home. However, the possibility of employees being harmed – in spite of the comprehensive informative and safety measures – and the Group being held liable for this cannot be excluded.

Compliance

Premeditated or negligent breach of laws and internal rules and regulations by members of staff or managers bears substantial risks for ANDRITZ. That is why a comprehensive, group-wide compliance management system was implemented many years ago and has been certified according to ISO 19600 (Compliance Management System) in the meantime. One of the bases of the compliance management system is systematic detection of compliance risks. In the past year, ANDRITZ conducted a comprehensive risk analysis in order to implement measures to minimize risks in the future. In addition, regular training is conducted on the basis of the Code of Business Conduct and Ethics, which applies throughout the Group, and other policies. Further information on this is provided in the consolidated Corporate Governance Report.

Compliance violations could result in fines, loss of profit, loss of sales that are secured by unfair means or dubious business partners, claims for damages from contract partners or third parties, additional tax payments, exclusion from public tenders, and even loss of image, fewer business opportunities, government sanctions and jeopardizing of company assets. Consequences for employees may be disciplinary measures, going as far as dismissal and possibly also criminal prosecution.

Information on all measures and activities in the compliance sector are available in the consolidated Corporate Governance Report.

Innovation

Business success of ANDRITZ depends to a large extent on the company's technical know-how and the resulting development of new products and technologies. Two years ago, ANDRITZ launched a global innovation management (AIM - ANDRITZ Innovation Management) scheme to enable employees to contribute innovative ideas for new products. The large number of ideas submitted reflects the wealth of know-how, innovative power and commitment of the employees.

However, innovation projects are often time-consuming and cost-intensive. Some projects fail to establish themselves on the market and have to be discontinued although many financial and human resources have been invested in their development. Furthermore, innovation projects often place high demands on the project managers concerned, who frequently develop and supervise new projects in addition to their normal duties.

The competitive pressure to produce new products and technologies all the time also bears the risk of quality deficiencies, or products are developed that do not succeed on the market as expected.

Data protection

ANDRITZ endeavors to protect its intellectual property and technical knowledge as best possible, for example by means of patents and similar instruments. However, a large part of the company's knowledge and know-how cannot be safeguarded by means of intellectual property rights. In this case, there is a risk of third parties exploiting this situation and building copies of ANDRITZ products or technologies, thus jeopardizing ANDRITZ's ability to compete.

On the other hand, data protection also involves protecting the data of third parties. When the European General Data Protection Regulation took effect in the past business year, it presented a large challenge. In order to comply with the legal requirements, data protection officers were nominated group-wide and trained. In addition, a data base was set up to document and handle the processes containing personal data. Nevertheless, the risk of infringing this law cannot be excluded. Penalties can be up to 4% of the Group's sales, which again creates a substantial risk for ANDRITZ.

Due to the increasing number of incidents in the world of business, ANDRITZ is also looking at attacks on information systems that use tricks, for example phishing mails, to manipulate the systems' users and thus gain access to internal and sensitive data and information or trigger unwarranted payments. On the one hand, the instructions for secure payment transactions have been tightened and on the other hand, employees are constantly alerted to this topic by reminders that mails come from external recipients as well as more information being provided in the intranet and employee magazine. There are also plans to establish a separate area of responsibility for payment transactions within the compliance organization in the coming year.

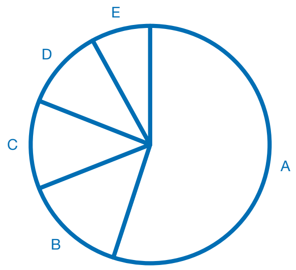
Human resources management

Motivated and committed employees are one of the fundamental requirements for ANDRITZ's long-term success. As a result, employee satisfaction, comprehensive education and training opportunities, and work-life-balance are the declared objectives of our activities in human resources management.

Technical progress leads to faster and faster changes and challenges to which companies have to adapt constantly and as quickly as possible. In order to do so and further strengthen collaboration within the Group, a set of ANDRITZ success factors was developed in 2018 in close collaboration between the top management, middle management and staff from various business areas and functions. The ANDRITZ success factors are forms of conduct and the basis of all activities for the purposes of further developing the ANDRITZ staff and management. These success factors are just as important as specialist know-how and describe what the company expects from all staff and managers and also from their collaboration worldwide.

Employees by region as of December 31, 2018 in %

(December 31, 2017)



A	**55** (58)	Europe
B	**14** (12)	North America
C	**12** (11)	South America
D	**11** (12)	China
E	**8** (7)	Asia (without China), Australia, Africa

The Human Resources Group Function focuses mainly on the role of HR as a partner for our business areas and global collaboration in the HR sector, management of the worldwide talent pool for best possible and prompt filling of vacancies, and on employer branding. Global employee mobility, measures to prevent wage and social dumping, as well as possible ways of increasing efficiency through digitalization of HR processes and using synergies across several company locations are also important topics.

Centers of Excellence were established for all these areas of activity during the reporting period to coordinate projects in their area of responsibility according to the target in each case. Ongoing analysis and optimization as well as coordination of all functionally related activities are intended to drive the development of cost-effective processes and systems forward. Training and support is provided to ensure the high quality of work by the Human Resources department at the company's locations. The goal is to achieve continuity in dealing with employee-related topics and offer standardized functional services for all employees (such as standardized appraisal interviews, etc.) throughout the group.

Furthermore, Global HR Business Partners have been nominated who are responsible for HR tasks for the individual business areas. The HR Business Partners assist the business areas on matters relating to human resources management and are also responsible for the exchange of important information with the local HR managers.

The goal is to react even more pro-actively to the requirements of the various business areas, develop solutions to employee issues together with the managers, and to speed up the recruiting process.

Globally active company – diversified workforce structure

Due to the company's global orientation, the workforce structure is very diversified: At the end of 2018, there were 29,096 employees (December 31, 2017: 25,566 employees) from more than 30 different countries working for ANDRITZ. This diversity is an advantage for ANDRITZ because it creates positive effects as a result of the exchange of knowledge and practical experience between people of different origins, religions, and cultures as well as different ages. The proportion of women in the Group increased slightly and amounted to 16.5% in 2018 (2017: 15.4%).

Employees by gender

	Absolute 2018	Absolute 2017	Percentage 2018	Percentage 2017
Men	24,303	21,630	83.5%	84.6%
Women	4,793	3,936	16.5%	15.4%
TOTAL	**29,096**	**25,566**	**100.0%**	**100.0%**

Education and vocational training

Global education and vocational training measures as well as career opportunities are very important for staff qualification and employee retention. The topic of specialist careers plays a significant role in this context. For example, there have been career opportunities from engineer to lead engineer and principal engineer in the Hydro business area for some time now. In future, such career plans are to be introduced throughout the Group.

A central element of professional development is the mentoring program. It forms the link between the program to promote the development of young talents (ANDRITZ Global Talent Program), which has been running for many years now, and the leadership development program for holders of key positions, which has also been used successfully for an equally long time.

Becoming a more attractive employer

ANDRITZ increased its focus on employer branding during the reporting period. The measures are intended to attract potential employees as well as to make the company stand out positively from other employers on the labor market.

The careers page on our web site has been redesigned and expanded. All vacancies can also be viewed in the ANDRITZ internet via the new job portal. LinkedIn is now being used systematically for recruiting and employer branding activities. Job advertisements, recruiting brochures and trade fair stands have also been redesigned to make them more attractive and adapt them to the new corporate design. Also new is a brand booklet that describes the ANDRITZ mission and vision and is available in nine languages.

In the so-called "On-Boarding Experience" project, ANDRITZ is trying to align the guidelines for new employees group-wide and standardize them as much as possible. In this connection, new employees should also learn about the company's values for the first time at the beginning of their career at ANDRITZ.

4,454 employees were given new employment contracts in the past year, 12% of whom were over 50 years old. Age distribution in the company has been very well balanced for many years. More than half of the employees are between 30 and 50 years old (2018: 57%, 2017: 57%), while the proportion of under-thirties is 14% (2017: 15%). 29% of the employees are over 50 years of age (2017: 28%). Employee retention at ANDRITZ remains consistently at a very high level, amounting to approximately 11.4 years within the Group. The fluctuation rate amounted to 12.1% or 3,531 employees in 2018 (2017: 14.4% or 3,658 employees) and thus corresponds to the European average for industrial companies.

Fluctuation by gender and age group

	Contracts terminated 2018	Contracts terminated 2017	Fluctuation rate 2018	Fluctuation rate 2017*
Men	3,016	3,206	13.3%	14.8%
Women	517	452	12.0%	11.7%
< 30 years old	821	859	20.8%	22.0%
30-50 years	1,883	1,874	12.3%	13.0%
> 50 years old	827	925	10.8%	13.0%
TOTAL	**3,531**	**3,658**	**12.1%**	**14.4%**

* Calculation of fluctuation rate: contracts terminated in relation to the average number of employees. Contracts terminated include dismissals by the employer and resignation of employees.

Regular appraisal interviews are an effective way of finding out more about employees' needs, and of giving and receiving constructive feedback. That is why well-prepared and properly structured appraisal interviews are held at least once a year, away from the daily routine. Appraisal interviews are also the basis for preparation of training programs at the individual locations.

In 2018, approximately 74 % of the workforce Group-wide took part in annual appraisal interviews (2017: 70%). In order to be able to identify optimization potential in the existing organization chart, management audits were also conducted in the past year with support from professional, external partners.

Equal treatment and fairness towards all employees

As an attractive employer, ANDRITZ's goal is to offer its workforce a working environment offering equal opportunities, attractive means of further development, and fair pay for all, regardless of their location worldwide.

The basic rights apply to all employees throughout the Group. These include the legal right of employees to co-determination and compliance with the principles and standards of the International Labour Organization (ILO) concerning the freedom of association, abolition of forced labor, child labor, and discrimination as well as fair and performance-based pay.

Regular and also event-driven meetings are held by the ANDRITZ AG Executive Board and the members of the Works Council to ensure and support an open and transparent exchange of information between both bodies. The company supports the formation of internal committees representing employees' interests. Freedom of assembly applies at all locations in accordance with the respective local legislation.

ANDRITZ does not condone or tolerate any form of employee harassment or discrimination by other employees due to gender, age, origin, religion, nationality, and so on. The working environment should be free of intimidating and offensive behavior for every employee. This is clearly documented in the Group-wide Code of Business Conduct and Ethics and in the HR policy applying throughout the Group. Possible ways of lodging a complaint are also defined. The notification periods for communication of significant changes in operations (closure of company locations, layoffs, etc.) are defined in a policy applying Group-wide.

Personnel expenses and social benefits

Human resources expenses amounted to 1,787.0 MEUR in the past year (2017: 1,717.8 MEUR). Salaries for women averaged approximately 84% of salaries for men during the reporting period. ANDRITZ supports female employees studying at university by offering them part-time employment or assists with child care, including company-run kindergarten facilities that have been opened at several locations. The company is also not averse to providing part-time contracts for men or other forms of support with child care.

At the end of 2018, there were 414 employees on parental leave (221 women and 193 men); this is equal to 4.6% women and 0.8% men measured across the total number of employees in the Group. (December 31, 2017: 428 employees in total; 226 women and 202 men or 5.7% women and 0.9% men).

In countries where the welfare system is less developed as in Europe, ANDRITZ helps its employees with voluntary social services that extend beyond the legal requirements. These range from voluntary accident insurance, contributions to pension funds and life insurance policies, to support for dependents.

ANDRITZ pursues the goal of enabling all employees to maintain a good work-life balance. Part-time contracts, educational leave, sabbaticals, or other employment models are agreed if necessary and if the respective position allows. Health care also has high priority within the company. Various programs are running at the individual company locations that are adapted to the special needs of the employees in each case.

In the past year, the request for more flexible working hours by many employees was answered and the framework for working from home was established in a group-wide policy.

Vocational training as an important social task

The apprentices of today are the important, skilled workers of tomorrow. This is why ANDRITZ focuses on sound vocational training in the apprentices' workshop in Graz established in 1922 or in the other locations around the world. As of December 31, 2018, there were 909 apprentices worldwide undergoing vocational training at a total of 41 subsidiaries (2017: 866 apprentices). During their training, the young employees not only acquire specific specialist knowledge, but also such key qualifications as quality awareness or a capacity for teamwork.

Through close cooperation with universities and other educational institutions, ANDRITZ has access to highly qualified young talents and is keen to motivate and gain them as employees for the company in the long term. For example, students receive support with their final papers and are also employed in the company during their studies in various ways – from marginal employment on an ongoing basis parallel to their education, to internships lasting several months.

Respect of human rights in execution of projects

ANDRITZ respects and supports the protection of internationally recognized human rights and maintains the principle of equal opportunities regardless of gender, religion, origin, nationality, age, sexual orientation, or disability. ANDRITZ considers it a duty to use every opportunity to promote compliance with human rights – both inside and outside the company.

Its business activities contribute towards economic, ecological and social progress. But sometimes these activities also affect individuals. The company endeavors in collaboration with the respective customers to draw up and implement compensatory measures or to help the customer to implement them.

Before participating in large-scale projects, due diligence audits are conducted in order to determine their potential effects on man and his environment. The resulting data and findings are evaluated and analysed. Participation in projects is then decided on this basis. Furthermore, ANDRITZ Hydro is a sustainability partner of the IHA (International Hydropower Association) and supports global acknowledgment of the “Hydropower Sustainability Assessment Protocol”.

Group Procurement Management

Pushing ahead with group-wide collaboration and supporting the development of all ANDRITZ procurement organizations in order to enhance efficiency.

The procurement organization at ANDRITZ is the most important point of intersection between the internal value chain and the roughly 38,000 suppliers worldwide. Approximately 3,800 of these suppliers cover almost 80% of the external purchasing volume. The global purchasing organization specifies strategic requirements and creates technical and contractual framework conditions for collaboration with the suppliers.

The basic criteria for ANDRITZ collaborating with a supplier in addition to quality, cost, and on-time delivery are the supplier’s attitude towards occupational health and safety, compliance, and sustainability, as well as strict adherence to the ANDRITZ Supplier Code of Conduct. All suppliers are audited in this respect at regular intervals.

ANDRITZ’s global supply chain management is divided into three main areas: Strategic material group management (Forward Sourcing) manages products/services and their suppliers/providers with a high level of coverage throughout all ANDRITZ purchasing organizations, including the framework agreements with these suppliers. Procurement Operations Development assists the locations with evaluations, internal consulting, implementation of new tools/systems, workshops, and training to optimize processes and develop employee qualifications further. Controlling, Reporting and Analyses can identify further potential for improvement and provide targeted recommendations for measures to be taken. Global Logistics works in cooperation with the main logistics partners. These areas are supported by other functions such as Supplier Compliance and Sustainability.

The external purchasing volume amounted to 2,960.4 MEUR (2017: 2,814.8 MEUR). In execution of its orders, ANDRITZ tries – as far as possible – to source its materials near the manufacturing facilities. Now that production capacities are being moved increasingly to China and India, ANDRITZ is using more suppliers from emerging economies.

The proportion of services and products sourced locally was 72.3% in 2018 (2017: 71.3%). 66.4% of the purchasing volume was generated in Europe, 13.5% in Asia, and 11.7% in North America.

ANDRITZ relies on long-term partnerships and remains in close contact with suppliers during the entire execution period of an order. In the event of critical components or new suppliers, ANDRITZ also monitors the production process on the spot in many cases.

Consumption of materials

Project materials and services account for the largest share of materials required (69%) – measured on the basis of cost. This includes mechanical parts, electrical components, structural steel and conveying technology, mechanical constructions, installation work, and start-up/commissioning. Overheads covering material, services and investments account for 20% and manufacturing materials such as sheet metal, screens, bars, profiles, or cast and forged parts account for 11%.

Logistics

The Logistics department – as a part of Global Procurement – assists the business areas with the logistical implementation of customer projects. Other important tasks in the logistics department are definition of transport standards and guidelines, calling for tenders, negotiating framework agreements with logistics service providers, and conducting internal training courses. Almost all services are outsourced as the company does not have its own vehicle fleet. As a result, CO_2 emissions are generated externally so these figures cannot be reported in any detail.

Supplier Compliance and Sustainability

In order to be able to work together with ANDRITZ, suppliers must agree to the content of the ANDRITZ Supplier Code of Conduct, which was compiled on the basis of the general Code of Business Conduct and Ethics. This is reviewed for the first time at the beginning of the business relationship when suppliers must confirm in writing that they accept and will obey the content of the Supplier Code of Conduct. In addition, suppliers are required to document their activities in the compliance and sustainability sectors. As a result, corrective action can be initiated on the part of the ANDRITZ Purchasing organization if needed.

Implementation and review of this process is one of the tasks assigned to the Compliance and Sustainability Officer. Furthermore, he assists the local purchasing organization with matters concerning supplier compliance and sustainability, as well as monitoring the compliance watchlist and blacklisting process.

Suppliers who have accepted the Supplier Code of Conduct cover 46% of the purchasing volume. About 8,000 suppliers have completed registration in terms of the compliance policy in the supplier relationship management tool.

In order to lend compliance and sustainability the necessary importance for suppliers in Asia as well, two auditors have been working on this in China and India for over a year. The aim is to audit the suppliers both in terms of the legal requirements and of ANDRITZ's requirements and to require that they are observed on a lasting basis. By conducting these compliance and sustainability audits, ANDRITZ is seeking to achieve an noticeable improvement in suppliers' compliance performance.

Since this process was implemented, there have already been 35 audits in India and six and China. All non-conformities are documented in reports and discussed with the suppliers, who must give notification of improvement measures within a certain period. Implementation of these measures is also verified and assessed. Supplier audits are to be intensified in the coming year. The goal is to carry out 50 audits per region every year.

All ANDRITZ employees in the purchasing process must complete online compliance training on the Supplier Code of Conduct. This is intended to improve the understanding of the content and objectives of compliance and sustainability measures where suppliers are involved. This training has also been rolled out externally to selected suppliers. Furthermore, the training documents are generally accessible online on the ANDRITZ website.

In addition, webinars have been conducted on implementation of the supplier compliance process as part of internal ANDRITZ purchasing training courses. Compliance is also a major topic in the advanced training courses on procurement.

Quality management

Quality management in the ANDRITZ GROUP covers products and applications, business processes as well as safety and environmental topics and is viewed holistically. Global requirements and standards improve the general understanding of processes and functions as well as enhancing collaboration and clear areas of responsibility. These measures should increase transparency, minimize risks, and support employees in their day-to-day work.

In everyday work, the quality requirements are structured along the business areas and at local level and can be accessed easily by employees in the company's intranet. Quality management accompanies an order from its award up to completion. There are also guidelines applying to support activities such as IT or communications.

External verifications confirm consistent and effective implementation of the standards. Meanwhile, 39 locations have been certified according to OHSAS 18001 (occupational health and safety) and 37 according to ISO 14001 (environmental management systems), and more are to follow. Furthermore, all products are certified internally and externally (Machinery Directive, ASME, NR 12, GB 150, ISO, ANSI, EN, and DIN). Thus, they meet the highest standards and are checked regularly for potential health and safety impacts.

Occupational health and safety and preventive health care

Occupational health and safety and preventive health care have top priority at ANDRITZ. Apart from the strict legal provisions, there are numerous internal regulations and requirements in force which are reviewed by the safety officers at the various locations and in internal and external audits.

Two years ago, Group Quality and Safety Management drew up a global plan of action to enhance occupational health and safety throughout the Group. As the risks differ depending on the job concerned, two fields of activity were defined: job sites and manufacturing. Special measures were defined for each of these areas. Based on a plan of action, a group-wide safety initiative was launched and implemented jointly with the business areas. The goals are to prioritize safety regulations, minimize risks, reduce the number of accidents or avoid accidents entirely, and develop a safety culture based on prevention.

The safety initiative is intended to build up high awareness of safety and a preventive safety culture in the long term throughout the Group. The objective here is to prevent unsafe actions in general and make workplaces and work processes safe. Safety must be an ever-present part of the daily work routine. “Zero accidents” is the motto – no accidents at all at work.

Industrial accidents

	2018	2017
Accidents at work (with more than three days of absence)	210	304
Accident frequency (accidents with more than three days of absence per 1 million working hours)	4	6.1
Accident frequency (accidents causing one or more days absence per 1 million working hours)	6.2	8.8
Fatal accidents at work	1	1
Severity of accidents (absence periods in hours per accident)	155	144
Number of medical treatment injuries at work	1,539	1,402

In order to meet the global targets, the head of the respective ANDRITZ locations puts together a plan of action for safety together with the management team. This plan of action is based on a location-specific risk analysis and self-assessment. Help is available here in a guideline available in the company intranet that shows to what extent a locations meets the standards and requirements of OHSAS 18001. A local safety committee must also be set up for each location. There are currently 39 locations with OHSAS 18001 certification.

Last year, the initiative focused on safe performance of activities in manufacturing, on job sites, and on service assignments involving life-threatening risks and dangers. This work must be carried out according to a defined safety process in order to provide the best possible protection for staff. Work involving life-threatening risks includes complex lifting tasks, work in confined spaces or at great heights, demolition work, first testing of prototypes, or work with dangerous substances.

The safety process requires appropriate planning, qualified staff who have received proper instruction, a formal permit to perform the work, and performance of the work according to the safety requirements. This work permit is part of a system that defines how a certain task can be carried out safely. The important thing here is to plan this work in logical steps, analyse the dangers involved in each step, and define the safety precautions needed. When all the safety precautions have been implemented, all persons involved have been instructed accordingly, and the manager has given clearance to start, the work can begin.

Prevention work requires managers to detect unsafe circumstances and activities and to implement safety measures in good time to prevent near-accidents or accidents. In order to ensure this, it is essential that managers perform safety inspections continually in their area of responsibility, consult employees, and assess risks and dangers in the workplace. An app is currently being developed to simplify these processes, especially the documentation of measures management and of efficiency audits. Group-wide implementation and use of the safety app is the main focus of activities for 2019. Another measure is an update of the “Group Health and Safety Management Policy” to comply with the requirements of ISO 45001 (occupational health and safety management systems) and greater coordination of safety activities in the regions.

Manufacturing

Around 150 manufacturing locations worldwide[1] produce tailor-made key components as well as spare and wear parts for ANDRITZ plants and machinery. Around two thirds of these locations are in Europe and North America and one third in the emerging markets of Asia, South America, and Eastern Europe.

Each location produces project- and order-related items for different business areas in the Group and sometimes for several business areas. ANDRITZ's manufacturing strategy focuses on the production of technology- and quality-critical core components, while everything else is largely outsourced to qualified suppliers. As a result, it is easier to deal with fluctuations in capacity utilization and ensure optimum use of own manufacturing capacities. Precise planning, high commitment, and flexible employees are essential factors to ensure short lead times and on-time production.

Investments are concentrated on the one hand on building up and expanding manufacturing capacities in the emerging markets of Asia and South America as well as in Central and Eastern Europe, and on modernizing existing locations in Central Europe and North America on the other hand. In order to plan manufacturing processes in exact detail, but also deal carefully and efficiently with the available resources, the Group Manufacturing Management function initiates and implements optimization and improvement projects on a continuous basis.

The "Manufacturing Execution System" (MES) makes it possible to steer, control and monitor manufacturing in real time. All data on planning, lead time, and costs, right up to machinery and operating data, are collected centrally using an IT solution that can also be adapted to local requirements if necessary. The advantage is that all the important information can be linked on a single platform. Considerable advantages are expected, especially if planning has to be revised or there are some planning deviations due to re-working, changes to delivery dates, materials missing, and so on. MES is also a one of the components for further developments in the digitalization sector and is currently being implemented as a pilot project in the Manufacturing departments in Graz and Weiz. Other locations use similar solutions from several compounded program sections, but these have not been integrated.

A second system for continuous improvement of the manufacturing processes is the ANDRITZ Production System (APS), which has already been in successful use for some time now.

First of all, improvement potentials are sought out at the production locations and assessed. During the implementation of "shop floor management", communication at and between locations was improved, more transparency was created, and efficiency was increased in the long term. Production processes can only be optimized by training suitable professional skills, which is why a "lean training program" was also launched. The "Lean Leadership" (for managers in the manufacturing sector) and "Lean Practitioner" (for practical users) training modules are currently in use. For the latter, examples of its implementation are also shown directly in manufacturing.

[1] including Xerium

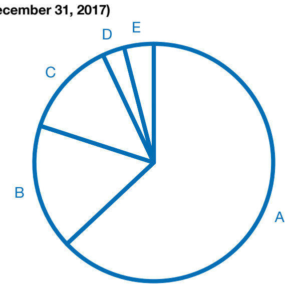
Key energy figures

The environmental data for the largest ANDRITZ production locations (93% of the overall annual manufacturing capacity[2]) are surveyed and checked on a regular basis and then used to derive possible improvement measures. The key consumption figures are based on approximated values to maintain comparability as the complete figures for the 4th quarter were not all available before the copy deadline. Due to adjustments made to the consumption figures, the following retrospective changes have resulted.

56% of all the manufacturing facilities surveyed are located in Europe, 22% in North America, 9% in South America, 7% in China, and 6% in India. Thus, the most electricity is consumed in Europe, followed by North America, China, South America, and India.

Energy consumption by region as of December 31, 2018 in %

(December 31, 2017)



A	**63**	(65)	Europe
B	**17**	(17)	North America
C	**13**	(11)	China
D	**3**	(3)	South America
E	**4**	(4)	Asia (without China)

The Group's overall electricity consumption slightly increased compared to the previous year and amounted to 200,204,308 kWh (2017: 187,869,642 kWh). The CO_2 equivalents arising due to the electricity consumption, heating energy, and process heat (Scope 1; energy consumption in the company) amounted to 22,591 tons in 2018 (2017: 23,655 tons).

Around 84% of the Group's electricity consumption is attributable to manufacturing operations, mostly for the production processes. The remaining electricity consumption is used for lighting, IT equipment, and for electric heating where needed.

All six main groups of manufacturing processes are used at all ANDRITZ locations worldwide: forming and casting mainly uses electrical equipment, particularly induction furnaces. The other processes, such as rolling, pressing, machining, welding, weaving, soldering and gluing are also performed with the aid of electrically powered machines. Only hardening and annealing processes use gas-powered machinery. As a general principle, the production processes in the ANDRITZ GROUP are less energy-intensive (except for one location in North America which has a foundry attached to it).

[2] Xerium will be integrated into the collection of environmental data during the 2019 business year.

Energy consumption within the organization

The bulk of energy and fuel consumption (heating oil, natural gas, district heating) is used for heating the company premises. In addition, a few production processes require oil, for example to heat the presses. Natural gas is needed in production primarily to operate hardening and annealing furnaces. Gasoline and diesel fuel are needed for company vehicles, while liquefied gas is required to operate stacker trucks and, in some countries, also for vehicles.

Energy consumption within the organization

	Unit	2018	2017
Externally procured heating		**32,451,523**	**30,510,429**
District heating	kWh	32,451,523	30,510,429
Non-renewable energy carriers for heating		**385,840,677**	**427,500,845**
Light fuel oil*	MJ	25,122,830	n.a.**
Natural gas	MJ	360,717,847	427,500,845
Non-renewable energy carriers for process heating		**177,371,483**	**160,152,384**
Oil	MJ	25,506,434	19,613,131
Gasoline	MJ	3,100,909	6,216,952
Diesel	MJ	16,377,941	22,152,896
Diesel for emergency generator**	MJ	4,473,111	2,871,887
Natural gas	MJ	117,148,448	99,109,876
Liquid (petrol) gas	MJ	10,764,640	10,187,642

* In 2017, no distinction was made yet between heavy oil and light fuel oil. Heavy oil is needed at one location to heat the presses.
** n.a. = not available
*** At two Indian locations for electricity supply at shortages.

ANDRITZ strives to reduce energy and fuel consumption in the production process. Annual fluctuations in consumption are largely due to the varying utilization according to the order situation and projects and make very detailed comparisons with previous years difficult.

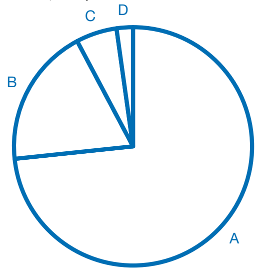
Resources are valuable and not unlimited. That is why particular attention is paid to conservation and re-use of materials. The important factors are the efficient use of materials and keeping waste to a minimum on the one hand, and economical energy consumption in material processing on the other hand. The largest share of waste comes from steel from the manufacturing process. Metal waste is separated into different types and then recycled. Other recyclable materials like plastic from packaging, waste from wooden crates and cardboard packaging, as well as waste paper are collected and recycled. Non-hazardous residual waste and hazardous waste are collected according to the legal provisions and taken away by disposal companies. Special attention is paid to observing all official regulations and record-keeping obligations, particularly when disposing of hazardous substances.

Water consumption

Water consumption in the past year was 705,619 m^3 (2017: 557,910 m^3). The water supply comes primarily from the public water system, but a few locations also recycle service water or take water from their own wells. Water consumption consists of process water for production plants (including cooling water) as well as water for drinking and for hygiene purposes. A small amount is also needed for hydraulic test stands.

Water consumption in manufacturing as of December 31, 2018 in %

(December 31, 2017)



A	88	(88)	Tap water
B	5	(6)	Ground water
C	5	(3)	Surface water
D	2	(3)	Rain water

Research & development

The ANDRITZ GROUP spent 108.9 MEUR (2017: 95.3 MEUR) on research and development activities during the reporting period. Research and development expenses, including order-related work, amounted to around 3% of sales.

The ANDRITZ GROUP holds approximately 6,650 patent rights. 75% of these patent rights have already been granted, the remaining part is under examination. In addition the Group owns 2,450 trademarks.

Rising population figures, high rates of urbanization, and increasing energy demand will push conventional energy sources to their limits in the near future. Taking account of current consumption data and based on international studies, we expect that use of fossil fuels will no longer be possible or only possible to a limited extent in a few decades. Integrated solutions combining fossil and renewable energy sources are already in demand today and will have even greater priority in the future. ANDRITZ has offered a series of products for many years now that counteract climate change or contribute towards protecting the environment. ANDRITZ already realizes just under 45% of its sales from “green” products and technologies that contribute towards sustainability and conserving resources.

Hydro

Technology development is targeted at technology leadership regarding performance of the electro-mechanical equipment over its entire lifetime.

With the development of the new HIPASE platform, Hydro business area is actively reacting to a changing market environment for secondary systems. The main drivers for the new development are based primarily on new requirements for cyber security, homogeneous interfaces for all subsystems, simple and easy engineering, as well as a common platform for all functions. Major goals of the development were the conflation of all different disciplines into one common platform, one common engineering workflow, as well as one common workflow for commissioning. With the new HIPASE platform, ANDRITZ Hydro has developed a sound basis to meet future market requirements. The latest extension of the product family HIPASE are the turbine governor and synchronisation application.

There is a rising demand worldwide for modern operating and maintenance concepts for hydropower stations. With the Metris DiOMera software platform and the Regional Support Center, ANDRITZ is offering a solution to further support digitalization of operation and maintenance work in hydropower plants. A further extension of services is the new hydropower plant assessor which allows a systematic data based and comprehensive insight into the state of existing power plants with risk assessment and maintenance needs to be done.

Due to the growing share of intermittent renewable energy and restrictions in grid infrastructure there is a growing demand for fast-response energy storage solutions worldwide, and especially in Asia. ANDRITZ developed a variable speed solution for the Feng Ning II pumped storage plant with high end generator technology, control solution with frequency converter and high efficiency hydraulic profile of the pump turbine runner allowing most flexible operation.

Pulp & Paper

The newly opened research center for sanitary paper grades (PrimeLine Tissue Innovation and Application Center) at the ANDRITZ headquarters in Graz, Austria, is set to push research and development of new machines and processes for sanitary papers. The pilot plant comprises a complete sanitary paper production line reflecting the latest state of the art and can be also be used by suppliers, research and development companies, as well as universities.

Tests and trial runs are conducted in order to develop new products and processes in the sanitary papers sector, for example to optimize fibers, fiber blends and fiber furnish for a particular type of sanitary paper, to enhance the quality of this product, increase the dryness, or reduce the energy consumption. The influence of such variables as fiber preparation, chemicals, vacuum, machine clothing, presses and their arrangement, and drying with hot air and steam can be measured here exactly and assessed.

The pilot machine can currently be operated with eight different main configurations and thus operates in a modular system. Customers can come forward with their requests and conduct extensive tests here for their respective future machine configurations.

The PrimeControl automation system developed by ANDRITZ was installed for the first time in the new pilot plant. This system offers maximum flexibility in monitoring and control of tissue machines and the stock preparation plants. This means, for example, easier operation and maintenance, integrated drive and quality control system, and a resources management system. The plant can be monitored by means of a mobile device, in the main control room, or by remote diagnosis. Furthermore, it uses the latest digital technology from ANDRITZ for monitoring and maintenance purposes – the Metris augmented reality glasses. This monitoring system also offers an optimum opportunity to monitor the systems by remote diagnosis with the service contracts available because service staff can see the same things with these glasses as staff on site can see.

The new innovative EvoDry pulp drying system from ANDRITZ with energy-saving technologies that reduce the plant operating costs significantly is being used successfully at the SCA Östrand mill in Sweden. The system extracts additional heat from the recovery boiler waste heat and generates additional low-pressure steam that is used in the pulp dryer. This results in savings on fresh steam.

In the mechanical pulping sector, a new chip feeding system was developed for the TX68 refiner in 2018. The TX68 refiner is the largest high-consistency refiner worldwide, with a refiner plate diameter of 68 inches (72 cm), permitting motor loads of up to 35 MW. The new feed system allows exact distribution and measurement of the chip feed to the two refining zones in the refiner. This results in improved fiber quality, load stability, and also better specific energy consumption. The new feed system was supplied to a customer in China for the first time in 2018, and a second machine will be supplied in 2019.

ANDRITZ is the globally leading manufacturer of screw presses for dewatering of fibrous pulps. The product portfolio was extended in 2018 by adding a new machine size that achieves even higher throughputs. A screw press that is 1.7 m in diameter and 10 m long (SCP1710) was developed for a customer in China. The total of three screw presses will dewater up to 1,000 tons of bleached and unbleached APMP pulp per day in various process stages. Start-up is scheduled for 2019.

Digital Twin

A Digital Twin is the dynamic data model of an industrial process that is linked in real time to a physical plant. This is where the IDEAS software developed by ANDRITZ comes into play. As soon as the digital modeling process has been completed, the simulated or virtual paper mill behaves in the same way as the real one. The Twin generates reliable information and values for optimum operation of the plant. In addition, it issues alerts for the operators or the control software if operating problems start to emerge.

Metals

The stricter regulations for CO_2 emissions in many countries are still determining the further development of lightweight materials for car body parts. This trend is strengthened by the increased use of electric motors with rechargeable batteries for motor vehicles. Metals Processing is responding to this development by adapting or developing new production plants and machines.

ANDRITZ is constantly designing innovative solutions for the annealing cycle required in the strip processing furnace and for rolling the new high-strength and ultra-high strength steel grades in cold rolling mills for the production of high-strength and ultra-high strength steel. Laser-welded blanks optimize a car's weight and crash behavior. ANDRITZ has developed high-efficiency laser welding machines for this purpose, many of which are already operating successfully.

Another important development in weight optimization of the body shell is the use of press-hardened steel. As a result, less material is needed at higher strength, which saves on weight with higher crash performance. The use of press-hardened steel for blanks requires an additional new technology to remove the surface coating (ablation) from the press-hardened steel before laser welding.

This ablation technology is available from ANDRITZ both as inline version, i.e. integrated into the laser welding machine, and offline as a separate ablation plant. Another measure in series production of lightweight cars is the use of aluminum instead of steel. ANDRITZ has developed and implemented a patented technology – a process for regulating the coiling temperature of a metal strip – for aluminum manufacturers' processing lines in Europe, North America, and China.

In the digitalization sector, the Metris OPP (Optimization of Process Performance) application already widely used in the pulp and paper industry and developed by ANDRITZ itself is being adapted to the needs of the metal industry. The focus lies on reducing the consumption of energy and raw materials as well as the waste water volumes produced at customers' plants. In addition, work is proceeding on physical models and simulations in order to replicate operator training and control of process lines and rolling mills by means of Digital Twins (3D simulation). This leads to faster start-up and a steep run-up curve for the plant.

In the recycling sector, ANDRITZ is investigating the treatment and recycling of iron oxide from the spray roasting plants in the steel production process. An alternative solution for preparation of dust from the steel mill is also an important innovation topic at the moment.

Following its machines with a pressing force of 100 to 400 tons, Schuler is now offering the MSP servo presses with 800 to 1,250 tons of pressing force. This series not only enables particularly economical manufacturing, but also easy operation: Users can select a predefined movement curve, then the SmartAssist software from Schuler guides them through the tool set-up process step by step. Start-up of the press, which also has condition monitoring functions, is much faster thanks to a Digital Twin.

In hot forming of sheet steel – hot stamping, such factors as temperature, cooling time and pressing force have a direct impact on the quality of the parts, which is why they should be able to be fully documented and tracked with absolute precision. This very process is possible with the process monitoring system developed by Schuler. Video and thermal imaging cameras provide an overview of the line in real time, while the system visualizes and records process data from the numerous sensors continuously in parallel to this. In this way, plant operators can closely monitor the production conditions for each part.

Separation

The goal of research and development activities in the past year was to make the main product group, comprising decanters, filter centrifuges and filter presses, even more attractive and competitive by implementing a standardization program.

On the Service side, the Metris addIQ for decanters as part of the Andritz Metris portfolio can be used for control of all Andritz decanter centrifuges as well as on competitor machines and replaces obsolete controls and provides improved reliability and process optimization of the decanters. There are different packages available ranging from very simple control of just the decanter to optimization of the decanter and control of the complete process line.

“SmartSim” for decanters is used for training plant personnel on the safe and efficient operation of the decanter centrifuges and for certification for plant operators. It has already been demonstrated at a number of international trade shows including IFAT, Pollutec, Weftec (USA), and at the customer day in Krefeld.

On Pollutec 2018, ANDRITZ officially launched a new generation of high performance decanter centrifuge for Enviro - Municipal effluent treatment market (first size DU3LL). Additionally a new mobile test unit for plastic sorting: “Censor” and Palm oil decanters with 3-phase separation adjustability during operation was also launched. Furthermore, ANDRITZ expanded its industrial decanter centrifuge for petrochemical and chemical applications and Metris addIQ for decanter controls with a scalable solution for the smaller machines.

“Smart Filter Cloth”, a system for precise monitoring of filter cloth life in filter presses and establishing wear patterns for troubleshooting purposes, was presented at ACHEMA this year. Customers use hand held tablets in the field to track the cloths that have special RFID chips sewn into the cloths. This new technology optimizes the maintenance planning in order to limit unexpected downtime thus increasing the machine availability and total production.

In the digitalization sector the intelligent cloth washing system was launched on the market. This intelligent washing system monitors the angle of the plates by means of sensors in order to detect build-ups of contamination and then starts up the filter cloth washing device automatically. This enhances the reliability of the presses and increases machine capacity by avoiding unnecessary washing cycles.

OUTLOOK

Economic experts expect the positive economic environment in the world's main economic regions to continue in 2019. However, growth – a 3.5% increase in GDP is expected – will decline slightly compared to 2018 (2018: 3.7%). The main reasons for this are the latent trade dispute between China and the USA as well as the general increase in interest levels in the main economic regions (especially in the USA), which will reduce corporate investments, but also by private households. In addition, capital outflows from the countries of the main emerging markets in Asia and South America as a consequence of the increase in interest rates in the USA could have a negative impact on the economic development in these countries and thus also on the global economy.

The prospects and expectations for the ANDRITZ business areas are largely unchanged compared to the preceding year. In the Hydro business area, global project and investment activity is expected to remain at the low level of the preceding years. Some larger, new hydropower projects are currently in the planning phase, especially in Southeast Asia and Africa; selective award of individual large-scale projects is likely. In the Pulp & Paper business area, unchanged good project and investment activity is also expected for 2019, both for modernization of existing plants and construction of new pulp mills. Continuing satisfactory project and investment activity is anticipated in the Metals business area – both in the Metals Forming and Metals Processing (plants for production and finishing of steel strip) sectors. A continuation of the positive market development is also expected in the Separation business area.

Once again, ANDRITZ will focus on creating internal growth in 2019 by introducing new products and by examining opportunities to acquire companies that extend the product portfolio in the four business areas. An additional focus lies on optimization of organizational and cost structures in order to ensure the overall competitiveness of the Group, but also of individual business areas, and to increase profitability.

From today's perspective, the ANDRITZ GROUP expects a significant increase in sales for 2019 compared to the previous year. The main reasons for this are the high order backlog as of the end of 2018 as a result of the positive trend in order intake as well as sales contributions by the companies acquired in 2018. The net income and the profitability (EBITA margin) should also increase compared to the previous year.

However, if – contrary to general expectations – the global economy suffers setbacks in 2019, this could have a negative impact on ANDRITZ's business development. This may lead to organizational and capacity adjustments and, as a result, to possible financial provisions that could have a negative effect on the ANDRITZ GROUP's earnings.

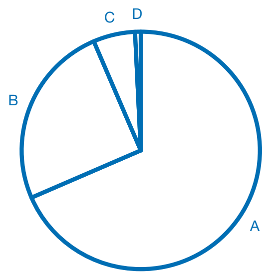
SHARES AND SHAREHOLDER STRUCTURE

Disclosure according to Article 243a of the Austrian Commercial Code (Unternehmensgesetzbuch – UGB)

The capital stock of ANDRITZ AG as of December 31, 2018 amounted to 104,000,000 EUR. The proportionate amount of the capital is 1.00 EUR per no-par value share. There are no limitations concerning the voting rights or the transfer of shares.

ANDRITZ has a stable and well-balanced shareholder structure. Custos Vermögensverwaltungs GmbH owns 25% plus one share, while Cerberus Vermögensverwaltung GmbH holds 0.77%. Some of the shares in these companies are held directly and some indirectly by Custos Privatstiftung and by Wolfgang Leitner, President and CEO of ANDRITZ AG, respectively. Certus Beteiligungs-GmbH, whose shares are owned indirectly by Manile Privatstiftung, holds 5.72%. The Takeover Commission has decided that, pursuant to § 23 (2), line 1 Takeover Act, the shares of Certus Beteiligungs GmbH are attributable to Custos Privatstiftung. With a free float of just under 70%, national and international institutional investors and private investors comprise the majority of shareholders. These include FMR LLC (Fidelity Management & Research, a Boston, Massachusetts-based investment company founded in 1946) holding 5.19%, BlackRock, Inc. (a United States investment firm founded in 1988 with headquarters in New York City, New York) holding 4.65%, and The Capital Group Companies, Inc. (an investment firm founded in 1931 with headquarters in Los Angeles, California) with 3.96%. The majority of institutional investors come from the UK, Austria, and Germany, while most private investors are from Austria and Germany.

Shareholder structure as of December 31, 2018 in %



A	**68.51**	Free float
B	**25.00***	Custos
C	**5.72**	Certus
D	**0.77**	Cerberus

* 25.00% + 1 share

At present, there is no authorized capital. The General Meeting held on March 23, 2018, authorized the Executive Board to purchase treasury shares up to the maximum amount permitted by law for a period of 30 months as from October 1, 2018, and to cancel these company shares where appropriate with the approval of the Supervisory Board without having to consult the General Meeting. There is no authorization of the members of the Executive Board – especially regarding the possibility of issuing or buying back shares – that does not result directly from legal stipulations.

The Executive Board and Supervisory Board of ANDRITZ AG resolved in mid-December to make use of the authorization from the Annual General Meeting to buy back shares. Up to 1,000,000 ANDRITZ shares (equaling

0.96% of the total outstanding shares) are to be repurchased through the Vienna Stock Exchange between December 27, 2018 and June 30, 2019.

As far as is known to the company, there are no holders of shares with special controlling rights. Employees exercise their voting rights directly. Furthermore, there are no stipulations regarding the appointment and removal of the members of the Executive Board and the Supervisory Board, nor regarding modifications of the company's Articles of Association that do not result directly from legal stipulations.

There are no significant agreements in which the company participates that would become effective, change, or end in the event of a change in the control of the company following a takeover bid.

According to the terms of the ANDRITZ corporate bond 2012-2019 issued in July 2012, all holders of a bond are entitled to accelerate maturity of their bonds and to require immediate repayment at the nominal value plus any interest accumulated up to the day of repayment in the event of a change of control by a large new shareholder and of this change of control leading to a substantial impairment of the issuer's ability to fulfill its obligations from the bond.

According to the terms of the "Schuldscheindarlehen" issued in June 2017 and August 2018, each lender is entitled to accelerate maturity of the amount corresponding to his contribution to the "Schuldscheindarlehen" and to require immediate repayment of this principal amount plus the interest accumulating up to the day of repayment in the event of a change of control. Acceleration of maturity shall only apply if the corresponding notice of termination is made within 30 days after the change of control is announced.

Compensation agreements exist between the company and members of its Executive Board in the event of a change of control. No such compensation agreements exist for the members of the Supervisory Board or any employees.

Graz, February 25, 2019

The Executive Board of ANDRITZ AG

Wolfgang Leitner	Humbert Köfler	Joachim Schönbeck	Wolfgang Semper	Mark von Laer
President and CEO	Pulp & Paper (Service), Separation	Pulp & Paper (Capital Systems), Metals Processing	Hydro	Executive Board Member and CFO

Disclaimer:
Certain statements contained in the annual financial report 2018 and in the annual report 2018 constitute "forward-looking statements." These statements, which contain the words "believe," "intend," "expect," and words of a similar meaning, reflect the Executive Board's beliefs and expectations and are subject to risks and uncertainties that may cause actual results to differ materially. As a result, readers are cautioned not to place undue reliance on such forward-looking statements. The company disclaims any obligation to publicly announce the result of any revisions to the forward-looking statements made herein, except where it would be required to do so under applicable law.

The annual financial report 2018 and the annual report 2018 contain assumptions and forecasts which were based on the information available up to the copy deadline on February 25, 2019. If the premises for these assumptions and forecasts do not occur, or risks indicated in the chapter "corporate risks" and in the management report in the annual financial report 2018 do arise, actual results may vary from the forecasts made in the annual financial report 2018 and the annual report 2018. Although the greatest caution was exercised in preparing data, all information related to the future is provided without guarantee.

CONSOLIDATED CORPORATE GOVERNANCE REPORT

The present report explains the structures, processes, and rules implemented with respect to financial management and towards shareholders, and which ANDRITZ follows in the corporate governance sector. As a publicly listed company with headquarters in Austria, the formal framework for corporate governance is derived from Austrian law, the articles of association, and the rules of procedure for the company boards, as well as the Austrian Code of Corporate Governance. The present report also contains the consolidated Corporate Governance report.

Commitment to the Austrian Code of Corporate Governance

ANDRITZ has adopted the rules of conduct laid down in the Austrian Code of Corporate Governance without restriction and regards the Code as an essential requirement for implementation of responsible company management, which is directed towards creating sustainable and long-term added value and a high degree of transparency for shareholders and other stakeholders. The Executive Board and the Supervisory Board, as well as the entire staff of the ANDRITZ GROUP, are committed to complying with the Code.

The Austrian Code of Corporate Governance applicable to the business year (January 2018 edition) is publicly accessible and available on the website of the ANDRITZ GROUP at andritz.com as well as on the website of the Austrian Working Group for Corporate Governance at corporate-governance.at.

The Austrian Code of Corporate Governance is based on a voluntary commitment and goes beyond the legal requirements for corporations. ANDRITZ obeys the rules of the Code almost entirely. In the interests of the basic principle of "Comply or Explain" in the code, ANDRITZ justifies its non-observance or non-compliant observance of those rules that go beyond the legal requirements (so-called C-rules) as follows:

Rule 30 (Disclosure of the basic principles of the remuneration system for the Executive Board): The variable portion is based exclusively on the net income; there are no non-financial criteria that impact the extent of the variable remuneration. The ANDRITZ GROUP operates in business areas that show considerable differences in some respects, which is why it is only useful to a limited extent to define uniform non-financial criteria for the entire Group. This fulfills the requirements of the objectivity and clear traceability concepts. The sustainability aspect was taken into account in designing the 2018 stock option program by including a three-year waiting period and the criteria of the increase in operating profitability (expressed as the EBITA margin) to an average of 8% and an increase in share price of 10 and 15%, respectively. Both targets (increase in operating profitability and increase in share price) must be achieved in order to exercise the options.

Composition of the Executive Board

The Executive Board of ANDRITZ AG was composed of five members as of December 31, 2018.

Name (date of birth)	Function	Date of first appointment to Executive Board	End of current mandate	Supervisory Board mandates in other companies in Austria and abroad
Wolfgang Leitner (March 27, 1953)	President & CEO	October 1, 1987 (CFO) June 29, 1994 (President & CEO)	June 28, 2023	Schuler AG; ETI Elektroelement d.d.
Humbert Köfler (January 11, 1961)	Member of the Executive Board	April 1, 2007	March 31, 2020	None
Joachim Schönbeck (January 30, 1964)	Member of the Executive Board	October 1, 2014	September 30, 2022	Westag & Getalit AG
Wolfgang Semper (March 9, 1958)	Member of the Executive Board	April 1, 2011	March 31, 2024	None
Mark von Laer (January 9, 1969)	Chief Financial Officer (CFO)	March 1, 2017	February 29, 2020	None

Wolfgang Leitner

Areas of responsibility

Central Group functions such as Human Resources Management, Corporate Communications, Investor Relations, Internal Auditing, Information Technology, Manufacturing Management, as well as Metals Forming

Professional career

Member of the Managing Board of AGIV AG, founder and President of GENERICON Pharma GmbH, Management Consultant at McKinsey & Company, Research Chemist at Vianova/HOECHST

Humbert Köfler

Areas of responsibility

Pulp & Paper (Service), Separation

Professional career

Head of the Paper Mill Services division at ANDRITZ AG, Head of the Mechanical Pulping Systems division at ANDRITZ AG, Regional Sales Manager at ANDRITZ Sprout-Bauer GmbH, Export Marketing Manager at Biochemie GmbH

Joachim Schönbeck

Areas of responsibility

Pulp & Paper (Capital systems), Metals Processing, as well as Group-wide Quality and Safety Management

Professional career

Spokesman of SMS Holding GmbH and Chairman of the Management Board of SMS Meer GmbH, management positions at SMS Group, Siemens, and Mannesmann

Wolfgang Semper

Areas of responsibility

Hydro and Group-wide Automation

Professional career

President of ANDRITZ HYDRO GmbH and Head of the Large Hydro division of the Hydro business area, management functions at VA TECH VOEST MCE and Voest-Alpine MCE, Technical Calculations Engineer at Voest-Alpine AG

Mark von Laer

Areas of responsibility

Central group functions such as Controlling, Treasury, Order and Project Financing, Legal, Compliance, as well as Group Procurement Management

Professional career

Chief Financial Officer at Lürssen Werft GmbH & Co KG, Germany, management positions with financial responsibility at Kraftanlagen Gruppe in Munich and at Lurgi Group

Composition of the Supervisory Board

The ANDRITZ AG Supervisory Board consists of six appointed members and three delegated members.

Name (date of birth)	Function	Date of first appointment to Executive Board	End of current mandate	Supervisory Board mandates in other (stock-exchange listed) companies in Austria and abroad
APPOINTED MEMBERS				
Christian Nowotny (July 23, 1950)	Chairman of the Supervisory Board	December 29, 1999	Until the Annual General Meeting in 2022	Schuler AG
Fritz Oberlerchner (June 16, 1948)	Deputy-Chairman of the Supervisory Board	March 29, 2006	Until the Annual General Meeting in 2020	STRABAG AG, Cologne
Jürgen Hermann Fechter (November 30, 1962)	Member of the Supervisory Board	March 30, 2016	Until the Annual General Meeting in 2021	None
Alexander Isola (July 24, 1957)	Member of the Supervisory Board	March 30, 2016	Until the Annual General Meeting in 2021	None
Monika Kircher (July 8, 1957)	Member of the Supervisory Board	March 21, 2014	Until the Annual General Meeting in 2019	RWE AG
Kurt Stiassny (October 6, 1950)	Member of the Supervisory Board	December 29, 1999	Until the Annual General Meeting in 2020	None
DELEGATED MEMBERS				
Georg Auer (October 12, 1974)	Member of the Supervisory Board	July 1, 2011		None
Andreas Martiner (November 11, 1964)	Member of the Supervisory Board	February 14, 2001		None
Monika Suppan (January 26, 1974)	Member of the Supervisory Board	January 1, 2018		None

Diversity

The main criteria in selecting the members of the Supervisory Board are professional qualifications and personal skills, as well as long-term experience in leading positions. However, various diversity aspects, such as the internationality of the members, representation of both men and women, and the age structure, are also taken into account. The Supervisory Board has two female members, thus the proportion of women is approximately 22%. The members of the Supervisory Board are aged between 44 and 70 on the reporting date. One member is not an Austrian citizen and has knowledge and experience gained as a former Executive Board member of a large German corporation operating globally.

Information relating to the independence of the Supervisory Board members

Regarding the independence criteria, the Supervisory Board of ANDRITZ AG follows the guidelines laid down in the Corporate Governance Code. According to these guidelines, it is assumed that members are not independent if they belong to the Supervisory Board for more than 15 years. This applies to Christian Nowotny and Kurt Stiassny. Nevertheless, both have confirmed that they perform their duties entirely independently and do not have any legal or economic relationship with the company or its executive bodies that could compromise their independence. The Supervisory Board is independent of the company and its executive bodies. No member of the Supervisory Board of ANDRITZ AG holds more than 10% of the total shares. The requirements of C-rules 53 and 54 of the Austrian Code of Corporate Governance are thus met.

Disclosure of information on the remunerations of the Executive Board and Supervisory Board

The remuneration report explains the amount and the structure of the remunerations paid to members of the Executive Board and of the Supervisory Board of ANDRITZ AG.

Executive Board remunerations

The Executive Board remunerations in the 2018 business year amounted to 8,826,987 EUR (2017: 10,018,340 EUR) and are divided as follows:

(in EUR)	Fixed	Variable	Other remunerations	Total
Wolfgang Leitner (President and CEO)	849,135	2,166,230	12,946	3,028,311
Humbert Köfler	400,000	1,083,115	11,937	1,495,052
Joachim Schönbeck	450,000	1,083,115	13,205	1,546,320
Wolfgang Semper	390,000	1,083,115	13,143	1,486,258
Mark von Laer	352,381	894,562	24,103	1,271,046
	2,441,516	**6,310,137**	**75,334**	**8,826,987**

The chairman of the Executive Board Wolfgang Leitner waived his remuneration as chairman of the Schuler AG Supervisory Board.

Basic principles of the remuneration policy

The principles applied in establishing the remunerations of the Executive Board and of senior managers comply almost entirely with the Austrian Code of Corporate Governance.

The remuneration of the Executive Board is composed of a fixed and a variable/success-based portion. The amount of the variable portion depends on the net profit. The maximum value for the variable annual remuneration was determined at three times the fixed annual remuneration. Any amounts in excess of this sum will be credited as a variable remuneration for the following years. If the net income of the Group falls short of a defined minimum amount, this results in a “malus” that is also carried forward to the following years and in a reduction in future variable salary components. The other remunerations relate primarily to taxable benefits in kind for company cars.

In all share option programs for managerial staff and the Executive Board since the Initial Public Offering (IPO), participation was contingent on investing at least 20,000 EUR in ANDRITZ shares for managerial staff and 40,000 EUR for members of the Executive Board no later than the allocation date of the options. This investment must be maintained continuously until exercise of the options by those persons subscribing to the option program and evidence thereof must be brought when the options are exercised. There is a waiting period of three years before options can be exercised if the contract of employment is still in force (exception: end of employment contract as scheduled according to contract provisions).

No options were exercised by Executive Board Members in the 2018 business year.

No advances or loans were granted to members of the ANDRITZ AG Executive Board.

The Austrian Financial Market Authority stopped publishing notifications of directors’ dealings by the Executive Board and Supervisory Board members or their related parties on July 3, 2016. This information must be published by the issuers.

The members of the Executive 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 as from a certain age provided that the employment contract has already been terminated by this date. The administration work has been outsourced to pension funds. Pension arrangements are either defined-contribution or defined-benefit plans. 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; after this, annual adjustments can be made to take account of the development in wages and salaries and of ANDRITZ’s economic status.

Most of the Executive Board members shall, upon termination of their function and concurrent termination of employment, be entitled to severance payments in the meaning of Article 23 of the Austrian Employees Act unless such termination is the result of justified dismissal. Severance payments in the event of premature termination of activities as member of the Executive Board without good cause are provided for in the Executive Board contracts according to Article 27 of the Austrian Salaried Employees Act.

ANDRITZ AG took out Directors’ and Officers’ liability insurance (D&O insurance) for 2018. The costs are covered by the company. The D&O insurance covers certain personal liability risks of persons in the ANDRITZ GROUP acting under responsibility. The annual cost is approximately 280,000 EUR.

In connection with the execution of a project in Austria, two administrative criminal proceedings for alleged violations in temporary hiring and employment of foreign nationals were opened against members of the ANDRITZ AG Executive Board and extremely high fines were imposed at first instance. The case is currently before the European Court of Justice. In the opinion of the company, these accusations are unfounded based on the current state of knowledge. The Supervisory Board has dealt with the accusations in detail and, on the basis of the current state of knowledge, considers that the Executive Board members facing prosecution are not at fault and that the costs of defense should be borne by the company until a final decision is reached. These costs amounted to approximately 350,000 EUR up to the end of the year.

Supervisory Board remunerations

Subject to approval by the Annual General Meeting, the Supervisory Board remunerations (including attendance fees) for the 2018 business year amount to a total of 305,000 EUR (2017: 300,000 EUR) and are divided between the individual Supervisory Board members as follows:

(in EUR)	Remuneration (including attendance fees)
Christian Nowotny (Chairman of the Supervisory Board)	76,250
Fritz Oberlerchner (Deputy Chairman of the Supervisory Board)	57,500
Jürgen Hermann Fechter	40,000
Alexander Isola	40,000
Monika Kircher	51,250
Kurt Stiassny	40,000
	305,000

No Supervisory Board remuneration was paid to the Supervisory Board members delegated by the employee representative organizations.

The chairman of the Supervisory Board, Christian Nowotny, is also a member of the Schuler AG Supervisory Board and received a remuneration amounting to 25,000 EUR (excluding attendance fees) for the 2018 business year.

The remuneration scheme of the Supervisory Board is composed of a fixed and an attendance-related portion. The fixed portion is a global sum, which is to be distributed such that the chairman of the Supervisory Board receives double the amount and his deputy one-and-a-half-times the amount paid to the other members. This also applies to the chairwoman of the audit committee. The second portion consists of a lump sum fee paid in respect of each meeting that the member attends.

No advances or loans were granted to members of the ANDRITZ AG Supervisory Board. There were no agreements subject to approval between ANDRITZ AG and individual members of the Supervisory Board or companies closely associated with Supervisory Board members.

The remuneration report for the Executive Board and the Supervisory Board of ANDRITZ AG is available in the notes to the consolidated financial statements in the 2018 Annual Financial Report.

Working procedures for the Executive Board and the Supervisory Board

Allocation of competencies in the Executive Board

The Executive Board of ANDRITZ AG holds board meetings at regular intervals on essential, Group-relevant topics and individual business areas. The competencies and responsibilities of the individual Executive Board members are listed in the notes on the Executive Board members in this Corporate Governance report. The rules of procedure for the Executive Board contain a comprehensive catalog of those business transactions requiring the prior approval of the Supervisory Board in addition to those stated in the mandatory regulations in the Corporation Act.

The Executive Board and Supervisory Board, particularly their chairmen, maintain ongoing contact to discuss the company's development and strategy beyond the scope of the discussions at the Supervisory Board meetings.

Supervisory Board committees

The Supervisory Board of ANDRITZ AG established an audit committee that held two meetings to deal with the annual and consolidated financial statements for 2018, prepare the review of the annual and consolidated financial statements for 2018 and of the proposal for distribution of profits, additionally to deal with issues concerning the auditor, and implementation of the internal control and risk management systems in the ANDRITZ GROUP. Monika Kircher – as a financial expert – is chairwoman of the audit committee.

The Supervisory Board has also established a nomination and remuneration committee that held two meetings in 2018 and whose scope of activities includes the remuneration paid to the Executive Board members and the content of their employment contracts, the extension of two Executive Board members' mandates, as well as appointments to Executive and Supervisory Board positions that become vacant and succession planning matters.

The ANDRITZ AG Supervisory Board held five regular meetings in the 2018 business year (four regular meetings, one constituent meeting). All members participated in more than half of the meetings. The focus of these meetings were monitoring of the current business development of the ANDRITZ GROUP, including possible deviations from the budget, the development of earnings on major orders, the strategic goals, medium-term planning for the individual business areas, as well as specific topics, such as company acquisitions, granting of joint procurations, and other business subject to approval. The chairman and deputy-chairman receive a monthly report on the main developments. One business area is presented at each of the regular Supervisory Board meetings and this business area's strategy is discussed. A comprehensive report on Group-wide compliance is provided at one of the Supervisory Board meetings; this meeting also deals with the results of internal audits, and any measures resulting from these audits are presented and discussed.

Pursuant to the requirement of the Austrian Code of Corporate Governance (C-rule 36), the Supervisory Board conducted a self-evaluation in the past business year and discussed the efficiency of its activities, especially its organizational structure and working methods.

Committee	**Members**
Audit committee	▪ Monika Kircher (Chairwoman) ▪ Christian Nowotny (Deputy-Chairman) ▪ Fritz Oberlerchner ▪ Andreas Martiner
Nomination and remuneration committee	▪ Christian Nowotny (Chairman) ▪ Fritz Oberlerchner (Deputy-Chairman) ▪ Monika Kircher

Auditors

KPMG Austria GmbH Wirtschaftsprüfungs- und Steuerberatungsgesellschaft, Vienna, was selected by the 111th Annual General Meeting of ANDRITZ AG held on March 23, 2018 as independent auditor for the 2018 financial statements and the consolidated financial statements.

Diversity concept

One of the Supervisory Board's most important tasks is to prepare and secure appointments to the Supervisory Board and Executive Board, as corporate bodies, that are appropriate to the company. The Executive Board and Supervisory Board of ANDRITZ AG should be formed by personalities who have the necessary knowledge, abilities, and the individual competences and experience that management and supervision of a globally operating company oriented towards the capital market and working in the mechanical and industrial plant engineering industry require and guarantee.

The Supervisory Board (nomination committee) defines the following goals for composition of the Supervisory Board and the Executive Board:

The **members of the Supervisory Board** should have special knowledge, skills and professional experience relating to the structure and business segment of the company as a whole:

- The Supervisory Board should have members with international experience or special expertise in one or several of the company's most important markets outside Austria.
- The Supervisory Board should contain personalities from the industry sector, science, technology or research who have gained experience in sectors of major significance for ANDRITZ.
- Furthermore, as representative of the shareholders, the Supervisory Board should contain personalities who have gained experience in management and/or controlling of another publicly listed company.
- In seeking out qualified personalities for the Supervisory Board and who strengthen the board as a whole as best possible with professional and management skills, it is also important to ensure there is diversity. In preparing suggestions for possible candidates, consideration should be given to achieving an appropriate distribution of both men and women in the Supervisory Board in addition to mutually complementary professional profiles as well as professional and life experience.
- At least one member of the Supervisory Board should have special expertise in the fields of accounting or auditing.
- None of the members of the Supervisory Board should hold an executive function or a consulting position for the company's main competitors or its suppliers.

The goal is to achieve an appropriate proportion of women in the Supervisory Board independently of any legal obligation in this respect.

The Supervisory Board ensures long-term **succession planning for positions on the Executive Board**. When screening candidates for position on the Executive Board, the basic suitability criteria from the perspective of the Supervisory Board should be the candidates' professional qualifications for the purview envisaged, convincing management skills, performance so far, as well as knowledge of the company. When weighing up which personality would best complement the Executive Board, diversity is also one of the criteria influencing the Supervisory Board's decision. Diversity means different, mutually complementary profiles, professional and life experience, also in the international field, as well as appropriate representation of men and women alike. The Supervisory Board takes the following aspects into consideration when taking its decision:

- The members of the Executive Board should have many years of management experience as well as experience from different professions if possible.

- The members should have experience in international management.
- At least one member of the Executive Board should have a technical education or many years of technical, professional experience.
- The Executive Board as a whole should have many years of experience in the fields of development, production, sales, finance, and human resources management.
- No target number has been defined for the proportion of women in the Executive Board. The Supervisory Board decides who holds the position of Executive Board member in the interests of the company and exclusively in acknowledgment of their professional and personal qualifications in each case. The Executive Board reports at regular intervals to the nomination committee on the proportion and development of female senior management, particularly those reporting to the top executives and at the first management level.
- The Supervisory Board will observe an age limit of seventy years for the members of the Executive Board; an adequate mix of age groups should be considered in the composition of the Executive Board.

The Executive Board has no female members; there are two female members on the Supervisory Board. There are women in management functions at the first and second reporting levels in numerous sectors. The proportion of women in the total workforce was 16.5% (2017: 15.4%) as of December 31, 2018.

The ANDRITZ GROUP supports and encourages the appointment of women, particularly in technical sectors. In many countries however, ANDRITZ is frequently confronted with the situation that there are still far fewer women than men in technical professions or graduating in technical subjects.

Thus, ANDRITZ supports various initiatives to encourage women to opt for a technical profession or take a degree in a technical subject. These initiatives include participating regularly in various events like recruiting and job orientation days for young women at universities. ANDRITZ also takes measures and makes investments to improve employees' work-life balance. The company-run kindergarten set up beside the headquarters of the ANDRITZ GROUP in Graz as well as at the Vienna location and the flexible working hours available to employees with young children are examples of these measures. When creating office space as part of new building projects, establishing child care facilities for the children of employees is always considered as well. In addition, a strict equal opportunities policy is considered very important in the recruitment process. In its efforts to promote female employees, ANDRITZ will refrain from any measures that would discriminate against male employees.

Compliance at ANDRITZ

Embedded in the organizational structure

The Compliance department reports to the CFO. Among other things, a global risk assessment including Risk Management Policy was implemented under his management. For its day-to-day operations, the Group function is divided into a compliance committee with specialized competence and legal experts with geographical and topic-related competence. The Group Compliance Officer coordinates between the committees and conducts strategic planning of all activities.

The Code of Business Conduct and Ethics available to both employees in the company intranet and external stakeholders on the ANDRITZ website, and published in 2010 forms the basis of this work. Some amendments were made in the past year, relating in particular to the topics of human rights and environmental protection. The new code was adopted in February 2019 and is to be published group-wide in the course of a comprehensive information campaign.

In order to check the effectiveness of the compliance management system and further improve it, ANDRITZ obtained certification according to ISO 19600 for the compliance management system and ISO 37001 for anti-corruption management in the past business year. The regulations contain requirements for developing, implementing and maintaining a compliance management system as well as suitable measures to help protect against, track down and provide proof of corruption. The certification covers the compliance risk fields insider trading, anti-bribery/anti-corruption, anti-trust, export controls, discrimination, and data protection.

Annual re-certification is necessary to maintain the validity of the certificates. Re-certification is scheduled for February 2019.

Risk assessment

A comprehensive, group-wide risk analysis was conducted in 2016 in order to be able to assess the risks in the compliance sector more accurately. Seven different sectors were assessed, and possible measures were developed to mitigate the risk in each case. As a result, the four-stage risk assessment has been implemented since 2017. The process is adapted continually.

The first measures have already been taken in the course of the analysis. A new compliance officer was appointed for Latin America and South America. A regional corruption guideline was compiled and introduced for China. Work began at all Italian locations to introduce an important Italian legislate decree on the topic of compliance.

Training

One of the most important basic requirements is an understanding of the need for rules and regulations. For this reason, online trainings were introduced many years ago to convey the main content of the compliance policies. These online trainings are being constantly updated; new training programs are launched for new relevant topics.

Each new employee must undergo basic training as well as corruption prevention training within the first few weeks after joining the company. This training is available online in nine languages. In addition, each employee inside the European Union receives special training on the topic of data protection, and each employee in the USA has training on “Harassment in the Workplace” and “Protection of Intellectual Property”. The training content is updated regularly. In 2018, 32,003 trainings were rolled out.

Additional training content, for example relating to anti-trust laws, insider trading, export controls, the supplier code of conduct, and handling of sensitive data is also provided regularly for the groups of employees exposed to these topics. Moreover, training on prevention of money laundering and on fighting corruption is to be introduced in 2019 because these topics have become much more important and relevant.

Whistleblowing system

The online whistleblowing system launched in the spring of 2016 enables employees and external business partners to report compliance-related incidents anonymously. These include insider trading, bribery and corruption, violation of export controls, personnel-related topics, and so on.

Measures to prevent data theft

Due to the increasing number of incidents in the world of business, ANDRITZ is also looking closely at the possibility of attacks on information systems with the aim of using tricks, for example phishing mails, to manipulate the systems' users and thus gaining access to internal and sensitive data and information or trigger unwarranted payments. ANDRITZ has tightened up the instructions for secure payment transactions. In addition, the employees are provided regularly and pro-actively with information on this topic, for example with more and more information in the intranet and in the employee magazine. Emails from externals sources are clearly marked as such. Risks connected with social engineering include money being transferred to fake accounts as well as hacking of mail accounts in order to change the bank accounts on outgoing invoices, causing customers to make payments to an account that is not in ANDRITZ's name. A separate area of responsibility for payment transactions is also to be established within the compliance organization in the coming year.

Anti-money laundering and financing of terrorism

Ever more stringent laws are being implemented worldwide to fight money laundering and financing of terrorism. As a result, money laundering and financing of terrorism have become a central topic in the financial sector. A new guideline was drawn up in 2018 in cooperation with the Finance department. The aim of this guideline is to ensure that each company within the Group introduces the necessary processes to prevent its being involved in money laundering and financing of terrorism. This policy applies to all outgoing and incoming payments.

Export controls

A software-based process was introduced last year – beginning with ANDRITZ AG in Graz – to guarantee compliance with all legal provisions for export controls (in particular the terror, goods and embargo lists as well as usage restrictions).

Internal auditing

The Internal Auditing Group function conducts comprehensive audits on ANDRITZ subsidiaries and Group Functions, focusing on financial and operational topics. In suspicious cases, event-driven audits are also conducted without prior notice. The purpose of the audits is to ensure compliance with internal guidelines and the fundamental principles of profitability and to highlight potential areas for improvement in the operational workflows. Other tasks handled by this Group function are identification of risks and dealing with them in an appropriate way.

The department reports directly to the President and CEO, and the audit schedule for the coming two years is established by the Executive Board. The audit reports are also presented to the Executive Board and in summarized form to the members of the Supervisory Board. In the 2018 business year, 26 audits were conducted (2017: 38 audits). The improvement measures proposed in these audits are aligned directly with the management of the company or Group Function under audit.

External evaluation of the corporate governance report

The Austrian Code of Corporate Governance requires regular external evaluation of the Code by the company. The last evaluation of this kind was conducted for the 2016 business year by BDO Austria GmbH Wirtschaftsprüfungs- und Steuerberatungsgesellschaft, Vienna. The auditors found as a result of the evaluation that ANDRITZ AG had adhered to the C-rules of the Austrian Code of Corporate Governance. The next external evaluation is planned for the 2019 business year. A full report on the external evaluation is available on the ANDRITZ web site, andritz.com.

Changes after the reporting date

There were no major changes between the reporting date and the date of issue of the Corporate Governance Report.

Graz, February 2019

The Executive Board of ANDRITZ AG

Wolfgang Leitner m.p. (President and CEO)	Humbert Köfler m.p.	Joachim Schönbeck m.p.	Wolfgang Semper m.p.	Mark von Laer m.p. (CFO)

REPORT OF THE SUPERVISORY BOARD

The Supervisory Board and the Executive Board held five meetings (four regular meetings, one constituent meeting) during the reporting period for in-depth discussions on the economic situation and strategic development of the company, as well as on major events, capital expenditures, and possible acquisitions. In the course of regular reporting and in all meetings, the Executive Board informed the Supervisory Board extensively in writing and verbally, by means of detailed reports, on the business and financial situation of the Group and its affiliates, as well as on topics regarding human resources, medium-term planning, capital expenditure, and acquisition projects. At one meeting, the Supervisory Board discussed safety at work and corresponding measures. At another meeting, compliance was one of the main points on the agenda. At individual meetings, medium-term planning by the individual business areas was discussed with the Executive Board. In the second quarter, the Supervisory Board dealt with and approved important investment decisions (in particular the takeover of Xerium Technologies, Inc.). Additional information was provided on special occurrences. The Chairman of the Supervisory Board and the Chief Executive Officer were also in regular contact to review and discuss the company's strategy and business development. The Supervisory Board is to conduct a self-evaluation of its activities and discuss the results during its meeting on May 5, 2019. An external audit on compliance with the "C-Rules" of the Austrian Corporate Governance Code (ÖCGK) had already been commissioned in 2016. The report dated February 28, 2017 by BDO Austria GmbH Wirtschaftsprüfungs- und Steuerberatungsgesellschaft confirms that the company complies with the "C-Rules" in this Code during the audit pursuant to Rule 62 of the ÖCGK.

The Executive Board mandate of its chairman Wolfgang Leitner was extended by five years until June 28, 2023, at the meeting on March 12, 2018. Wolfgang Semper's Executive Board mandate was also extended by five years until March 31, 2024 at the meeting on December 6, 2018.

The Presidium of the Supervisory Board acted on behalf of the company in matters concerning the Executive Board. The nomination and remuneration committee dealt in two meetings with matters relating to the Executive Board.

All members of the Supervisory Board attended all of its meetings except one.

The audit committee dealt in two meetings in particular with the proposal for the appointment of the auditor of the financial statements and consolidated financial statements, the quality of the internal control system relating to presentation of financial statements, the risk management program, reporting by the Internal Auditing department, and the measures to safeguard the independence of the annual auditor when providing permitted non-audit services. In addition, individual topics such as risk analysis and IT security to prevent external attacks as well as implementation of the EU General Data Protection Regulation were discussed and a report was submitted to the Supervisory Board. All members of the audit committee attended the committee meetings at all times.

In dealing with the financial statements for 2017, the audit committee called in the annual auditor to attend its meeting on March 1, 2018 in order to review the financial statements, consolidated financial statements, the management report, and the Executive Board's proposal for distribution of profits. The auditor was also present at the preparatory meeting in December 2017. Furthermore, a proposal was made for the choice of auditor of the financial statements and consolidated financial statements for the 2018 business year. This auditor's relationship with the ANDRITZ GROUP and its executive bodies was examined, the fee for the annual audit was negotiated, and a suggestion was made to propose KPMG Austria GmbH to the Annual General Meeting for appointment as auditors of the 2018 financial statements and consolidated financial statements. Further items on the agenda were the auditor's report on the function of the risk management system in the company, a report on the Internal Auditing department, the compliance report, and a review of the sustainability report.

At the audit committee meeting on December 6, 2018, the committee members – with the auditor also present – discussed the organization, scheduling and auditing of the 2018 financial statements and consolidated financial statements as well as a report by the Executive Board on the form and modus operandi of the internal control system and internal auditing. The committee also decided to give limited permission to provide non-audit services up to completion of the audit for the 2018 financial year.

At the Supervisory Board meeting on March 23, 2018 after the Annual General Meeting and held on the same day, Christian Nowotny was elected Chairman of the Supervisory Board and Fritz Oberlerchner as Deputy-Chairman. Monika Kircher (Chairwoman), Christian Nowotny (Deputy-Chairman), and Fritz Oberlerchner were elected as members of the audit committee and Andreas Martiner was delegated to the committee by the employees' representatives. Christian Nowotny (Chairman), Fritz Oberlerchner (Deputy-Chairman), and Monika Kircher were elected as members of the nomination and remuneration committee.

The financial statements and management report of ANDRITZ AG and the consolidated financial statements for 2018 drawn up according to IFRS were audited (including the accounts) and certified by KPMG Austria GmbH Wirtschaftsprüfungs- und Steuerberatungsgesellschaft, Vienna, who had been appointed as auditors by the Annual General Meeting. The Supervisory Board examined the documents in accordance with Article 96 of the Corporation Act as well as the Management Report and approved the financial statements, which are hereby adopted in accordance with Article 96 (4) of the Corporation Act; the Supervisory Board also examined and approved the Executive Board's proposal for distribution of profits. The final results of the audits conducted did not give rise to any objections.

Graz, February 2019

Christian Nowotny m.p.
Chairman of the Supervisory Board

Consolidated financial statements 2018 of the ANDRITZ GROUP

CONSOLIDATED INCOME STATEMENT

For the 2018 financial year

(in TEUR)	Note	2018	2017
Sales	**1.**	**6,031,455**	**5,889,047**
Changes in inventories of finished goods and work in progress		-3,372	31,282
Capitalized cost of self-constructed assets		1,835	7,296
		6,029,918	**5,927,625**
Other operating income	2.	89,270	188,394
Cost of materials	3.	-2,987,737	-3,028,822
Personnel expenses	4.	-1,786,998	-1,717,830
Other operating expenses	5.	-846,404	-827,707
Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA)		**498,049**	**541,660**
Depreciation, amortization, and impairment of intangible assets and of property, plant, and equipment	6.	-160,550	-135,970
Impairment of goodwill	11.	-15,884	-6,428
Earnings Before Interest and Taxes (EBIT)		**321,615**	**399,262**
Result from associated companies	13.	21	16
Interest income		22,068	33,521
Interest expenses		-46,549	-44,047
Other financial result		7,079	11,851
Financial result	**7.**	**-17,381**	**1,341**
Earnings Before Taxes (EBT)		**304,234**	**400,603**
Income taxes	8.	-84,541	-134,980
NET INCOME		**219,693**	**265,623**
Thereof attributable to:			
Shareholders of the parent		221,991	262,967
Non-controlling interests	22.	-2,298	2,656
Weighted average number of no-par value shares	9.	101,009,544	101,850,822
Basic earnings per no-par value share (in EUR)	9.	2.20	2.58
Effect of potential dilution of share options		0	0
Weighted average number of no-par value shares and share options	9.	101,009,544	101,850,822
Diluted earnings per no-par value share (in EUR)	9.	2.20	2.58
Proposed or paid dividend per no-par value share (in EUR)	22.	1.55	1.55

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

For the 2018 financial year

(in TEUR)	Note	2018	2017
NET INCOME		**219,693**	**265,623**
Items that may be reclassified to profit or loss:			
Currency translation adjustments of foreign operations		-13,544	-63,450
Reclassification to profit or loss		-1,226	-816
Related income taxes		470	0
Currency translation adjustments of foreign operations		**-14,300**	**-64,266**
Result from available-for-sale financial assets		0	-17,712
Reclassification to profit or loss		0	-6,362
Related income taxes		0	3,638
Result from available-for-sale financial assets, net of tax		**0**	**-20,436**
Result from cash flow hedges		-1,458	363
Reclassification to profit or loss		0	726
Related income taxes		364	-60
Result from cash flow hedges, net of tax	**K)**	**-1,094**	**1,029**
Result from associated companies, accounted for using the equity method		-99	-424
Reclassification to profit or loss		492	0
Result from associated companies, accounted for using the equity method, net of tax	**13.**	**393**	**-424**
Items that will not be reclassified to profit or loss:			
Actuarial gains/losses		-7,149	7,774
Related income taxes		972	-1,310
Actuarial gains/losses, net of tax	**24.**	**-6,177**	**6,464**
Result from fair value valuation of financial assets		-22,156	0
Related income taxes		3,313	0
Result from fair value valuation of financial assets, net of tax	**K)**	**-18,843**	**0**
OTHER COMPREHENSIVE INCOME		**-40,021**	**-77,633**
TOTAL COMPREHENSIVE INCOME		**179,672**	**187,990**
Thereof attributable to:			
Shareholders of the parent		182,206	186,024
Non-controlling interests		-2,534	1,966

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As of December 31, 2018

(in TEUR)	Note	2018	2017
ASSETS			
Intangible assets	10.	372,921	160,701
Goodwill	11.	784,590	547,637
Property, plant, and equipment	12.	1,132,134	762,267
Shares in associated companies	13.	17	6,407
Investments and other financial assets	14.	139,960	170,471
Other receivables and assets	16.	32,753	60,714
Deferred tax assets	8.	167,157	152,647
Non-current assets		**2,629,532**	**1,860,844**
Inventories	17.	869,274	761,013
Advance payments made	18.	114,558	99,264
Trade accounts receivable	15.	974,117	891,980
Cost and earnings of projects under construction in excess of billings		0	599,550
Contract assets	1.	786,354	0
Receivables from current taxes		54,121	54,741
Other receivables and assets	16.	304,233	341,183
Investments	19.	325,974	565,780
Cash and cash equivalents	20.	858,758	1,071,478
Assets held for sale	21.	1,702	19,515
Current assets		**4,289,091**	**4,404,504**
TOTAL ASSETS		**6,918,623**	**6,265,348**
SHAREHOLDERS' EQUITY AND LIABILITIES			
Share capital		104,000	104,000
Capital reserves		36,476	36,476
Retained earnings		1,174,816	1,160,334
Equity attributable to shareholders of the parent		**1,315,292**	**1,300,810**
Non-controlling interests		15,504	24,600
Total shareholders' equity	**22.**	**1,330,796**	**1,325,410**
Bonds		0	349,759
Bank loans and other financial liabilities	25.	922,548	424,851
Obligations under finance leases	25.	25,170	17,196
Provisions	23./24.	579,710	582,058
Other liabilities	26.	59,114	103,941
Deferred tax liabilities	8.	184,368	87,892
Non-current liabilities		**1,770,910**	**1,565,697**
Bonds	25.	343,684	0
Bank loans and other financial liabilities	25.	116,380	80,890
Obligations under finance leases	25.	4,792	1,138
Trade accounts payable		604,189	461,239
Billings in excess of cost and earnings of projects under construction		0	1,052,571
Contract liabilities from sales recognized over time	1.	1,003,518	0
Advance payments received		0	277,219
Contract liabilities from sales recognized at a point in time	1.	277,116	0
Provisions	23.	437,977	484,079
Liabilities for current taxes		53,996	71,515
Other liabilities	26.	975,265	942,979
Liabilities relating to assets held for sale	21.	0	2,611
Current liabilities		**3,816,917**	**3,374,241**
TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES		**6,918,623**	**6,265,348**

CONSOLIDATED STATEMENT OF CASH FLOWS

For the 2018 financial year

(in TEUR)	Note	2018	2017
Earnings Before Taxes (EBT)		**304,234**	**400,603**
Interest result	7.	24,481	10,526
Depreciation, amortization, and impairment of intangible assets, goodwill as well as property, plant, and equipment		176,434	142,398
Result from associated companies	7.	-21	-16
Changes in provisions		-105,941	-22,962
Gains/losses from disposal of fixed and financial assets		-7,268	-55,530
Other non-cash income/expenses		12,909	-24,354
Gross cash flow		**404,828**	**450,665**
Changes in inventories		-23,070	-40,868
Changes in advance payments made		-13,555	870
Changes in receivables		41,536	-121,375
Changes in contract assets*		-159,818	96,062
Changes in contract liabilities from sales recognized at a point in time*		-17,961	28,409
Changes in liabilities		-39,241	24,894
Changes in contract liabilities attributable to sales recognized over time*		-66,632	-31,672
Change in net working capital		**-278,741**	**-43,680**
Interest received		21,005	33,840
Interest paid		-36,539	-28,201
Dividends received		711	3,573
Income taxes paid		-103,510	-169,686
CASH FLOW FROM OPERATING ACTIVITIES		**7,754**	**246,511**
Payments received for asset disposals (including financial assets)		7,800	62,343
Payments received from associated companies (including disposal)		-6,308	0
Payments made for intangible assets and for property, plant, and equipment		-127,128	-115,453
Payments made for non-current financial assets		-19,687	-118,887
Net cash flow from company acquisitions	J)	-269,983	-13,435
Net cash flow from sale of subsidiaries	J)	25,347	23,966
Payments received for investments and other current financial assets		514,623	151,217
Payments made for investments and other current financial assets		-214,500	-533,790
CASH FLOW FROM INVESTING ACTIVITIES		**-89,836**	**-544,039**
Payments made for the redemption of bonds	25.	-427,586	0
Payments received from the issuance of Schuldscheindarlehen	25.	500,000	400,033
Payments received from other financial liabilities	25.	57,794	46,332
Payments made for other financial liabilities	25.	-78,072	-103,603
Dividends paid by ANDRITZ AG	22.	-156,642	-153,090
Dividends paid to non-controlling interest holders		-2,388	-2,074
Purchase of own corporate bonds		0	-4,019
Purchase of non-controlling interests and payments to former shareholders		-411	-817
Purchase of treasury shares	22.	-4,922	-48,310
CASH FLOW FROM FINANCING ACTIVITIES		**-112,227**	**134,452**

(in TEUR)	Note	2018	2017
CHANGES IN CASH AND CASH EQUIVALENTS		**-194,309**	**-163,076**
Currency translation adjustments		-18,306	-52,618
Changes in consolidation scope		111	1,082
Reclassification as held for sale		0	-10,246
Valuation allowance		-216	0
Cash and cash equivalents at the beginning of the period	20.	1,071,478	1,296,336
Cash and cash equivalents at the end of the period	20.	858,758	1,071,478

* The changes in contract assets, changes in contract liabilities from sales recognized over time, and changes in contract liabilities from sales recognized at a point in time were in prior years represented as positions changes in cost and earnings of projects under construction in excess of billings, changes in billings in excess of cost and earnings of projects under construction, and changes in advance payments received.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

For the 2018 financial year

										Attributable to shareholders of the parent	Non-controlling interests	Total shareholders' equity
(in TEUR)	Note	Share capital	Capital reserves	Other retained earnings	IAS 39 reserve	Fair value reserve	Actuarial - gains/ losses	Currency translation adjustments	Treasury shares	Total		
BALANCE AS OF JANUARY 1, 2017		**104,000**	**36,476**	**1,287,232**	**47,685**		**-82,133**	**14,416**	**-80,173**	**1,327,503**	**16,728**	**1,344,231**
Net income				262,967						262,967	2,656	265,623
Other comprehensive income					-19,433		6,153	-63,663		-76,943	-690	-77,633
Total comprehensive income				**262,967**	**-19,433**		**6,153**	**-63,663**		**186,024**	**1,966**	**187,990**
Dividends	22.			-153,090						-153,090	-422	-153,512
Changes in treasury shares	22.			179					-47,111	-46,932		-46,932
Changes concerning share option programs	22.			-4,390						-4,390		-4,390
Transactions with non-controlling interests				-4,004				-3,150		-7,154	6,335	-819
Changes in consolidation type				-1,151						-1,151	-7	-1,158
BALANCE AS OF DECEMBER 31, 2017		**104,000**	**36,476**	**1,387,743**	**28,252**		**-75,980**	**-52,397**	**-127,284**	**1,300,810**	**24,600**	**1,325,410**
Change in accounting policies	B) c)			-9,315	-28,252	28,423		620		-8,524	-167	-8,691
BALANCE AS OF JANUARY 1, 2018		**104,000**	**36,476**	**1,378,428**		**28,423**	**-75,980**	**-51,777**	**-127,284**	**1,292,286**	**24,433**	**1,316,719**
Net income				221,991						221,991	-2,298	219,693
Other comprehensive income						-19,936	-6,160	-13,689		-39,785	-236	-40,021
Total comprehensive income				**221,991**		**-19,936**	**-6,160**	**-13,689**		**182,206**	**-2,534**	**179,672**
Dividends	22.			-156,642						-156,642	-2,388	-159,030
Changes from acquisitions											32	32
Changes in treasury shares	22.			95					-3,650	-3,555		-3,555
Changes concerning share option programs	22.			2,965						2,965		2,965
Transactions with non-controlling interests				-2,003						-2,003	2,003	
Changes in consolidation type	22.			35						35	-6,042	-6,007
Other changes				816		44		-860		0		
BALANCE AS OF DECEMBER 31, 2018		**104,000**	**36,476**	**1,445,685**		**8,531**	**-82,140**	**-66,326**	**-130,934**	**1,315,292**	**15,504**	**1,330,796**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

As of December 31, 2018

A) GENERAL INFORMATION

ANDRITZ AG is incorporated under the laws of the Republic of Austria and has been listed on the Vienna Stock Exchange since June 2001. The registered office address of ANDRITZ AG, the parent company of the ANDRITZ GROUP, is at Stattegger Strasse 18, 8045 Graz, Austria. The ANDRITZ GROUP (the "Group" or "ANDRITZ") is a leading producer of high-technology industrial machinery and operates through four strategic business areas: Hydro, Pulp & Paper, Metals, and Separation.

The consolidated financial statements are prepared under the responsibility of the Executive Board and are acknowledged by the Supervisory Board and the Annual General Meeting. On February 25, 2019, the Executive Board authorized the consolidated financial statements for the year ending on December 31, 2018.

Various amounts and percentages set out in these consolidated financial statements have been rounded. As a result, totals may differ from the amounts shown. If not stated otherwise, amounts are given in thousands of euros (TEUR).

B) ACCOUNTING PRINCIPLES

The financial statements were prepared in accordance with all International Financial Reporting Standards (IFRS) published by the International Accounting Standards Board (IASB) and endorsed by the European Union, whose application is mandatory for 2018. All interpretations published by the International Financial Reporting Interpretations Committee (IFRIC), which also have to be observed for 2018, were applied. The consolidated financial statements meet the requirements of section 245a UGB (Austrian Commercial Code) on exempting consolidated financial statements according to internationally accepted accounting standards.

a) Standards and interpretations that are applicable for the first time

In 2018, the following new, revised, and supplemented standards by the IASB as well as interpretations of the IFRIC are to be considered mandatory:

Standard/Interpretation	Title	Effective for annual financial statements for periods beginning on or after	Endorsement by EU
IAS 40	Amendment: Transfers of investment property	January 1, 2018	March 14, 2018
IFRS 1 and IAS 28	Annual improvements of IFRS (cycle 2014-2016)	January 1, 2018	February 7, 2018
IFRS 2	Amendment: Classification and measurement of share-based payment transactions	January 1, 2018	February 26, 2018
IFRS 4	Amendment: Applying IFRS 9 Financial instruments with IFRS 4 Insurance contracts	January 1, 2018	November 3, 2017
IFRS 9	Financial instruments	January 1, 2018	November 22, 2016
IFRS 15	Revenue from contracts with customers	January 1, 2018	September 22, 2016
IFRS 15	Clarification: Revenue from contracts with customers	January 1, 2018	October 31, 2017
IFRIC 22	Foreign currency transactions and advance consideration	January 1, 2018	March 28, 2018

IFRS 15 – Revenue from contracts with customers

IFRS 15 sets out a 5-step recognition model for revenue from contracts with customers. According to IFRS 15, revenue recognition must reflect the transfer of goods or services promised to customers in an amount that reflects the consideration to which the entity expects to be entitled to in exchange for those goods or services. This standard supersedes all existing regulations on revenue recognition (IAS 11 – Construction contracts and IAS 18 – Revenue) under IFRS.

IFRS 9 – Financial instruments

IFRS 9 sets out the requirements for the recognition and measurement of financial assets, financial liabilities, and, for some contracts for the purchase or sale of non-financial items. This standard supersedes IAS 39 – Financial instruments: recognition and measurement.

The disclosures on the first-time application of IFRS 15 – Revenue from contracts with customers and IFRS 9 – Financial instruments can be found in chapter B) c) First-time application of IFRS 15 – Revenue from contracts with customers and IFRS 9 – Financial instruments.

Other

IFRIC 22 regulates the accounting of transactions that involve the receipt or payment of consideration in foreign currencies. It clarifies the point in time at which the exchange rate is to be determined for the translation of transactions in foreign currencies that contain advanced payments received or made.

The amendments to **IAS 40** clarify that an entity may transfer a property to or from its investment property only if there is evidence of a change in use.

The amendments to **IFRS 2** include regulations considering both, market-related and non-market-related conditions in the measurement of cash-settled commitments as well as the classification of share-based payments received by tax assessment.

The amendments to **IFRS 4** include additions to the previously decided postponement or overlay approach for companies whose primary activity is in the insurance business.

The **annual improvements of IFRS (cycle 2014-2016)** include clarifications to IFRS 1 – First-time adoption of International Financial Reporting Standards as well as to IAS 28 – Investments in associates and joint ventures.

These amended standards have no or no material effect on ANDRITZ.

b) Standards and interpretations, which have been published but are not yet applied

The International Accounting Standards Board (IASB) is working on numerous projects that will only have an effect on the financial years 2019 and onwards. ANDRITZ has not adopted the following accounting pronouncements that have been issued by the IASB, but are not yet effective:

Standard/Interpretation	Title	Effective for annual financial statements for periods beginning on or after	Endorsement by EU
IAS 19	Amendment: Plan amendment, curtailment or settlement	January 1, 2019	planned Q1 2019
IAS 28	Amendment: Long-term interests in associates and joint ventures	January 1, 2019	February 8, 2019
IAS 23, IFRS 3, IFRS 11	Annual improvements of IFRS (cycle 2015-2017)	January 1, 2019	planned Q1 2019
IFRS 9	Amendment: Prepayment feature with negative compensation	January 1, 2019	March 22, 2018
IFRS 16	Leasing	January 1, 2019	October 31, 2017
IFRIC 23	Uncertainty over income tax treatments	January 1, 2019	October 23, 2018
IFRS 3	Amendment: Definition of a business	January 1, 2020	planned 2019
IAS 1 and IAS 8	Amendment: Definition of material	January 1, 2020	planned 2019
	Amendments to references to the conceptual framework in IFRS standards	January 1, 2020	planned 2019
IFRS 17	Insurance contracts	January 1, 2021	pending

IFRS 16 – Leases

The central idea of IFRS 16 is to record all leases and related contractual rights and obligations on the balance sheet of the lessee. For all leases, the lessee recognizes a lease liability for the obligation to make lease payments in the future. At the same time, the lessee capitalizes a right to use the underlying asset, which basically corresponds to the present value of the future lease payments plus directly attributable costs. The differentiation between finance and operating leases previously required under IAS 17 – Leases is no longer applicable to the lessee. For the lessor, however, the requirements of the new standard are similar to the previous requirements of IAS 17.

As of December 31, 2017, ANDRITZ has published the results of an initial assessment of the potential impact of the application on IFRS 16 on the consolidated financial statements. The main tasks in the project around IFRS 16 were next the content analysis of the standard, preparation of the notes, and revision of the accounting policy, the implementation of an IT system and the set-up of a harmonized Group-wide monthly process. The project is currently in the transition phase from initial data collection to an ongoing process. The actual effects of the application of IFRS 16 on the consolidated financial statements at the time of first-time adoption differ from the original assessment as of December 31, 2017 only slightly, as the economic conditions, such as the interest rate as of January 1, 2019, the composition of the leasing portfolios, the assessment of ANDRITZ on the exercise of extension options and the extent of the use of exemption clauses and waiver exemptions, occurred almost as expected.

IFRS 16 provides various transition methods. ANDRITZ has decided against early application and opted for the modified retrospective method. As a result, IFRS 16 will be applied for the first time on January 1, 2019, the previous year's comparative figures will not be adjusted and the right of use asset will be recognized in the amount of the lease liability (with the exception of advance payments/deferred payments). A retrospective valuation of the right of use asset was waived. All adjustment amounts are recognized in equity in the opening balance sheet in the year of initial application.

Furthermore, ANDRITZ has decided not to exercise the option of recognizing short-term contracts and low-value assets.

The new lease definition applies to all old and new contracts. Upon initial recognition of the contracts, all contracts were reassessed. The preservation of the original estimates for old contracts ("grandfathering" method) was not applied.

The following effects have been identified:

- ANDRITZ will recognize new assets and liabilities for operating leases for land and buildings, vehicles, and other tangible assets.

- As of the balance sheet date, the Group has non-cancellable obligations from operating leases amounting to 199 MEUR. The Group assumes that the balance sheet values of property, plant, and equipment and liabilities will increase by about 280 MEUR from the existing lease obligations.

- Most of the contracts, measured by number, originate from vehicle leases. The majority of the contracts, measured by the value of the right of use asset, originates from real estate lease agreements (around 260 MEUR).

- The structure of the expenses related with these leases will change as the linear expenses for operating leases are replaced by a depreciation charge on usage rights and interest expense on lease liabilities. As a result, Group EBITDA is expected to increase by about 50 MEUR. EBITA, which is the Group's key performance indicator, is expected to increase by around 5 MEUR.

- No significant impact on finance leases is expected.

IFRS 9 – Amendment: Prepayment feature with negative compensation

According to the previous requirements of IFRS 9, the cash flow condition is not met or a valuation at fair value through profit or loss is mandatory if the lender would have to make a settlement payment in the event of termination by the borrower (sometimes referred to as a prepayment gain). The amendment adapts the existing requirements of IFRS 9 so that measurement at amortized cost (or, depending on the business model, at fair value through profit or loss) can be applied, even in the case of negative compensation payments. According to the new regulation, the sign of the compensation payment is not relevant. Depending on the prevailing interest rate on termination, a payment is also possible in favor of the contracting party, which causes the early repayment. The calculation of this compensation payment must be the same, both, in the case of a prepayment penalty and in the case of a prepayment gain. This change is unlikely to have any material effect on ANDRITZ.

Other

The amendment to **IAS 19** requires a compulsory recalculation of the current service cost and the net interest using the current actuarial assumptions in the event of an amendment, curtailment or settlement of defined benefit plans.

The amendment to **IAS 28** clarifies the application of IFRS 9 to long-term interests in associates or joint ventures that form part of the net investment in these associates or joint ventures, but are not accounted using the equity method.

The **annual improvements of IFRS (cycle 2015-2017)** include clarifications to IAS 23 – Borrowing costs, IFRS 3 – Business combinations as well as to IFRS 11 – Joint arrangements.

IFRIC 23 clarifies the accounting for uncertainty over income tax treatments.

With the amendment to **IFRS 3**, the IASB clarifies that a business comprises a group of assets that contain at least one resource input and a substantial process, which together significantly contribute to the ability to produce output.

The amendments to **IAS 1** and **IAS 8** create a uniform definition of the materiality of financial information.

IFRS 17 regulates the recognition, measurement, presentation, and disclosures for insurance contracts.

The effects on the consolidated financial statements of ANDRITZ are currently reviewed.

c) First-time application of IFRS 15 – Revenue from contracts with customers and IFRS 9 – Financial instruments

ANDRITZ has applied the cumulative method for the conversion to **IFRS 15 – Revenue from contracts with customers** and **IFRS 9 – Financial instruments**. Due to the choice of the cumulative transition method, the consolidated statement of financial position and the consolidated income statement for the comparative period 2017 were not adjusted. The cumulative effects at the time of initial application, January 1, 2018, were recognized in equity and are as follows:

(in TEUR)	December 31, 2017	IFRS 9	IFRS 15	Deferred taxes	January 1, 2018
ASSETS					
Non-current assets					
Investments and other financial assets	170,471	5,199			175,670
Other receivables and assets	60,714	-41			60,673
Deferred tax assets	152,647			2,511	155,158
Current assets					
Inventories	761,013		2,248		763,261
Trade accounts receivable	891,980	-5,834	-26		886,120
Cost and earnings of projects under construction in excess of billings	599,550		-599,550		
Contract assets	0	-2,132	612,505		610,373
Other receivables and assets	341,183	-1,497	13,791		353,477
Investments	565,780	-1,010			564,770
Cash and cash equivalents	1,071,478	-166			1,071,312
SHAREHOLDERS' EQUITY AND LIABILITIES					
Shareholders' equity					
Retained earnings	1,160,334	-5,426	-5,273	2,176	1,151,810
Non-controlling interests	24,600	-55	-129	17	24,433
Non-current liabilities					
Provisions	582,058		-528		581,530
Deferred tax liabilities	87,892			318	88,210
Current liabilities					
Trade accounts payable	461,239		287		461,526
Billings in excess of cost and earnings of projects under construction	1,052,571		-1,052,571		
Contract liabilities recognized over time			1,362,545		1,362,545
Advance payments received	277,219		-277,219		
Contract liabilities recognized at a point in time			277,219		277,219
Provisions	484,079		-1,555		482,524
Other liabilities	942,979		3,412		946,391

IFRS 15 – Revenue from contracts with customers

The first-time application of IFRS 15 as of January 1, 2018 included a cumulative effect in the amount of 5,402 TEUR (before taxes) to reduce capital. This effect results from the following changes:

Fulfillment of the performance obligations

In accordance with IFRS 15, the revenue attributed to the performance obligations identified is only recognized when the customer has gained control of the underlying product or service. When concluding a contract, it has to be determined according to IFRS 15 whether the income resulting from the contract has to be recognized at a point in time or over time. In most cases, construction contracts that were previously accounted for using the percentage-of-completion method, also met the conditions for the over time revenue recognition in accordance with IFRS 15. Only a few construction contracts that were previously accounted for using the percentage-of-completion method in accordance with IAS 11 changed to the point in time revenue recognition method because the prerequisites for over time revenue recognition in accordance with IFRS 15 were not met. Over time revenue recognition in accordance with performance progress is made using input- or output-oriented methods. In few cases, there was a change in the method of measuring the performance progress as well as a change between over time and at a point in time revenue recognition.

Contract costs

IFRS 15 stipulates the recognition of costs incurred by a company in connection with the initiation and fulfillment of contracts for the supply of goods and services to customers. Contract costs that can be directly attributed to the initiation of the contract (at ANDRITZ mainly sales commissions) must be capitalized in accordance with IFRS 15. These capitalized contract costs have to be written off analogously to the transfer of control of the goods and services to the customer. As of January 1, 2018 this change resulted in a capitalization of contract costs in the amount of 14 MEUR that were recorded in other receivables.

Determination of the transaction price

The basis of the new regulations for determining the transaction price is the consideration expected by the company. This should correspond to the amount to which the company is entitled under the existing contract. When determining the transaction price, fixed and variable components (at ANDRITZ in individual cases especially penalties) must be assessed and estimated in accordance with IFRS 15 at the time of conclusion of the contract. As a result, the over time realization of revenue leads to a shift in the stage of completion and thus to a shift in revenue recognition. The impact on revenue recognition was of minor importance.

Key financing components

For certain transactions, the timing of the payment and the timing of the transfer of control over goods or services to the customer are not the same. This is the case, if the consideration is paid in advance or after the delivery of the goods or rendering of the service. There was no impact on financial position, financial performance, and cash flow of the Group as of January 1, 2018.

The following tables show the described changes to the consolidated statement of financial position and to the consolidated income statement of the ANDRITZ GROUP as of December 31, 2018. The impact on the consolidated statement of cash flows as of December 31, 2018 is of minor importance.

Impact on the consolidated statement of financial position as of December 31, 2018

(in TEUR)	Amounts reported as of December 31, 2018	Adjustments	Amounts without application of IFRS 15
ASSETS			
Non-current assets			
Deferred tax assets	167,157	8,207	175,364
Current assets			
Inventories	869,274	109,376	978,650
Cost and earnings of projects under construction in excess of billings		736,802	736,802
Contract assets	786,354	-786,354	
Other receivables and assets	304,233	-13,005	291,228
SHAREHOLDERS' EQUITY AND LIABILITIES			
Total shareholders' equity	**1,330,796**	**-23,957**	**1,306,839**
Non-current liabilities			
Deferred tax liabilities	184,368	2,851	187,219
Provisions	579,710	-243	579,467
Current liabilities			
Billings in excess of cost and earnings of projects under construction		976,850	976,850
Contract liabilities recognized over time	1,003,518	-1,003,518	
Advance payments received		372,427	372,427
Contract liabilities recognized at a point in time	277,116	-277,116	
Provisions	437,977	-1,355	436,622

Impact on the consolidated income statement for the 2018 financial year

(in TEUR)	Amounts reported as of December 31, 2018	Adjustments	Amounts without application of IFRS 15
Sales	**6,031,455**	**-100,745**	**5,930,710**
Changes in inventories of finished goods and work in progress	-3,372	91,926	88,554
Capitalized cost of self-constructed assets	1,835		1,835
	6,029,918	**-8,819**	**6,021,099**
Other operating income	89,270		89,270
Cost of materials	-2,987,737	1,597	-2,986,140
Personnel expenses	-1,786,998		-1,786,998
Other operating expenses	-846,404	-13,005	-859,409
Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA)	**498,049**	**-20,227**	**477,822**
Depreciation, amortization, and impairment of intangible assets and of property, plant, and equipment	-160,550		-160,550
Impairment of goodwill	-15,884		-15,884
Earnings Before Interest and Taxes (EBIT)	**321,615**	**-20,227**	**301,388**
Financial result	**-17,381**		**-17,381**
Earnings Before Taxes (EBT)	**304,234**	**-20,227**	**284,007**
Income taxes	-84,541	5,356	-79,185
NET INCOME	**219,693**	**-14,871**	**204,822**

IFRS 9 – Financial instruments

The first-time application of IFRS 9 as of January 1, 2018 included a cumulative effect of 5,481 TEUR (before taxes) to reduce capital. This effect is entirely attributable to changes in financial assets. The first-time adoption of IFRS 9 had no impact on financial liabilities. The nature and effect of changes in previous accounting policies and details of the new significant accounting policies are set out below.

A separate presentation of the impairment losses in the income statement according to IAS 1.82 (ba) was not made due to materiality considerations. The impairment losses can be found in chapter L) a) Credit risks.

Classification – Financial assets

IFRS 9 includes a new classification and measurement approach for financial assets that reflects the business model in which the assets are held as well as the characteristics of their cash flows. IFRS 9 contains three important classification categories for financial assets: measured at amortized cost, measured at fair value through profit or loss (FVTPL), and measured at fair value through other comprehensive income (FVTOCI). The standard eliminates the existing categories of IAS 39: held to maturity, loans and receivables, and available for sale. According to IFRS 9, derivatives embedded in contracts for which the basis is a financial asset within the scope of the standard are never accounted for separately. Instead, the hybrid financial instrument is assessed as a whole in terms of measurement.

The classification and valuation of financial assets can be reconciled from IAS 39 to IFRS 9 as follows:

(in TEUR)	Original classification under IAS 39	New classification under IFRS 9	Net book value as of December 31, 2017	Net book value as of January 1, 2018*	IFRS 9 Adjustment
Measured at fair value					
Investments: Debt instruments	Available for sale	At fair value through profit and loss	107,248	107,248	
Investments: Equity instruments	Available for sale	At fair value through OCI	33,492	33,492	
Shares in non-consolidated companies	Available for sale	At fair value through profit and loss	11,892	17,109	5,217
Other shares	Available for sale	At fair value through OCI	604	604	
Derivatives: Foreign exchange forward contracts	Held for trading	At fair value through profit and loss	67,686	67,686	
Derivatives: Interest rate swaps	Hedge accounting	At fair value through profit and loss	9,518	9,518	
Measured at amortized costs					
Investments: Debt instruments	Available for sale	At amortized costs	495,870	494,842	-1,028
Miscellaneous other financial assets	Loans and receivables	At amortized costs	7,145	7,145	
Trade accounts receivable	Loans and receivables	At amortized costs	891,980	886,146	-5,834
Other receivables and assets	Loans and receivables	At amortized costs	132,334	130,796	-1,538
Other receivables and assets	No IAS 39 valuation category	No IFRS 9 valuation category	172,359	172,359	
Schuldscheindarlehen	Loans and receivables	At amortized costs	100,000	100,000	
Cash and cash equivalents	Loans and receivables	At amortized costs	1,071,478	1,071,312	-166
Cost and earnings of projects under construction in excess of billings / Contract assets	No IAS 39 valuation category	No IFRS 9 valuation category	599,550	597,418	-2,132
TOTAL					**-5,481**

* These carrying amounts refer only to the amendments made by IFRS 9. The effects of IFRS 15 can be seen in the previous chapter to reconcile to the actual carrying amounts as of January 1, 2018.

Investments were categorized as available for sale in accordance with IAS 39 and, with the exception of permanent impairments, are measured at fair value through OCI. In accordance with IFRS 9, the investments are classified as equity and debt instruments and assessed by business model and cash flow analysis. Shares, as equity instruments, are generally measured at fair value through profit or loss. If there is no intention to trade, an option for valuation without effect on profit or loss can be exercised at initial recognition. This option is used, which results in a valuation through OCI. Debt instruments include funds and other financial instruments. These instruments are measured at fair value through profit or loss in accordance with IFRS 9, because the cash flow criteria are not met within the exception of time deposits, which are measured at amortized cost, because the conditions of cash flow analysis are met and a business model without trading intent is in place.

Derivatives include foreign currency forward contracts and interest rate swaps. These instruments are further measured at fair value through profit or loss. In accordance with IFRS 9, derivatives are always measured at fair value through profit or loss. Therefore, a detailed analysis is not required.

The interests in non-consolidated companies and other investments were categorized and measured as available for sale in accordance with IAS 39. Corresponding to IFRS 9, these instruments are classified as equity instruments and measured accordingly, which resulted in a revaluation of 5,217 TEUR. There is no intention to trade these instruments. The option to designate instruments at initial recognition to valuation through OCI is carried out for other investments.

Receivables and other financial assets continue to be measured at amortized cost. Since these are debt instruments, it was determined that the cash flow criteria are met and a business model without trading intent is given. Due to the extended impairment regulations, an additional impairment loss is recorded, which is explained in detail below.

Impairment – Financial assets and contract assets

IFRS 9 replaces the incurred losses model of IAS 39 with a forward-looking model of "expected credit losses". This requires considerable judgment on the extent to which expected credit losses are affected by changes in economic factors. The respective estimation was determined on the basis of weighted probabilities.

The new impairment model was applied to financial assets that are measured at amortized cost, debt instruments measured at FVTOCI, and contract assets.

In accordance with IFRS 9, valuation allowances were valued on one of the following bases:

- 12-month credit losses: These are expected credit losses due to possible defaults within 12 months after balance sheet date.

- Lifetime credit losses: These are expected credit losses due to all possible defaults during the expected lifetime of a financial instrument.

The measurement according to the concept of lifetime credit losses is applicable if the credit risk of a financial asset has increased significantly between initial recognition and the reporting date. Otherwise, the valuation has to be applied according to the concept of 12-month credit losses.

However, the concept of lifetime credit losses must always be applied to trade receivables and contract assets without a significant financing component. ANDRITZ also applies this method to contract assets with a significant financing component.

Impairment on financial assets within the scope of the impairment model of IFRS 9 has changed as follows:

- **Trade accounts receivable**: Estimated expected credit losses were calculated on the basis of experience of actual defaults over the past five years. Credit risk within the Group was segmented using common default risk characteristics such as credit risk assessment. The experience of actual defaults had been adjusted using scaling factors to reflect the differences between the economic conditions at the time the historical data was collected, the current conditions, and the Group's view of the economic conditions over the expected lifetime of the receivables. The scaling factor was based on forecasts of the gross domestic product (GDP) and unemployment rate as well as the industry outlook and was around 2 percent.

- **Contract assets:** Impairment requirements have been calculated based on internal credit risk reporting. Contract assets were valued differently, depending on whether there is collateral or not.

- **Other receivables:** Estimated expected credit losses were calculated on the basis of experience with actual defaults over the last five years and the consideration of a scaling factor.

- **Cash and cash equivalents and investments:** Cash and cash equivalents and time deposits included in "Investments" deposited at banks or financial institutions were rated as of December 31, 2017 from Aaa to B1 by the rating agency Moody's and from AA+ to BB+ by Standard & Poor's and Fitch. ANDRITZ monitors changes in default risk by observing published external credit ratings. The estimated allowances to cash and cash equivalents and time deposits included in "Investments" were calculated on the basis of expected losses within twelve months and reflect short maturities. ANDRITZ assumed that cash and cash equivalents as well as time deposits included under "Investments" have a low default risk based on the external ratings of banks and financial institutions. Parameters for financial loss ratios reflected an assumed recovery rate of 40 percent.

The application of the impairment regulations under IFRS 9 as of January 1, 2018 led to the following additional valuation allowances:

(in TEUR)

VALUATION ALLOWANCES AS OF DECEMBER 31, 2017 ACCORDING TO IAS 39	**47,386**
Additional impairment recognised as of January 1, 2018 on:	
Trade accounts receivable	5,834
Contract assets	2,132
Other receivables and assets	1,538
Time deposits	1,083
Cash and cash equivalents	111
VALUATION ALLOWANCES AS OF JANUARY 1, 2018 ACCORDING TO IFRS 9	**58,084**

Accounting of hedges

When applying IFRS 9 for the first time, ANDRITZ has the option of continuing to apply the accounting rules of IAS 39 for hedges instead of the requirements of IFRS 9. ANDRITZ has decided not to apply the new requirements of IFRS 9 on accounting of hedges.

C) CONSOLIDATION SCOPE

The consolidated financial statements include ANDRITZ AG and those companies ANDRITZ controls directly and indirectly, where their influence on assets, liabilities, financial position, and profit or loss of the Group is not of minor importance. The decision on inclusion is made on the basis of quantitative and qualitative considerations. Not fully consolidated were 43 (2017: 45) companies controlled by ANDRITZ; not accounted for at-equity were 7 (2017: 6) associated companies. They are recorded in item “Investments and other financial assets”. The entities of the Group are listed in chapter R) Group companies.

The consolidation scope changed as follows:

		2018		2017
	Full consolidation	Equity method	Full consolidation	Equity method
Balance as of January 1	**139**	**4**	**139**	**4**
Acquisition of companies	57	1	4	
Disposal of companies	-1	-2	-1	
New foundations	1		2	
Additions due to a change in consolidation type	3		1	
Mergers and liquidations	-9		-6	
Balance as of December 31	**190**	**3**	**139**	**4**
Thereof attributable to:				
Domestic companies	6	0	6	0
Foreign companies	184	3	133	4

The acquisition of companies is explained in subsection D) Acquisitions. The changes in the consolidation scope disclosed in the respective subsections of the notes to the consolidated statement of financial position are based on acquisitions of companies and changes in the consolidation type of subsidiaries. The company disposal is explained in chapter I) 21. Assets held for sale.

D) ACQUISITIONS

Xerium Technologies, Inc.

In June 2018, ANDRITZ AG signed a merger agreement to acquire a 100% stake in Xerium Technologies, Inc., headquartered in Youngsville, North Carolina, USA. The acquisition of Xerium Technologies, Inc. was closed successfully in October 2018. ANDRITZ acquired Xerium for $13.50 per share in cash; in a transaction valued at approximately 833 MUSD, including net financial liabilities of approximately 590 MUSD. Xerium's common stock was publicly traded on the New York Stock Exchange under the ticker XRM.

This acquisition complements the product portfolio of the Pulp & Paper business area. Xerium Technologies is a global manufacturer and supplier of machine clothing (forming fabrics, press felts, drying fabrics) and roll covers for paper, tissue, and board machines, including maintenance and aftermarket services. With its Smart® technology, the company provides a sophisticated digital software tool to optimize pressing performance by means of sensors integrated into the roll covers. Xerium has around 2,900 employees and operates more than 29 production facilities worldwide, including a site in Gloggnitz, Austria. In 2017, the company generated annual sales of 481 MUSD and an EBITDA of 85 MUSD, or 100 MUSD adjusted for extraordinary effects.

Due to this acquisition 47 fully consolidated companies were included in the consolidation scope of ANDRITZ.

Diatec S.r.l.

ANDRITZ GROUP has acquired a 70% stake in Diatec S.r.l. in cash. Diatec has around 70 employees and generates sales of around 30 MEUR. Diatec designs and manufactures a wide range of special machines and technological solutions, mainly for the production of baby diapers and other absorbent hygiene products. With this acquisition, ANDRITZ complements its product portfolio in the Pulp & Paper business area. The acquisition was closed in July 2018. Due to this acquisition one fully consolidated company was included in the consolidation scope of ANDRITZ.

For the remaining 30% stake in Diatec, there is a mutual put-call option, which was recognized as a liability as of December 31, 2018, in the amount of 23,775 TEUR. The option is included in "Other liabilities". The value of the contingent consideration is determined by assumptions about future developments.

Other acquisitions

HMI Canada Inc.

ANDRITZ GROUP has acquired a 100% stake in HMI Canada Inc., Canada, as well as in two other sister companies. HMI has over 60 years' experience in the energy sector, especially in the hydropower segment. Among other services, the company provides expertise for the repair and modernization of gates as well as other equipment for hydropower stations. HMI has around 100 employees in Québec city and Bouchervilly, QC and in Langley, BC, Canada. This acquisition complements the Hydro Business area's product portfolio. The acquisition was closed in November 2018. Due to this acquisition three fully consolidated companies were included in the consolidation scope of ANDRITZ.

ASKO, Inc.

ANDRITZ GROUP has acquired a 100% stake in ASKO, Inc., USA. ASKO has approximately 140 employees and generates annual sales of approximately 40 MUSD. ASKO manufactures a wide range of shear knives, blades, liners, wear plates, and accessories for the metals producing, processing, and recycling industries. This acquisition complements the Metals business area's product portfolio. The acquisition was closed in September 2018. Due to this acquisition three fully consolidated companies were included in the consolidation scope of ANDRITZ. Due to the minor importance for the assets, liabilities, financial position, and profit or loss one additional company will not be included in the consolidation scope.

Farina Presse S.p.A.

The Schuler Group, which belongs to ANDRITZ, has acquired a 100% stake in Farina Presse S.p.A., Italy. Farina has about 40 employees and generates sales of around 20 MEUR. Farina works in the fields forging and single-stroke presses and complements the product portfolio of the Metals (Forming) business area. The acquisition was closed in August 2018. Due to this acquisition two fully consolidated companies were included in the consolidation scope of ANDRITZ. Due to the minor importance for the assets, liabilities, financial position, and profit or loss one additional company will not be included in the consolidation scope.

Novimpianti Drying Technology S.r.l.

ANDRITZ GROUP has acquired a 100% stake in Novimpianti Drying Technology S.r.l., Italy. Novimpianti has about 40 employees and generates sales of about 10 MEUR. The company is a global supplier of engineered equipment and services for air and energy systems to the paper industry's leading manufacturers. With this acquisition, ANDRITZ complements its product portfolio in the Pulp & Paper business area. The acquisition was closed in July 2018. Due to this acquisition one fully consolidated company was included in the consolidation scope of ANDRITZ.

Other acquisitions

In the first half of 2018, ANDRITZ acquired individual assets and liabilities and took over employees of Metall-Konstruktions- und Betriebsmittelbau Zwickau GmbH & Co. KG, Germany. MKB is specialized in the production of prototypes and small series in the automotive sector. The acquisition complements the product portfolio in the Metals business area. In addition, another asset deal was closed, which is also attributable to the Metals business area.

In June 2018, ANDRITZ acquired a 51% stake in a joint venture in Sweden (now ANDRITZ Technologies AB). The company is assigned to the Pulp & Paper business area. Due to the minor importance for the assets, liabilities, financial position, and profit or loss the company will not be included in the consolidation scope.

The goodwill of the acquired companies results mainly from the skills and technical talent of the workforce and the expected synergies from the integration into the ANDRITZ GROUP. The recorded goodwill is not expected to be deductible for tax purposes.

Preliminary fair values at the acquisition date

The preliminary fair values of the assets acquired and liabilities assumed are as follows:

(in TEUR)	Xerium	Diatec	Others	Total
Intangible assets	199,425	40,903	23,039	263,367
Property, plant, and equipment	315,204	5,794	18,153	339,151
Deferred tax assets	4,367	0	0	4,367
Inventories	67,487	3,401	18,520	89,409
Trade accounts receivable	71,191	3,961	19,259	94,411
Contract assets	0	11,101	1,563	12,664
Cash and cash equivalents	7,491	12,902	12,181	32,574
Receivables from current taxes	7,735	0	472	8,207
Other assets	23,139	2,323	2,876	28,338
Deferred tax liabilities	-59,487	-12,473	-6,013	-77,973
Bonds	-436,213	0	0	-436,213
Bank loans and other financial liabilities	-44,116	-16,229	-9,332	-69,677
Provisions	-59,333	-2,163	-3,060	-64,557
Contract liabilities recognized at a point in time	-2,459	-520	-4,444	-7,423
Contract liabilities recognized over time	0	-1,823	-3,281	-5,104
Trade accounts payable	-25,601	-8,545	-8,772	-42,918
Liabilities for current taxes	-18,971	-1,330	-2,753	-23,053
Other liabilities	-54,829	-2,444	-8,833	-66,107
Net assets	**-4,969**	**34,857**	**49,576**	**79,464**
Non-controlling interests	-32	0	0	-32
Goodwill	205,251	33,928	12,291	251,470
CONSIDERATION TRANSFERRED	**200,250**	**68,785**	**61,867**	**330,903**

Due to time constraints and the fact that valuations have not been finalized yet, the initial accounting of all assets acquired and liabilities assumed is based on preliminary figures. If new information, obtained within one year of the date of acquisition about facts and circumstances that existed at the date of acquisition, identifies adjustments to the above amounts, or any additional provisions that existed at the date of acquisition, the accounting for the acquisition will be revised. Transaction costs directly related to the business combination are recognized as an expense incurred. The acquired receivables do not contain any receivables expected to be uncollectible.

Since the first-time consolidation the acquisitions have contributed to ANDRITZ as follows:

(in TEUR)	Xerium	Diatec	Others	Total
Sales	106,009	21,697	22,102	149,807
Earnings Before Interest and Taxes (EBIT)	-9,463	-3,355	-3,349	-16,167

If the businesses had been acquired at the beginning of the financial year 2018, they would have contributed to the ANDRITZ GROUP as follows:

(in TEUR)	Xerium	Diatec	Others	Total
Sales	423,060	59,012	90,841	572,913
Earnings Before Interest and Taxes (EBIT)	926	-4,367	-2,926	-6,366

E) ACCOUNTING POLICIES

With the exception of the amendments resulting from the first-time application of new standards (see chapter B) c) First-time application of IFRS 15 – Revenue from contracts with customers and IFRS 9 – Financial instruments) ANDRITZ has consistently applied all accounting policies adopted in preparing the consolidated financial statements to all periods presented.

a) Consolidation principles

The separate financial statements of all fully consolidated companies compiled in accordance with uniform standards throughout the Group and complying with IFRS provisions form the basis of the consolidated financial statements. Intercompany receivables, liabilities, and internal service charges, including interim results within the Group, were eliminated. The consolidated financial statements were compiled on the basis of uniform accounting principles for comparable business transactions.

Business combinations are accounted for by applying the acquisition method, whereby the purchase price is offset against the revalued net assets of the acquired company (capital consolidation). In doing so, the values at the acquisition date, which is the date on which control of the acquiree was obtained, are used as a basis. The acquired identifiable assets, liabilities, and contingent liabilities are generally recognized at their fair values irrespective of the extent attributable to non-controlling interests. Application of the acquisition method requires certain estimates and assumptions to be made, especially concerning the fair values of the intangible assets and property, plant, and equipment acquired, the liabilities assumed at the acquisition date, and the useful lives of the intangible assets and the property, plant, and equipment acquired. Non-controlling interests can be measured either at cost (partial goodwill method) or at fair value (full goodwill method). The choice of method can be made on a case-by-case basis. It is general practice within the ANDRITZ GROUP to use the partial goodwill method. In step acquisitions, where a company is acquired in several stages, the fair values of the acquired entity's assets and liabilities are measured in accordance with IFRS 3 – Business Combinations at the date on which control is obtained. Any resulting adjustments to the fair value of the existing interest are recognized in profit or loss. The carrying amount of the assets and liabilities already recognized in the statement of financial position is then adjusted accordingly.

b) Subsidiaries

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to or has rights to variable returns from its involvement with the entity and has the ability to affect those returns through its power of disposition over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control is obtained until the date on which control is lost. Changes in the Group's share in a subsidiary that do not result in a loss of control are accounted for as equity transactions. When the Group loses control over a subsidiary, it derecognizes the assets and liabilities of the subsidiary, any related non-controlling interests, and other components of equity. Any resulting gain or loss is recognized through profit or loss.

c) Currency translation

The consolidated financial statements are compiled in euros.

Foreign currency transactions

Foreign currency transactions are recorded in the functional currency by applying the exchange rate between the functional 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 subsidiaries

Foreign consolidated subsidiaries are regarded as foreign operations because they are financially, economically, and organizationally autonomous. Their functional currencies are generally their respective local currencies. Items of the statement of financial position of foreign subsidiaries are translated at year-end rates to the presentation currency (EUR). Expenses and income are translated using the average exchange rates for the year. All resulting translation differences are included in currency translation adjustments in equity.

The major exchange rates used for foreign currency translation are as follows:

In number of units per 1 EUR		Rate at reporting date		Average rate for year	
Currency		December 31, 2018	December 31, 2017	2018	2017
BRL	Brazilian real	4.44	3.97	4.31	3.61
CAD	Canadian dollar	1.56	1.50	1.53	1.47
CHF	Swiss franc	1.13	1.17	1.15	1.11
CNY	Chinese renminbi yuan	7.88	7.80	7.81	7.63
DKK	Danish kroner	7.47	7.44	7.45	7.44
GBP	British pound	0.89	0.89	0.88	0.88
INR	Indian rupee	79.73	76.61	80.73	73.62
SEK	Swedish kronor	10.25	9.84	10.26	9.64
USD	US dollar	1.15	1.20	1.18	1.13

d) Sales

Revenue covers all income resulting from the ANDRITZ GROUP's typical business activities and is generated in accordance with IFRS 15 from contracts with customers. Accordingly, ANDRITZ recognizes revenue when control of a promised product or service is transferred to a customer.

The rules of IFRS 15 are implemented as part of the 5-step model: the model starts with the identification of the contract with the customer, followed by the identification of separate performance obligations. According to this, separately identifiable services as well as bundles of prodcts and services are to be separated. In the third step, the transaction price is determined. The transaction price is the amount of the consideration to which the supplying company is entitled as expected in exchange for the goods or services supplied. Subsequently, the transaction price is split up to the identified performance obligations. In the last step, the revenue recognition is realized when the performance obligation is satisfied. Revenue recognition is realized either over time or at a point in time.

The vast majority of revenues at ANDRITZ are recognized **over time**. Over time revenue recognition in accordance with performance progress is made using in- or output-oriented methods. Projects that are recognized over time are characterized by fixed prices agreed upon on the basis of individual contract terms. The performance progress is established mainly by the input-oriented method ("cost-to-cost method"). In applying the cost-to-cost method, sales and profits are recorded in consideration of the ratio of accumulated costs to the estimated total costs to complete. Changes to total estimated project costs and losses, if any, are recognized in the income statement for the period in which they are determined. An individually assessed amount is included in the estimated project costs for each project for technological and financial risks that might occur during the remaining project period. Impending losses out of the valuation of projects are recognized when it is probable that the total project costs will exceed the sales. For possible costs of rectification, provisions are accounted for according to the profit realization. Upon completion of a project, the remaining warranty risk is reassessed.

If the criteria according to IFRS 15 for revenue recognition over time are not met, the revenue is recognized **at a point in time**. At ANDRITZ, a customer obtains control over a promised product or service, mainly when the asset is accepted or when the risks and rewards of ownership are transferred.

The criteria for revenue recognition by sales category are explained in detail in chapter G) 1. Sales.

In the comparative period, revenues were recognized when the significant risks and rewards of ownership of the goods and products sold were transferred and when it was reasonably probable that the business would benefit from the sale and the amount could be reliably determined. Revenue from construction contracts was recognized in the comparative period according to the performance progress in accordance with the percentage of completion method in accordance with IAS 11.

Contract balances

If advance and partial payments received from customers exceed the performance progress in the context of the revenues recognized over time, contract liabilities from sales recognized over time are accounted, otherwise contract assets are recognized. Advance payments received from customers for projects recognized at a point in time, are shown in the balance sheet as contract liabilities from sales recognized at a point in time.

Contract assets and liabilities are within the ordinary business cycle of ANDRITZ and are reported as current assets or liabilities. Amounts originally reported as contract assets are reclassified to trade receivables at the time they are invoiced to customers. If several contracts with a customer are to be combined into one package, the contract assets or contract liabilities are netted.

e) Income taxes

Income taxes include current and deferred taxes. Current and deferred taxes are recognized in profit or loss except to the extent that the taxes are linked to a business combination or to items recognized in other comprehensive income. Current taxes are the expected tax due (or tax receivable) on the taxable income (or the tax loss) for the financial year based on the applicable income tax rates and all adjustments to the tax debt in respect of previous years. Actual tax liabilities also contain all tax debts arising as a result of dividends being declared. Current tax receivables and liabilities are offset if a legal right exists towards a tax authority to settle on a net basis. In the case of values determined in tax statements that cannot be realized the expected effects of these uncertain tax positions are considered.

Deferred taxes are recognized in respect of temporary differences between the net book value of assets and liabilities in the IFRS consolidated financial statements and their tax bases at the level of the subsidiaries. Deferred taxes are not recognized for

- taxable temporary differences in the initial recognition of goodwill
- temporary differences in the initial recognition of assets or liabilities in a business transaction which is not a business combination and affects neither the accounting profit nor the taxable profit
- temporary differences in connection with shares in subsidiaries, associated companies, and joint ventures provided that the Group is able to control the timing of the reversal of the temporary difference and it is likely that the temporary difference will not be reversed in the foreseeable future.

Deferred taxes are measured in accordance with the taxation rates (and regulations) applicable on the balance sheet date or which have essentially been passed as law and are expected to be applicable on the date when the deferred tax credits are realized or deferred tax liabilities are settled. A deferred tax asset is recognized for unused tax losses, unused tax credits, and deductible temporary differences to the extent that it is probable that future taxable profit will be available against which it can be utilized. Deferred tax credits are assessed at every reporting date and reduced to the extent to which it is no longer likely that the related tax advantage will be realized. Provided that the deferred taxes relate to the same taxable entity and the same tax authority and that there is also a legally enforceable right to offset actual tax receivables against actual tax liabilities, deferred tax assets and liabilities are offset.

Within ANDRITZ GROUP, a tax group consists of ANDRITZ AG as head and ANDRITZ HYDRO GmbH as member of the tax group according to section 9 KStG 1988 (Austrian Corporate Tax Act). A tax compensation agreement was concluded. Furthermore, four fiscal unities with profit and loss absorption agreements exist between selected affiliated companies in Germany. In addition, comparable tax groups exist in the USA, United Kingdom, the Netherlands, France, and Italy.

f) Intangible assets

Intangible assets are accounted for at cost. After initial recognition, intangible assets are accounted for at cost less accumulated amortization and any accumulated impairment losses. The intangible assets have a finite useful life and are therefore 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 the end of the fiscal year.

Intangible assets are reviewed for impairment losses whenever events or changes in circumstances indicate that the net book value of an asset may be higher than the amount recoverable (the higher amount of fair value less costs to sell and value in use of an asset or of a cash generating unit). Whenever the net book value of an asset exceeds its recoverable amount, an impairment loss is recognized.

Amortization is calculated on a straight-line basis using the following estimated useful lives:

Concessions, industrial rights, and similar rights	3 - 15 years
Customer relationships	3 - 10 years
Order backlog	1 - 3 years
Technology	3 - 10 years
Brand names	7 - 10 years

Research costs are expensed as incurred. Development costs required for projects are recognized as part of the contract costs.

g) Goodwill

IFRS 3 is applied for business combinations and any resulting goodwill. According to this standard, goodwill is measured as the residual of the cost of the business combination after recognizing the acquired identifiable assets, liabilities, and contingent liabilities at fair value. Following a review of the amounts stated, the resulting value from the comparison of cost and fair value of the net assets of the acquired negative goodwill is recognized immediately in the income statement.

Goodwill is not amortized, but tested for impairment. This test has to be performed at least annually or more frequently if events or changes in circumstances indicate a need for impairment. ANDRITZ performs the annual goodwill impairment test at December 31 of each business year. In determining whether the recognition of an impairment loss is required, goodwill is allocated to the cash generating units that are expected to benefit from the synergies of the business combination. If the net book value exceeds the value in use which is calculated by using a discounted cash flow (DCF) calculation and the fair value less costs of disposal is not higher, an impairment loss is recognized. An impairment loss recognized for goodwill will not be reversed in a subsequent period.

The planning is done at the level of the cash generating units for the next three years. Future payment surpluses are based on internal forecasts, which are prepared in detail for the next financial year and with simplifications for the subsequent two years, reflecting the historical performance and best estimates on future developments. After this detailed planning horizon a normalized development is assumed.

The discount rate used for the DCF calculation is based on an interest rate representing the actual assessment of possible changes in exchange rates as well as specific risks of an asset. In consideration of the applicable currency and the corresponding risk profile, a discount rate before tax was applied.

In case the compositions of the original cash generating units change in the course of time due to reorganizations and changes in the reporting structure, the goodwill is reallocated accordingly.

h) Property, plant, and equipment

Property, plant, and equipment are measured at cost less accumulated depreciation and any accumulated impairment losses. When assets are sold or retired, their costs and accumulated depreciation are removed from the accounts and any resulting gain or loss is included as other operating income or as other operating expenses in the income statement. The cost of property, plant, and equipment comprises its purchase price including import duties and non-refundable purchase taxes as well as any directly attributable costs of bringing it to the appropriate location for its intended use and putting the asset into working condition. The production costs of self-constructed assets contain direct material and production costs as well as adequate indirect material and production costs. Expenditure incurred after the fixed assets have been put into operation, such as maintenance and repair, is charged to the income statement in the period in which the costs are incurred.

Assets under construction are considered as plant and properties under construction and are stated at cost.

Depreciation is calculated on a straight-line basis using the following estimated useful lives:

Buildings	20 - 50 years
Technical equipment and machinery	4 - 10 years
Tools, office equipment, and vehicles	3 - 10 years

The useful lives and the depreciation method 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.

Property, plant, and equipment are reviewed for impairment losses whenever events or changes in circumstances indicate that the net book value of an asset may be higher than the amount recoverable (the higher amount of fair value less costs to sell and value in use of an asset or of a cash generating unit). Whenever the net book value of an asset exceeds its recoverable amount, an impairment loss is recognized. Recoverable amounts are estimated for individual assets or, if this is not possible, for the cash generating unit.

Government grants

Government grants related to assets are deducted from the cost of the asset. Grants related to income are recorded as other operating income in the income statement.

Borrowing costs

Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are generally capitalized as part of the cost of the asset. All other costs of borrowing are expensed in the period in which they are incurred.

i) Leases

A lease is an agreement whereby the lessor assigns the lessee the right to use an asset for an agreed period of time in return for a payment or series of payments. Leases are classified as either finance or operating leases. Leasing transactions that transfer substantially all risks and rewards incidental to ownership of the leased asset to the lessee are classified as finance leases. All other leasing agreements are classified as operating leases.

Where ANDRITZ is the lessee in a finance lease, the leased asset is capitalized at the lower of the fair value or present value of the minimum lease payments at the beginning of the lease term and recognized simultaneously as financial liabilities. The leased asset is depreciated by the straight-line method over the expected useful life or, if shorter, over the term of the relevant lease according to IAS 17. When the Group is the lessee in an operating lease, the lease payments are generally expensed on a straight-line basis over the term of the leasing agreement. The leased asset remains on the statement of financial position of the lessor as property, plant, and equipment.

Where ANDRITZ is the lessor, the lease receivables are recognized by lessees as receivables equal to the net investment of the Group in the leases. The income from finance leases is allocated to the accounting periods to reflect a constant periodic return on the Group's outstanding net investment in respect of the leases. Rental income from operating leases is recognized on a straight-line basis over the term of the respective lease. The initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognized on a straight-line basis over the term of the lease.

j) Shares in associated companies

Associated companies are those entities which the Group has significant influence on, but not control or joint control over the financial and operating policies. Associated companies are accounted for at equity and are initially recorded at cost.

k) Investments and other financial assets

Non-current investments and other financial assets consist primarily of non-current securities, Schuldschein-darlehen, shares in non-consolidated companies, and other shares.

The current investments consist mainly of government bonds, bonds of top-rated banks, money market funds, and time deposits. They are held for the purpose of investing liquid funds and are not generally intended to be retained on a long-term basis.

Details on valuation are explained in chapter E) u) Financial instruments.

l) Trade accounts receivable

Receivables are initially recognized at fair value and subsequently at amortized cost after valuation allowances for doubtful accounts. Details on the valuation are explained in chapter E) u) Financial instruments.

m) Inventories

Inventories, including work in progress and unfinished services, are valued at the lower of purchase or production cost and net realizable value after valuation allowances for obsolete and slow-moving items. The net realizable value is the selling price in the ordinary course of business minus 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 is fully written-off. Contracts recognized at a point in time are valued at production cost. Changes in inventories of finished goods and work in progress serve to neutralize expenses for inventories still in stock on the balance sheet date.

n) Cash and cash equivalents

Cash includes cash in hand and cash at banks. Cash equivalents comprise short-term investments that have original maturities of three months or less and are subject to an insignificant risk of changes in value. Details on the valuation are explained in chapter E) u) Financial instruments.

o) Share capital

Only ordinary shares exist and all shares have been issued and have the same rights. The share capital of ANDRITZ AG amounts to 104,000 TEUR, divided into 104 million shares of no-par value.

p) Capital reserves

The capital reserves include additional payments from shareholders on the issue of shares.

q) Retained earnings

Retained earnings predominantly include retained income, fair value reserve, actuarial gains and losses, and currency translation adjustments.

r) Provisions

A provision is recognized when the enterprise has a current obligation (legal or constructive) as a result of a past event and it is probable 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 measured at the expected settlement amount. Provisions are reviewed at each balance sheet date and adjusted to reflect the current best estimate. When the effect of the time value of money is significant, a non-current provision is recorded at the present value of the expenditure expected to be required to settle the obligation.

s) Employee benefits

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

In some countries there is a legal obligation to make severance payments in certain cases of termination of employment. No severance payments are made in the event of a voluntary resignation of the employee. Appropriate provisions are made for severance payment obligations.

The obligations are valued every year by professionally qualified and independent actuaries by using the projected unit credit method, different discount rates for different countries, and different average terms, respectively. This method assumes that in each year of service an additional part of the final benefit entitlement is earned and assesses each of these separately to build up the final obligation. The plan assets are deducted at fair value from the gross obligation. This results in the net debt and the net asset value, respectively, to be reported. Due to the net interest approach, the Group determines the net interest cost (net interest income) by multiplying the net debt (net asset value) at the beginning of the period by the interest rate based on the discounting of the performance-related gross obligation at the beginning of the period. The net interest component resulting from obligations and plan assets is recognized as interest expenses in the consolidated income statement. All remeasurement effects are shown in other comprehensive income for the year. The remeasurement components include the actuarial gains and losses from measurement of the performance-related gross obligation on the one hand and the difference between actually realized return on plan assets and the typically assumed return at the beginning of the period on the other hand. In the event that the plan has been overfunded, the remeasurement component also contains the change in net asset value from applying the asset ceiling if this has not been considered in the net interest component. If the present value of a defined benefit obligation changes as a result of plan amendments or curtailments, ANDRITZ shows the resulting effects in profit or loss for the period. Past service costs are generally recognized at the time the plan amendment occurs.

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

t) Management share option programs

Share Option Program 2016

The 109th Annual General Meeting, held on March 30, 2016, adopted another share option program for managers and members of the Executive Board. The number of options granted to the different managers can be up to 20,000, depending on the respective area of responsibility, and up to 37,500 for the members of the Executive Board. The options are to be drawn from the pool of shares bought back under the corporate share buy-back program. One share option entitles the holder to the purchase of one share. In order to exercise a share option, eligible persons must have been in active employment with ANDRITZ AG or one of its affiliates as from May 1, 2016, until the 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 members of the Executive 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 109th Annual General Meeting, held on March 30, 2016.

The options can be exercised between May 1, 2019, and April 30, 2021 (i.e. period of exercise), provided that the average unweighted closing price of the ANDRITZ share over 20 consecutive trading days within the period from May 1, 2018 to April 30, 2019 is at least 15% above the exercise price and the earnings per share in the 2017 financial year (based on the total number of shares listed); or the earnings per share in the 2018 financial year (based on the total number of shares listed) are at least 15% above the earnings per share in the 2015 financial year (based on the total number of shares listed); or the average unweighted closing price of the ANDRITZ share over 20 consecutive trading days within the period from May 1, 2019 to April 30, 2020 is at least 20% above the exercise price and the earnings per share in the 2018 financial year (based on the total number of shares listed); or the earnings per share in the 2019 financial year (based on the total number of shares listed) are at least 20% above the earnings per share in the 2015 financial year (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 options granted in 2016 totaled 926,500. The fair value of the options at the time of granting amounts to 6,286 TEUR; thereof 2,095 TEUR were reported as proportionate expense in 2018 (2017: 2,095 TEUR). The calculation of fair value was based on an option pricing model; a Monte Carlo simulation was applied. The share price at the time of granting the options was the closing price of the ANDRITZ share on June 1, 2016, and amounts to 45.29 EUR. The exercise price of 47.80 EUR was calculated in accordance with the rules of the share option program. The expected volatility and the expected dividend were calculated on the basis of historical data of ANDRITZ.

Due to the fact that the management share option programs do not include cash settlements, corresponding expenses are recorded directly in equity, according to the International Financial Reporting Standards.

Share Option Program 2018

The 111th Annual General Meeting, held on March 23, 2018, adopted another share option program for managers and members of the Executive Board. The number of options granted to the different managers can be up to 20,000, depending on the respective area of responsibility, and up to 37,500 for the members of the Executive Board. The options are to be drawn from the pool of shares bought back under the corporate share buy-back program. One share option entitles the holder to the purchase of one share. In order to exercise a share option, eligible persons must have been in active employment with ANDRITZ AG or one of its affiliates as from May 1, 2018, until the 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 members of the Executive 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 111th Annual General Meeting, held on March 23, 2018.

The options can be exercised between May 1, 2021, and April 30, 2023 (i.e. period of exercise), provided that the average unweighted closing price of the ANDRITZ share over 20 consecutive trading days within the period from May 1, 2020 to April 30, 2021 is at least 10% above the exercise price and the EBITA margin for the 2019 business year amounting to at least 7.9% or to at least 8.0% for the 2020 business year; or the average unweighted closing price of the ANDRITZ share over 20 consecutive trading days within the period from May 1, 2021 to April 30, 2022 is at least 15% above the exercise price and the EBITA margin for the 2020 business year amounting to at least 8.0% or to at least 8.1% for the 2021 business year.

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 options granted in first half of 2018 totaled 975,000. The fair value of the options at the time of granting amounts to 4,475 TEUR; thereof 870 TEUR were reported as proportionate expense in 2018. The calculation of fair value was based on an option pricing model; applying methods scientifically recognized. The share price at the time of granting the options was the closing price of the ANDRITZ share on June 1, 2018, and amounts to 43.00 EUR. The exercise price of 46.01 EUR was calculated in accordance with the rules of the share option program. The expected volatility and the expected dividend were calculated on the basis of historical data of ANDRITZ.

Due to the fact that the management share option programs do not include cash settlements, corresponding expenses are recorded directly in equity, according to the International Financial Reporting Standards.

u) Financial instruments

A financial instrument is a contract that gives rise to both a financial asset for one entity and a financial liability or equity instrument for another entity. Financial instruments are accounted for on the trading day. Financial assets and financial liabilities included in the balance sheet comprise cash and cash equivalents, investments and other financial assets, trade receivables and payables as well as a portion of other receivables and other liabilities, bank and other financial liabilities, and issued bonds.

Financial assets and financial liabilities are recognized in the consolidated balance sheet when the Group becomes a party to the contractual arrangements of the financial instrument. Initial recognition is at fair value plus transaction costs. This does not apply to financial assets categorized as "at fair value through profit or loss". For these instruments the initial recognition is made at fair value without consideration of transaction costs. Financial instruments are netted if the Group has a legally enforceable right to netting and intends to settle either only the balance or both the receivable and the liability at the same time.

Classification as debt or equity

Debt and equity instruments are classified either as financial liabilities or as equity in accordance with the substance of the contractual arrangement. An equity instrument is any contract that evidences a residual share in the assets of an entity after deducting all of its liabilities. Equity instruments are recorded at the proceeds received, net of direct issue costs.

Categories and subsequent measurement of financial assets

For all financial assets, subsequent measurement is carried out at amortized cost or at fair value, depending on the classification category. The classification and measurement approach for financial assets takes the business model into account in which the assets are held and the characteristic of the cash flows. The following three classification categories for financial assets are distinguished:

- valued at amortized cost
- valued at fair value through profit and loss (FVTPL)
- valued at fair value through other comprehensive income (FVTOCI)

The classification category is determined by type of instrument: derivatives, equity instrument, and debt instrument.

Upon subsequent measurement, **derivatives** are valued as FVTPL. Derivatives, other than those designated as effective hedging instrument, are shown at fair value at each reporting date. Any gain or loss resulting from valuation is recognized in profit or loss. Depending on the fair value, the derivatives are recognized either as other receivable or as other liability.

A **debt instrument** is measured at **amortized cost** if it meets both of the following conditions and is not designated as FVTPL:

- it is held within a business model whose objective is to hold assets in order to collect contractual cash flows; and

- its contractual terms lead to cash outflows on certain dates, which are solely principal and interest payments on the outstanding principal amount.

In the Group, trade receivables, loans, and other receivables with fixed or determinable payments that are not quoted on an active market belong to this category. These assets are measured at amortized cost using the effective interest method. The amortized costs are reduced by impairment losses. Interest income, foreign exchange gains and losses, derecognition effects, and impairments are recognized in profit or loss.

A **debt instrument** is valued at **FVTOCI** if it meets both of the following conditions and is not designated as FVTPL:

- it is held within a business model whose objective is both, to collect contractual cash flows and to sell financial assets; and

- its contractual terms lead to cash outflows on certain dates, which are solely principal and interest payments on the outstanding principal amount.

In the Group, no instrument is assigned to this category in the financial year. These assets are subsequently measured at fair value. Interest income calculated using the effective interest method, currency gains and losses and impairments are recognized in profit or loss. Other net gains and losses are recognized in OCI. Upon derecognition, the cumulative gains and losses in OCI are reclassified to the income statement.

All **debt instruments** that are not measured at amortized cost or FVTOCI as described above are measured at **FVTPL**. In addition, upon initial recognition, the Group may irrevocably designate a financial asset that meets the requirements to be measured at amortized cost or at FVTOCI to be measured at FVTPL if it eliminates or substantially reduces an accounting mismatch. This option is not exercised within the Group. This category includes financial instruments acquired either mainly for the purpose of being sold or bought back at short notice. Debt instruments to obtain profits from short-term fluctuations in the market price or from the trader's margin are not held. Any gain, including interest, or loss resulting from the valuation is recognized in profit or loss.

An **equity investment** is generally designated as measured at **FVTPL** because it is held for trading or because it is irrevocably decided upon initial recognition to not present subsequent changes in fair value in OCI but in the income statement. This choice is made for each investment individually. Equity instruments that are held to gain profits from short-term fluctuations in the market price or from the trader's margin are not held. Any gain, including dividend income, or loss resulting from the valuation is recognized in profit or loss.

The Group has decided to measure individual **equity investments** at **FVTOCI**. These assets are subsequently measured at fair value. Dividends are recognized in profit or loss unless the dividend is clearly a reimbursement of part of the investment cost. Other net gains and losses are recognized in OCI and are not reclassified to profit or loss.

Categories and subsequent measurement of financial liabilities

The valuation of financial liabilities depends on their classification in certain categories, which are distinguished and explained as follows:

- valued at fair value through profit or loss (FVTPL)
- valued at amortized cost

The Group measures its financial liabilities at **fair value through profit or loss** if the financial liability is held for trading or if it is a derivative that has not been designated as a hedging instrument and is not effective as such. The fair value option is not exercised within the Group. The Group uses derivatives to hedge interest rate and foreign currency risks and to hedge the price risk of commodities. Those derivatives are included in this category if they do not meet the criteria for hedge accounting according to IAS 39. Any profit or loss resulting from valuation is recognized in profit or loss. Depending on the fair value, the derivatives are recognized either as other receivables or as other liabilities. Financial liabilities to obtain profits from short-term fluctuations in the market price or from the trader's margin are not held.

Other financial liabilities, including loans, are initially recognized at fair value less transaction costs. As part of subsequent measurement, other financial liabilities are measured at **amortized cost** in accordance with the effective interest method, whereby the interest costs are recognized in profit or loss corresponding with the effective interest rate.

Impairment

The impairment model applies to the following assets:

- Financial assets valued at amortized cost
- Debt instruments valued at FVTOCI
- Contract assets

The impairment model of "expected credit losses" (ECL) is applied. This requires significant judgment to what extend the expected credit losses are affected by changes in economic factors. This assessment is determined on the basis of weighted probabilities (ECLs). One of the following principals serves as a basis:

- 12-month credit losses: These are the expected credit losses due to possible defaults within 12 months after balance sheet date.

- Lifetime credit losses: These are expected credit losses due to all possible defaults during the expected lifetime of a financial instrument.

If an asset does not yet show an impairment loss at the time of acquisition, it is assessed on the basis of the concept of 12-month credit loss at initial recognition. In principal, this assessment is retained for the following balance sheet dates. If the credit risk of a financial asset has increased significantly on the balance sheet date since initial recognition, the valuation is based on the concept of lifetime credit loss. When determining if the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECLs, the Group considers appropriate and supportable information that is relevant and available without redundand effort. This includes both quantitative and qualitative information and analysis, based on the historical experience of the Group and forward looking information as well as a substantiated credit rating.

The Group assumes that the credit risk of a financial asset has increased significantly if

- the financial asset is more than 30 days past due, unless grounds are at hand or
- an instrument needs to be renegotiated and stricter requirements (e.g. increase in collateral, etc.) are applied or
- there is a significant change in credit spreads, credit default swap rates for borrowers, etc. for a given or similar instrument.

At each balance sheet date, the Group assesses whether the respective assets are credit-impaired. This is the case when one or more events that adversely affect estimated future cash flows have occurred. A corresponding impairment reduces the gross book value of the assets. The following indicators are used in order to be able to judge, after reasonable assessment, that a significant change in credit risk has occurred and that it can not be realized:

- The borrower is unlikely to fully offset his credit commitments to the Group without the Group taking any action such as the realization of collateral (if any) or
- the financial asset is more than 90 days overdue, unless there are reasonable grounds or
- the rating no longer meets the notation "investment grade". The Group defines this as Baa3 respectively BBB- or higher (Cash and cash equivalents and time deposits included in “Investments“ deposited at banks or financial institutions are generally rated from Aaa to B1 by the rating agency Moody's and from AA+ to BB+ by Standard & Poor’s and Fitch).

For **trade receivables** and **contract assets** that do not have a material financing component, the lifetime credit losses concept always applies. ANDRITZ has also decided to apply this method to contract assets with a material financing component and other receivables. In addition to taking single valuation allowances into account, the estimated expected credit losses are calculated on the basis of experience of actual credit losses over the past five years. Credit risk within the Group is segmented by common default risk characteristics such as credit risk assessment. Actual credit losses are adjusted using scaling factors to reflect the differences between the economic conditions at the time the historical data was collected, the current conditions as well as the Group's view of economic conditions over the expected life of the receivables. The scaling factor is based on the gross domestic product (GDP) and the unemployment rate forecasts as well as the industry outlook, and is around 2 percent.

When recognizing the impairments, special disclosure requirements must be observed. There is a differentiation depending on the type of financial instrument and the level of the impairment model to which a financial instrument is assigned:

- Impairment losses on financial assets measured at amortized cost are deducted from the gross carrying amount of the assets.
- If, for instance, there are objective indications of impairment at the time of acquisition, the expected credit loss is priced into the interest rate. At the time of acquisition, a separate disclosure of the valuation allowance is not necessary. For changes after initial recognition, a separate valuation allowance is required.

Fair value

The fair value is the price that would be received if an asset is sold or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Measurement of financial instruments at fair value follows a three-level hierarchy and is oriented according to the proximity of the applied measurement factors to an active market.

- **Level 1:** Financial instruments are valued according to level 1 if they have a quoted price in an active market for an identical asset or liability accessible for an entity. Quoted prices represent the fair value.

- **Level 2:** If the valuation according to level 1 is not accomplishable, level 2 valuation uses directly or indirectly observable inputs for determining the fair value.

- **Level 3:** If inputs are not observable level 3 valuation uses unobservable inputs for determining the fair value.

Hedge Accounting

Derivatives designated as a hedging instrument because they meet the requirements for hedge accounting are accounted for in accordance with IAS 39. ANDRITZ has exercised the option of not applying the new requirements of IFRS 9.

In connection with the **hedging of the fair value of a recognized asset or a recognized liability** (**fair value hedge**), the change in the fair value of the hedging instrument and the hedged item are recognized in income statement. ANDRITZ has designated the issued bonds and the related interest rate swaps as fair value hedges. At inception of the hedging relationship, the Group documented the relationship between the hedged item and the hedging instrument, including the risk management objectives and the corporate strategy underlying the hedge. Furthermore, when entering the hedging relationship and during its progression, it is regularly documented and demonstrated that the interest rate swap is highly effective in terms of the hedged risk of change in fair value.

In connection with the **cash flow hedge** of a recognized receivable or payable or a highly probable future transaction, the effective portion of the change in fair value is shown in other comprehensive income and the ineffective portion is immediately shown in the income statement. The amounts in other comprehensive income are transferred to the income statement in the period in which the hedged obligation or expected transaction affects the income statement. ANDRITZ designated the variable interest portion of the Schuldscheindarlehen issued in 2018 and the related interest rate swaps as a cash flow hedge. At inception of the hedge, the Group documented the relationship between the hedged item and the hedging instrument, including the risk management objectives and the underlying corporate strategy. In addition, both, when the hedge was entered into and during its progression, it was regularly documented and demonstrated that the interest rate swap is highly effective in terms of the hedged risk of changing future cash flows.

v) Contingent assets and liabilities

A contingent asset is not recognized in the financial statements, but is disclosed if an inflow of economic benefit is probable. Contingent liabilities are not recognized in the financial statements. They are only disclosed if the possibility of an outflow of resources embodying economic benefit is probable.

F) USE OF DISCRETIONARY JUDGMENTS AND ESTIMATES

Preparation of the consolidated financial statements requires the management to make discretionary judgments, estimates, and assumptions that can affect the applied accounting policies and the reported amounts of assets, liabilities, income, and expenses. Actual results may differ from these estimates. Estimates and underlying assumptions are reviewed regularly. Revisions of estimates are recognized prospectively. The Group has made key assumptions concerning the future and has identified material sources of estimation uncertainties and discretionary judgments.

a) Sales

Over time revenue recognition in accordance with performance progress is made using in- or output-oriented methods. The accounting for revenue that is recognized over time is based on estimations for project costs, recoverable revenue as well as project risks including technical, political, and financial risks. These estimations are verified and adjusted regularly. Although these estimations are based on all information available on the balance sheet date, substantial changes after the balance sheet date are possible.

The evaluation of whether two or more contracts with customers are to be combined into one performance obligation or whether a contract with a customer must be split into several performance obligations, requires estimates that may affect the recognition of revenue or profit. Variable consideration is estimated at the most likely amount. Estimates are based primarily on expectations as well as historical, current, and forecasted information available as of the balance sheet date.

b) Income taxes

Estimates of the future realization of deferred tax assets are decisive in assessing the recognition and recoverability of deferred tax assets. This realization is dependent on the generation of future taxable profits during the periods in which taxable temporary differences reverse and tax loss carryforwards can be utilized. This assessment takes account of the probability of the deferred tax liabilities being reversed as well as the future taxable profits. It could have adverse effects on the assets, financial, and earnings situation, if the actual results deviate from these estimates or if these estimates need to be adjusted in future periods. Effects of uncertain tax positions include the best estimation of the expected tax payment. In the future, new information could be available causing the management to change the assumptions.

c) Goodwill, other intangible assets, and tangible assets

The impairment analysis for goodwill, other intangible assets, and tangible assets is primarily based on discounted estimated future cash flows to be expected from the continued use and disposal of an asset at the end of its useful life. Factors such as lower than anticipated sales and resulting decreases of net cash flows as well as changes in the discount rates used, could lead to impairment.

d) Trade accounts receivable

The allowance for doubtful accounts includes estimates and judgments of individual receivables to a significant extent, based on the creditworthiness of the respective customer, current economic developments, and the analysis of historical bad debts.

e) Assets held for sale

In accordance with IFRS 5 – Non-current assets held for sale and discontinued operations, assets held for sale are measured at the lower of fair value less costs to sell and carrying amount. The determination of the fair value less costs to sell includes management estimates and assumptions that are subject to a degree of uncertainty. Actual sales revenue may differ from the assumptions made.

f) Management share option programs

The share option plans are measured based on the fair value of the options on the grant date. The fair value of the options is based on parameters such as volatility, interest rate, share price, duration of the options, and expected dividends. The interpretation of market information necessary for the estimation of fair values also requires a certain degree of subjective judgment. This can result in a difference between the amounts recorded and values subsequently realized in the market.

g) Employee benefits

For the valuation of various pension plan and other employee benefits, parameters such as the expected discount rate, increases of salary and pension payments as well as the return on plan assets are used. If the relevant parameters develop significantly different than expected, this could have a material impact on the Group’s defined benefit obligation and, subsequently, on related expenses.

h) Provisions

Provisions are recognized and measured based on estimates of the extent and probability of future events as well as estimates of the discount rate. As far as possible, these are based on past experience.

i) Leasing

The application of the appropriate accounting policies for the classification of leases leads to discretionary decisions by the management.

G) NOTES TO THE CONSOLIDATED INCOME STATEMENT

1. Sales

ANDRITZ has applied the cumulative method for the conversion to IFRS 15 – Revenue from contracts with customers. Due to the choice of the cumulative transition method, the consolidated statement of financial position and the consolidated income statement for the comparative period were not adjusted. Deviations in accounting policies between IFRS 15, IAS 11, and IAS 18 were disclosed separately in Note E) d) Sales.

Nature of products and services, timing of satisfaction of performance obligations and significant payment terms

ANDRITZ is a supplier of plants, equipment, and services for hydropower stations, the pulp and paper industry, the metalworking and steel industries, and for solid/liquid separation in the municipal and industrial sectors as well as for animal feed and biomass pelleting. Detailed information on the four business areas is provided in the context of the segment reporting (see chapter H) Segment reporting).

Within **capital sytems**, ANDRITZ fulfills the performance obligations using the input-oriented method (cost-to-cost method) if the conditions for the revenue recognition over time according to performance progress are met. Within capital systems, the criteria for revenue recognition over time are on the one hand, the fact that there is no alternative use and, on the other hand, that ANDRITZ has an enforceable right to payment for performance completed to date (costs plus an appropriate margin). If the criteria according to IFRS 15 for revenue recognition over time are not met, the performance obligations are met on at a point in time, as soon as a customer obtains control over a promised product or service. This is especially the case when the asset is finally accepted. Payments and down payments of customers are made – depending on the content of the contract – already before the project starts and/or in regular intervals or after reaching certain milestones.

In the **service** business, ANDRITZ basically fulfills the performance obligations with simultaneous use by the customer while the service is rendered. Revenue is recognized over time. For services on site at the customer's premises, repairs or maintenance with a short runtime or execution time, the revenue is recognized at a point in time. The invoicing of services by ANDRITZ and the payment by the customer are made on a regular basis.

Invoices will be issued in accordance with the terms and conditions of the contract, whereby the terms of payment depend, among other things, on the country risk or customer credit risk.

With regard to the satisfaction of the performance obligations, it is evaluated whether two or more contracts with customers are to be combined into one performance obligation or whether one contract with a customer is to be divided into several performance obligations. If a contract is divided into several performance obligations, the total consideration is allocated to the respective performance obligations on the basis of the estimated individual selling prices. Since ANDRITZ's products and services predominantly represent customer-specific solutions, the individual selling prices are mainly the expected costs plus a margin. Contracts with customers may also contain variable components such as bonuses, contractual penalties or other claims from the customer or from ANDRITZ. Variable consideration is taken into account to the extent that they are most likely to occur.

In financial year 2018, there were neither contracts nor financing commitments implied by terms of payment, which have significant financing components.

For projects with contractually agreed standardized **warranty services** ("assurance-type-warranty"), ANDRITZ recognizes provisions in accordance with revenue recognition. In exceptional cases where an additional warranty, beyond the standard ("service-type-warranty") is contractually agreed upon, a separate performance obligation arises, to which part of the contingent consideration is attributed.

Disaggregation of sales

The following table shows the external sales of ANDRITZ by business areas:

	Hydro		Pulp & Paper		Metals		Separation		Total	
(in TEUR)	2018	2017*	2018	2017*	2018	2017*	2018	2017*	2018	2017*
REGIONS										
Europe	486,630	485,057	959,726	807,415	708,956	705,796	205,566	193,957	2,360,878	2,192,225
North America	231,042	220,416	418,695	392,108	365,932	448,117	172,792	163,273	1,188,461	1,223,914
South America	108,760	159,581	296,735	331,165	28,220	25,888	57,313	50,036	491,028	566,670
Asia (without China)	409,719	410,270	186,560	183,127	119,050	75,313	97,732	111,273	813,061	779,983
China	143,545	146,667	299,317	301,478	405,790	381,712	77,748	52,150	926,400	882,007
Others	137,826	161,082	72,133	44,385	7,164	6,709	34,504	32,072	251,627	244,248
	1,517,522	**1,583,073**	**2,233,166**	**2,059,678**	**1,635,112**	**1,643,535**	**645,655**	**602,761**	**6,031,455**	**5,889,047**
TIMING OF REVENUE RECOGNITION										
Over time	1,269,120	1,305,852	1,340,056	1,242,364	973,019	1,036,171	230,307	146,871	3,812,502	3,731,258
At a point in time	248,402	277,221	893,110	817,314	662,093	607,364	415,348	455,890	2,218,953	2,157,789
	1,517,522	**1,583,073**	**2,233,166**	**2,059,678**	**1,635,112**	**1,643,535**	**645,655**	**602,761**	**6,031,455**	**5,889,047**
SALES CATEGORIES										
Capital systems	1,080,985	1,111,922	1,187,379	1,205,211	1,254,291	1,240,743	353,664	320,712	3,876,319	3,878,588
Service	436,537	471,151	1,045,787	854,467	380,821	402,792	291,991	282,049	2,155,136	2,010,459
	1,517,522	**1,583,073**	**2,233,166**	**2,059,678**	**1,635,112**	**1,643,535**	**645,655**	**602,761**	**6,031,455**	**5,889,047**

* ANDRITZ has applied IFRS 15 for the first time as of January 1, 2018. Due to the choice of the cumulative transition method, the comparative period was not adjusted.

Contract balances

If the performance progress exceeds advance payments received from customers in the context of revenues recognized over time, ANDRITZ recognizes contract assets. In the financial year 2018, the contract assets were impaired in the amount of 738 TEUR. Due to acquisitions contract assets increased by 12,667 TEUR. Amounts originally reported as contract assets are reclassified to trade receivables at the time when rights are unconditional. This usually happens when the invoice is sent to the customer.

Advance payments received for projects that are recognized at a point in time, are recognized as contract liabilities from sales recognized at a point in time. If advance payments received from customers exceed the performance progress in the context of the revenue recognized over time, contract liabilities from sales recognized over time are accounted. The amount of 900,871 TEUR recognised in contract liabilities from sales recognized over time at the beginning of the period has been recognized as revenue for the period ended as of December 31, 2018. Due to acquisitions contract liabilties increased by 12,526 TEUR.

Transaction price assigned to the remaining performance obligations

The following overview shows the revenue by business area as of December 31, 2018, which is not allocated to performance obligations (or partially not) and will only be realized in the future:

(in TEUR)	2019	2020 and later	Total
Hydro	1,112,281	1,555,601	2,667,882
Pulp & Paper	1,721,984	699,118	2,421,102
Metals	1,228,701	362,844	1,591,545
Separation	364,340	39,405	403,745
	4,427,306	**2,656,968**	**7,084,274**

ANDRITZ has not made use of the practical expedient in accordance with IFRS 15.121.

Contract costs

ANDRITZ assumes that sales commissions paid to intermediaries as a result of the contract are eligible for reimbursement. At ANDRITZ, all contract costs can be attributed directly to the contract initiation. The capitalized contract costs are included in item "Other receivables". Contract costs of 13,005 TEUR were capitalized as of December 31, 2018. According to the project progress, 6,138 TEUR was amortized in the 2018 financial year and no significant impairment losses were recognized on capitalized contract costs.

In the comparative period, sales commissions were recognized as other operating expenses when incurred.

2. Other operating income

(in TEUR)	2018	2017
Government grants	23,865	22,749
Rental income	8,869	8,140
Profit on disposal of intangible assets and property, plant, and equipment	8,397	59,797
Income from scrap material	6,137	6,829
Insurance income	2,887	24,652
Exchange rate gains	0	21,254
Miscellaneous	39,115	44,973
	89,270	**188,394**

Gains from disposal of intangible assets and property, plant, and equipment mainly included in prior year the sale of the Schuler Technology Center in Tianjin, China, and the sale of properties in Germany and Switzerland.

3. Cost of materials

(in TEUR)	2018	2017
Expenses for raw materials, supplies, and goods purchased	2,238,852	2,310,800
Expenses for services purchased	748,885	718,022
	2,987,737	**3,028,822**

4. Personnel expenses

(in TEUR)	2018	2017
Wages and salaries	1,423,063	1,388,246
Expenses for social security contributions as required by law as well as salary-based charges and compulsory contributions	230,067	219,914
Other social expenses and termination expenses	72,815	54,695
Pension expenses	54,686	49,526
Severance expenses	6,367	5,449
	1,786,998	**1,717,830**

The number of employees within ANDRITZ GROUP is composed as follows:

(headcount)	2018	2017
As of December 31, 2018	29,096	25,566
Average	26,538	25,404

5. Other operating expenses

(in TEUR)	2018	2017
Sales expenses	197,850	195,192
Travel expenses	176,113	173,309
Legal, consulting, and audit expenses	90,259	72,617
Repairs and maintenance	84,758	78,446
Rents and lease expenses	78,066	75,700
Administrative expenses	57,276	52,714
Expenses for energy and water	35,238	30,400
Insurance premiums and charges	33,517	37,052
Bank charges, guarantees, and similar expenses	25,481	26,310
Other taxes and charges	20,656	11,831
Exchange rate losses	10,726	0
Further training expenses to employees	10,548	11,726
Expenses for industrial patents, rights, licenses	8,532	10,188
Expenses for valuation allowance and bad debt losses for receivables	8,139	6,715
Miscellaneous	9,245	45,507
	846,404	**827,707**

Miscellaneous other operating expenses include, but are not limited to, charges to public institutions and losses from the disposal of intangible assets and property, plant, and equipment.

6. Depreciation, amortization, and impairment of intangible assets and property, plant, and equipment

(in TEUR)	2018	2017
Intangible assets		
Depreciation and amortization	58,574	42,829
Impairment losses	4,247	2,030
Property, plant, and equipment		
Depreciation and amortization	96,373	86,719
Impairment losses	1,356	4,392
	160,550	**135,970**

Impairment losses on intangible assets of 4,247 TEUR in the 2018 financial year relate to the Metals business area, of which technology-related intangible assets amount to 3,724 TEUR, as the business did not develop as expected. Property, plant, and equipment were mainly impaired for technical equipment in Brazil and Germany. These impairment losses are atrributable to the Hydro and the Pulp & Paper business areas.

7. Financial result

(in TEUR)	2018	2017
Result from associated companies	21	16
Interest income	22,068	33,521
Interest expenses	-46,549	-44,047
Other financial result	7,079	11,851
	-17,381	**1,341**

Interest expenses contain 6,236 TEUR (2017: 4,171 TEUR) for interest cost on obligations for pensions, severance payments, and jubilee payments as well as on expected return on plan assets. The item “Other financial result” consists of gains from disposal of securities of 4,825 TEUR (2017: 6,349 TEUR), exchange rate gains and losses on loans and cash accounts in the amount of -2,127 TEUR (2017: 4,478 TEUR) as well as dividend income from investments of 786 TEUR (2017: 3,603 TEUR).

8. Income taxes

(in TEUR)	2018	2017
Current taxes	-73,424	-120,378
Deferred taxes	-11,117	-14,602
	-84,541	**-134,980**

The reconciliation of the calculated income tax expense to the effective tax expense is defined below. The calculated tax expense in the amount of 76,053 TEUR is determined by multiplying the Earnings Before Taxes in the amount of 304,214 TEUR by the applicable tax rate for ANDRITZ AG of 25%:

(in TEUR)	2018	2017
Earnings Before Taxes (EBT)	304,214	400,603
Calculated tax expense (25% in 2018 and 25% in 2017)	-76,053	-100,151
Increase (-)/Decrease (+) of tax expense by:		
Non-tax-deductible expenses	-12,591	-11,454
Tax allowances and tax-exempted income	5,822	5,284
Foreign tax rate differential arising from foreign fiscal jurisdictions	7,400	4,931
Effects of changes in tax rates	810	-8,115
Taxes for prior years	9,810	-5,145
Change in valuation allowance; non-recognition of deferred tax assets	-6,461	-14,411
Non-deductible impairment of goodwill	-2,591	-1,996
Non-allowable withholding taxes; foreign operating site taxes	-14,329	-13,526
Tax-exempted income from business disposals	4,293	4,470
Others	-651	5,133
Effective tax expense	**-84,541**	**-134,980**
in % of EBT	-27.8%	-33.7%

The nominal income tax rates applicable for subsidiaries abroad were between 9.0% and 34.9% (2017: 9.0% and 38.4%) in the financial year.

The changes in deferred taxes in the statement of financial position are as follows:

(in TEUR)	2018	2017
Deferred tax assets	152,647	187,528
Deferred tax liabilities	-87,892	-104,300
Balance as of January 1	**64,755**	**83,228**
Change in accounting policies	2,193	0
Deferred taxes recognized in income statement	-11,117	-14,602
Deferred taxes recognized in other comprehensive income	5,119	2,268
Changes in consolidation scope	-75,041	323
Currency translation adjustments	-3,120	-8,937
Reclassification as held for sale	0	2,475
Balance as of December 31	**-17,211**	**64,755**
Thereof:		
Deferred tax assets	167,157	152,647
Deferred tax liabilities	-184,368	-87,892

Deferred tax assets and liabilities as of December 31, 2018 and 2017 are the result of the following temporary valuation differences between the book values of the statement of financial position according to IFRS and the relevant tax bases:

	2018		2017	
	Deferred taxes		Deferred taxes	
(in TEUR)	Assets	Liabilities	Assets	Liabilities
Intangible assets	4,593	-89,611	6,072	-34,401
Property, plant, and equipment	10,544	-65,379	10,706	-28,640
Financial assets	1,743	-22,295	8,113	-28,312
Inventories	302,059	-1,420	257,367	-4,823
Receivables and other assets	69,872	-158,865	156,728	-242,996
	388,811	**-337,570**	**438,987**	**-339,172**
Provisions	151,266	-25,415	127,060	-22,031
Liabilities	95,130	-318,329	101,698	-257,297
	246,396	**-343,744**	**228,758**	**-279,328**
Tax loss carryforwards	188,033	0	100,710	0
Deferred taxes before non-recognition and netting	**823,240**	**-681,314**	**768,455**	**-618,500**
Non-recognized deferred tax assets	-159,137	0	-87,675	0
	664,103	**-681,314**	**680,779**	**-618,500**
Reclassification as held for sale	0	0	0	2,475
Netting	-496,946	496,946	-528,133	528,133
Net deferred tax assets and liabilities	**167,157**	**-184,368**	**152,647**	**-87,892**

On the balance sheet date, the Group has operating loss carry forwards (gross values) amounting to 852,872 TEUR (2017: 500,756 TEUR). Thereof, corporate tax loss carry forwards of 147,836 TEUR (2017: 134,551 TEUR) and trade tax loss carry forwards of 131,691 TEUR (2017: 132,861 TEUR).

Non-recognition of deferred tax assets apply to the following (gross values):

(in TEUR)	2018	2017
Deductible temporary differences	83,919	75,596
Tax loss carry forwards	530,266	228,663

The unrecognized tax loss carry forwards (gross values) include an amount of 10,741 TEUR, which are subject to expiration within the next five years. German fiscal unities contain frozen corporate tax loss carry forwards of 10,437 TEUR as well as frozen trade tax loss carry forwards of 7,860 TEUR.

The deductible temporary partial write-downs (amounts for outstanding sevenths from tax write-downs on investments) calculated in accordance with Austrian tax law amounted to 12,940 TEUR (2017: 15,725 TEUR). Deferred tax assets were recognized in the amount of 3,235 TEUR (2017: 3,931 TEUR).

Regarding investments in subsidiaries, branches, and associated companies as well as in interests in joint arrangements no deferred tax liabilities were recognized for temporary differences in the amount of 199,553 TEUR (2017: 198,135 TEUR).

9. Earnings per share

Basic earnings per share (as stated subsequently in the consolidated income statement) were calculated by dividing the net income for the period attributable to shareholders of the parent company by the weighted average number of ordinary shares outstanding during the period.

Diluted earnings per share were calculated by dividing the net income for the period attributable to shareholders of the parent company by the weighted average number of ordinary shares outstanding during the period with consideration of share options.

(in TEUR)	2018	2017
Net income attributable to shareholders of the parent	221,991	262,967
Weighted average number of no-par value shares	101,009,544	101,850,822
Effect of potential dilution of share options	0	0
Weighted average number of no-par value shares and share options	101,009,544	101,850,822
Basic earnings per no-par value share (in EUR)	2.20	2.58
Diluted earnings per no-par value share (in EUR)	2.20	2.58

H) SEGMENT REPORTING

a) Business areas

For management purposes, the Group is divided into four business areas on a worldwide basis:

ANDRITZ Hydro (HY)
ANDRITZ Hydro is one of the leading global suppliers of electromechanical equipment for hydropower plants. With over 175 years of accumulated experience and more than 31,000 turbines installed, totaling approximately 430,000 megawatts output, the business area provides the complete range of products, including turbines, generators, and additional equipment of all types and sizes – "from water to wire" for small hydro applications to large hydropower plants with outputs of more than 800 megawatts per turbine unit. ANDRITZ Hydro has a leading position in the growing modernization, refurbishment, and upgrade market for existing hydropower plants. Pumps (for water and waste water management such as irrigation, drainage, desalination, or water transport, as well as for various other applications in a wide range of industries) and turbogenerators for thermal power plants are also assigned to this business area.

ANDRITZ Pulp & Paper (PP)
ANDRITZ Pulp & Paper is a leading global supplier of complete plants, systems, equipment, and comprehensive services for the production and processing of all types of pulp, paper, board, and tissue. The technologies cover processing of logs, annual fibers, and waste paper; production of chemical pulp, mechanical pulp, and recycled fibers; recovery and reuse of chemicals; preparation of paper machine furnish; production of paper, board, and tissue; sizing, calendering and coating of paper; as well as treatment of reject materials and sludge. The service offering includes system and machine modernization, rebuilds, spare and wear parts, on-site and workshop services, optimization of process performance, maintenance and automation solutions, as well as machine relocation and second-hand equipment. Biomass, steam and recovery boilers for power production, gasification and flue gas cleaning plants, systems and plants for the production of nonwovens and absorbent hygiene products, dissolving pulp, and panelboard (MDF), as well as recycling and shredding solutions for various waste materials also form a part of this business area.

ANDRITZ Metals (ME)
ANDRITZ Metals is the technology and global market leader in forming equipment through the Schuler Group, in which ANDRITZ has a stake of more than 95 percent. Schuler offers presses, automation solutions, dies, process know-how, and services for the entire metal forming industry. Its customers include car manufacturers and their suppliers, as well as companies in the forging, household appliance, packaging, energy, and electrical industries. Schuler is also the market leader in minting technology and offers system solutions for various high-tech segments. In addition, ANDRITZ Metals is one of the leading global suppliers of complete lines for the production and processing of cold-rolled strip made of carbon steel, stainless steel, aluminum, and other non-ferrous metals. The lines comprise equipment for pickling, cold rolling, annealing and heat treatment, surface finishing, strip coating and finishing, punching and deep drawing, and regeneration of pickling acids. The business area also supplies turnkey furnace systems for the steel, copper, and aluminum industries, burners and refractory products, welding systems, as well as comprehensive services for the metal working industry.

ANDRITZ Separation (SE)
ANDRITZ Separation is one of the leading separation technology specialists with the broadest technology portfolio in solid/liquid separation. The industries served include sectors ranging from environment to food, chemicals, and mining and minerals. The comprehensive product portfolio for solid/liquid separation comprises mechanical technologies such as centrifuges, filters, screens, thickeners, or separators, and thermal technologies such as dryers or coolers. The service sector focuses on customer support through local presence, prompt delivery of spare and wear parts, process monitoring and optimization, as well as operator training. In addition, the Separation business area offers technologies and services for the production of animal feed and biomass pellets.

These strategic business areas form the basis of the internal reporting structure to the Executive Board as the key decision maker. The accounting and valuation principles of the individual segments are the same as those of the Group (see chapter E) Accounting policies). The segment Separation also contains the Feed & Biofuel Technologies business area for which the Executive Board obtains a separate reporting. As the thresholds of the Feed & Biofuel Technologies business area are below the limits, both business areas are condensed to one reportable segment. According to the internal reporting structure, all sales and all direct and indirect expenses (including overhead and administrative costs) are allocated to business areas and reflect the management structure of the organization and the predominant sources of risks and opportunities. The key measure of operating performance for the Group is Earnings Before Interest, Taxes, and Amortization (EBITA). There are no substantial intersegmental transactions. All consolidation effects related to the income statement are included in the relevant business area.

Business area information

2018

(in TEUR)	HY	PP	ME	SE	Total
Sales	1,517,522	2,233,166	1,635,112	645,655	6,031,455
EBITDA	142,395	258,396	57,769	39,489	498,049
EBITA	113,811	222,143	27,293	31,017	394,264
Capital expenditure	57,882	33,775	36,136	9,249	137,042
Depreciation, amortization, and impairment of intangible assets and of property, plant, and equipment	28,751	56,700	66,579	8,520	160,550
Result from associated companies	0	21	0	0	21
Shares in associated companies	17	0	0	0	17

2017

(in TEUR)	HY	PP	ME	SE	Total
Sales	1,583,073	2,059,678	1,643,535	602,761	5,889,047
EBITDA	154,005	221,540	129,724	36,391	541,660
EBITA	122,993	194,863	98,591	27,543	443,990
Capital expenditure	36,285	42,127	29,673	8,674	116,759
Depreciation, amortization, and impairment of intangible assets and of property, plant, and equipment	34,047	28,977	61,322	11,624	135,970
Result from associated companies	0	16	0	0	16
Shares in associated companies	0	0	6,407	0	6,407

b) Geographical segmentation

The Group's activities are mainly conducted in Europe, North America, South America, China, and Asia (without China). External sales allocated by geographical segments are based on the location of the customers. There are no sales from transactions with a single external customer that amount to 10% or more of the Group's sales.

Information according to geographical segments

2018

(in TEUR)	Europe	North America	South America	China	Asia (without China)	Rest of the world and consoli-dation	Total
External sales	2,360,878	1,188,461	491,028	926,401	813,061	251,626	6,031,455
Non-current assets	704,065	444,256	52,178	113,267	22,698	985,934	2,322,398
Capital expenditure	64,696	17,195	32,423	18,628	3,790	310	137,042

2017

(in TEUR)	Europe	North America	South America	China	Asia (without China)	Rest of the world and consoli-dation	Total
External sales	2,192,225	1,223,914	566,671	882,008	779,983	244,246	5,889,047
Non-current assets	709,945	141,695	25,087	111,259	33,976	509,357	1,531,319
Capital expenditure	86,890	12,691	5,547	5,979	5,557	95	116,759

External sales in Europe include an amount of 180,448 TEUR (2017: 151,117) recognized in Austria. Non-current assets of 338,611 TEUR (2017: 298,347) are located in Austria. Non-current assets consist of property, plant, and equipment, goodwill, intangible assets as well as other non-current receivables and assets.

I) NOTES TO THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

10. Intangible assets

(in TEUR)	Intangible assets related to customers and technologies	Other intangible assets	Total
COST			
Balance as of December 31, 2016	**318,976**	**79,273**	**398,249**
Additions	0	6,199	6,199
Disposals	-49,825	-2,189	-52,014
Reclassification	0	546	546
Currency translation adjustments	-4,534	-1,106	-5,640
Changes in consolidation scope	438	70	508
Balance as of December 31, 2017	**265,055**	**82,793**	**347,848**
Additions	0	6,880	6,880
Disposals	-10,715	-2,615	-13,330
Reclassification	0	-1,441	-1,441
Currency translation adjustments	2,452	-500	1,952
Changes in consolidation scope	267,862	143	268,005
Balance as of December 31, 2018	**524,654**	**85,260**	**609,914**
ACCUMULATED DEPRECIATION			
Balance as of December 31, 2016	**-137,772**	**-59,224**	**-196,996**
Depreciation and amortization	-36,271	-6,558	-42,829
Impairment losses	-2,029	0	-2,029
Disposals	49,825	2,036	51,861
Reclassification	0	-377	-377
Currency translation adjustments	2,373	850	3,223
Balance as of December 31, 2017	**-123,874**	**-63,273**	**-187,147**
Depreciation and amortization	-53,042	-5,532	-58,574
Impairment losses	-3,724	-523	-4,247
Disposals	10,715	2,303	13,018
Reclassification	0	40	40
Currency translation adjustments	-512	429	-83
Balance as of December 31, 2018	**-170,437**	**-66,556**	**-236,993**
NET BOOK VALUE			
Balance as of December 31, 2017	141,181	19,520	160,701
Balance as of December 31, 2018	354,217	18,704	372,921

Research and development costs

Expenditure for research and non-capitalized development costs was considered in the amount of 108,850 TEUR in 2018 and of 95,295 TEUR in 2017. Development costs were not capitalized in the 2018 financial year because the criteria for capitalization according to IAS 38 were not met.

Additionally, the Group conducts a part of its development work as customer-related and large-scale projects. The related expenses do not constitute as development costs to be capitalized as defined in the IFRS standards and are therefore recognized as project costs.

Collateral securities

There is no carrying amount of intangible assets whose title is restricted and pledged as security for liabilities (2017: 0 TEUR).

11. Goodwill

(in TEUR)	2018	2017
COST		
Balance as of January 1	**776,356**	**801,223**
Changes in consolidation scope	251,467	0
Remeasurement (IFRS 3)	0	-162
Currency translation adjustments	6,555	-24,705
Balance as of December 31	**1,034,378**	**776,356**
ACCUMULATED IMPAIRMENT		
Balance as of January 1	**-228,720**	**-237,796**
Impairment loss	-15,884	-6,428
Currency translation adjustments	-5,184	15,505
Balance as of December 31	**-249,788**	**-228,719**
NET BOOK VALUE		
Balance as of January 1	547,637	563,427
Balance as of December 31	784,590	547,637

The net book value is divided between the business areas as follows:

(in TEUR)	2018	2017
Hydro	112,037	108,910
Pulp & Paper	353,321	121,946
Metals	289,516	287,052
Separation	29,716	29,729
	784,590	**547,637**

Impairment loss

In the 2018 financial year an impairment of goodwill was recorded in the amount of 15,884 TEUR, because business did not develop as expected. The impairment relates to cash generating units (CGUs) for product lines and technologies, which were acquired in Germany, the USA, and in France. The impairment is assigned to the Pulp & Paper (8,884 TEUR) as well as Metals business area (7,000 TEUR). The recoverable amounts of these cash generating units correspond to their values in use. In 2017, impairment losses of 6,428 TEUR were recorded in the Hydro (5,906 TEUR), and Separation (522 TEUR) business areas.

Cash generating units

As of December 31, 2018, the structure of cash generating units was adjusted to ensure consistency with internal reporting. The goodwill was tested on the basis of the new as well as the old structure. The following tables show the significant cash generating units and groups of cash generating units, respectively:

2018

CGU	Year of purchase	Business area	Goodwill	Discount rate before tax	Non-current growth rate	Description
			(in TEUR)	(in %)	(in %)	
Schuler	2013	ME	215,061	9.06	2.39	Presses, automation, dies, process know-how and services in the forming equipment field
Xerium	2018	PP	207,510	11.30	2.32	Manufacturing and supply of machine clothing (forming fabrics, press felts, drying fabrics) and roll covers for paper, tissue, and board machines
Large Hydro (HLH)	2006	HY	45,594	11.38	2.42	Electromechanical systems and services for hydropower plants (including products and services for small and medium-sized hydroelectric power plants and solutions for mini hydro power plants) as well as modernization, rehabilitation, and capacity increases
Service Rehab (HSR)	2006-2014	HY	41,308	9.24	2.42	Modernization, rehabilitation, and capacity increases of electromechanical systems and services for hydropower plants
Diatec	2018	PP	33,925	14.02	2.32	Special machines and technological solutions, mainly for the production of baby diapers and other absorbent hygiene products
Kraft & Paper Mill Services (PKP)	2000-2011	PP	30,571	10.55	2.32	Production systems and services for sawmills, wood yard, fiberlines, pulp drying plants, chemical recovery operations, and power island
Yadon (MYA)	2016	ME	27,710	9.21	4.56	Presses in the forming equipment field
Separation	2004-2012	SE	24,542	10.81	2.55	Mechanical technologies such as centrifuges, filters, screens, thickeners or separators, and thermal technologies such as dryers or coolers as well as service
Strip Processing & Rolling (MPR)	1997-2014	ME	18,597	9.53	2.19	Turnkey systems for the production and processing of hot- and cold-rolled strip made of stainless steel, coated metals, nonferrous metals, and special materials
Engineered Wear Parts (PEW)	1999-2003	PP	18,049	10.96	2.32	Engineered wear products for the pulp & paper industry
Compact Hydro (HCH)	2006	HY	15,000	10.14	2.42	Products and services for small and medium-sized hydroelectric power plants and solutions for mini hydro power plants
Other CGUs			106,723			
			784,590			

2017

CGU or group of CGU	Year of purchase	Business area	Goodwill	Discount rate before tax	Non-current growth rate	Description
			(in TEUR)	(in %)	(in %)	
Schuler	2013	ME	215,061	9.32	2.57	Presses, automation, dies, process know-how, and services in the forming equipment field
VA TECH HYDRO*	2006	HY	97,775	12.73	2.41	Electromechanical systems and services for hydropower plants (including products and services for small and medium-sized hydroelectric power plants and solutions for mini hydro power plants) as well as modernization, rehabilitation, and capacity increases
ANDRITZ AG*	1999	All	60,136	10.33 - 11.49	2.41 - 2.93	Essentially equipment for pulp and paper, environment and process technologies, rolling mills and strip processing, and feed technology
Yadon	2016	ME	27,961	9.60	4.67	Presses in the forming equipment field
Ahlstrom	2000	PP	20,208	10.43	2.88	Chemical pulping equipment, pulping and screening systems of the recycled fiber production process, and equipment for the stock preparation of paper and board in the paper-making process
AWEBA	2016	ME	16,012	8.60	2.57	Tool construction in the forming equipment field
Iggesund	2011	PP	11,673	8.56	2.88	Knife systems for woodyard chippers
Other CGUs			98,811			
			547,637			

* Group of cash generating units

Due to the acquisitions in the financial year 2018, the cash generating units Xerium and Diatec were tested for the first time as of December 31, 2018 (see chapter D) Acquisitions).

The cash generating units Large Hydro (HLH), Service Rehab (HSR), and Compact Hydro (HCH) are resulting from the acquisition of the VA TECH HYDRO Group. In the previous year, these were summarized in a group of cash generating units.

The cash generating unit Kraft & Paper Mill Services (PKP) mainly contains parts from the CGUs Ahlstrom and Iggesund shown in the previous year.

The ANDRITZ AG CGU, which was presented as a group of cash generating units in the previous year, was brought to a finer granulated level as part of the adjustment of the CGU structure and was mainly split between the Separation, Strip Processing & Rolling (MPR), and Engineered Wear Parts (PEW) CGUs (the remaining portion of the ANDRITZ AG CGU is included in line "other CGUs" in the 2018 financial year).

The AWEBA CGU was impaired in the financial year 2018 and is therefore no longer included in the main cash generating units. In the financial year 2018, the discount rate before taxes of AWEBA was 8.78% and the growth rate was 2.39%.

Sensitivity analysis

In order to validate the values in use determined as of December 31, 2018, other scenarios were conducted with respect to the calculation parameters described above. The management considered the following scenarios possible:

- A change of +/-0.5 percentage points in the discount rate
- A change of +/-1.0 percentage points in the planned cash flows
- A change of +/-0.5 percentage points in the planned growth rates

The change would have resulted in the following effects on goodwill impairment, provided all other parameters remained the same:

(in TEUR)		2018	2017
Discount rate	+0.5%	-12,282	0
	-0.5%	5,638	523
Planned cash flows	+10%	2,573	523
	-10%	-31,832	0
Planned growth rates	+0.5%	4,635	523
	-0.5%	-11,380	0

12. Property, plant, and equipment

(in TEUR)	Land and buildings	Technical equipment and machinery	Other equipment, factory and office equipment	Assets under construction and advance payments	Total
COST					
Balance as of December 31, 2016	**574,883**	**643,086**	**189,421**	**72,218**	**1,479,608**
Additions	5,330	32,116	19,714	53,403	110,563
Disposals	-7,092	-23,682	-11,473	-1,196	-43,443
Reclassification	4,972	12,837	3,376	-21,731	-546
Currency translation adjustments	-16,793	-24,206	-7,554	-1,093	-49,646
Changes in consolidation scope	1,928	4,047	224	95	6,294
Reclassification as held for sale	-14,023	0	0	0	-14,023
Balance as of December 31, 2017	**549,205**	**644,198**	**193,708**	**101,696**	**1,488,807**
Additions	43,202	32,863	19,811	34,286	130,162
Disposals	-1,767	-19,097	-16,141	-96	-37,101
Reclassification	57,672	32,864	7,883	-96,978	1,441
Currency translation adjustments	3,450	-1,170	-2,138	-117	25
Changes in consolidation scope	136,159	188,224	8,835	7,573	340,791
Balance as of December 31, 2018	**787,921**	**877,882**	**211,958**	**46,364**	**1,924,125**
ACCUMULATED DEPRECIATION					
Balance as of December 31, 2016	**-183,214**	**-384,793**	**-124,913**	**0**	**-692,920**
Depreciation and amortization	-17,801	-48,135	-20,783	0	-86,719
Impairment losses	-1,748	-1,107	-579	-958	-4,392
Disposals	2,095	17,536	10,733	958	31,322
Reclassification	2,129	-1,394	-358	0	377
Currency translation adjustments	979	14,783	5,226	0	20,988
Reclassification as held for sale	4,804	0	0	0	4,804
Balance as of December 31, 2017	**-192,756**	**-403,110**	**-130,674**	**0**	**-726,540**
Depreciation and amortization	-20,515	-53,610	-22,248	0	-96,373
Impairment losses	0	-1,293	-63	0	-1,356
Disposals	467	17,747	14,761	0	32,975
Reclassification	-57	-3	19	1	-40
Currency translation adjustments	-2,728	1,553	1,320	-1	144
Changes in consolidation scope	-99	-786	84	0	-801
Balance as of December 31, 2018	**-215,688**	**-439,502**	**-136,801**	**0**	**-791,991**
NET BOOK VALUE					
Balance as of December 31, 2017	356,449	241,088	63,034	101,696	762,267
Balance as of December 31, 2018	572,233	438,380	75,157	46,364	1,132,134

Collateral securities
As of December 31, 2018, property, plant, and equipment amounting to 48,161 TEUR (as of December 31, 2017: 5,775 TEUR) have been pledged as collateral security.

Commitments
The commitments arising from contracts for expenditure on property, plant, and equipment are only within the ordinary scope of business. As of December 31, 2018, these commitments amounted to 22,986 TEUR (as of December 31, 2017: 16,663 TEUR).

Borrowing costs
No borrowing costs relating to qualifying assets were capitalized in the financial years 2018 and 2017 as the amounts were immaterial.

Government grants

In the 2018 financial year, government grants amounting to 312 TEUR (2017: 630 TEUR) were paid for capital expenditure on buildings, plant, and machinery and offset against costs. Other grants in the amount of 23,865 TEUR (2017: 22,749 TEUR) were recognized directly as other operating income.

Finance leases

Details regarding finance lease are shown in chapter M) b) Finance leases.

13. Associated companies

Company	Main office	Business area	2018	2017
Beijing Andritz Sintai Engineering Technology Co., Ltd.	Beijing, China	ME	0.00%	40.00%
Enmas ANDRITZ Pvt. Ltd.	Chennai, India	PP	40.00%	40.00%
Viafin Brazil Oy	Teuva, Finland	PP	40.00%	40.00%
A&V MONTAGENS INDUSTRIAIS Ltda.	Lapa, Brazil	PP	0.00%	40.00%
Psiori GmbH	Wilhelmshaven, Germany	HY	25.10%	0.00%

The summarized financial information for associated companies is shown in an aggregated form because the individual companies can be considered of minor importance. The following overview shows the items of the statement of financial position and the income statement for companies accounted for using the equity method:

(in TEUR)	2018	2017
DISCLOSURES ON FINANCIAL POSITION		
Assets	15,288	15,018
Liabilities	355	58
DISCLOSURES ON THE INCOME STATEMENT		
Sales	1,056	3,181
Result for the year	51	46

ANDRITZ has the following share in the income of associated companies:

(in TEUR)	2018	2017
Share of net income	21	18
Share of other comprehensive income	-100	-426
Share of total comprehensive income	**-79**	**-408**
Aggregate carrying amount of the shares in associated companies	**17**	**6,407**

The result from associated companies amounted to 21 TEUR (2017: 16 TEUR) in the consolidated income statement. Non-recognized losses of associated companies amount to 0 TEUR (2017: 0 TEUR). The cumulative unrecognized losses amount to -997 TEUR (2017: -996 TEUR). They belong entirely to Enmas ANDRITZ Pvt. Ltd.

14. Investments and other financial assets

(in TEUR)	2018	2017
Schuldscheindarlehen	80,000	80,000
Investment securities	31,330	70,830
Shares in non-consolidated companies	18,485	11,892
Other shares	606	604
Others	9,539	7,145
	139,960	**170,471**

In the 2018 financial year, impairment for shares in non-consolidated companies was recognized in the amount of 7,864 TEUR (2017: -838 TEUR). The shares in non-consolidated companies neither included restricted right of use in 2018, nor in 2017. The item „Investment securities" contains time deposits in the amount of 14,972 TEUR (2017: 35,000 TEUR).

15. Trade accounts receivable

(in TEUR)	2018	2017
Gross amount of trade accounts receivable	1,032,381	935,365
Valuation allowance	-58,264	-43,385
TRADE ACCOUNTS RECEIVABLE	**974,117**	**891,980**

All trade accounts receivable are classified as current. Details on payments overdue and the development of impairment are shown in chapter L) a) Credit risks.

The disposal limitations arising due to the granting of collateral securities amount to 13,592 TEUR (2017: 13,421 TEUR). The parties receiving collateral security have no rights allowing them to sell or repledge the collateral securities provided.

16. Other receivables and assets

(in TEUR)	2018	2017
Receivables from value-added tax and from other taxes and changes	122,092	134,583
Derivatives	49,734	77,204
Prepayments and deferred charges	34,424	27,480
Bills of exchange receivable	24,842	44,468
Loans from associated and non-consolidated companies	5,116	13,336
Receivables from non-current taxes	1,632	1,664
Schuldscheindarlehen	0	20,000
Miscellaneous	99,146	83,162
	336,986	**401,897**
thereof current	304,233	341,183
thereof non-current	32,753	60,714

Miscellaneous other receivables and assets include, but are not limited to, claims against insurance companies, deposits, and debit creditors. The carrying amount of other receivables pledged as collateral for liabilities amounts to 4,742 TEUR (2017: 164 TEUR).

17. Inventories

(in TEUR)	2018	2017
Materials and supplies	302,373	255,243
Work in progress	429,288	401,545
Finished goods	137,613	104,225
	869,274	**761,013**

The valuation allowances on inventories were recognized in the income statement in the amount of 791 TEUR (2017: -444 TEUR). In the financial year, no substantial reversal of impairment was captured as a reduction of cost of materials. The book value of inventories recognized at net realizable value amounts to 211,438 TEUR (2017: 200,529 TEUR). The disposal limitations arising due to the granting of collateral securities amount to 10,639 TEUR (2017: 20,860 TEUR).

18. Advance payments made

The advance payments made and presented in the statement of financial position relate to orders for ongoing contracts.

19. Investments

(in TEUR)	2018	2017
Time deposits	227,711	460,860
Funds	60,776	56,763
Bank bonds	27,934	48,157
Government bonds	9,553	0
	325,974	**565,780**

20. Cash and cash equivalents

(in TEUR)	2018	2017
Cash in banks	618,373	631,792
Time deposits	240,385	439,686
	858,758	**1,071,478**

The cash and cash equivalents in the consolidated statement of financial position correspond to cash and cash equivalents in the consolidated statement of cash flows.

In various countries exchange restrictions and other legal restrictions exist. As a result, the availability of these funds of cash and cash equivalents to ANDRITZ AG as the parent company might be restricted.

21. Assets held for sale

The Pulp & Paper business area includes two production sites in Middletown, Virginia, USA and Warwick, Québec, Canada.

Classification of assets as held for sale

As at the balance sheet date December 31, 2018, the requirements of IFRS 5 for classification as held for sale were met: Assets held for sale are assets that are available for immediate sale, the sale is highly probable, and the sale is expected to be completed within one year from the classification as held for sale. Assets held for sale contain individual assets.

Measurement

Immediately before initial classification of the assets as held for sale, the carrying amount of the asset was measured in accordance with IFRS 5, resulting in a write-off in the amount of 1,397 TEUR. After the classification as held for sale, the assets are measured at the lower amount of carrying amount and fair value less costs to sell in the amount of 1,702 TEUR.

In the Metals business area, the sale of a company in Shanghai, China, was initiated in the 2017 financial year. The final execution of the purchase agreement (closing) was in August 2018. The sale resulted in a gain of 5,146 TEUR, which was recognized in other operating income.

22. Equity

(in TEUR)	2018	2017
Share capital	104,000	104,000
Capital reserves	36,476	36,476
Other retained earnings	1,445,685	1,387,743
IAS 39 reserve	0	28,252
Fair value reserve	8,531	0
Actuarial gains/losses	-82,140	-75,980
Currency translation adjustments	-66,326	-52,397
Treasury shares	-130,934	-127,284
Total	**1,315,292**	**1,300,810**
Non-controlling interests	15,504	24,600
TOTAL SHAREHOLDERS' EQUITY	**1,330,796**	**1,325,410**

IAS 39 reserve

(in TEUR)	from hedging activities (cash flow hedge)	from financial assets measured at fair value through OCI	Total
Balance as of December 31, 2016	**-1,010**	**48,695**	**47,685**
Gains and losses from changes in fair values	358	-17,719	-17,361
Related deferred taxes	-126	3,638	3,512
Transfers to income statement	715	-6,362	-5,647
Related deferred taxes	63	0	63
Balance as of December 31, 2017	**0**	**28,252**	**28,252**
Change in accounting policies	0	171	171
Gains and losses from changes in fair values	-1,458	-22,147	-23,605
Related deferred taxes	364	3,349	3,713
Balance as of December 31, 2018	**-1,094**	**9,625**	**8,531**

Dividends

For 2018, a dividend of 1.55 EUR per outstanding share is proposed by the Executive Board. The dividend of 156,642 TEUR for 2017, which is equal to 1.55 EUR per share, was proposed by the Executive Board and approved by the 111th Annual General Meeting on March 23, 2018. The dividend was paid to the shareholders on March 29, 2018.

Treasury shares

Based on authorizations of the Annual General Meeting and with approval from the Supervisory Board, the Executive Board adopted share buy-back and share resale programs for buying up to 1,000,000 no-par value shares between December 27, 2018 and June 30, 2019. In 2018, 112,000 shares were bought back at an average price of 43.94 EUR per share. No shares were sold to eligible executives under the management share option plan. 29,372 no-par value shares were transferred to employees of ANDRITZ in the course of employee participation programs. As of December 31, 2018, the company held 3,023,498 treasury shares at a market value of 121,303 TEUR. It is planned to use these shares for the management share option plan and the employee participation programs.

The following table shows the changes in the number of shares outstanding:

	Shares outstanding	Treasury shares	Total
Balance as of December 31, 2016	**102,060,216**	**1,939,784**	**104,000,000**
Purchase of treasury shares	-1,030,000	1,030,000	0
Used to cover share options and employee participation programs	28,914	-28,914	0
Balance as of December 31, 2017	**101,059,130**	**2,940,870**	**104,000,000**
Purchase of treasury shares	-112,000	112,000	0
Used to cover share options and employee participation programs	29,372	-29,372	0
Balance as of December 31, 2018	**100,976,502**	**3,023,498**	**104,000,000**

Management share option programs

Due to the fact that the management share option plans do not allow cash settlement, the corresponding expenses are recorded directly as equity according to the International Financial Reporting Standards.

926,500 options were granted in 2016. The fair value of the options at the time of granting amounted to 6,286 TEUR; thereof 2,095 TEUR were recognized as proportionate expense in 2018. Furthermore, 975,000 options were granted in 2018. The fair value of the options at the time of granting amounts to 4,475 TEUR; thereof 870 TEUR were recognized as proportionate expense in 2018.

Movements in options under the share option plans for the 2018 and 2017 financial years were as follows:

	2018		2017	
	Number of options	Average exercise price per option (in EUR)	Number of options	Average exercise price per option (in EUR)
Balance as of January 1	**874,500**	**47.80**	**1,894,000**	**46.07**
Options granted	975,000	46.01	0	0.00
Options exercised	0	0.00	0	0.00
Options expired and forfeited	-50,000	47.80	-1,019,500	44.59
Balance as of December 31	**1,799,500**	**46.83**	**874,500**	**47.80**
Exercisable at year-end	0		0	

Non-controlling interests

The following overview discloses information on ANDRITZ subsidiaries having non-controlling interests:

(in TEUR)	Main office	Proportion of ownership interests and voting rights held by non-controlling interests		Net income allocated to non-controlling interests		Non-controlling interests	
		2018	2017	2018	2017	2018	2017
Otorio Ltd	Tel Aviv, Israel	49.99%	49.99%	-1,454	0	-85	0
PT. ANDRITZ HYDRO	Jakarta, Indonesia	49.00%	49.00%	568	567	1,434	1,307
ANDRITZ POWERLASE HOLDINGS LIMITED	West Sussex, United Kingdom	20.00%	49.90%	-1,483	0	-843	0
Schuler Aktien-gesellschaft (Subgroup)	Göppingen, Germany	3.38%	3.38%	71	2,089	14,974	23,293
Xerium Technologies, Inc. (Subgroup)	Youngsville / North Carolina, USA	0.00%	0.00%	0	0	23	0
Total				**-2,298**	**2,656**	**15,504**	**24,600**

The share attributable to non-controlling interests is shown separately in equity of the consolidated statement of financial position, in the consolidated income statement, and in the consolidated statement of other comprehensive income. The purchase method was applied for all companies acquired. Companies purchased or sold during the year were included in the consolidated financial statements as from the date of their purchase or up to the date of their sale.

In 2018 ANDRITZ POWERLASE HOLDINGS LIMITED (including subsidiaries) was fully consolidated for the first time. During the business year, ANDRITZ acquired a stake of 29.90% and thus has a stake of 80% in ANDRITZ POWERLASE HOLDINGS LIMITED. Furthermore, a subsidiary of the Schuler Aktiengesellschaft (Subgroup) with non-controlling interests of 23.25% was disposed in the financial year. The ANDRITZ GROUP recognized this change in interest rate as an equity transaction.

In addition, ANDRITZ acquired a 100% stake in Xerium Technologies, Inc., although non-controlling interests exist within the consolidated subgroup.

The summarized financial information on subsidiaries with significant non-controlling interests is as follows:

Schuler Aktiengesellschaft (Subgroup)

(in TEUR)	2018	2017
Current assets	785,495	852,941
Non-current assets	561,233	544,693
Current liabilities	-543,223	-521,599
Non-current liabilities	-247,237	-310,580
Non-controlling interests of subgroup	2,081	-7,107
Net assets	**558,349**	**558,348**
Proportion of ownership interests and voting rights held by non-controlling interests	**3.38%**	**3.38%**
Net book value of non-controlling interests	**18,863**	**18,872**
Sales	**1,212,054**	**1,233,104**
Result for the year	13,492	72,078
Other comprehensive income	-4,334	-15,342
Total comprehensive income	**9,158**	**56,736**
Thereof attributable to:		
Shareholders of the parent	8,849	54,818
Non-controlling shareholders	309	1,918
Dividends paid to non-controlling interest holders	**-1,850**	**-4**
Cash flow from operating activities	32,983	12,730
Cash flow from investing activities	-27,224	18,315
Cash flow from financing activities	-42,004	-89,280
Total	**-36,245**	**-58,235**

Additional capital disclosures

ANDRITZ is committed to maintain a strong financial profile, characterized by a conservative capital structure that provides financial flexibility. As of December 31, 2018 equity and total assets amounted to the following:

(in TEUR)	2018	2017
Total shareholders' equity	1,330,796	1,325,410
Total assets	6,918,623	6,265,348
Equity ratio	19.2%	21.2%

ANDRITZ is not subject to any statutory capital requirements. Commitments exist to sell shares in connection with established share-based payment plans. In recent years, commitments from share-based payments have primarily been satisfied through buy-back of the company's shares.

The goal in capital management is to ensure that entities in the Group will be able to continue as going concern while improving the return to shareholders through the optimization of the debt and equity balance. In the past bonds and Schuldscheindarlehen (in 2017 and 2018) were issued to safeguard the financial stability and to provide the basis for further growth of the ANDRITZ GROUP. The capital structure of the Group consists of debt, cash, and equity attributable to shareholders of the parent, comprising share capital, capital reserves, and retained earnings.

The capital structure is reviewed on an ongoing basis. The cost of capital and the risks associated with each class of capital are considered apart from this review. Based on this, the Group is committed to optimize its overall capital structure through the payment of dividends, issue of new shares, share buy-backs as well as the issue of new debt or the redemption of existing debt.

The Group's overall strategy remains unchanged from 2017.

23. Provisions

Non-current provisions

(in TEUR)	Pensions	Severance payments	Anniversary bonuses	Order-related	Others	Total
Balance as of January 1, 2018	**240,353**	**100,235**	**25,497**	**157,479**	**58,494**	**582,059**
Change in accounting policies	0	0	0	-528	0	-528
Additions	20,674	2,484	1,749	38,129	8,659	71,695
Unwinding of discount effect	4,701	1,629	-5	0	-31	6,294
Usage	-8,609	-6,710	-1,072	-8,172	-1,384	-25,947
Release	-2,499	608	-121	-41,556	-27,185	-70,753
Reclassification	0	0	-37	-33,460	258	-33,239
Currency translation adjustments	352	-217	26	-1,498	-2,597	-3,934
Changes in consolidation scope	41,071	13,086	0	-94	0	54,063
Balance as of December 31, 2018	**296,043**	**111,115**	**26,037**	**110,300**	**36,214**	**579,710**

Current provisions

(in TEUR)	Order-related	Others	Total
Balance as of January 1, 2018	**426,292**	**57,787**	**484,079**
Change in accounting policies	-1,555	0	-1,555
Additions	130,554	17,458	148,012
Usage	-74,766	-19,035	-93,801
Release	-122,103	-17,934	-140,037
Reclassification	33,460	-221	33,239
Currency translation adjustments	-859	-971	-1,830
Changes in consolidation scope	7,565	2,305	9,870
Balance as of December 31, 2018	**398,588**	**39,389**	**437,977**

Order-related provisions include provisions for warranties, impending losses, and other order-related risks. The warranty provisions recorded are based on past experience and individual assessments; they represent the legal and contractual warranty obligations as well as voluntary commitments to customers. Order-related imminent losses are provided for customer projects not yet completed. Generally, ANDRITZ expects the order-related non-current provisions to result in cash outflows during the next three years. Order-related current provisions are expected to result in cash outflows within the next fiscal year.

Other non-current and other current provisions contain restructurings and adjustments of personnel costs in the amount of 31,483 TEUR (2017: 28,942 TEUR). They relate primarily to the financial provisions to optimize the value chain in the Metals (Forming) business area.

24. Employee benefits

The post-employment benefits are divided into defined contribution and defined benefit plans.

Pensions

The pension costs comprise:

(in TEUR)	2018	2017
EXPENSES FROM DEFINED BENEFIT PLANS		
Current service cost	8,245	9,645
Past service cost	6,503	1,723
Effects of plan curtailments and settlements	14	-238
EXPENSES FROM DEFINED CONTRIBUTION PLANS		
Payments to defined contribution plans	39,924	38,396
	54,686	**49,526**

According to IAS 19, the defined benefit plans for pensions are itemized according to the different geographic locations. The pension plans largely relate to Germany, Austria, and Switzerland. The "Other" category primarily comprises of Canada and USA as well as of the pension plans of the in the financial year 2018 acquired subgroup Xerium Technologies, Inc.

Basic actuarial assumptions for calculation of pension obligations as of December 31, 2018 and 2017 are as follows:

2018

		Germany and Austria	Switzerland	Others
Discount rate	in %	1.43 - 2.26	0.75 - 0.99	0.39 - 7.50
Wage and salary increases	in %	0.00 - 2.50	0.50	0.00 - 6.33
Retirement benefit increases	in %	2.00	0.00	0.00 - 3.20
Average term of the benefit obligation	in years	6.41 - 17.61	14.32 - 18.50	8.08 - 17.12

2017

		Germany and Austria	Switzerland	Others
Discount rate	in %	1.06 - 2.17	0.54 - 0.82	0.37 - 7.50
Wage and salary increases	in %	0.00 - 2.50	0.50 - 1.00	0.00 - 6.33
Retirement benefit increases	in %	2.00	0.00	0.00 - 2.00
Average term of the benefit obligation	in years	7.72 - 17.62	14.70 - 19.10	8.57 - 19.60

The following mortality tables were primarily used:

	2018	2017
Austria	AVÖ 2018-P	AVÖ 2008-P
Germany	Heubeck "Richttafeln 2018 G"	Heubeck "Richttafeln 2005 G"
Switzerland	BVG 2015 Generationentafel	BVG 2015 Generationentafel

The following tables show the changes in pension benefit obligation from January 1 to December 31:

2018

(in TEUR)	Germany and Austria	Switzerland	Others	Total
Defined benefit obligation as of January 1	**254,548**	**213,697**	**76,604**	**544,849**
Current service cost	3,004	4,780	461	8,245
Past service cost	5,900	0	603	6,503
Effects of plan curtailments and settlements	0	155	-2	153
Interest expenses	4,849	1,581	3,297	9,727
Actuarial gains (-) and losses (+) from change in demographic assumptions	2,924	0	160	3,084
Actuarial gains (-) and losses (+) from change in financial assumptions	-1,576	-3,057	-3,304	-7,937
Actuarial gains (-) and losses (+) from change in experience adjustments	-938	-1,365	-210	-2,513
Benefits paid	-10,835	-9,781	-5,687	-26,303
Contributions by the plan participants	3,491	2,743	3	6,237
Currency translation adjustments	0	7,846	-2,550	5,296
Changes in consolidation scope	0	0	128,164	128,164
Other changes	0	-77	0	-77
Defined benefit obligation as of December 31	**261,367**	**216,522**	**197,539**	**675,428**
Fair value of plan assets	-45,628	-199,488	-136,913	-382,029
Reduction of assets	0	0	2,644	2,644
Defined benefit liability as of December 31	**215,739**	**17,034**	**63,270**	**296,043**

2017

(in TEUR)	Germany and Austria	Switzerland	Others	Total
Defined benefit obligation as of January 1	**258,406**	**220,988**	**81,413**	**560,807**
Current service cost	4,168	5,094	383	9,645
Past service cost	0	1,663	60	1,723
Effects of plan curtailments and settlements	-448	129	0	-319
Interest expenses	3,384	1,457	2,591	7,432
Actuarial gains (-) and losses (+) from change in demographic assumptions	0	1,240	34	1,274
Actuarial gains (-) and losses (+) from change in financial assumptions	-3,135	2,595	2,737	2,197
Actuarial gains (-) and losses (+) from change in experience adjustments	-386	-2,648	-1,912	-4,946
Benefits paid	-10,410	-1,678	-4,208	-16,296
Contributions by the plan participants	3,454	2,936	0	6,390
Currency translation adjustments	0	-18,079	-4,979	-23,058
Other changes	-485	0	485	0
Defined benefit obligation as of December 31	**254,548**	**213,697**	**76,604**	**544,849**
Fair value of plan assets	-46,149	-197,843	-61,495	-305,487
Reduction of assets	0	0	991	991
Defined benefit liability as of December 31	**208,399**	**15,854**	**16,100**	**240,353**

Out of the total pension benefit obligation in the amount of 675,428 TEUR (2017: 544,849 TEUR), 422,878 TEUR (2017: 328,548 TEUR) are covered entirely or partly by investments in funds.

The following tables reconcile the fair value of the plan assets:

2018

(in TEUR)	Germany and Austria	Switzerland	Others	Total
Fair value of plan assets as of January 1	**46,149**	**197,843**	**61,496**	**305,488**
Interest income	988	1,474	2,564	5,026
Return on plan assets (excl. interest income)	-1,683	-3,875	-8,852	-14,410
Effects of plan curtailments and settlements	0	139	0	139
Benefits paid	-2,104	-9,823	-5,767	-17,694
Contributions by the employer	2,278	3,649	2,848	8,775
Contributions by the plan participants	0	2,743	3	2,746
Currency translation adjustments	0	7,415	-2,472	4,943
Changes in consolidation scope	0	0	87,093	87,093
Other changes	0	-77	0	-77
Fair value of plan assets as of December 31	**45,628**	**199,488**	**136,913**	**382,029**

2017

(in TEUR)	Germany and Austria	Switzerland	Others	Total
Fair value of plan assets as of January 1	**47,078**	**198,585**	**64,264**	**309,927**
Interest income	691	1,301	2,061	4,053
Return on plan assets (excl. interest income)	451	9,379	1,680	11,510
Effects of plan curtailments and settlements	-193	112	0	-81
Benefits paid	-2,025	-1,744	-4,004	-7,773
Contributions by the employer	147	3,916	1,310	5,373
Contributions by the plan participants	0	2,936	0	2,936
Currency translation adjustments	0	-16,642	-3,816	-20,458
Fair value of plan assets as of December 31	**46,149**	**197,843**	**61,495**	**305,487**

The plan assets are invested as follows:

2018

(in TEUR)	Germany and Austria	Switzerland	Others	Total
Equity instruments	**10,712**	**37,939**	**61,260**	**109,911**
thereof listed on an active market	6,884	37,939	61,260	106,083
Debt instruments	**10,322**	**60,818**	**67,461**	**138,601**
thereof listed on an active market	10,295	60,818	67,461	138,574
Property, plant, and equipment	**718**	**47,007**	**73**	**47,798**
thereof listed on an active market	116	4,033	73	4,222
Other assets	**23,876**	**53,724**	**8,119**	**85,719**
thereof listed on an active market	22,451	23,278	2,144	47,873
	45,628	**199,488**	**136,913**	**382,029**

2017

(in TEUR)	Germany and Austria	Switzerland	Others	Total
Equity instruments	**10,682**	**40,183**	**21,499**	**72,364**
thereof listed on an active market	6,867	40,183	21,499	68,549
Debt instruments	**9,658**	**61,081**	**31,633**	**102,372**
thereof listed on an active market	9,569	61,081	31,633	102,283
Property, plant, and equipment	**842**	**44,947**	**0**	**45,789**
thereof listed on an active market	135	3,658	0	3,793
Other assets	**24,967**	**51,632**	**8,363**	**84,962**
thereof listed on an active market	23,774	24,794	1,857	50,425
	46,149	**197,843**	**61,495**	**305,487**

In 2018, the actual investment results from plan assets amounted to -1.51% (2017: 4.41%).

Payments to the pension funds for defined benefit plans are expected in the amount of 18,247 TEUR for 2019.

As of December 31, 2018, there are no extraordinary risks specific to the company or to the plan, or any substantial risk concentrations.

The discretionary assessments and assumptions concerning future developments for the valuation of provisions for pensions are based on relevant actuarial assumptions. A change of +/- 0.5 percentage points in the discount factor, +/- 0.5 percentage points in the salary increase, +/- 0.5 percentage points in pension benefits, and +/- 1 year in life expectancy would have the following effects on the present value of the pension obligation, if all other parameters remained unchanged:

2018

(in TEUR)		Germany and Austria	Switzerland	Others	Total
Discount rate	+0.5%	-15,511	-14,469	-12,014	-41,994
	-0.5%	19,094	16,473	13,414	48,981
Wage and salary increases	+0.5%	731	1,395	778	2,904
	-0.5%	-674	-1,437	-751	-2,862
Retirement benefit increases	+0.5%	11,248	7,305	1,843	20,396
	-0.5%	-8,731	-1,446	-1,475	-11,652
Life expectancy	+1 year	9,595	5,643	7,160	22,398
	-1 year	-9,493	-5,766	-7,225	-22,484

2017

(in TEUR)		Germany and Austria	Switzerland	Others	Total
Discount rate	+0.5%	-15,513	-14,752	-4,609	-34,874
	-0.5%	19,260	16,852	5,033	41,145
Wage and salary increases	+0.5%	752	1,424	325	2,501
	-0.5%	-695	-1,438	-312	-2,445
Retirement benefit increases	+0.5%	11,501	7,346	623	19,470
	-0.5%	-8,845	-772	-323	-9,940
Life expectancy	+1 year	9,620	5,689	1,911	17,220
	-1 year	-9,550	-5,794	-1,921	-17,265

Severances

The expenses for severance payments consist of:

(in TEUR)	2018	2017
EXPENSES FROM DEFINED BENEFIT PLANS		
Current service cost	3,455	3,077
EXPENSES FROM DEFINED CONTRIBUTION PLANS		
Payments to defined contribution plans	2,912	2,372
	6,367	**5,449**

In the 2018 financial year, contributions to the employees' severance funds in Austria of 2,023 TEUR (2017: 1,813 TEUR) are included in the severance expenses.

A breakdown of severance obligations to the various geographical locations has been omitted because these obligations relate to more than 90% to Austria.

The basic actuarial assumptions used for Austria to determine severance obligations as of December 31, 2018 are as follows:

(in %)		2018	2017
Discount rate	in %	1.68 - 1.75	1.64
Wage and salary increases	in %	2.50 - 3.00	2.50
Average term of the benefit obligation	in years	9.24 - 15.00	9.14 - 9.78

The following table shows the changes in defined benefit obligations from January 1 to December 31:

(in TEUR)	2018	2017
Defined benefit obligation as of January 1	**102,113**	**101,756**
Current service cost	3,455	3,077
Interest expenses	1,778	1,079
Actuarial gains (-) and losses (+) from change in demographic assumptions	582	-338
Actuarial gains (-) and losses (+) from change in financial assumptions	-1,499	3,046
Actuarial gains (-) and losses (+) from change in experience adjustments	646	1,678
Benefits paid	-6,845	-7,986
Currency translation adjustments	-290	-199
Changes in consolidation scope	13,086	0
Defined benefit obligation as of December 31	**113,026**	**102,113**
Fair value of plan assets	-1,911	-1,878
Defined benefit liability as of December 31	**111,115**	**100,235**

The following table reconciles the fair value of plan assets:

(in TEUR)	2018	2017
Fair value of plan assets as of January 1	**1,878**	**1,747**
Interest income	149	126
Return on plan assets (excl. interest income)	-26	-6
Benefits paid	-135	-100
Contributions by the employer	118	235
Currency translation adjustments	-73	-124
Fair value of plan assets as of December 31	**1,911**	**1,878**

The plan assets are invested as follows:

(in TEUR)	2018	2017
Debt instruments	**1,268**	**1,352**
thereof listed on an active market	0	0
Other assets	**643**	**526**
thereof listed on an active market	172	130
	1,911	**1,878**

The discretionary assessments and assumptions concerning future developments for the valuation of provisions for severances are based on relevant actuarial assumptions. A +/- 0.5 percentage point change in the discount factor and a change of +/- 0.5 percentage points in the salary increase would have the following effects on the present value of the severance obligation, if all other parameters remain unchanged:

(in TEUR)		2018	2017
Discount rate	+0.5%	-5,096	-4,613
	-0.5%	5,526	5,000
Wage and salary increases	+0.5%	5,262	4,832
	-0.5%	-4,906	-4,507

25. Financial liabilities

(in TEUR)	Bond	Obligations under finance leases	Schuldschein-darlehen	Bank loans and other financial liabilities	Total
Balance as of December 31, 2016	**359,325**	**20,264**	**0**	**197,355**	**576,944**
Payments received	0	0	400,033	46,332	446,365
Payments made	-4,019	-2,034	0	-101,569	-107,622
Other non-cash changes	-5,547	113	-963	-12,410	-18,807
Currency translation adjustments	0	-9	0	-12,587	-12,596
Changes in consolidation scope	0	0	0	-10,450	-10,450
Balance as of December 31, 2017	**349,759**	**18,334**	**399,070**	**106,671**	**873,834**
Payments received	0	0	500,000	57,794	557,794
Payments made	-427,586	-3,021	0	-75,051	-505,658
Other non-cash changes	-6,075	115	-936	-166	-7,062
Currency translation adjustments	-8,627	-41	0	-3,869	-12,537
Changes in consolidation scope	436,213	14,575	0	55,415	506,203
Balance as of December 31, 2018	**343,684**	**29,962**	**898,134**	**140,794**	**1,412,574**

In the third quarter of 2018, ANDRITZ AG issued a Schuldscheindarlehen in four tranches (with partly fixed and partly variable interests) with an issuing volume of 500,000 TEUR in order to provide funds for corporate financing including refinancing and for acquisitions. This emission was made with maturities of five to ten years.

26. Other liabilities

(in TEUR)	2018	2017
Accruals and outstanding order-related costs	425,863	482,035
Unused vacation and other personnel-related accruals	252,584	234,384
Earn out and contingent considerations	98,612	62,737
Liabilities from value-added tax and from other taxes and charges	60,964	69,662
Derivatives	53,581	56,979
Liabilities due to employees	24,811	14,995
Liabilities from social security	18,221	18,308
Liabilities from commissions	16,289	9,168
Prepayments and deferred charges	7,289	17,266
Miscellaneous	76,165	81,386
	1,034,379	**1,046,920**
thereof current	975,265	942,979
thereof non-current	59,114	103,941

Miscellaneous other liabilities include, but are not limited to, accrued interest and credit accounts receivable.

J) NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS

In the consolidated statement of cash flows, cash flows are separated into cash inflows and outflows from operating activities, investing activities, and financing activities, irrespective of how the items are classified in the consolidated statement of financial position.

Cash flow from operating activities is derived indirectly based on the Earnings Before Taxes. Earnings Before Taxes are adjusted for non-cash expenses (primarily depreciation and amortization) and income. Cash flow from operating activities is calculated considering the changes in net working capital.

Investing activities mainly comprise payments for intangible assets and property, plant, and equipment as well as financial assets, incoming and outgoing payments for investments in securities and Schuldscheindarlehen, and payments for the acquisition of subsidiaries. The payments for intangible assets as well as property, plant, and equipment include capital expenditures (additions to intangible assets and property, plant, and equipment) for the fiscal year to the extent that they already had an effect on cash.

Financing activities include not only dividend payments, but also cash flows from the redemption or issue of bonds and Schuldscheindarlehen as well as other debts and outgoing payments for buy-back of treasury shares and own corporate bonds.

Non-cash transactions encompass the acquisition of intangible assets and property, plant, and equipment either by assuming directly related liabilities (sale on credit) or by means of a finance lease.

The changes of the items in the consolidated statement of financial position shown in the consolidated statement of cash flows cannot be derived directly as effects of currency conversion, companies not fully consolidated in prior periods due to minor importance as well as assets classified as held for sale do not result in cash outflows and thus have been eliminated.

The net cash flows from company acquisitions are as follows:

(in TEUR)	2018	2017
Net assets	**79,464**	**15,105**
Non-controlling interests	-32	0
Goodwill	251,470	-1,660
CONSIDERATION TRANSFERRED	**330,903**	**13,445**
Cash and cash equivalents acquired	-32,574	-10
Payables from purchase price not yet paid (incl. contingent consideration)	-28,345	0
Fair value of formerly held interests	0	0
NET CASH FLOW FROM COMPANY ACQUISITIONS	**269,983**	**13,435**

The payables from purchase price not yet paid (incl. contingent consideration) mainly comprise of the acquisition Diatec (see chapter D) Acquisitions). The cash flows from company acquisitions are valued at the rates applying to the respective transactions.

The effect of business disposal is as follows:

(in TEUR)	
Property, plant, and equipment	-8,862
Cash and cash equivalents	-19,897
Other assets	-50
Non-controlling interests	6,046
Deferred tax liabilities	2,429
Provisions	133
Net assets and liabilities	**-20,201**
Consideration received, satisfied in cash and cash equivalents	25,347
Gain on disposal	**5,146**

K) FINANCIAL INSTRUMENTS

a) Valuation techniques

Class	Valuation techniques for the determination of fair values
Derivatives, investments, miscellaneous other financial assets, Schuldscheindarlehen, bank loans, and other financial liabilities, obligations under finance leases, and contingent considerations	The fair value is basically calculated using stock market prices. If no stock market prices are available, the valuation is carried out using customary valuation methods taking specific parameters into account. The valuation model takes the present value of the expected cash flows into account, discounted with a risk-adjusted discount rate applicable for the remaining term.
Trade accounts receivable, other receivables and assets, cash and cash equivalents, time deposits included in “Investments“, trade accounts payable, and other liabilities	These classes of financial assets and liabilities are accounted for at their book value, which is a reasonable approximation of their fair value due to the fact that their residual maturity is essentially short.
Shares in non-consolidated companies and other shares	There are no prices quoted on an active market for these financial instruments. The valuation is made via valuation parameters that are not observable on the market.

b) Levels and fair values

The following tables show the carrying amounts and fair values of financial assets and financial liabilities, including their levels in the fair value hierarchy. They do not include fair value information for financial assets and financial liabilities not measured at fair value if the carrying amount is a reasonable approximation of fair value:

As of December 31, 2018

(in TEUR)								Net book value				Fair value
		Measured at fair value			Measured at amortized costs							
	Note	Hedge accounting	Mandatory at FVtPL	Equity instruments - fair value through OCI	At amortized costs	Other financial liabilities	No IFRS 9 valuation category	Total	Level 1	Level 2	Level 3	Total
Investments	14./19.		100,589	14,032	242,683			357,304	114,621			114,621
Shares in non-consolidated companies and other shares	14.		18,485	606				19,091			19,091	19,091
Derivatives	16.	3,302	46,432					49,734		49,734		49,734
Miscellaneous other financial assets	14.				9,539			9,539		9,683		9,683
Trade accounts receivable	15.				974,117			974,117				
Other receivables and assets	16.				120,007		167,245	287,252				
Schuldscheindarlehen	14.				80,000			80,000		79,885		79,885
Cash and cash equivalents	20.				858,758			858,758				
Financial Assets		**3,302**	**165,506**	**14,638**	**2,285,104**		**167,245**	**2,635,795**				
Derivatives	26.	1,658	51,923					53,581		53,581		53,581
Bond	25.					343,684		343,684	347,140			347,140
Bank loans and other financial liabilities	25.					140,794		140,794		139,950		139,950
Obligations under finance leases	25.					29,962		29,962		28,315		28,315
Trade accounts payable						604,189		604,189				
Earn out and contingent considerations	26.		4,798			93,814		98,612		97,904		97,904
Schuldscheindarlehen	25.					898,134		898,134		897,635		897,635
Other liabilities	26.					813,932	68,254	882,186				
Financial liabilities		**1,658**	**56,721**			**2,924,509**	**68,254**	**3,051,142**				

As of December 31, 2017

(in TEUR)								Net book value				Fair value
	Note	Held for trading	Hedge accounting	Loans and receivables	Available for sale	Other financial liabilities	No IAS 39 valuation category	Total	Level 1	Level 2	Level 3	Total
Investments	14./19.				175,750			175,750	175,750			175,750
Derivatives	16.	67,686	9,518					77,204		77,204		77,204
Financial assets measured at fair value		**67,686**	**9,518**		**175,750**			**252,954**				
Shares in non-consolidated companies and other shares	14.				12,496			12,496				
Miscellaneous other financial assets	14.			7,145				7,145		7,415		7,415
Trade accounts receivable	15.			891,980				891,980				
Other receivables and assets	16.			112,964			172,359	285,323				
Schuldscheindarlehen	14./16.			100,000				100,000		99,076		99,076
Cash and cash equivalents	20.			1,071,478				1,071,478				
Financial assets measured at amortized costs				**2,183,567**	**12,496**		**172,359**	**2,368,422**				
FINANCIAL ASSETS		**67,686**	**9,518**	**2,183,567**	**188,246**		**172,359**	**2,621,376**				
Derivatives	26.	56,979						56,979		56,979		56,979
Financial liabilities measured at fair value		**56,979**						**56,979**				
Bond	25.					349,759		349,759	362,439			362,439
Bank loans and other financial liabilities	25.					106,671		106,671		110,141		110,141
Obligations under finance leases	25.					18,334		18,334		18,611		18,611
Trade accounts payable						461,239		461,239				
Earn out and contingent considerations	26.					62,737		62,737		67,632		67,632
Schuldscheindarlehen	25.					399,070		399,070		410,145		410,145
Other liabilities	26.					840,276	86,928	927,204				
Financial liabilities measured at amortized costs						**2,238,086**	**86,928**	**2,325,014**				
FINANCIAL LIABILITIES		**56,979**				**2,238,086**	**86,928**	**2,381,993**				

c) Equity instruments at fair value through other comprehensive income

As of January 1, 2018, the following equity instruments were designated as at fair value through other comprehensive income. These shares represent long-term strategic investments; therefore, this valuation category is considered appropriate by ANDRITZ. In the previous year, these shares were measured at amortized cost or at fair value. Part of the investment in Chengdu Techcent Environment Co., Ltd was sold during the year, as the investment strategy was further developed. At the time of sale, the fair value of the portion to be sold amounted to 3,554 TEUR. An income of 3,363 TEUR was realized, which is already included in other comprehensive income. This income was reclassified within equity.

(in TEUR)	2018	2017
Chengdu Techcent Environment Co., Ltd	10,022	32,216
Others	4,616	1,276
	14,638	**33,492**

d) Fair value hedges

The Group uses interest rate swaps (Forward contract – interest rate) to hedge the change in fair value of the issued bond due to interest rate changes. Since the hedge is considered to be effective, the net book value of the bond is adjusted for changes in the fair value attributable to the hedged risk.

The portfolio of the bond (hedged item) changed as follows:

(in TEUR)	2018	2017
Balance as of January 1	**349,759**	**359,325**
Gains (-)/losses (+) recognized through profit or loss	-6,075	-5,816
Repurchase of own corporate bonds	0	-3,750
Redemptions	0	0
Balance as of December 31	**343,684**	**349,759**

The market values of interest rate swaps (the hedging instrument) changed as follows:

(in TEUR)	2018	2017
Fair value of swaps as of January 1	9,518	15,122
Fair value of swaps as of December 31	3,302	9,518
Gains/losses recognized through profit or loss	**-6,216**	**-5,604**

The following table shows the changes from hedged items recognized through profit or loss and changes from hedging instruments in fair value hedging relationships:

(in TEUR)	2018	2017
From hedged items	6,075	5,816
From hedging instruments	-6,216	-5,604
Gains/losses recognized through profit or loss	**-141**	**212**

e) Cash flow hedges

In 2018, a Schuldscheindarlehen was issued in four tranches of 500,000 TEUR in total. The tranches were concluded with terms of five to ten years and have variable or fixed interest rates. To hedge the interest rate risk of future cash flows, three interest rate swaps (Forward contract – interest rate) were concluded and designated as a cash flow hedge. The future cash flows expected from the floating-rate nominal amount of 180,500 TEUR were designated as the underlying. The hedging relationship will result in cash flows of 12,962 TEUR over the next five years and 5,587 TEUR from 2024 on. The effectiveness of the hedging relationship is determined using the cumulative dollar offset method based on forward rates.

The ineffective portion of the hedging relationship in the financial year was 0 TEUR (2017: 0 TEUR). Therefore, all changes in value that represented the effective portions of the hedging relationships were recognized in equity in the fair value reserve. These are shown in the consolidated statement of comprehensive income in the result from cash flow hedges and have developed as follows:

(in TEUR)	2018	2017
Balance as of January 1	**0**	**-1,010**
Gains and losses from changes in fair values	-1,458	358
Related deferred taxes	364	-126
Transfers to income statement	0	715
Related deferred taxes	0	63
Balance as of December 31	**-1,094**	**0**

f) Derivatives

The fair values are determined using forward rates at the balance sheet date. The Group's own credit risk as well as the credit risk of the contracting partner were included in the fair value measurement.

2018

(in TEUR)	Remaining terms nominal values			Fair value		
	not exceeding 1 year	more than 1 year	Total	positive	negative	Total
Forward contracts - Foreign exchange	2,238,084	327,682	2,565,766	46,432	51,923	-5,491
Forward contracts - Interest rate	350,000	182,500	532,500	3,302	1,658	1,644
Forward contracts - Commodities	0	0	0	0	0	0
Total	**2,588,084**	**510,182**	**3,098,266**	**49,734**	**53,581**	**-3,847**

2017

(in TEUR)	Remaining terms nominal values			Fair value		
	not exceeding 1 year	more than 1 year	Total	positive	negative	Total
Forward contracts - Foreign exchange	1,744,014	269,405	2,013,419	67,535	56,979	10,556
Forward contracts - Interest rate	0	350,000	350,000	9,518	0	9,518
Forward contracts - Commodities	689	0	689	151	0	151
Total	**1,744,703**	**619,405**	**2,364,108**	**77,204**	**56,979**	**20,225**

The fair values of the foreign exchange forward contracts classified according to transaction currency are as follows:

(in TEUR)	not exceeding 1 year	more than 1 year	Total 2018	Total 2017
US dollar	-4,520	-1,509	-6,029	6,656
Euro	2,316	-104	2,212	46
Canadian dollar	1,952	0	1,952	778
Brazilian real	-2,049	-1,435	-3,484	-916
Chinese renminbi yuan	274	-287	-13	196
Other currencies	444	-573	-129	3,796
	-1,583	**-3,908**	**-5,491**	**10,556**

g) Offsetting

The Group concludes derivatives in accordance with the Global Netting Agreements (Framework Agreement) of the International Swaps and Derivative Association (ISDA) and similar agreements. These agreements do not meet the criteria for netting in the balance sheet. This is because at present the Group has no legal entitlement to offset the amounts recognized. In the case of a termination of the framework agreement or an early termination of the outstanding contracts, the net amounts of the market values of all contracts to be terminated would be compensated. The following table sets out the book values of the financial instruments that are subject to the arrangements described:

(in TEUR)	2018		2017	
	positive	negative	positive	negative
Gross and net amounts (in the statement of financial position)	**49,734**	**-53,581**	**77,204**	**-56,979**
Netting (potential effects)	-2,225	2,225	-2,844	2,844
NET AMOUNTS	**47,509**	**-51,356**	**74,360**	**-54,135**

h) Net gains and losses

2018

(in TEUR)	Derivatives	Other financial assets measured at fair value through profit and loss	Financial assets measured at fair value through other comprehensive income	Financial assets measured at amortized costs	Financial liabilities measured at amortized costs
Interest result			1,759	20,559	-40,563
Dividends		648	138		
Valuation	-26,867	2,787	93	-12,100	6,075
Gains and losses from sale and disposal		4,825			
Net gains/losses recognized in net income	**-26,867**	**8,260**	**1,990**	**8,459**	**-34,488**
Net gains/losses recognized in other comprehensive income	-1,458		-22,147		
NET GAINS/LOSSES	**-28,325**	**8,260**	**-20,157**	**8,459**	**-34,488**

2017

(in TEUR)	Held for trading	Hedge accounting	Loans and receivables	Available for sale	Other financial liabilities
Interest result			31,582	1,939	-33,762
Dividends				3,603	
Valuation	26,875	-6,319	-6,699	3,889	
Gains and losses from sale and disposal				6,243	
Net gains/losses recognized in net income	**26,875**	**-6,319**	**24,883**	**15,674**	**-33,762**
Net gains/losses recognized in other comprehensive income		1,073		-17,719	
NET GAINS/LOSSES	**26,875**	**-5,246**	**24,883**	**-2,045**	**-33,762**

L) RISK MANAGEMENT – RISKS RELATING TO FINANCIAL INSTRUMENTS

As a global company serving a variety of different markets and customers, the Group is subject to risks relating to financial instruments as well as strategic and operational risks. ANDRITZ has implemented an established Group-wide control and risk management system with the main task of identifying emerging risks at an early stage and quickly taking countermeasures. This system is an important element in the active risk management system within the Group. Despite having this control and risk management system in place, it cannot be guaranteed that all risks will be identified at an early stage. Consequently, the assets, liabilities, financial position, and profit or loss of the Group could be adversely affected. In order to minimize the financial risks at the best possible rate and to enhance monitoring, control, and assessment of its financial and liquidity position, ANDRITZ GROUP has implemented comprehensive policies and a transparent information system. The individual risks relating to financial instruments are described below. A detailed presentation of strategic and operative risks can be found in the Management report in chapter Risk Management.

a) Credit risks

The risk of a possible default (insolvency) by individual or several counterparties is minimized by means of an internal counterparty limit system. In this system, the maximum investment limit for each individual counterparty is determined in view of the respective counterparty's credit rating (by international rating agencies such as Moody's, Standard & Poor's, Fitch) and the credit default swap spreads (CDS spreads – indicator of the probability of the counterparty defaulting). The counterparty limit is adjusted on a monthly basis so that it is possible to react quickly in the event of credit rating changes at short notice. If there are larger, short-term changes in CDS spreads or counterparty ratings, the counterparty exposure is reduced immediately.

Credit risks and the risk of a delay in payment by counterparties are controlled by the use of credit approvals, credit limits, and monitoring procedures. If appropriate, the Group obtains guarantees from governmental export agencies or similar private institutions to reduce the risk of a counterpart defaulting.

Without considering risk minimization strategies as described above, the carrying values of financial assets recorded in the financial statements represent the Group's maximum exposure to credit risk.

Valuation allowances are included for all known risks. The possibility of a future shortfall in payment exceeding the recorded valuation allowance cannot be avoided with certainty. The following tables show the gross book values and value adjustments of the assets included in the impairment model of IFRS 9, separated by risk category. The risk classes are based on the method of determining the valuation allowance.

Trade accounts receivable

In order to control the credit risks from trade receivables outstanding effectively, ANDRITZ GROUP has established a uniform risk management process and compiled an appropriate Group-wide policy. In the ANDRITZ subsidiaries, the respective credit risk managers are responsible for conducting regular credit rating analyses on customers and project risk analyses, including the valuation of collateral securities. In particular, collateral securities include credit insurance, advance payments, letters of credit, and guarantees.

Already in the bidding phase, customer credit assessments are carried out and corresponding credit limits are set. In order to minimize the risk related to bad debts, collateral is agreed with customers or the risk of default is largely covered by public or private insurances. In addition to single valuation allowances, the estimated expected credit losses are calculated on the basis of experience with actual credit defaults over the last five years and the inclusion of a scaling factor separated into days overdue and risk classes.

2018

(in TEUR)	Average weighted loss rate - risk category 1	Average weighted loss rate - risk category 2	Gross amount	Impairment loss	Net amount
Not due	0.04%	0.41%	657,216	-1,458	655,758
Up to 60 days past due	0.23%	1.04%	176,490	-897	175,593
61 to 120 days past due	0.69%	3.13%	46,422	-874	45,548
More than 120 days past due	1.84%	8.35%	95,538	-3,918	91,620
Individually impaired			56,715	-51,117	5,598
Sum			**1,032,381**	**-58,264**	**974,117**

2017

(in TEUR)	Average weighted loss rate - risk category 1	Average weighted loss rate - risk category 2	Gross amount	Impairment loss	Net amount
Not due	-	-	584,975		584,975
Up to 60 days past due	-	-	155,742		155,742
61 to 120 days past due	-	-	38,548		38,548
More than 120 days past due	-	-	103,924		103,924
Individually impaired			52,176	-43,385	8,791
Sum			**935,365**	**-43,385**	**891,980**

Contract assets

Already in the bidding phase, customer credit assessments are carried out and corresponding credit limits are set. In order to minimize the risk associated with bad debts, collateral is agreed with customers or the risk of default is largely covered by public or private insurances. Based on internal credit risk reporting, contract assets are valued differently, depending on whether there is collateral or not. This impairment was first recognized in the financial year 2018, so no prior year table is presented.

2018

(in TEUR)	Average weighted loss rate	Gross amount	Impairment loss	Net amount
Individually impaired	-	2,038	-1,437	601
Unsecured proportion	0.86%	67,878	-582	67,296
Secured proportion	0.32%	720,745	-2,288	718,457
Sum		**790,661**	**-4,307**	**786,354**

Other receivables

In addition to single valuation allowances, the estimated expected credit losses are calculated on the basis of experience with actual credit defaults over the last five years and the inclusion of a scaling factor.

2018

(in TEUR)	Average weighted loss rate	Gross amount	Impairment loss	Net amount
Individually impaired	-	29,394	-9,429	19,965
Lump sum impaired	1.12%	101,077	-1,035	100,042
Sum		**130,471**	**-10,464**	**120,007**

2017

(in TEUR)	Average weighted loss rate	Gross amount	Impairment loss	Net amount
Individually impaired	-	4,001	-4,001	0
Not impaired		112,964	0	112,964
Sum		**116,965**	**-4,001**	**112,964**

Cash and cash equivalents and investments

ANDRITZ pursues a risk-averse investment strategy. Cash is largely invested in low-risk financial assets, such as government bonds, government-guaranteed bonds, money market funds, investment funds to cover pension obligations, Schuldscheindarlehen insured by a certificate of deposit or time deposits. However, turbulences on the international financial markets may lead to unfavorable price developments for various securities or make them non-tradable. This could have an adverse effect on the ANDRITZ GROUP's financial result or shareholders' equity due to necessary impairment or valuation allowances. On a monthly basis the Executive Board is informed about the extent and volume of current risk exposure and the respective counterparty limits in the ANDRITZ GROUP.

Credit risk related to cash and cash equivalents and time deposits included in "Investments" is low, since a conservative investment strategy determines a preferably wide diversification with minimum criteria for the counterparty's credit rating of the investment. Bank balances and time deposits are assessed based on ratings. This impairment was first applied in financial year 2018, so no prior year comparative table is presented.

2018

(in TEUR)	External rating	Average weighted loss rate	Gross amount	Impairment loss	Net amount
Low risk	AAA bis BBB-	0.05%	971,981	-514	971,467
Medium risk	BB+ bis BB-	0.16%	125,263	-230	125,033
High risk	B+ bis D	0.22%	4,952	-11	4,941
Sum			**1,102,196**	**-755**	**1,101,441**

The development of the value adjustments recognized in the reporting period is as follows:

(in TEUR)	Trade accounts receivable	Contract assets	Other receivables and assets	Cash and cash equivalents	Investments	Total
Balance as of December 31, 2016	**-48,639**	**0**	**-7,592**	**0**	**0**	**-56,231**
Charged to expenses	-15,315		-48			-15,363
Usage	6,021		78			6,099
Release	15,331		3,564			18,895
Currency translation adjustments	-783		-3			-786
Balance as of December 31, 2017	**-43,385**	**0**	**-4,001**	**0**	**0**	**-47,386**
Change in accounting policies	-5,834	-2,132	-1,538	-166	-1,028	-10,698
Charged to expenses	-7,101	-2,162	-7,324	-50	-10	-16,647
Usage	3,141		96			3,237
Release	190		2,279		499	2,968
Currency translation adjustments	-5,275	-13	24			-5,264
Balance as of December 31, 2018	**-58,264**	**-4,307**	**-10,464**	**-216**	**-539**	**-73,790**

The Group does not have any significant credit risk exposure to any single counterparty or any group of counterparties having similar characteristics. The Group defines counterparties as having similar characteristics if they are related entities. There are no sales from transactions with a single external customer that amount to 10% or more of the Group's sales. On an overall basis, there is no significant concentration of credit risk.

To ensure transparency with respect to financial risks on projects and to enable immediate countermeasures a quarterly credit risk reporting to the Executive Board has been implemented. The reporting shows the maximum expected unsecured credit risk for orders with a value of over one million euros as well as customer ratings.

b) Liquidity risks

In order to minimize the financial risks at the best possible rate and to enhance monitoring, control, and assessment of its financial and liquidity position, ANDRITZ GROUP has implemented a comprehensive policy and a transparent information system. The Group manages liquidity risks especially by holding adequate financial reserves, by issuing bonds, by requiring substantial customer advances, and by reconciling maturity date profiles of financial assets, receivables, and liabilities. A liquidity forecast with a defined planning horizon, quarterly updates of this rolling forecast, and existing but unused credit facilities ensure the necessary liquidity for the ANDRITZ GROUP.

The Group endeavors to mitigate the risk of payment failure by customers at the best possible rate by means of bank guarantees and export insurance. Further information can be found in chapter L) a) Credit risks. However, it can not be excluded that there will not be any individual payment default that will have a substantial negative impact on development of earnings and liquidity of the Group in the event of occurrence.

The ANDRITZ GROUP's position in terms of liquidity is very good and it has high liquidity reserves. The Group avoids dependence on a single bank or a few banks. In order to ensure independence, only a certain volume of each major financial product (cash and cash equivalents, financial liabilities, financial assets, guarantees, and derivatives) is handled by only one bank at a time. In the ANDRITZ GROUP, liquidity not only means the ability to meet financial obligations in the narrower sense, but also the availability of sureties. Operative business requires that bid bonds, contract performance guarantees, downpayment guarantees as well as performance and warranty bonds are provided on a continuous basis. As a result, financial flexibility is also determined by sufficient surety lines. With this diversification, ANDRITZ is seeking to minimize the counterparty risk at the best possible rate.

There are no substantial credit delays by the ANDRITZ GROUP; in general all financial liabilities are settled on due date. The following tables show the undiscounted future contractual cash flows from financial liabilities:

2018

(in TEUR)	Net book value	Contractual cash flows			
		Not exceeding 1 year	1 to 5 years	More than 5 years	Total
Bonds	343,684	363,563	0	0	363,563
Bank loans and other financial liabilities	140,794	122,441	17,275	1,313	141,029
Obligations under finance leases	29,962	6,109	17,833	11,969	35,911
Trade accounts payable	604,189	604,189	0	0	604,189
Earn out and contingent considerations	98,612	74,837	23,775		98,612
Schuldscheindarlehen	898,134	13,318	160,753	814,502	988,573
Other liabilities	882,186	860,951	16,607	4,628	882,186
Non-derivative financial liabilities	**2,997,561**	**2,045,408**	**236,243**	**832,412**	**3,114,063**
Derivatives	53,581	43,607	9,974	0	53,581
Derivative financial liabilities	**53,581**	**43,607**	**9,974**	**0**	**53,581**
TOTAL	**3,051,142**	**2,089,015**	**246,217**	**832,412**	**3,167,644**

2017

(in TEUR)	Net book value	Contractual cash flows			
		Not exceeding 1 year	1 to 5 years	More than 5 years	Total
Bonds	349,759	13,563	363,563	0	377,126
Bank loans and other financial liabilities	106,671	84,999	22,310	4,473	111,782
Obligations under finance leases	18,334	1,781	13,705	4,907	20,393
Trade accounts payable	461,239	461,239	0	0	461,239
Earn out and contingent considerations	62,737	1,762	67,512	0	69,274
Schuldscheindarlehen	399,070	6,200	24,800	415,210	446,210
Other liabilities	927,204	902,430	17,860	6,914	927,204
Non-derivative financial liabilities	**2,325,014**	**1,471,974**	**509,750**	**431,504**	**2,413,228**
Derivatives	56,979	44,999	11,980	0	56,979
Derivative financial liabilities	**56,979**	**44,999**	**11,980**	**0**	**56,979**
TOTAL	**2,381,993**	**1,516,973**	**521,730**	**431,504**	**2,470,207**

c) Market risks

The major market risks of ANDRITZ GROUP contain exchange rate risks, interest rate risks, and raw material price risks.

Exchange rate risks

The currency risks of the Group occur due to the fact that the Group operates worldwide in different countries that do not have Euro as their local currency. The Group enters into foreign exchange forward contracts and swaps in order to exclude or minimize the foreign exchange risk (hedging) resulting from orders that are concluded in foreign currency. Exchange rate risks resulting from the recognition of equity are not hedged. Foreign exchange forward contracts are concluded exclusively with first-class national or international banks whose credit rating is checked continuously by Group Treasury in order to avoid a “cluster risk”. The measures and regulations needed in connection with hedging of orders not concluded in the respective functional currencies of the Group companies are stated in the Group-wide treasury policy.

The sensitivity analysis provides an approximate quantification of the risk exposure in the event that certain specified parameters were to be changed under a specific set of assumptions. Exchange rate risks occur particularly with the US dollar (USD), Chinese renminbi yuan (CNY), Canadian dollar (CAD), Swiss franc (CHF), Swedish krona (SEK), and Indian rupee (INR). The following details describe the sensitivity to a rise or fall in the above noted currencies against the Euro (EUR) from the Group’s point of view. The change shows the amount applied in internal reporting of foreign currency risk and reflects the Group’s assessment of a possible change in foreign exchange rates. Currency risks in the meaning of IFRS 7 arise from financial instruments that are denominated in a currency other than the functional currency and are of a monetary nature. Translation differences from converting the financial statements of foreign Group companies into the Group currency are disregarded. The sensitivity analysis includes the material financial instruments of the ANDRITZ GROUP outstanding on the balance sheet date.

The impact on net income is as follows:

(in TEUR)		2018	2017
EUR/USD	+10%	-23,297	-34,294
	-10%	23,297	34,294
EUR/CAD	+10%	-3,963	-3,789
	-10%	3,963	3,789
EUR/CNY	+10%	7,121	7,716
	-10%	-7,121	-7,716
EUR/SEK	+10%	221	1,111
	-10%	-221	-1,111
EUR/CHF	+10%	4,404	1,146
	-10%	-4,404	-1,146
EUR/INR	+10%	-1,400	-2,329
	-10%	1,400	2,329

The changes compared to the net income reported are mainly due to the market valuation of foreign exchange forward contracts at new rates, which are used to hedge plan items and are not included in any hedge relationship according to IAS 39. These changes in fair values of derivatives are offset by the hedged order backlog.

Interest rate risks

In July 2012, ANDRITZ AG issued a bond with a nominal value of 350 MEUR with a tenor of seven years and a nominal interest rate of 3.875% p.a. For this bond, interest rate swaps were concluded to hedge the risk arising from the fixed interest rate of the bond. The interest rate swaps changed the fixed interest rate of the bond to a variable interest rate for the whole period. Therefore, ANDRITZ AG is exposed to the risk of a changing interest rate concerning the cash flows, but the fair value of the bond is hedged and thus, hedge accounting according to IAS 39 is applied.

In the financial year, a Schuldscheindarlehen was issued in four tranches. In order to hedge the floating-rate tranches, interest rate swaps were concluded. The variable interest rate exposure was converted into fixed interest obligations. ANDRITZ GROUP uses cash flow hedge accounting for the purpose of securing this interest rate risk. The effectiveness of this hedging relationship is determined using the cumulative dollar-offset-method. In the financial year, the effective portion of these interest rate swaps resulted in an unrealized loss of 1.5 MEUR. This was recognized in other comprehensive income, taking deferred taxes into account. Ineffectiveness did not occur.

The basic contractual parameters of the swaps are similar to those of the bond and therefore, the fair value hedge was virtually 100% effective. By applying the rules of hedge accounting, the gain or loss from the change in fair value of the swaps was recognized through profit or loss. The gain or loss attributable to the changes of the hedged interest rate risk leds to an adjustment of the net book value of the bond and was also recognized through profit or loss. As a result, the gains and losses resulting from the swaps and the bond almost offset each other.

The ANDRITZ GROUP estimates that the exposure to interest rate risk of financial assets and liabilities is low due to the risk-averse strategy; additional significant derivatives for hedging of interest risks are not used. The interest rate risks are managed by internal Cash-flow-at-Risk (CfaR) and Value-at-Risk (VaR) calculations as well as by prespecified limits. The limits for CfaR and VaR are set by using a benchmarking approach. Observation of the defined limits is monitored on a quarterly basis.

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

2018

(in %)	EUR	USD	BRL	CNY
FINANCIAL ASSETS				
Cash on current accounts	0.0	0.9	1.6	0.7
Current deposits	0.1	0.0	6.3	2.3
Investments - current	0.6	0.0	0.0	2.7
Investments - non-current	0.3	0.0	0.0	0.0
FINANCIAL LIABILITIES				
Overdrafts on current accounts	0.0	0.7	0.0	0.0
Current loans	0.3	4.0	5.1	6.6
Non-current loans	1.7	0.0	0.0	5.7
Bonds, current	2.0	0.0	0.0	0.0
Bonds, non-current	0.0	0.0	0.0	0.0
Schuldscheindarlehen - non-current	1.5	0.0	0.0	0.0

2017

(in %)	EUR	USD	BRL	CNY
FINANCIAL ASSETS				
Cash on current accounts	0.0	0.6	0.3	0.9
Current deposits	0.1	1.2	6.8	2.8
Investments - current	0.3	0.0	0.0	4.1
Investments - non-current	0.3	0.0	0.0	0.0
FINANCIAL LIABILITIES				
Overdrafts on current accounts	0.0	0.5	0.0	0.0
Current loans	0.8	4.2	9.4	0.0
Non-current loans	2.8	0.0	0.0	6.3
Bonds, non-current	2.0	0.0	0.0	0.0
Schuldscheindarlehen - non-current	1.6	0.0	0.0	0.0

The interest rates refer to the remaining terms of the respective financial asset or financial liability.

The sensitivity analysis has been determined based on the bond's exposure to interest rates as of balance sheet date. There is no risk of a changing interest rate concerning the cash flows of ANDRITZ AG, as the issuer of the fixed-interest bearing bond. However, a change in the interest rate level would affect the fair value of the bond. Interest rate swaps were used for the bond to hedge the risk from the change in fair value. Interest rate sensitivity is assumed at 100 basis points in internal reporting on the interest rate risk. This reflects the Group's estimate with respect to a possible change in the interest rate. If interest rates change by 100 basis points and all other variables are kept constant, this would cause a change in the fair value of the swaps and a countervailing change in the net book value of the bond through profit or loss by virtually the same amount.

(in TEUR)		2018	2017
Changes in market interest rates by +100 bp	Swaps	-697	-3,383
	Bonds	697	3,383
	Effect on net income	**0**	**0**
Changes in market interest rates by -100 bp	Swaps	705	3,460
	Bonds	-705	-3,460
	Effect on net income	**0**	**0**

A rise in the interest level by 100 basis points, while simultaneously keeping all other variables constant, would have led to an increase in the interest result of 4,922 TEUR in the 2018 financial year (2017: increase of 9,138 TEUR). A decline in the interest level would have led to a decrease in the interest result in the same amount.

Raw material price risks

Raw materials are exposed to price fluctuation risks due to the volatility of the raw material markets. The Group uses commodity forwards mainly to hedge the price risk for copper, which is used in manufacturing of generators. Contracts are concluded exclusively with first-class banks whose credit rating is checked continuously by Group Treasury.

M) LEASES

Leasing contains operating leases and finance leases:

a) Operating leases

The Group has entered into various operating lease agreements for real estate (office and workshop), machinery, vehicles, and other facilities as lessee. Lease terms do not contain restrictions on the Group's activities concerning dividends, additional debt or further leasing.

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

(in TEUR)	2018	2017
Not exceeding 1 year	45,688	42,497
1 to 5 years	102,049	84,742
More than 5 years	51,158	39,373
	198,895	**166,612**

b) Finance leases

ANDRITZ leases facilities for its business operations that are classified as finance leases. These largely cover rental of real estate at the sites at Raaba (Austria), Vierkirchen (Germany), Kunshan (China), and Youngsville, (USA) as well as rental of machinery at the site at Aue (Germany), and vehicles. The lease contracts mainly comprise terms between 12 and 180 months. Future minimum lease payments under non-cancelable finance leases are as follows:

2018

(in TEUR)	Not exceeding 1 year	1 to 5 years	More than 5 years	Total
Total minimum lease payments	6,109	17,833	11,969	35,911
Less amount representing interest	-1,317	-3,527	-1,105	-5,949
Present value of leasing payments	**4,792**	**14,306**	**10,864**	**29,962**

2017

(in TEUR)	Not exceeding 1 year	1 to 5 years	More than 5 years	Total
Total minimum lease payments	1,781	13,705	4,907	20,393
Less amount representing interest	-643	-1,294	-122	-2,059
Present value of leasing payments	**1,138**	**12,411**	**4,785**	**18,334**

The following carrying amounts are included in property, plant, and equipment:

(in TEUR)	2018	2017
Land and buildings	24,584	17,457
Technical equipment and machinery	2,185	2,518
Other equipment, factory and office equipment	0	218
	26,769	**20,193**

c) ANDRITZ as lessor

In the financial year 2018, rental income of 8,869 TEUR (2017: 8,140 TEUR) was generated. The contracts largely refer to real estate. Future minimum lease payments under non-cancelable finance leases are as follows:

(in TEUR)	2018	2017
Not exceeding 1 year	5,390	5,031
1 to 5 years	4,551	5,450
More than 5 years	7,451	8,280
	17,392	**18,761**

N) CONTINGENT LIABILITIES

In the course of its business, the ANDRITZ GROUP is party to numerous legal proceedings before both administrative and judicial courts and bodies as well as before arbitration tribunals. The substantial majority of such proceedings is typical for the Group's industry, including contract and project disputes, product liability claims, and intellectual property litigation. ANDRITZ GROUP records adequate provisions to cover the expected outcome of proceedings to the extent that negative outcomes are likely and reliable estimates can be made. There is no guarantee that these provisions will be sufficient. Given the amounts involved in some of these legal disputes, a negative decision for ANDRITZ in one or several of these disputes may have a material adverse effect on the earnings and liquidity position of the Group. In cases, where a negative outcome is unlikely, though seems possible (and is not totally remote), ANDRITZ GROUP does not record provisions. Such material cases are as follows:

The subject area product liability includes a number of cases alleging injuries and/or death resulting from exposure to asbestos. As of December 31, 2018 certain subsidiaries of the ANDRITZ GROUP are defendants in 31 asbestos cases (29 cases as of December 31, 2017) in the USA. In total, the cases involve 414 plaintiffs (401 plaintiffs as of December 31, 2017). All cases relate to claims against multiple defendants. All subsidiaries intend to defend each claim vigorously.

ANDRITZ HYDRO S.A., Brazil, faces tax claims based on allegations of joint and several liability with the Inepar Group arising out of the previous minority holding of Inepar. The tax claim enforcement actions, which were also contested, are not active as a result of Inepar's participation in the governmental tax amnesty program (REFIS). However, certain appeals by ANDRITZ relating to these claims are still active. As Inepar failed to comply with its obligation under the REFIS program, the tax proceedings against ANDRITZ HYDRO Ltda. may be resumed.

O) RELATED PARTY TRANSACTIONS

Under IAS 24 (Related Party Disclosures), related party transactions should be disclosed with companies, as far as they are not already included as consolidated companies in the consolidated financial statements of ANDRITZ AG and with persons or their family members, respectively. The members of the Executive Board and the Supervisory Board have been defined as key management personnel, making them and the close members of their families related parties. The compensation to be disclosed includes the remuneration of the Executive Board and the Supervisory Board.

a) Related entities

In addition to the companies included in the consolidated financial statements, the Group has direct or indirect relations in the ordinary course of business with non-consolidated subsidiaries and associated companies that are considered related parties of the Group. As the Group's transfer pricing policy provides transfer prices at arm's length, no transactions are conducted that do not comply with market standards. The non-inclusion of non-consolidated entities in the consolidated financial statements has no significant impact on the Group's net assets, liabilities, financial position, and profit or loss.

The extent of business relations with non-consolidated Group companies and associated companies is as follows:

(in TEUR)	2018	2017
SALES AND OTHER OPERATING INCOME	**15,190**	**12,427**
with non-consolidated companies	15,076	12,144
with associated companies	114	283
EXPENSES	**-26,141**	**-18,375**
with non-consolidated companies	-26,141	-18,375
with associated companies	0	0
TRADE AND OTHER RECEIVABLES	**10,588**	**17,512**
from non-consolidated subsidiaries	**10,584**	**17,450**
Gross amount	24,160	26,218
Valuation allowance	-13,576	-8,768
from associated companies	**4**	**62**
Gross amount	444	502
Valuation allowance	-440	-440
LIABILITIES	**4,823**	**5,293**
to non-consolidated companies	4,494	4,964
to associated companies	329	329

b) Related persons

Executive Board

The Executive Board of ANDRITZ AG was composed of five members as of December 31, 2018:

Name	Function	Date of first appointment to Executive Board	End of current mandate
Wolfgang Leitner	President & CEO	October 1, 1987 (CFO) June 29, 1994 (President & CEO)	June 28, 2023
Humbert Köfler	Member of the Executive Board	April 1, 2007	March 31, 2020
Joachim Schönbeck	Member of the Executive Board	October 1, 2014	September 30, 2022
Wolfgang Semper	Member of the Executive Board	April 1, 2011	March 31, 2024
Mark von Laer	Chief Financial Officer	March 1, 2017	February 29, 2020

A company controlled by the President and CEO of ANDRITZ AG has ceded operation of a corporate jet aircraft owned by the company to a professional private aviation firm. The related expenses for business trips by the President and CEO and other members of the Executive Board amounted to 843 TEUR in 2018 (2017: 1,058 TEUR). As of December 31, 2018 a liability to this company amounting to 12 TEUR (2017: 44 TEUR) was recognized in this regard. These and other business relations with companies in which members of the Supervisory Board or the Executive Board of ANDRITZ AG are involved are conducted at usual market terms and are of minor importance, both individually and collectively.

The chairman of the Executive Board Wolfgang Leitner waived his remuneration as chairman of the Schuler AG Supervisory Board.

Custos Vermögensverwaltungs GmbH owns 25% plus one share, while Cerberus Vermögensverwaltung GmbH holds 0.77%. Some of the shares in these companies are held directly and some indirectly by Custos Privatstiftung and by Wolfgang Leitner, CEO of ANDRITZ AG, respectively. Certus Beteiligungs-GmbH, whose shares are owned indirectly by Manile Privatstiftung, holds 5.72%. The Takeover Commission has decided that, pursuant to § 23 (2), line 1 Takeover Act, the shares of Certus Beteiligungs-GmbH are attributable to Custos Privatstiftung.

The remuneration of the Executive Board is composed of a fixed and a variable/success-based portion. The amount of the variable portion depends on the net profit. For contracts with members of the Executive Board, the maximum value for the variable annual remuneration was fixed at three times the fixed annual remuneration. Any amounts in excess of this sum will be credited as a variable remuneration for the following years. If the net income of the Group falls short of a defined minimum amount, this results in a “malus” that is also carried forward to the following years and in a reduction in future variable salary components. The other remunerations relate primarily to taxable benefits in kind for company cars.

In all share option programs for managerial staff and the Executive Board since the Initial Public Offering (IPO), participation was contingent on investing at least 20 TEUR in ANDRITZ shares for managerial staff and 40 TEUR for members of the Executive Board no later than the allocation date of the options. This investment must be maintained continuously until exercise of the options by those persons subscribing to the option program and evidence thereof must be brought when the options are exercised. There is a waiting period of three years before options can be exercised if the contract of employment is still in force (exception: end of employment contract as scheduled according to contract provisions).

No advances or loans were granted to members of the ANDRITZ AG Executive Board.

The members of the Executive 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 work has been outsourced to pension funds. Pension contracts are either defined contribution oriented or performance oriented. 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; after this, annual adjustments can be made to take account of the development in wages and salaries and of ANDRITZ's economic status.

A large section of the Executive Board shall, upon termination of his function and concurrent termination of employment, be entitled to severance payments in the meaning of section 23 of the Austrian Employees Act unless such termination is the result of justified dismissal.

The principles applied in establishing the remuneration of the Executive Board and of senior managers comply almost entirely with the Austrian Code of Corporate Governance.

The following expenses have been recognized for the Executive Board:

(in TEUR)	2018	2017
Short-term benefits	8,827	10,018
Post-employment benefits	5,281	427
Share-based expenses	556	-331
	14,664	10,114

A provision was recorded for pensions of former members of the Executive Board and their dependents of 6,211 TEUR in 2018 (2017: 5,286 TEUR). Expenses for these pensions amounted to 180 TEUR in 2018 (2017: 125 TEUR).

ANDRITZ AG took out Directors' and Officers' liability insurance (D&O insurance) for 2018. The costs are covered by the company. The D&O insurance covers certain personal liability risks of persons in the ANDRITZ GROUP acting under responsibility. The annual costs amount to approximately 280 TEUR (2017: approximately 200 TEUR).

In connection with the execution of a project in Austria, two administrative criminal proceedings for alleged violations in temporary hiring and employment of foreign nationals were opened against members of the ANDRITZ AG Executive Board and extremely high fines were imposed at first instance. The case is currently pending before the European Court of Justice. In the opinion of the company, these accusations are unfounded based on the current state of knowledge. The Supervisory Board has dealt with the accusations in detail and, on the basis of the current state of knowledge, considers that the Executive Board members facing prosecution are not at fault and that the costs of defense should be borne by the company until a final decision is reached. These costs amounted to approximately 350 TEUR up to the end of the year.

Supervisory Board

The ANDRITZ AG Supervisory Board consists of six appointed members and three delegated members.

Name	Function	Date of first appointment to Executive Board	End of current mandate
APPOINTED MEMBERS			
Christian Nowotny	Chairman of the Supervisory Board	December 29, 1999	Until the Annual General Meeting in 2022
Fritz Oberlerchner	Deputy-Chairman of the Supervisory Board	March 29, 2006	Until the Annual General Meeting in 2020
Jürgen Hermann Fechter	Member of the Supervisory Board	March 30, 2016	Until the Annual General Meeting in 2021
Alexander Isola	Member of the Supervisory Board	March 30, 2016	Until the Annual General Meeting in 2021
Monika Kircher	Member of the Supervisory Board	March 21, 2014	Until the Annual General Meeting in 2019
Kurt Stiassny	Member of the Supervisory Board	December 29, 1999	Until the Annual General Meeting in 2020
DELEGATED MEMBERS			
Georg Auer	Member of the Supervisory Board	July 1, 2011	
Andreas Martiner	Member of the Supervisory Board	February 14, 2001	
Monika Suppan	Member of the Supervisory Board	January 1, 2018	

The remuneration scheme of the Supervisory Board is composed of a fixed and an attendance-related portion. The fixed portion is a global sum, which is to be distributed such that the chairman of the Supervisory Board receives double the amount and his deputy one-and-a-half-times the amount paid to the other members. The second portion consists of a lump sum fee paid in respect of each meeting that the member attends. Subject to approval by the Annual General Meeting, the Supervisory Board remunerations for the 2018 business year amount to a total of 305 TEUR (2017: 300 TEUR). No Supervisory Board remuneration was paid to the Supervisory Board members delegated by the employee representative organizations.

The chairman of the Supervisory Board, Christian Nowotny, is also a member of the Schuler AG Supervisory Board and received a remuneration amounting to 25 TEUR (excluding attendance fees) for the 2018 business year.

No advances or loans were granted to members of the ANDRITZ AG Supervisory Board. There were no agreements subject to approval between ANDRITZ AG and individual members of the Supervisory Board or companies closely associated with Supervisory Board members.

The law firm Graf & Pitkowitz Rechtsanwälte GmbH, in which the Supervisory Board member Alexander Isola acts as a partner, provided consultancy services as a legal advisor to ANDRITZ AG in the 2018 financial year. These mandates were settled at the respective applicable hourly rates of the law firm. The total volume of fees incurred in the financial year 2018 was around 100 TEUR.

P) EXPENSES FOR SERVICES BY THE GROUP AUDITOR

(in TEUR)	2018	2017
Year-end audits	336	306
Other reviews	11	9
Other services	28	2
	375	317

Q) EVENTS AFTER THE BALANCE SHEET DATE

There were no events of material significance after the balance sheet date.

R) GROUP COMPANIES

Company	Main office	2018 Share*	2018 Type of consolidation	2017 Share*	2017 Type of consolidation
Anstalt für Strömungsmaschinen GmbH	Graz, Austria	100.00%	NC	100.00%	NC
ANDRITZ Technology and Asset Management GmbH	Graz, Austria	100.00%	FC	100.00%	FC
ANDRITZ Power & Water GmbH	Vienna, Austria	100.00%	FC	100.00%	FC
ANDRITZ Environment S.r.l.	Milan, Italy	100.00%	NC	100.00%	NC
ANDRITZ Environmental Engineering (Shanghai) Co., Ltd.	Shanghai, China	100.00%	FC	100.00%	FC
AE Energietechnik GmbH	Raaba, Austria	-	-	100.00%	NC
ANDRITZ SEPARATION GmbH[2)]	Cologne, Germany	100.00%	FC	100.00%	FC
Lenser Filtration GmbH[2)]	Senden, Germany	100.00%	FC	100.00%	FC
Lenser Asia Sdn. Bhd.	Petaling Jaya, Malaysien	100.00%	FC	100.00%	FC
Modul Systeme Engineering GmbH[2)]	Laufen, Germany	100.00%	FC	100.00%	FC
ANDRITZ KMPT GmbH[2)]	Vierkirchen, Germany	100.00%	FC	100.00%	FC
ANDRITZ KMPT Inc.	Florence / Kentucky, USA	100.00%	FC	100.00%	FC
ANDRITZ FBB GmbH[2)]	Mönchengladbach, Germany	100.00%	FC	100.00%	FC
ANDRITZ Deutschland Beteiligungs GmbH	Krefeld, Germany	100.00%	FC	100.00%	FC
ANDRITZ Ritz Immobilien GmbH	Krefeld, Germany	100.00%	FC	100.00%	FC
TANIAM GmbH & Co. KG	Pullach im Isartal, Germany	100.00%	FC	100.00%	FC
ANDRITZ GmbH	Hemer, Germany	100.00%	FC	100.00%	FC
ANDRITZ Kaiser GmbH	Bretten-Gölshausen, Germany	100.00%	FC	100.00%	FC
ANDRITZ Sundwig GmbH	Hemer, Germany	100.00%	FC	100.00%	FC
ANDRITZ Fiedler GmbH	Regensburg, Germany	100.00%	FC	100.00%	FC
ANDRITZ Fliessbett Systeme GmbH	Ravensburg, Germany	100.00%	FC	100.00%	FC
Lenser Verwaltungs GmbH	Senden, Germany	100.00%	FC	100.00%	FC
ANDRITZ S.R.L.	Cisnadie, Romania	100.00%	NC	100.00%	NC
ANDRITZ HYDRO GmbH	Ravensburg, Germany	100.00%	FC	100.00%	FC
ANDRITZ Küsters GmbH	Krefeld, Germany	100.00%	FC	100.00%	FC
ANDRITZ Kufferath GmbH	Düren, Germany	100.00%	FC	100.00%	FC
AKRE Real Estate GmbH	Düren, Germany	100.00%	FC	100.00%	FC
ANDRITZ MAERZ GmbH	Düsseldorf, Germany	100.00%	FC	100.00%	FC
ANDRITZ Ritz GmbH	Schwäbisch Gmünd, Germany	100.00%	FC	100.00%	FC
ANDRITZ Atro GmbH	Schwäbisch Gmünd, Germany	100.00%	FC	100.00%	FC
ANDRITZ Ritz Pte. Ltd.	Singapore, Singapore	100.00%	FC	100.00%	FC
Ritz Pumps South Africa (Pty) Ltd.	Germiston, South Africa	25.00%	NC	23.00%	NC
Ritz - Verwaltungsgesellschaft mit beschränkter Haftung	Schwäbisch Gmünd, Germany	100.00%	NC	100.00%	NC
ANDRITZ MeWa GmbH	Gechingen, Germany	100.00%	FC	100.00%	FC
ANDRITZ MeWa Kft.	Győr, Hungary	100.00%	NC	100.00%	NC
HGI Holdings Limited	Limassol, Cyprus	100.00%	NC	100.00%	NC
ANDRITZ SEPARATION AND PUMP TECHNOLOGIES INDIA PRIVATE LIMITED	Chennai, India	100.00%	FC	100.00%	FC

Company	Main office	2018 Share*	2018 Type of consolidation	2017 Share*	2017 Type of consolidation
ANDRITZ Slovakia s.r.o.	Humenné, Slovakia	100.00%	FC	100.00%	FC
ANDRITZ HYDRO GmbH	Vienna, Austria	100.00%	FC	100.00%	FC
ANDRITZ HYDRO SAS	Fontaine, France	100.00%	FC	100.00%	FC
ANDRITZ HYDRO Private Limited	Mandideep, India	100.00%	FC	100.00%	FC
ANDRITZ HYDRO Nepal Pvt. Ltd.	Kathmandu, Nepal	100.00%	NC	100.00%	NC
Bhutan Automation & Engineering Limited	Chhukha, Bhutan	49.00%	NC	-	-
ANDRITZ HYDRO S.L.	Algete, Spain	100.00%	FC	100.00%	FC
ANDRITZ HYDRO S.r.l., Unipersonale	Schio, Italia	100.00%	FC	100.00%	FC
ANDRITZ HYDRO AG	Kriens, Switzerland	100.00%	FC	100.00%	FC
ANDRITZ HYDRO S.A. de C.V.	Morelia, Mexico	100.00%	FC	100.00%	FC
ANDRITZ HYDRO AS	Jevnaker, Norway	100.00%	FC	100.00%	FC
ANDRITZ HYDRO S.A. Panama	El Dorado, Panama	100.00%	NC	100.00%	NC
ANDRITZ HYDRO Ltd. Sti.	Tekeli, Turkey	100.00%	FC	100.00%	FC
PT. ANDRITZ HYDRO	Jakarta, Indonesia	51.00%	FC	51.00%	FC
ANDRITZ HYDRO S.A.	Lima, Peru	100.00%	NC	100.00%	NC
ANDRITZ HYDRO (Pty) Ltd	Kyalami, South Africa	100.00%	NC	100.00%	NC
ANDRITZ HYDRO Ltda.	Bogotá, Colombia	100.00%	FC	100.00%	FC
ANDRITZ HYDRO s.r.o.	Prague, Czech Republic	100.00%	NC	100.00%	NC
ANDRITZ O&M PRIVATE LIMITED	Mandideep, India	100.00%	FC	100.00%	FC
ANDRITZ HYDRO C.A.	Caracas, Venezuela	100.00%	NC	100.00%	NC
ANDRITZ POWER Sdn. Bhd.	Kuala Lumpur, Malaysien	100.00%	NC	100.00%	NC
ANDRITZ HYDRO, INC.	Makati City, Philippines	100.00%	NC	100.00%	NC
PHP PHILIPPINES HYDRO PROJECT, Inc.	Makati City, Philippines	24.98%	NC	24.98%	NC
ANDRITZ Ulu Jelai Project Sdn. Bhd.	Kuala Lumpur, Malaysien	100.00%	NC	100.00%	NC
ANDRITZ HYDRO Hammerfest AS	Hammerfest, Norway	100.00%	FC	100.00%	FC
ANDRITZ HYDRO Hammerfest (UK) Limited	Glasgow, United Kingdom	100.00%	FC	100.00%	FC
ANDRITZ HYDRO, UNIPESSOAL LDA	Porto, Portugal	100.00%	NC	100.00%	NC
ANDRITZ HYDRO DRC SARL	Kinshasa, Democratic Republic of the Congo	100.00%	NC	100.00%	NC
AH PUMPSTORAGE GmbH	Vienna, Austria	60.00%	NC	60.00%	NC
ANDRITZ HYDRO Beteiligungsholding GmbH	Graz, Austria	100.00%	FC	100.00%	FC
ANDRITZ HYDRO Brasilien Beteiligungsgesellschaft mbH	Graz, Austria	100.00%	FC	100.00%	FC
ANDRITZ HYDRO LTDA.	Barueri, Brazil	100.00%	FC	100.00%	FC
ANDRITZ Construcoes e Montagens Ltda	Barueri, Brazil	100.00%	FC	100.00%	FC
ANDRITZ HYDRO (SU), LDA.	Luanda, Angola	100.00%	NC	100.00%	NC
ANDRITZ HYDRO VIETNAM COMPANY LIMITED	Hanoi, Vietnam	100.00%	NC	100.00%	NC
ANDRITZ FEED & BIOFUEL A/S	Esbjerg, Denmark	100.00%	FC	100.00%	FC
ANDRITZ FEED & BIOFUEL Brasil Ltda.	Curitiba, Brazil	100.00%	NC	100.00%	NC
ANDRITZ Chile Ltda.	Santiago de Chile, Chile	100.00%	FC	100.00%	FC
Andritz Metaliza S.A.	Santiago de Chile, Chile	50.00%	NC	50.00%	NC
ANDRITZ CHILE SITE SERVICES SpA	Santiago de Chile, Chile	100.00%	NC	-	-

Company	Main office	2018 Share*	2018 Type of consolidation	2017 Share*	2017 Type of consolidation
ANDRITZ CHILE SERVICES SpA	Santiago de Chile, Chile	100.00%	NC	-	-
ANDRITZ POWERLASE HOLDINGS LIMITED	West Sussex, United Kingdom	80.00%	FC	50.10%	NC
ANDRITZ POWERLASE LIMITED	West Sussex, United Kingdom	100.00%	FC	100.00%	NC
ANDRITZ POWERLASE Inc.	Orlando / Florida, USA	100.00%	FC	100.00%	NC
ANDRITZ (USA) Inc.	Alpharetta / Georgia, USA	100.00%	FC	100.00%	FC
ANDRITZ Inc.	Alpharetta / Georgia, USA	100.00%	FC	100.00%	FC
ANDRITZ Iggesund Tools Inc.	Oldsmar / Florida, USA	-	-	100.00%	FC
ANDRITZ SHW Inc.	Torrington / Connecticut, USA	100.00%	FC	100.00%	FC
ANDRITZ SEPARATION Inc.	Arlington / Texas, USA	100.00%	FC	100.00%	FC
ANDRITZ SEPARATION Technologies Inc.	Arlington / Texas, USA	100.00%	FC	100.00%	FC
ANDRITZ HYDRO Corp.	Charlotte / North Carolina, USA	100.00%	FC	100.00%	FC
ANDRITZ Metals Inc.	Canonsburg / Pennsylvania, USA	100.00%	FC	100.00%	FC
Genesis Worldwide II, Inc.	Alpharetta / Georgia, USA	100.00%	FC	100.00%	FC
ANDRITZ Herr-Voss Stamco, Inc.	Callery / Pennsylvania, USA	100.00%	FC	100.00%	FC
Breakaway Services LLC	Alpharetta / Georgia, USA	-	-	100.00%	FC
ANDRITZ ASKO Inc.	Homestead / Pennsylvania, USA	100.00%	FC	-	-
ANDRITZ ASKO Emera B.V.	Amsterdam, The Netherlands	100.00%	FC	-	-
ANDRITZ ASKO B.V.	Amsterdam, The Netherlands	100.00%	FC	-	-
SOTEC S.A. de C.V.	San Francisco Cuautlalpan, Mexico	25.00%	NC	-	-
Xerium Technologies, Inc.	Youngsville / North Carolina, USA	100.00%	FC	-	-
Xerium Asia, LLC	Youngsville / North Carolina, USA	100.00%	FC	-	-
Xerium Asia Holding Limited	Hong Kong, China	100.00%	FC	-	-
Beloit Asia Pacific (M) Inc.	Port Louis, Mauritius	100.00%	FC	-	-
Stowe Woodward (Xi'an) Roll Covering Co. Ltd.	Xi'an, China	90.00%	FC	-	-
Stowe Woodward (Changzhou) Roll Technologies Co. Ltd.	Changzhou, China	100.00%	FC	-	-
Xerium China Co. Ltd.	Kunshan City, China	100.00%	FC	-	-
Xerium Asia Pacific (Shanghai) Ltd.	Shanghai, China	100.00%	FC	-	-
Huyck Wangner (Shanghai) Trading Co. Ltd.	Shanghai, China	100.00%	FC	-	-
JJ Plank Company, LLC	Neenah / Delaware, USA	100.00%	FC	-	-
Weavexx, LLC	Youngsville / North Carolina, USA	100.00%	FC	-	-
Huyck.Wangner Japan Limited	Ibaraki-Ken, Japan	100.00%	FC	-	-
Xerium Argentina SA	Berazategui, Argentina	100.00%	FC	-	-

Company	Main office	2018 Share*	2018 Type of consolidation	2017 Share*	2017 Type of consolidation
Huyck Licensco Inc.	Youngsville / North Carolina, USA	100.00%	FC	-	-
Xerium III (US) Limited	Youngsville / North Carolina, USA	100.00%	FC	-	-
Xerium V (US) Limited	Youngsville / North Carolina, USA	100.00%	FC	-	-
Xerium Canada Inc.	Kentville, Canada	100.00%	FC	-	-
Xerium Technologies Chile SpA	Coronel, Chile	100.00%	FC	-	-
Stowe Woodward LLC	Youngsville / North Carolina, USA	100.00%	FC	-	-
Stowe Woodward Licensco LLC	Youngsville / North Carolina, USA	100.00%	FC	-	-
XTI, LLC	Youngsville / North Carolina, USA	100.00%	FC	-	-
XERIUM TECHNOLOGIES LIMITED	London, United Kingdom	100.00%	FC	-	-
Huyck.Wangner UK Limited	Kent, United Kingdom	100.00%	FC	-	-
HUYCK.WANGNER Austria GmbH	Gloggnitz, Austria	100.00%	FC	-	-
Stowe Woodward Finland Oy	Kerava, Finland	100.00%	FC	-	-
XERIUM ITALIA S.p.A.	Milan, Italy	100.00%	FC	-	-
HUYCK.WANGNER ITALIA S.p.A.	Latina, Italy	100.00%	FC	-	-
Xerium Technologies Makina Hizmetleri Sanayi LS	Corlu/Tekirdag, Turkey	100.00%	FC	-	-
Huyck.Wangner Australia Pty Ltd.	Geelong, Australia	100.00%	FC	-	-
Stowe-Woodward (UK) Limited	London, United Kingdom	100.00%	FC	-	-
Xerium France SAS	Paris, France	100.00%	FC	-	-
Stowe Woodward France S.A.	Meyzieu, France	100.00%	FC	-	-
Xerium Germany Holding GmbH	Reutlingen, Germany	100.00%	FC	-	-
Robec Walzen GmbH	Düren, Germany	100.00%	FC	-	-
Stowe Woodward Aktiengesellschaft	Düren, Germany	100.00%	FC	-	-
Huyck.Wangner Germany GmbH	Reutlingen, Germany	100.00%	FC	-	-
Stowe Woodward Sweden AB	Uppsala, Sweden	100.00%	FC	-	-
Huyck.Wangner Scandinavia Aktiebolag	Uppsala, Sweden	100.00%	FC	-	-
Huyck.Wangner Spain S.A.	San Sebastian, Spain	100.00%	FC	-	-
Wangner Itelpa I LLC	Youngsville / North Carolina, USA	100.00%	FC	-	-
Wangner Itelpa Participacoes Ltda	Piracicaba, Brazil	100.00%	FC	-	-
Wangner Itelpa II LLC	Youngsville / North Carolina, USA	100.00%	FC	-	-
Xerium IV (US) Limited	Youngsville / North Carolina, USA	100.00%	FC	-	-
Xerium do Brasil Ltda	Piracicaba, Brazil	100.00%	FC	-	-
Robec Brazil LLC	Youngsville / North Carolina, USA	100.00%	FC	-	-
Xerium Technologies Brasil Indústria e Comércio SA	Piracicaba, Brazil	100.00%	FC	-	-
Xerium Mexico SA de CV	Queretaro, Mexico	100.00%	FC	-	-
ANDRITZ Paperchine, Inc.	Rockton / Delaware, USA	-	-	100.00%	FC

		2018		2017	
Company	**Main office**	**Share***	**Type of consolidation**	**Share***	**Type of consolidation**
Paperchine Canada Holdings Inc.	Coquitlam / British Columbia, Canada	-	-	100.00%	FC
Paperchine GmbH	Maintal, Germany	-	-	100.00%	FC
ANDRITZ JohnsonFoils Limited	Chachoengsao, Thailand	100.00%	FC	100.00%	FC
ANDRITZ SAS	Châteauroux, France	100.00%	FC	100.00%	FC
ANDRITZ Selas SAS	Asnières-sur-Seine, France	100.00%	FC	100.00%	FC
ANDRITZ Selas Tianjin Industrial Furnace Equipment Co., Ltd.	Tianjin, China	40.00%	NC	40.00%	NC
Jaybee Eng. (Holdings) Pty. Ltd.	Carrum Downs / Victoria, Australia	100.00%	FC	100.00%	FC
ANDRITZ Pty. Ltd.	Carrum Downs / Victoria, Australia	100.00%	FC	100.00%	FC
ANDRITZ (NZ) Ltd.	Tauranga, New Zealand	100.00%	FC	100.00%	FC
ANDRITZ Ingeniería S.A.	Madrid, Spain	100.00%	FC	100.00%	FC
ANDRITZ Brasil Ltda.	Curitiba, Brazil	100.00%	FC	100.00%	FC
ANDRITZ SEPARATION Indústria e Comércio de Equipamentos de Filtraçâo Ltda.	Pomerode, Brazil	100.00%	FC	100.00%	FC
Sindus ANDRITZ Ltda.	Porto Alegre, Brazil	100.00%	FC	100.00%	FC
ANDRITZ Pilão Equipamentos Ltda.	Curitiba, Brazil	100.00%	FC	100.00%	FC
ANDRITZ Oy	Helsinki, Finland	100.00%	FC	100.00%	FC
Savonlinna Works Oy	Savonlinna, Finland	100.00%	FC	100.00%	FC
ANDRITZ HYDRO Oy	Tampere, Finland	100.00%	FC	100.00%	FC
Warkaus Works Oy	Varkaus, Finland	100.00%	FC	100.00%	FC
Enmas ANDRITZ Pvt. Ltd.	Chennai, India	40.00%	EQ	40.00%	EQ
Viafin Brazil Oy	Teuva, Finland	40.00%	EQ	40.00%	EQ
A&V MONTAGENS INDUSTRIAIS Ltda.	Lapa, Brazil	-	-	100.00%	EQ
ANDRITZ HYDRO Canada Inc.	Pointe-Claire / Québec, Canada	100.00%	FC	100.00%	FC
ANDRITZ Ltd.	Lachine / Québec, Canada	100.00%	FC	100.00%	FC
ANDRITZ Paper Machinery Ltd.	Lachine / Québec, Canada	100.00%	FC	100.00%	FC
ANDRITZ AUTOMATION Ltd.	Richmond / British Columbia, Canada	100.00%	FC	100.00%	FC
ANDRITZ Iggesund Tools Canada Inc.	Laval / Québec, Canada	-	-	100.00%	FC
HMI Canada Inc.	Boucherville / Québec, Kanada	100.00%	FC	-	-
HME Consultants Inc.	Boucherville / Québec, Kanada	100.00%	FC	-	-
HMI Construction Inc.	Boucherville / Québec, Kanada	100.00%	FC	-	-
ANBO Inc.	Blenheim / Ontario, Canada	100.00%	FC	100.00%	FC
ANDRITZ Asselin-Thibeau S.A.S.	Elbeuf, France	100.00%	FC	100.00%	FC
ANDRITZ Gouda B.V.	Waddinxveen, The Netherlands	100.00%	FC	100.00%	FC
S.A.S.J.E. Duprat & Cie	La Roche Blanche, France	100.00%	NC	100.00%	NC
ANDRITZ AB	Örnsköldsvik, Sweden	100.00%	FC	100.00%	FC
ANDRITZ HYDRO AB	Nälden, Sweden	100.00%	FC	100.00%	FC

Company	Main office	2018 Share*	2018 Type of consolidation	2017 Share*	2017 Type of consolidation
ANDRITZ Technologies AB	Stockholm, Sweden	51.00%	NC	-	-
ANDRITZ Ltd.	Newcastle-under-Lyme, United Kingdom	100.00%	FC	100.00%	FC
ANDRITZ (China) Ltd.	Foshan, China	100.00%	FC	100.00%	FC
ANDRITZ (Shanghai) Equipment & Engineering Co., Ltd	Shanghai, China	100.00%	FC	100.00%	FC
Shanghai Shenliang Mechanical Equipment and Erection Co. Ltd.	Shanghai, China	100.00%	FC	100.00%	FC
Beijing Andritz Sintai Engineering Technology Co., Ltd.	Beijing, China	-	-	40.00%	EQ
ANDRITZ-Wolfensberger Special Alloy Foundry Co. Ltd.	Foshan, China	100.00%	FC	100.00%	FC
ANDRITZ Technologies H.K. Ltd.	Hong Kong, China	100.00%	FC	100.00%	FC
ANDRITZ Thermtec Holding B.V.	Rotterdam, The Netherlands	100.00%	FC	100.00%	FC
ANDRITZ Thermtec B.V.	Rotterdam, The Netherlands	100.00%	FC	100.00%	FC
ANDRITZ Technologies Pvt. Ltd.	Bangalore, India	100.00%	FC	100.00%	FC
ANDRITZ FEED & BIOFUEL Ltd.	Hull, United Kingdom	100.00%	FC	100.00%	FC
ANDRITZ FEED & BIOFUEL B.V.	Geldrop, The Netherlands	100.00%	FC	100.00%	FC
ANDRITZ B.V.	Den Helder, The Netherlands	100.00%	FC	100.00%	FC
ANDRITZ Singapore Pte. Ltd.	Singapore, Singapore	100.00%	FC	100.00%	FC
ANDRITZ Uruguay S.A.	Fray Bentos, Uruguay	100.00%	FC	100.00%	FC
ANDRITZ Industrias S.A.	Fray Bentos, Uruguay	100.00%	NC	100.00%	NC
ANDRITZ Pulp Technologies Punta Pereira S.A.	Montevideo, Uruguay	100.00%	FC	100.00%	FC
ANDRITZ K.K.	Tokyo, Japan	100.00%	FC	100.00%	FC
ANDRITZ DELKOR (Pty) Ltd.	Kyalami, South Africa	100.00%	FC	100.00%	FC
GKD Delkor (Pty) Ltd.	Kyalami, South Africa	100.00%	NC	100.00%	NC
PT. ANDRITZ	Jakarta, Indonesia	100.00%	FC	100.00%	FC
LLC ANDRITZ	St. Petersburg, Russia	100.00%	FC	100.00%	FC
LLC ANDRITZ HYDRO	Moscow, Russia	100.00%	NC	100.00%	NC
ANDRITZ Kufferath s.r.o.	Levice, Slovakia	100.00%	FC	100.00%	FC
ANDRITZ Kft.	Tiszakécske, Hungary	100.00%	FC	100.00%	FC
ANDRITZ Perfojet SAS	Montbonnot Saint-Martin, France	100.00%	FC	100.00%	FC
ANDRITZ Biax SAS	Le Bourget du Lac, France	100.00%	FC	100.00%	FC
ANDRITZ Frautech S.r.l.	Schio, Italia	100.00%	FC	100.00%	FC
ProGENF IP GmbH	Wolfsburg, Germany	30.00%	NC	30.00%	NC
ANDRITZ COMO S.R.L.	Grandate, Italy	100.00%	NC	100.00%	NC
ANDRITZ Soutec AG	Neftenbach, Switzerland	100.00%	FC	100.00%	FC
Soutec Shanghai Ltd.	Shanghai, China	-	-	100.00%	NC
EK Finance SAS	Scorbé-Clairvaux, France	100.00%	FC	100.00%	FC
ANDRITZ Euroslot France SAS	Scorbé-Clairvaux, France	100.00%	FC	100.00%	FC
ANDRITZ EUROSLOT INDIA PRIVATE LIMITED	Mumbai, India	74.00%	NC	74.00%	NC
ANDRITZ FZCO	Dubai, United Arab	100.00%	NC	100.00%	NC

Company	Main office	2018 Share*	2018 Type of consolidation	2017 Share*	2017 Type of consolidation
	Emirates				
OTORIO LTD	Tel Aviv, Israel	50.01%	FC	50.01%	FC
ANDRITZ Novimpianti S.r.l.	Capannori, Italy	100.00%	FC	-	-
ANDRITZ Diatec S.r.l.	Collecorvino, Italy	70.00%	FC	-	-
Psiori GmbH	Wilhelmshaven, Germany	25.10%	EQ	-	-
ANDRITZ Beteiligungsgesellschaft IV GmbH	Krefeld, Germany	100.00%	FC	100.00%	FC
Schuler Aktiengesellschaft	Göppingen, Germany	96.62%	FC	96.62%	FC
Schuler Pressen GmbH	Göppingen, Germany	100.00%	FC	100.00%	FC
Schuler Italia S.r.l.	Turin, Italy	90.00%	NC	90.00%	NC
Schuler (Dalian) Forming Technologies Co. Ltd.	Dalian, China	100.00%	FC	100.00%	FC
Schuler (China) Forming Technologies Co. Ltd.	Shanghai, China	100.00%	FC	100.00%	FC
Yangzhou Metal Forming Machine Tool Co., Ltd.	Yangzhou City, China	52.90%	FC	52.90%	FC
Binake (Yangzhou) Machinery Co., Ltd.	Yangzhou City, China	-	-	40.00%	NC
Beutler Nova AG	Gettnau, Switzerland	100.00%	FC	100.00%	FC
Schuler Presses UK Limited	Walsall, United Kingdom	100.00%	FC	100.00%	FC
BCN Technical Services Inc.	Hastings / Michigan, USA	100.00%	FC	100.00%	FC
Pressensysteme Schuler-México, S.A. de C.V.	Puebla, Mexico	100.00%	FC	100.00%	FC
Schuler Thailand Co. Ltd.	Banglamung Chonburi, Thailand	100.00%	NC	100.00%	NC
Gräbener Pressensysteme GmbH & Co. KG[1]	Netphen, Germany	100.00%	FC	100.00%	FC
Schuler Automation GmbH & Co. KG[1]	Heßdorf, Germany	-	-	100.00%	FC
Vögtle Service GmbH	Eislingen, Germany	100.00%	FC	100.00%	FC
Schuler France S.A.	Strasbourg, France	100.00%	FC	100.00%	FC
Schuler Inc.	Canton / Michigan, USA	100.00%	FC	100.00%	FC
Prensas Schuler S.A.	São Paulo, Brazil	100.00%	FC	100.00%	FC
Shanghai Schuler Presses Co. Ltd.	Shanghai, China	-	-	79.39%	FC
Gräbener Pressensysteme-Verwaltungs GmbH	Netphen, Germany	100.00%	NC	100.00%	NC
Graebener Press Systems Inc.	Warwick / Rhode Island, USA	100.00%	NC	100.00%	NC
Schuler Automation Geschäftsführungs GmbH	Heßdorf, Germany	-	-	100.00%	NC
Schuler Ibérica S.A.U.	Sant Cugat del Vallès, Spain	100.00%	NC	100.00%	NC
Schuler Slovakia Services s.r.o.	Dubnica nad Váhom, Slovakia	100.00%	NC	100.00%	NC
Schuler India Private Limited	Mumbai, India	100.00%	NC	100.00%	NC
Schuler Poland Service Sp. Z.o.o.	Kedzierzyn-Kózle, Poland	100.00%	NC	100.00%	NC
Tianjin GMS Machine Tool Service Co. Ltd.	Tianjin, China	50.00%	NC	50.00%	NC
PRESSE ITALIA - S.p.A.	Naples, Italy	95.00%	NC	95.00%	NC
AWEBA Werkzeugbau GmbH Aue	Aue, Germany	100.00%	FC	100.00%	FC
WVL-Werkzeug- und Vorrichtungsbau Lichtenstein GmbH	St. Egidien, Germany	100.00%	FC	100.00%	FC
Dabaki Grundstücksverwaltungs-	Mainz, Germany	94.00%	FC	94.00%	FC

		2018		2017	
Company	Main office	Share*	Type of consolidation	Share*	Type of consolidation
gesellschaft mbH & Co. Vermietungs KG					
ATF Auer Teilefertigung GmbH	Aue, Germany	-	-	100.00%	FC
LLC Schuler Service Rus	Toljatti, Russia	100.00%	NC	100.00%	NC
Farina Presse S.p.A.	Suello, Italy	100.00%	FC	-	-
Farina Presse S.r.l.	Suello, Italy	100.00%	FC	-	-
Farina Suisse Sagl	Lugano, Switzerland	100.00%	NC	-	-

* The share is shown as the share of the immediate parent company. If a subsidiary has more than one immediate parent company within the ANDRITZ GROUP the subsidiary is included with its share of the total ANDRITZ GROUP under the parent company with the majority share.

FC ... Full consolidation
EQ ... Equity valuation
NC ... Non-consolidated due to minor importance

1) The exemption rule according to section 264b HGB (German Commercial Code) is applied.
2) The exemption rule according to section 264 paragraph 3 HGB (German Commercial Code) is applied (loss transfer agreement exists).

Graz, February 25, 2019

Wolfgang Leitner m.p.
President and CEO

Humbert Köfler m.p.
Pulp & Paper (Service), Separation

Joachim Schönbeck m.p.
Pulp & Paper (Capital Systems), Metals Processing

Wolfgang Semper m.p.
Hydro

Mark von Laer m.p.
Chief Financial Officer

STATEMENT BY THE EXECUTIVE BOARD

Statement by the Executive Board of ANDRITZ AG, pursuant to section 124 paragraph 1 of the (Austrian) Stock Exchange Act

We confirm to the best of our knowledge that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position, and profit or loss of the Group as required by the applicable accounting standards and that the Group management report gives a true and fair view of the development and performance of the business and the position of the Group, together with a description of the principal risks and uncertainties the Group faces.

We confirm to the best of our knowledge that the financial statements of the parent company give a true and fair view of the assets, liabilities, financial position, and profit or loss as required by the applicable accounting standards and that the management report gives a true and fair view of the development and performance of the business and the position of the company, together with a description of the principal risks and uncertainties the company faces.

Graz, February 25, 2019

The Executive Board of ANDRITZ AG

Wolfgang Leitner	Humbert Köfler	Joachim Schönbeck	Wolfgang Semper	Mark von Laer
President and CEO	Pulp & Paper (Service), Separation	Pulp & Paper (Capital Systems), Metals Processing	Hydro	Chief Financial Officer

GLOSSARY

ATX
Austrian Traded Index, the leading stock market index of the Vienna stock exchange.

ATX-weighting
Weighting of the ANDRITZ share according to the calculation of the Vienna stock exchange. This weighting is based on the market capitalization of public free float.

Average number of shares traded
Number of shares, which is on average traded per day by using the double count method as published by the Vienna Stock Exchange.

Capital employed
Net working capital plus intangible assets and property, plant, and equipment.

Capital expenditure
Additions to intangible assets and property, plant, and equipment.

CGU
Cash generating unit.

Dividend per share
Part of earnings per share, which is distributed to shareholders.

Earnings per share
Net income (without non-controlling interests)/ weighted average number of no-par value shares.

EBIT
Earnings before interest and taxes.

EBITA
Earnings before interest, taxes, amortization of identifiable assets acquired in a business combination and recognized separately from goodwill and impairment of goodwill.

EBITDA
Earnings before interest, taxes, depreciation, and amortization.

EBT
Earnings before taxes.

Employees
Number of employees without apprentices.

Equity attributable to shareholders per share
Equity attributable to shareholders of the parent/weighted average number of no-par value shares.

Equity ratio
Total shareholders' equity/total assets.

EV
Enterprise Value: Market capitalization as of end of year minus net liquidity.

Free cash flow
Cash flow from operating activities minus capital expenditure plus payments from the sale of intangible assets and property, plant, and equipment.

Free cash flow per share
Free cash flow/total number of shares.

FVTOCI
Fair Value through other comprehensive income.

FVTPL
Fair Value through profit and loss.

Gearing
Net debt/total shareholders' equity.

HY
Hydro business area.

Liquid funds
Cash and cash equivalents plus investments plus Schuldscheindarlehen.

Market capitalization
Number of shares outstanding multiplied by the closing price.

ME
Metals business area.

MEUR
Million euros.

MUSD
Million United States dollar.

Net debt
Interest bearing liabilities including provisions for severance payments, pensions, and jubilee payments less liquid funds.

Net liquidity
Liquid funds plus fair value of interest rate swaps less financial liabilities.

Net working capital
Non-current receivables plus current assets (excluding investments, cash as well as Schuldscheindarlehen) less other non-current liabilities and current liabilities (excluding financial liabilities and provisions).

Order backlog
The order backlog consists of present customer orders at the balance sheet date. Basically, it is calculated by the order backlog at the beginning of the period plus new order intake during the period less sales during the period.

Order intake
The order intake is the estimated order sales which have already been put into effect considering changes and corrections of the order value; letter of intents are not part of the order intake.

Payout ratio
Part of net income, which is distributed to shareholders. It is calculated as dividend per share/earnings per share.

Performance of the ANDRITZ share
Relative change of the ANDRITZ share within one year.

PP
Pulp & Paper business area.

Price-earnings-ratio
Closing share price/earnings per share.

Return on equity
Earnings before taxes/total shareholder’s equity.

Return on investment
Earnings before interest and taxes/total assets.

Return on sales
Earnings before interest and taxes/sales.

ROE
Return On Equity: Net income/total shareholder’s equity.

SE
Separation business area.

Sureties
These contain bid bonds, contract performance guarantees, downpayment guarantees as well as performance and warranty bonds at the expense of the ANDRITZ GROUP.

TEUR
Thousand euros.

Total shareholders’ equity
Total shareholders’ equity including non-controlling interests.

AUDITOR'S REPORT

REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS

Audit Opinion

We have audited the consolidated financial statements of

Andritz AG,
Graz

and its subsidiaries ("the Group"), which comprise the consolidated comprise the Consolidated Statement of Financial Position as at as at 31 December 2018, and the Consolidated Income Statement, the Consolidated Statement of Comprehensive Income, Consolidated Statement of Changes in Equity and Consolidated Statement of Cash Flows for the year then ended, and the Notes to the Consolidated Financial Statements.

In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of 31 December 2018, and its consolidated financial performance and consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs) as adopted by the EU, the additional requirements pursuant to Section 245a UGB (Austrian Commercial Code).

Basis for our Opinion

We conducted our audit in accordance with the EU Regulation 537/2014 ("EU Audit Regulation") and Austrian Standards on Auditing. These standards require the audit to be conducted in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the "*Auditor's Responsibilities*" section of our report. We are independent of the Group in accordance with Austrian company law and professional regulations, and we have fulfilled our other responsibilities under those relevant ethical requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, however, we do not provide a separate opinion thereon.

We have identified the following key audit matters:

- Project Accounting
- Valuation of Goodwill
- Accounting of the acquisition of Xerium Technologies, Inc., USA

This report is a translation of the original report in German, which is solely valid.

Project Accounting

Refer to notes 1 and 23

Risk for the Consolidated Financial Statements

A major component of the revenues and net income contribution is derived from the project business. The project business comprises a large number of projects with individual project revenues of more than EUR 100 million and project terms extending over several years. When certain criteria are met, revenue is recognized over time according to the progress of the respective projects, which is measured using the cost to cost-method. This method is not applied to projects for which a project loss is expected. Such loss is immediately recognized in the income statement. For completed projects the Group is liable for warranty over a defined period of time. In certain active and completed projects, the Group is involved with customers and/or suppliers with regard to contractual obligations, resulting in potential or active legal proceedings. The Group recognizes provisions for warranty liabilities as well as for potential obligations as a result of legal proceedings. The application of over time revenue recognition, determination of the stage of completion, the estimate of costs to complete as well as the measurement of project provisions require a substantial number of assumptions and forward looking estimates. Due to the significant volume of project business, this results in a risk of project revenue, net income, and project-related balance sheet items being materially misstated.

Our response

When performing our audit, we obtained an understanding of the processes and internal controls relevant to project accounting and we tested the effectiveness of selected internal controls. This relates specifically to internal controls with respect to approval of project cost estimates at contract inception, approval of the ongoing cost status reports, the actual cost-to-budget-analysis, the status reports relating to current projects, and estimate of the amount of outstanding or potentially outstanding costs to complete the project. Based on the results of these tests, we have planned additional audit procedures.

We have applied these procedures to a sample of current projects and we have assessed management's assumptions regarding those projects. The selection was based on risk criteria such as project volume, low or negative project margin or significant margin changes. Audit procedures mainly included: review of underlying contracts and agreements, a plausibility check on current project information, inquiries of individuals responsible for project execution or project controlling as to the reasonableness of estimates and assumptions used, evaluation of the accuracy of accounting estimates by comparing actual results to prior period estimates, and a reconciliation of the assumptions used for estimates with contract information and other relevant documents. In addition, we have evaluated the method used to determine the stage of completion and the proper allocation of contract cost to individual contracts. To assess whether the provisions for litigations and claims from costumers are appropriate, we have read the relevant documents, obtained attorney confirmation letters and discussed the cases with personnel involved and inspected their documentation.

In addition, we have assessed whether the presentation of the project business in the consolidated financial statements as well as the disclosures in the notes are in line with the IFRS 15 requirements.

Valuation of Goodwill

Refer to note 11

Risk for the Consolidated Financial Statements

Goodwill capitalized in the consolidated statement of financial position as of 31 December 2018 amounts to EUR 784.6 million. Once a year, or if a triggering event occurs, Andritz AG conducts an impairment test in order to confirm the valuation of goodwill. The approach for measuring goodwill, the allocation of goodwill to the cash generating units as well as the assumptions used and the results of the impairment tests are described in the notes.

Testing goodwill for impairment requires a considerable number of estimates concerning future development of revenues, earnings, and net cash inflows as well as assumptions on discount rates used, and is therefore exposed to significant uncertainty. For the financial statements, this leads to the risk of goodwill being overstated.

Our response

We have evaluated the reasonableness of forward looking estimates and significant assumptions as well as the valuation methodologies used, consulting our own valuation experts.

We have reconciled the revenue and margin projections used for impairment testing to the Group's current business plan as approved by the supervisory board. We have tested the underlying assumptions for reasonableness in discussions with the management and reconciliation to information relating to the current and expected development of the respective cash generating units. We also verified the historical accuracy of the business plan by comparing plans for prior periods with the actual results.

With regard to the discount rates used, we have tested the underlying assumptions by comparing them to market- and industry-specific benchmarks and methodologies, and we have reviewed the respective calculation formula, consulting our own valuation experts.

Furthermore we have assessed whether the entity-prepared impairment test disclosures in the notes are appropriate.

Accounting of the acquisition of Xerium Technologies, Inc., USA

Refer to note D

Risk for the Consolidated Financial Statements

Effective October 2018, Andritz AG has acquired 100 % of the shares of Xerium Technologies, Inc., USA ("Xerium") and its subsidiaries. The consideration transferred amounted to EUR 200.3 million. The allocation of the purchase price to identifiable assets and liabilities acquired resulted in the recognition of intangible assets (previously not recognized by the acquiree) and in the revaluation of already-recognized assets, in particular tangible assets. First-time-recognition and revaluation effects of the purchase price allocation resulted in the recognition of assets amounting to EUR 901.3 million (thereof EUR 205.3 million goodwill) and liabilities amounting to EUR 701.0 million.

Accounting for acquisitions applies complex accounting policies (mainly IFRS 3 Business Combinations) and involves significant judgments and assumptions. This leads to the risk that accounting and measurement policies applied to the consolidated financial statements are not in accordance with IFRS 3. In addition, assumptions and methods used for valuations are not appropriate and as a result the amount is not accurate determined.

Our response

In assessing the accounting of acquisition we have obtained an understanding of the deal structure, read the relevant agreements and supporting documents, as well as assessed whether the accounting treatment is in accordance with IFRS 3. This comprises, inter alia, the evaluation of whether the recognized intangible assets have been correctly identified and measured and whether the revaluation of assets and liabilities has been appropriate determined.

We have evaluated the valuation methods used in determining the fair-values by consulting with valuation experts. We have also tested the valuation for mathematical accuracy. In addition, we have assessed whether the transactions presented in the consolidated financial statements and their disclosures in the notes are in line with the IFRS 3 requirements.

Responsibilities of Management and the Audit Committee for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards (IFRSs) as adopted by the EU, the additional requirements pursuant to Section 245a UGB (Austrian Commercial Code) and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Management is also responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting, unless management either intents to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

The audit committee is responsible for overseeing the Group's financial reporting process.

Auditor's Responsibilities

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement – whether due to fraud or error – and to issue an auditor's report that includes our audit opinion. Reasonable assurance represents a high level of assurance, but provides no guarantee that an audit conducted in accordance with the AP Regulation and Austrian Standards on Auditing (and therefore ISAs), will always detect a material misstatement, if any. Misstatements may result from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with the AP Regulation and Austrian Standards on Auditing, we exercise professional judgment and maintain professional skepticism throughout the audit.

Moreover:

- We identify and assess the risks of material misstatement in the consolidated financial statements, whether due to fraud or error, we design and perform audit procedures responsive to those risks and obtain sufficient and appropriate audit evidence to serve as a basis for our audit opinion. The risk of not detecting material misstatements resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or override of internal control.

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- We obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- We evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- We conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our audit report to the respective note in the consolidated financial statements. If such disclosures are not appropriate, we will modify our audit opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- We evaluate the overall presentation, structure and content of the consolidated financial statements, including the notes, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- We obtain sufficient appropriate audit evidence regarding the financial information of the entities and business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

- We communicate with the audit committee regarding, amongst other matters, the planned scope and timing of our audit as well as significant findings, including any significant deficiencies in internal control that we identify during our audit.

- We communicate to the audit committee that we have complied with the relevant professional requirements in respect of our independence, that we will report any relationships and other events that could reasonably affect our independence and, where appropriate, the related safeguards.

- From the matters communicated with the audit committee, we determine those matters that were of most significance in the audit i.e. key audit matters. We describe these key audit matters in our auditor's report unless laws or other legal regulations preclude public disclosure about the matter or when in very rare cases, we determine that a matter should not be included in our audit report because the negative consequences of doing so would reasonably be expected to outweigh the public benefits of such communication.

REPORT ON OTHER LEGAL REQUIREMENTS

Group Management Report

In accordance with Austrian company law, the group management report is to be audited as to whether it is consistent with the consolidated financial statements and prepared in accordance with legal requirements. It is our responsibility to determine whether the consolidated non-financial statement has been prepared as part of the group management report, to read and assess whether, based on knowledge gained during our audit, it contains any material inconsistencies with the consolidated financial statements or any apparent material misstatement of fact.

Management is responsible for the preparation of the group management report in accordance with Austrian company law.

We have conducted our audit in accordance with generally accepted standards on the audit of group management reports as applied in Austria.

Opinion

In our opinion, the group management report is consistent with the consolidated financial statements and has been prepared in accordance with legal requirements. The disclosures pursuant to Section 243a UGB (Austrian Commercial Code) are appropriate.

Statement

Based on our knowledge gained in the course of the audit of the consolidated financial statements and our understanding of the Group and its environment, we did not note any material misstatements in the group management report.

Other Information

Management is responsible for other information. Other information is all information provided in the annual report, other than the consolidated financial statements, the group management report, and the auditor's report.

Our opinion on the consolidated financial statements does not cover other information and we do not provide any assurance thereon.

In conjunction with our audit, it is our responsibility to read this other information and to assess whether, based on knowledge gained during our audit, it contains any material inconsistencies with the consolidated financial statements or any apparent material misstatement of fact. If we conclude that there is a material misstatement of fact in other information, we must report that fact. We have nothing to report in this regard.

This report is a translation of the original report in German, which is solely valid.

Additional Information in accordance with Article 10 AP Regulation

At the Annual General Meeting dated 23 March 2018, we were elected as group auditors. We were appointed by the Supervisory Board on 30 August 2018. We have been the Group's auditors from the year ended 31 December 2016, without interruption.

We declare that our opinion expressed in the *"Report on the Consolidated Financial Statements"* section of our report is consistent with our additional report to the Audit Committee, in accordance with Article 11 AP Regulation.

We declare that we have not provided any prohibited non-audit service s (Article 5 Paragraph 1 AP Regulation) and that we have ensured our independence throughout the course of the audit, from the audited Group.

Engagement Partner

The engagement partner is Mr. Helmut Kerschbaumer.

Vienna, 25. February 2019

KPMG Austria GmbH
Wirtschaftsprüfungs- und Steuerberatungsgesellschaft

Signed by:
Mag. Helmut Kerschbaumer
Wirtschaftsprüfer
(Austrian Chartered Accountant)

This report is a translation of the original report in German, which is solely valid.
The consolidated financial statements together with our auditor's opinion may only be published if the consolidated financial statements and the group management report are identical with the audited version attached to this report. Section 281 Paragraph 2 UGB (Austrian Commercial Code) applies.

GRI INDEX

General standard disclosures

	Short description	Page
Organizational profile		
102-1	Name of organization	Cover
102-2	Activities, brands, products and services	andritz.com, Financial reporting p. 107f
102-3	Location of the organization's headquarters	Graz, Österreich
102-4	Overview of the organization's locations	andritz.com
102-5	Nature of ownership and legal form	Financial report p. 47f
102-6	Markets served	Financial report p.5
102-7	Scale of organization	Annual report, inside cover
102-8	Information on employees and other workers	Financial report p. 177
102-9	Description of organization's supply chain	Financial report p. 34
102-10	Significant changes to the organization and its supply chain	Financial report p. 26
102-11	Precautionary principle or approach	Financial report p.26
102-12	Externally developed harters, principles or other initiatives to which the organization subscribes	Financial report p 28,p. 34, p. 36
102-13	Memberships of associations	Memberships in associations are held by the respective business areas and are not managed centrally
Strategy		
102-14	Statement from the most senior decision-maker of the organization	Annual report p. 1
Ethics and integrity		
102-16	Values, principles, standards, and norms of behaviour	Annual report Umschlag, Financial report p. 58
Governance		
102-18	Governance structure and its composition	Finanzbericht S. 50ff
Stakeholder engagement		
102-40	List of stakeholder groups engaged	https://www.andritz.com/group-en/about-us/gr-sustainability
102-41	Percentage of total employees covered by collective bargaining agreements	Not reported
102-42	Identification and selection of stakeholders with whom to engage	Stakeholder analysis 2015
102-43	Stakeholder engagement	Finanzbericht S. 25
102-44	Key topics and concerns raised through stakeholder engagement	Finanzbericht S. 25
Reporting practice		
102-45	Entities included in the organization's consolidated financial statements	Financial report p. 154 ff
102-46	Defining report content and topic boundaries	Finanzbericht S. 25
102-47	List of material topics	Finanzbericht S. 25
102-48	Restatements of information	Finanzjahresbericht S. 39
102-49	Changes in reporting	No significant changes
102-50	Reporting period	2018 (compared to 2017)
102-51	Date of most recent report	March 6th, 2019
102-52	Reporting cycle	annual
102-53	Contact point for questions regarding the report	csr@andritz.com
102-54	Claims of reporting in accordance with the GRI Standards	Core
102-55	GRI content index	Financial report p. 172ff
102-56	External assurance	Within the framework of NaDiVeG

Category: Economic

Material aspects	Topic-specific disclosures	Page	Omissions/ Explanations
GRI 201: Economic performance			
	Management approach disclosures	Financial report p. 23	
201-2	Direct economic value generated and distributed	Financial report p. 6ff	
201-2	Financial implications and other risks and opportunities due to climate change	Financial report p. 27	
201-3	Defined benefit plan obligations and other retirement plans	Financial report p. 122ff	
201-4	Financial assistance received from government	Financial report p. 101	
GRI 204: Procurement practices			
	Management approach disclosures	Financial report p. 34	
204-1	Proportion of spending on local suppliers	Financial report p. 35	

Category: Environmental

Material aspects	Topic-specific disclosures	Page	Omissions/ Explanations
GRI 301: Materials			
	Management approach disclosures	Financial report p.35.	
301-1	Materials used by weight or volume	Financial report p. 35	Reported according to share of the purchasing volume
GRI 302: Energy			
	Management approach disclosures	Financial report p. 35	
302-1	Energy consumption within the organization	Financial report p. 39	Reported in Manufacturing, as this is the area with the highest consumption
302-5	Reductions in energy requirement of sold products and services	Financial report p. 41ff	Reported descriptively
GRI 303: Water			
	Management approach disclosures	Financial report p. 41	
303-3	Total water withdrawal by source	Finanzbericht S. 180	Reported in Manufacturing, as this is the area with the highest consumption
GRI 306: Effluents and waste			
	Management approach disclosures	Finanzbericht S. 40	
306-1	Total water discharge	Finanzbericht S. 180	Total water discharge in manufacturing is reported
306-2	Waste by type and disposal method	Finanzbericht S. 181	Reported in Manufacturing
GRI 307: Environmental compliance			
307-1	Non-compliance with environmental laws and regulations		No complaints have been received on a groupwide level in the reporting period
GRI 308: Supplier environmental assessment			
308-1	New suppliers that were screened using environmental criteria	Finanzbericht S. 35	

Category: Social

Material aspects	Topic-specific disclosures	Page	Omissions/ Explanations
GRI 401: Employment			
	Management approach disclosures	Financial report p. 30	
401-1	New employee hires and employee turnover	Finanzbericht S. 178	Reported according to gender and age only
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees		Social benefits are available to all employees regardless of their contract of employment and only vary from one country to another as a result of the legal requirements.
401-3	Parental leaves	Financial report p. 33	
GRI 402: Labor/Management relations			
402-1	Minimum notice periods regarding operational changes	Financial report p. 33	Reported descriptively
GRI 403: Occupational health and safety			
	Management approach disclosures	Financial report p. 36	
403-5	A description of any occupational health and safety training provided to workers, including generic training as well as training on specific work-related hazards, hazardous activities, or hazardous situations.		Basic training on occupational safety is provided regularly throughout the Group for new employees; workplace-related training must be organized by the locations themselves.
403-9	a. Work-related injuries for all employees c. Work-related hazards that pose a risk of high-consequence injury	Financial report p. 37	
GRI 404: Training and education			
	Management approach disclosures	Financial report p. 31f	
404-1	Average hours of training per year per employee	Finanzbericht S. 178	
404-3	Percentage of employees receiving regular performance and career development reviews	Financial report p. 32	
GRI 405: Diversity and equal opportunity			
	Management approach disclosures	Financial report p. 31	
405-1	Diversity of governance bodies and employees	Financial report p. 56	
405-2	Ratio of basic salary and remuneration of women to men	Financial report p. 33	
GRI 406: Non-discrimination			
	Management approach disclosures	Financial report p. 32f	

Material aspects	Topic-specific disclosures	Page	Omissions/ Explanations
406-1	Incidents of discrimination and corrective actions taken		Cases of discrimination are dealt with by the regional compliance officers, sometimes in cooperation with the member of the compliance committee responsible for HR topics. At the moment there are no global records concerning the number of incidents.
GRI 408: Child labor			
	Management approach disclosures	Financial report p. 32f	
408-1	Operations and suppliers at significant risk for incidents of child labor		Even if there is a certain risk of child labor in some countries in which ANDRITZ has locations, child labor locations is virtually precluded through strict internal rules and controls.
GRI 409: Forced or compulsory labor			
	Management approach disclosures	Financial report p. 32f	
409-1	Operations and suppliers at significant risk for incidents of forced and compulsory labor		Even if there is a certain risk of forced and compulsory labor in some countries in which ANDRITZ has locations, forced and compulsory labor is virtually precluded through strict internal rules and controls.
GRI 412: Human rights assessment			
	Management approach disclosures	Financial report p. 34	
412-2	Employee training on human rights policies or procedures		Employees will also be trained on aspects of human rights as a result of the revised Code of Business Conduct and Ethics.
GRI 414: Supplier social assessment			
	Management approach disclosures	Financial report p. 35	
414-1	New suppliers that were screened using social criteria	Financial report p. 35	
GRI 418: Customer privacy			
	Management approach disclosures	Financial report p. 29, p. 58	
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data		No complaints on a groupwider level in the reporting period
GRI 419: Socioeconomic Compliance			
	Management approach disclosures	Financial report p. 58f	
419-1	Non-compliance with laws and regulations in the social and economic area		No complaints on a groupwider level in the reporting period

CSR DATA OVERVIEW

Employees

Employees by gender, age group, type of employment and employment contract

	Absolute 2018	Absolute 2017	Percentage 2018	Percentage 2017
Men	24,303	21,630	84%	85%
Women	4,793	3,936	16%	15%
TOTAL	**29,096**	**25,566**	**100%**	**100%**
< 30 years old	4,115	3,860	14%	15%
30-50 years	16,490	14,574	57%	57%
> 50 years old	8,491	7,132	29%	28%
TOTAL	**29,096**	**25,566**	**100%**	**100%**
White-collar workers	17,399	16,210	60%	63%
Blue-collar workers	11,697	9,356	40%	37%
TOTAL	**29,096**	**25,566**	**100%**	**100%**
Full-time	27,914	24,705	96%	97%
thereof male	23,831	20,355	85%	82%
thereof female	4,083	4,350	15%	18%
Part-time	1,182	861	4%	3%
thereof male	451	326	38%	38%
thereof female	731	535	62%	62%
TOTAL	**29,096**	**25,566**	**100%**	**100%**
Permanent	25,801	22,373	89%	88%
thereof male	21,644	17,998	84%	80%
thereof female	4,157	4,375	16%	20%
Temporary	3295	3,193	11%	12%
thereof male	2672	2,661	81%	83%
thereof female	623	532	19%	17%
TOTAL	**29,096**	**25,566**	**100%**	**100%**

Employees per region

	Absolute 2018	Absolute 2017	Percentage 2018	Percentage 2017
Europe	15,900	14,574	55%	58%
North America	4,060	3,093	14%	12%
South America	3,499	2,893	12%	11%
China	3,253	3,155	11%	12%
Asia (excluding China)	2,310	1,778	8%	7%
Rest of the world	74	73	0%	0%
TOTAL	**29,096**	**25,566**	**100%**	**100%**

Personnel expenditure

(in MEUR)	2018	2017
TOTAL Expenditure on wages and salaries*	**1,787.0**	**1,717.8**

* Including wages and salaries, social security contributions, pensions, severance payments, and other social expenses.

Newly hired employees by gender and age group

	Absolute 2018	Absolute 2017	Percentage 2018	Percentage 2017
Men	3,445	3,703	77%	85%
Women	1,009	633	23%	15%
< 30 years old	1,502	1,534	34%	35%
30-50 years	2,411	2,287	54%	53%
> 50 years old	541	515	12%	12%
TOTAL	**4,454**	**4,336**	**100%**	**100%**

Fluctuation by gender and age group*

	Contracts terminated 2018	Contracts terminated 2017	Fluctuation rate 2018	Fluctuation rate 2017
Men	3,016	3,206	13.3%	14.8%
Women	517	452	12.0%	11.7%
< 30 years old	821	859	20.8%	22.0%
30-50 years	1,883	1,874	12.3%	13.0%
> 50 years old	827	925	10.8%	13.0%
TOTAL	**3,531**	**3,658**	**12.1%**	**14.4%**

* Calculation of fluctuation rate: contracts terminated in relation to the average number of employees. Contracts terminated include dismissals by the employer and resignation of employees.

Parental leave periods by gender

	Absolute 2018	Absolute 2017	Percentage 2018	Percentage 2017
Men	193	202	0.8%	0.9%
Women	221	226	4.6%	5.7%
TOTAL	**414**	**428**	**1.4%**	

* Percentage of the total workforce of the ANDRITZ GROUP

Expenditure on education and training

	2018	2017
TOTAL (in TEUR)	**10,382**	**11,726**
Average expenditure per employee (EUR)	357	456
Total training hours	351,553	388,381

Employees appraisals

	2018	2017
Men	75%	71%
Women	68%	64%
TOTAL	**74%**	**70%**

* Percentage of the total workforce that took part in employee appraisals during the reported period

Average duration of employment by age group and region*

(in years)	Europe 2018	Europa 2017	North America 2018	North America 2017	South America 2018	South America 2017	China 2018	China 2017	Asia (excl. China) 2018	Asia (excl. China) 2017
< 30 years old	4.3	4.2	2.6	2.5	2.5	2.3	2.9	2.9	2.5	2.8
30-50 years	10.9	10.7	7.7	6.7	6.6	5.7	8.9	8.8	4.0	7.5
> 50 years old	22.4	22.6	14.5	14.8	11.3	10.8	19.8	19.7	4.0	11.6
TOTAL	**14.1**	**13.9**	**9.5**	**9.4**	**6.7**	**5.9**	**8.7**	**8.3**	**3.6**	**7.1**

* Staff of Xerium Technologies Inc. were included in this diagram for North America only. Specific allocation will be made in retrospect as from the 2019 Annual Financial Report.

Accident statistics

	2018	2017
Accidents at work (with more than three days of absence)	210	304
Accident frequency (accidents with more than three days of absence per 1 million working hours)	4	6.1
Accident frequency (accidents causing one or more days absence per 1 million working hours)	6.2	8.8
Fatal accidents at work	1	1
Severity of accidents (absence periods in hours per accident)	155	144
Number of medical treatment injuries at work	1,539	1,402

Procurement

Purchasing volume

(in MEUR)	2018	2017
TOTAL	**2,960.4**	**2,814.8**

Local percentage of external purchasing volume	72.3%	71.3%

* Percentage of local purchasing volume that was bought in the respective country

Purchasing volume by region

(in %)	2018	2017
Europe	66.4	70.4
China	13.5	11.5
North America	11.7	9.6
South America	2.3	3.2
Asia (excluding China)	5.7	4.8
Other	0.5	0.6

Environment

Overall electricity consumption

	Unit	2018	2017
TOTAL	**kWh**	**200,204,308**	**189,869,642**
thereof manufacturing	%	84	85
thereof office buildings	%	16	15

* For 2017 and 2016, only office buildings attached to a manufacturing site were included.

Energy consumption within the organization

	Unit	2018	2017
Externally procured heating		**32,451,523**	**30,510,429**
District heating	kWh	32,451,523	30,510,429
Non-renewable energy carriers for heating		**385,840,677**	**427,500,845**
Light fuel oil*	MJ	25,122,830	n.v.**
Natural gas	MJ	360,717,847	427,500,845
Non-renewable energy carriers for process heating		**177,371,483**	**160,152,384**
Oil	MJ	25,506,434	19,613,131
Gasoline	MJ	3,100,909	6,216,952
Diesel	MJ	16,377,941	22,152,896
Diesel for emergency generator**	MJ	4,473,111	2,871,887
Natural gas	MJ	117,148,448	99,109,876
Liquid (petrol) gas	MJ	10,764,640	10,187,642

* No distinction was made yet between heavy oil and-light heating oil in 2017. At one location, heavy oil is used to heat the presses.
** n.a. = not available
*** At two Indian locations for electricity supply at shortages.

Water consumption and disposal of waste water in manufacturing

(in m3)	2018	2017
Surface water	36,429	15,383
Ground water	36,883	27,028
Municipal water supplies	622,936	500,790
Rain water	9,371	14,709
TOTAL	**705,619**	**557,910**
Disposal of waste water*	630,733	509,009

* As water is reused at some site (mainly in Asia) for watering green spaces, the figures for overall water consumption and disposal of waste water may differ.

Waste from manufacturing

(in kg)	2018	2017
Non-hazardous waste recycled	**28,587,587**	**30,269,652**
thereof waste metal	27,166,290	28,913,874
thereof waste glass	4,320	1,062
thereof waste paper and cardboard	621,575	475,765
thereof plastics	517,663	563,260
thereof cardboard	277,739	315,691
Non-hazardous waste incinerated	**5,280,370**	**5,402,033**
thereof waste paper and cardboard	124,489	31,102
thereof cardboard	0	150
thereof wood waste	2,936,670	3,216,240
thereof plastics	10,448	208,740
thereof residual waste	1,859,428	1,441,544
thereof other non-hazardous waste	120,975	408,320
thereof bulk waste	117,240	42,140
thereof polysterene	3,293	1,517
thereof washing / cleaning agents residuals	107,827	52,280
Non-hazardous waste landfill	**2,981,800**	**6,489,977**
thereof waste paper and cardboard	39,933	28,875
thereof cardboard	7,433	450
thereof plastics	6,255	7,295
thereof residual waste	2,928,179	6,453,357
Processing of old electrical appliances and electronic devices	**20,716**	**46,920**
E-waste disposal	20,716	46,920
Hazardous waste processing	**75,231**	**82,238**
thereof lamps	33,511	82,238
thereof batteries	41,720	n.a.
Hazardous waste incineration	**528,668**	**622,124**
thereof fat remover	217,096	241,120
therof fat resolver	50,830	10,887
thereof mix of solvents	260,742	370,117
Hazardous waste landfill	**3,079,547**	**1,782,358**
thereof old paints	964,733	276,669
thereof other hazardous waste	2,114,814	1,505,689
TOTAL	**40,553,919**	**44,695,302**

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Disclaimer

Certain statements contained in the 2018 annual report and in the 2018 annual financial report constitute "forward-looking statements." These statements, which contain the words "believe", "intend", "expect", and words of a similar meaning, reflect the Executive Board's beliefs and expectations and are subject to risks and uncertainties that may cause actual results to differ materially. As a result, readers are cautioned not to place undue reliance on such forward-looking statements. The company disclaims any obligation to publicly announce the result of any revisions to the forward-looking statements made herein, except where it would be required to do so under applicable law. The 2018 annual report and the 2018 annual financial report contain assumptions and forecasts based on the information available up to the copy deadline on February 25, 2019. If the premises for these assumptions and forecasts do not occur, or risks indicated in the chapter "Risk Management" and in the management report in the 2018 annual financial report do arise, actual results may vary from the forecasts made in the 2018 annual report and in the 2018 annual financial report. Although the greatest caution was exercised in preparing data, all information related to the future is provided without guarantee.

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