



ANDRITZ GROUP

INNOVATIVE TECHNOLOGIES FOR THE PLANET

A GLOBAL PARTNER FOR KEY INDUSTRIES THAT SHAPE THE WORLD

JULY, 2024

ANDRITZ

ENGINEERED SUCCESS

NO CHALLENGE IS TOO BIG – A PIONEER IN LARGE-SCALE TECH SOLUTIONS WORLDWIDE



WHAT WE DO:

Developing large-scale, state-of-the-art engineering and service solutions



Elevating customer operations with state-of-the-art technologies



Supporting our customers' operations with life-cycle services



Empowering our customers to drive the green transition

KEY FINANCIAL FIGURES H1 2024



ORDER INTAKE
3.8 billion EUR

(H1 2023: 4.7 billion EUR / -18%)

GROUP REVENUE
4.0 billion EUR

(H1 2023: 4.1 billion EUR / -3%)

ORDER BACKLOG
9.7 billion EUR

(H1 2023: 10.6 billion EUR / -8%)

EBITA
333 MEUR

(H1 2023: 333 MEUR / +/-0%)

EBITA MARGIN
8.4%

(H1 2023: 8.1%)

NET INCOME
(incl. non-controlling interests)
224 MEUR

(H1 2023: 222 MEUR / +1%)

WORLD MARKET LEADER WITH FOUR BUSINESS AREAS



PULP & PAPER



46%*

Pulp: #1
Paper: #3

METALS



21%*

Forming: #1
Processing: #1-2

HYDROPOWER



18%*

#1-2

ENVIRONMENT & ENERGY



15%*

#1-3

* Share of total Group revenue 2023

Global market position, estimated by ANDRITZ

CLOSE TO OUR CUSTOMERS, IN MORE THAN 80 COUNTRIES



AROUND

30,000

EMPLOYEES
WORLDWIDE



OVER

280

LOCATIONS



OVER

80

COUNTRIES



COMPETENCE, COMMITMENT, PASSION – THE WHOLE TEAM STANDS FOR ANDRITZ’S SUCCESS



Around **30,000**
employees within the ANDRITZ GROUP

- Approx. 64% white-collar and 36% blue-collar
- >32% are working in engineering, technology or project management




A JOURNEY OF 170 YEARS FROM A FOUNDRY TO GLOBAL TECHNOLOGY LEADERSHIP



<p>▼</p> <p>1852</p> <p>Established by Josef Körösi as a foundry and machine works</p> 	<p>▼</p> <p>1922</p> <p>Foundation of ANDRITZ apprentice workshop</p> 	<p>▼</p> <p>1948</p> <p>Expanded to big turbines (Escher-Wyss)</p> 	<p>▼</p> <p>1951</p> <p>Start of manufacturing of complete paper machines</p> 	<p>▼</p> <p>1997</p> <p>ANDRITZ China founded</p> 	<p>▼</p> <p>2000</p> <p>Pulp technology (Ahlström Machinery)</p> 	<p>▼</p> <p>2001</p> <p>ANDRITZ Brazil founded</p> 	<p>▼</p> <p>2006</p> <p>Hydropower (VA TECH Hydro)</p> 	<p>▼</p> <p>2013</p> <p>Advanced metals technology (Schuler Group)</p> 	<p>▼</p> <p>2018</p> <p>Fabrics and Rolls (Xerium Technologies)</p> 	<p>▼</p> <p>2022</p> <p>Battery production (Sovema)</p> 
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OWNERSHIP

1852	1900	1938-1949	1950	1987	1999	2001	2003
Established by Josef Körösi	Gutmann Group	Expropriation	Creditanstalt-Bankenverein	AGIV AG	Financial investors and the Custos private foundation	IPO – Listing on the Vienna Stock Exchange	 <p>Custos private foundation increased its stake to 30%</p> <p>Wolfgang Leitner former CEO of ANDRITZ</p>

WE EXPAND OUR PORTFOLIO IN ALL BUSINESS AREAS



Acquisitions by business area since 2002

PULP & PAPER		METALS		HYDROPOWER		ENVIRONMENT & ENERGY			
2002	ABB Drying	2012	AES	2002	SELAS SAS Furnace Div.	2006	VA TECH HYDRO	2002	3SYS
2003	IDEAS Simulation	2013	MeWa	2004	Kaiser	2007	Tigép	2003	Fiedler
2003	Acutest Oy	2016	SHW CastingTech	2005	Lynson	2008	GE Hydro business	2004	Bird Machine
2004	EMS (JV)	2017	Paperchine	2008	Maerz	2010	GEHI (JV)	2004	NETZSCH Filtration
2005	Cybermetrics	2018	Novimpianti	2012	Bricmont	2010	Precision Machine	2004	Fluid Bed Systems
2005	Universal Dynamics Group	2018	Diatec	2012	Soutec	2010	Hammerfest Strøm	2005	Lenser Filtration
2006	Küstern	2018	Xerium	2013	Schuler	2011	Hemicycle Controls	2006	CONTEC Decanter
2006	Carbona	2019	Kempulp	2013	FBB Engineering	2018	HMI	2009	Delkor Capital Equipment
2006	Pilão	2020	Enviroburners	2014	Herr-Voss Stamco			2010	KMPT
2007	Bachofen + Meier	2021	Laroche	2016	Yadon			2010	Ritz
2007	Sindus	2022	Bonetti Group	2016	AWEBA			2011	AE&E Austria (Clean Air Technologies)
2008	Kufferath	2022	ĐURO ĐAKOVIĆ TEP	2018	Farina Presse			2012	Gouda
2009	Rollteck	2023	Dan-Web	2018	ASKO			2013	Shende Machinery
2010	Rieter Perfojet	2023	SciTech Service	2022	Sovema Group			2015	Euroslot
2010	DMT/Biax	2023	Imagine That Inc.					2016	ANBO
2011	AE&E Austria (Boiler)	2024	NAF					2021	GE Steam Power
2011	Iggesund Tools	2024	Procemex					2022	J. Parpala
2011	Tristar Industries							2023	Dedert
2011	Asselin-Thibeau								

OUR STRATEGY: LONG-TERM PROFITABLE GROWTH



DECARBONIZATION



DIGITALIZATION



CUSTOMER SERVICE



LONG-TERM
PROFITABLE
GROWTH



- Grow revenue
- Grow profitability
- Grow service share

REDEFINING THE FUTURE: UNLEASHING OUR INNOVATION ENGINE



139 MEUR

for R&D in 2023



370

new patent
applications in 2023



6,510

patent protection rights



DECARBONIZATION: WE ENABLE THE GREEN TRANSITION

- Developing economically feasible key technologies for the green transition
- Providing full life cycle services from project development to operation and maintenance
- We offer solutions for:
 - carbon capture
 - production of green hydrogen
 - production of renewable fuels
 - battery production for e-mobility
 - textile recycling



Engineering

FOR THE
CHANGE

DIGITALIZATION: SUPPORTING CUSTOMERS THROUGHOUT PLANT LIFE CYCLE



Maximize
plant process
performance



Maximize the
value of data –
from raw data to
plant insights



Maximize
productivity,
efficiency and
availability
for all assets



Proactively
manage digital
security risks

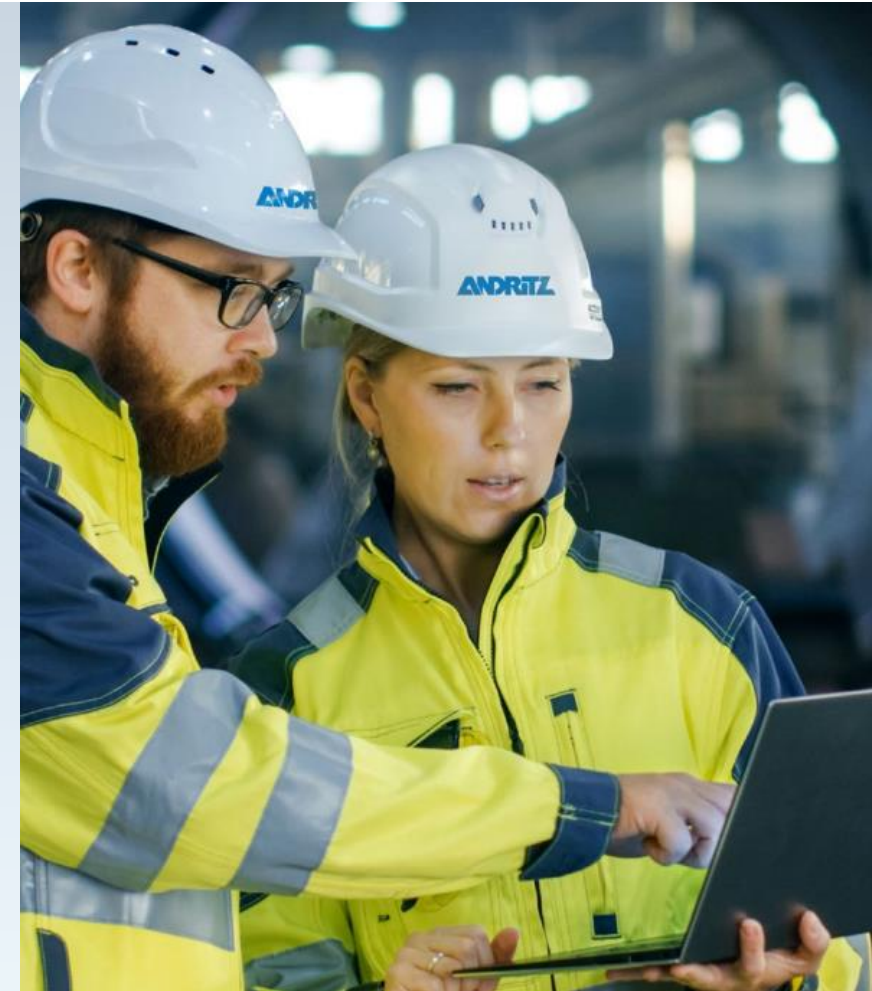
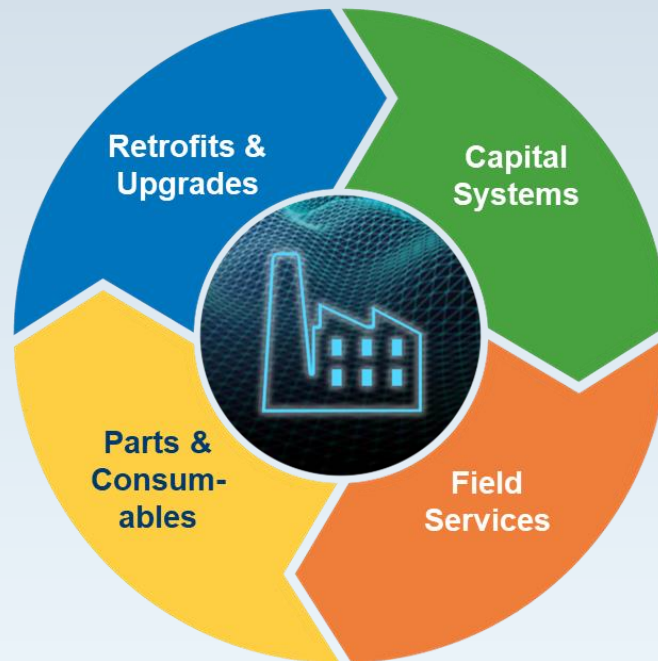


Boost customer
expertise and
reduce risk to
people, plant, and
investment

CUSTOMER SERVICE: SUCCESS THROUGH OUR LIFE CYCLE SOLUTIONS



We service our customers at every step, ensuring them high product quality, output, and uptime through quick response time and cost-competitive, efficient life cycle solutions.



"WE CARE" – OUR ESG PROGRAM



Sustainability is an integrated part of our corporate policy – we are committed to the SBTi (Science Based Targets initiative) to further reduce our greenhouse gas emissions by 2030

E

ENVIRONMENT

Reduce our CO₂ footprint, save resources and develop sustainable technologies

S

SOCIAL

Ensure a safe and viable future for our employees

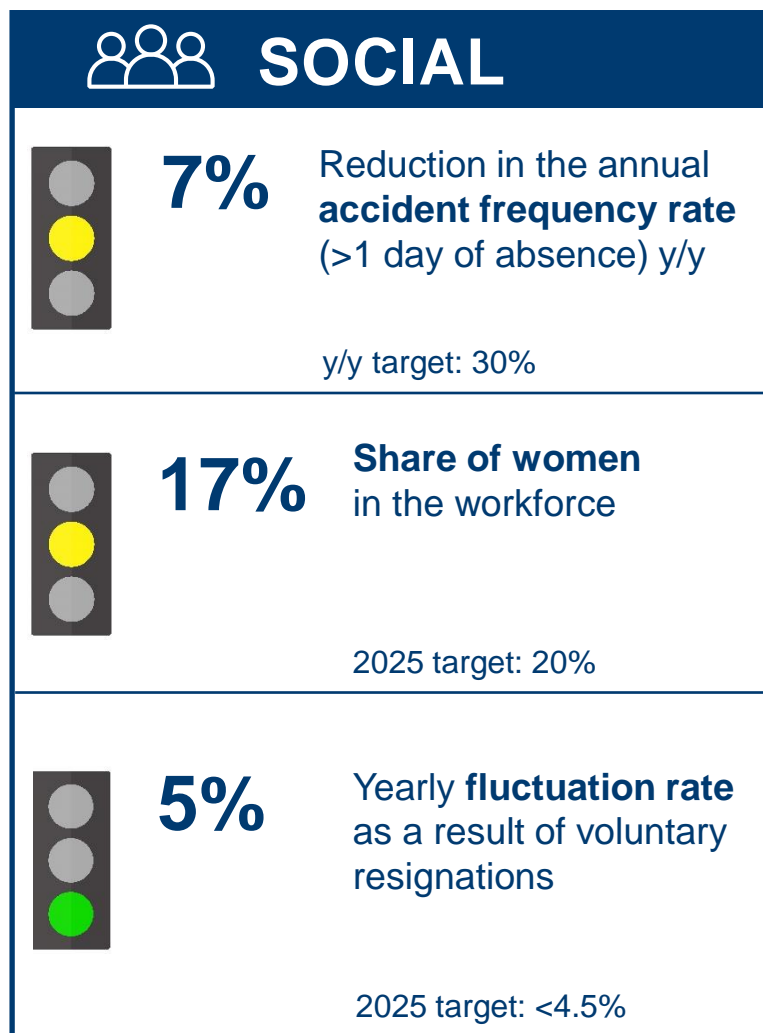
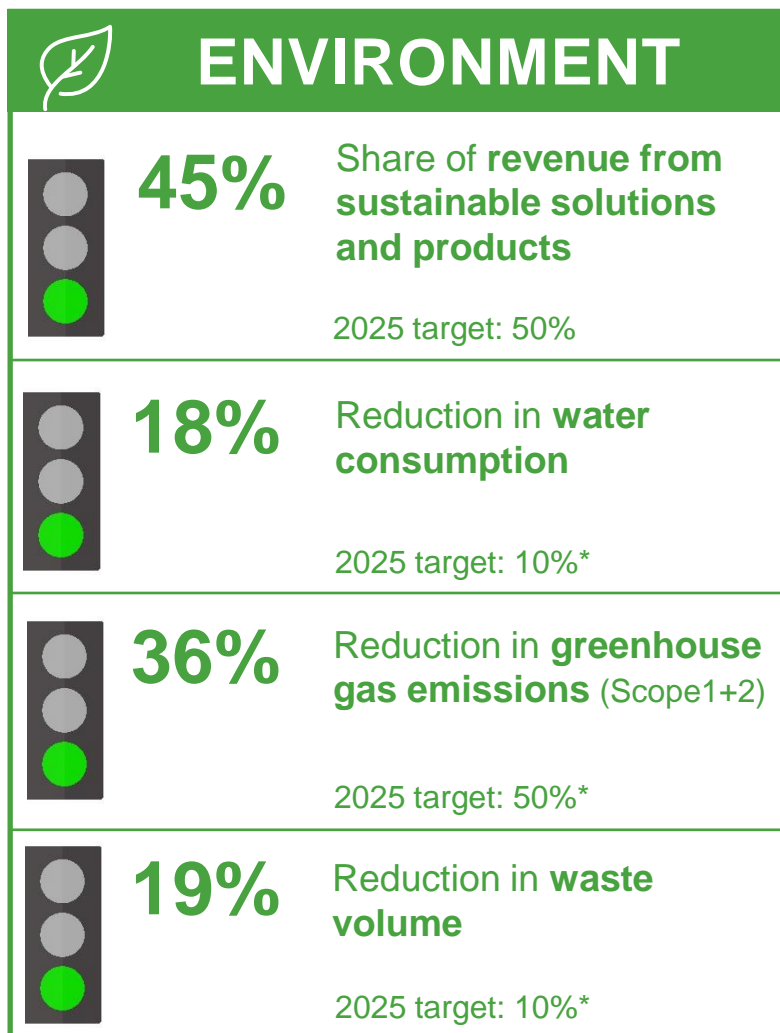
G

GOVERNANCE

Pursue fair and ethical business practices



WELL ON TRACK TO REACH OUR ESG GOALS STATUS AT THE END OF 2023



OUR GOAL IS ZERO OCCUPATIONAL INJURIES AND ILLNESSES



TARGET 2024

Reduce the LTAFR* **BY FURTHER 30% to 1.9**

We are **constantly improving** and **monitoring** our safety performance.

- LTAFR **reduced** from 10.2 in 2016 to **2.7** in **2023**
- Have all employees working under ISO 45001 certification
- Guarantee a safe, healthy and comfortable working environment for all



* The lost time accident frequency rate (LTAFR) is the number of accidents, causing more than one day absence, per one million working hours

OUR MISSION, VISION AND VALUES



We love what we do and we do everything to make sure that our customers succeed.



ENGINEERED SUCCESS

OUR MISSION

We drive the success of our customers through **innovative and quality engineering and services**, and we form strong and sustainable relationships – with a positive impact for key industries and for the planet. The world keeps changing, our passion stays the same.

OUR VISION

In our chosen markets, we are **global leaders with a passion for innovative engineering solutions**. As technology and quality leader, we create sustainable value for our customers and shareholders, thus ensuring the continuation of our long-term profitable growth.

OUR VALUES

We at ANDRITZ all share the same core values that define how we act and what we stand for.



Passion



Partnership



Perspectives



Versatility



A

METALS

ENGINEERED SUCCESS FOR FLAT PRODUCT PROCESSING

JULY 2024

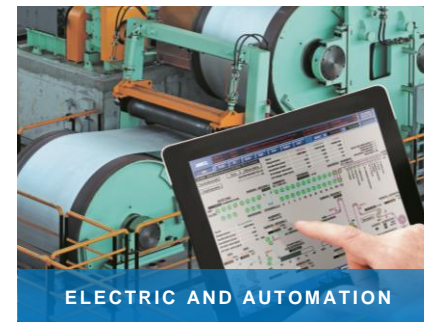
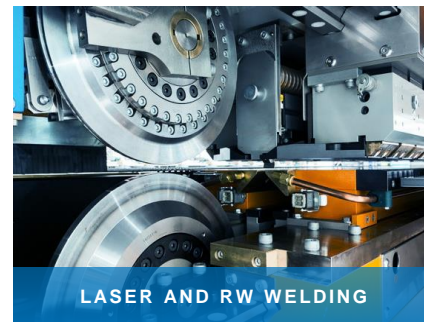
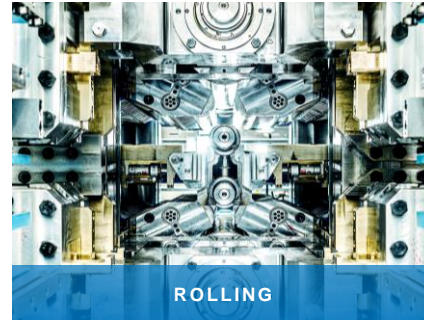
ANDRITZ

ENGINEERED SUCCESS

ANDRITZ METALS



Carbon and stainless steel, aluminum and copper



FUNDAMENTALS OF OUR EXCELLENCE



ANDRITZ

Schuler AG
Soutec AG
Thermtec
Selas France SA
FBB GmbH
Lynson
United Utilities
ASKO
Sundwiger Eisenhütte Maschinenfabrik
Herr-Voss Stamco
MAERZ-Gautschi Industrieofenanlagen GmbH
Davy-Swindell
Otto Kaiser GmbH
HiTEQ
Ruthner AG
Bricmont Inc.
Nisterhammer

ANDRITZ METALS CAPABILITIES



FINDING SOLUTIONS TO ANY CHALLENGE!

A reliable partner for the production and processing of stainless steel, carbon steel and non-ferrous metals with strong focus on

- Health, Safety and Environment
- Sustainability
- Research and development
- Project and site management
- Manufacturing and engineering
- Automation and digitalization
- Life-cycle full service



ANDRITZ METALS HEALTH, SAFETY AND ENVIRONMENT



- All locations of ANDRITZ Metals are already part of matrix certification, for the integrated QHSE Management System acc. to ISO 9001, ISO 14001 and ISO 45001.



ANDRITZ METALS

HEALTH, SAFETY AND ENVIRONMENT



- When it comes to workplace safety, our goal is simple – **we do not want injuries or accidents at any time**
- **Safety begins with each individual employee.** We never take risks that could endanger ourselves or others during our jobs
- **We strive to eliminate accidents in all of our facilities** by ensuring a safe and healthy work environment and by looking for ways to continuously improve
- We comply with all safety laws and believe that **safety comes before anything else**



ANDRITZ METALS “SAFETY FIRST” PROGRAM



ANDRITZ "Safety First" program implemented at site

- Strong cooperation between all contractors at site
- High management commitment
- Strict control of site works to increase installation quality, safety and health of on-site staff
- Permanent high management compliance workgroup
- Extremely good safety numbers during the projects



SUSTAINABILITY - VISION

Sustainability is the main driver for innovation.

Strategic Focus:

- CO₂ emission reduction
- NO_x reduction
- Digitalization



Sustainability and customer focused service and technology leader for flat product processing

**smarter
cleaner
greener**

ANDRITZ METALS RESEARCH AND DEVELOPMENT



Our innovation portfolio is based on the following focus areas:

- Environmentally sustainable production, circular economy: solutions for recycling waste acid and waste water, reducing CO₂ and NO_x emission and contributing to a toxic free environment
- Lightweight material for the automotive industry: new process technologies to produce also future generations of AHSS, TWBs and aluminum grades
- Digitalization: We combine domain know-how with automation and digitalization expertise! The four main pillars are increase asset value, increase product quality, improve production performance and secure sustainable production.



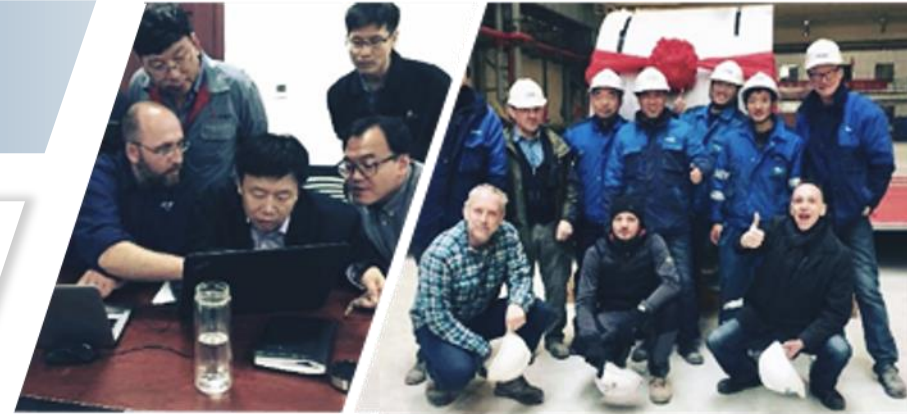
7 R&D centers in Europe and USA

ANDRITZ METALS PROJECT AND SITE MANAGEMENT



PROJECT MANAGEMENT

- Project set up with interdisciplinary international teams led by experienced project managers
- Coordination of design engineering and interfaces with customer and suppliers
- Effective communication with all involved parties and project stakeholders
- Professional document management
- Time scheduling and progress reporting for on-time delivery
- Efficient installation, commissioning and start-up



ANDRITZ METALS PROJECT AND SITE MANAGEMENT



SITE MANAGEMENT

- Wide range of site jobs ranging from very small field service orders to large scale full installation contracts
- Most capital contracts include:
 - Only supervision service
 - Installation in customer scope
- Couple of full installation / EPC contracts
- Typical large capital project:
 - Approx. 5000 SV man-days
 - Approx. MEUR 10-20 installation costs
- 100 specialized site supervisors globally



ANDRITZ METALS MANUFACTURING AND ENGINEERING



BENEFIT FROM OUR MANUFACTURING CAPABILITIES!

- Consistent technological development
- Consistent improvement of reliability
- Quality
- Service (upgrades, rebuilds, spare & wear parts)

STRATEGY

- Production of key components
- High- and consistent quality due to ANDRITZ manufacturing standard
- Excellent in engineering, design and planning



ANDRITZ METALS AUTOMATION



THE RIGHT CLICK FOR YOUR PLANT!

Functional, reliable and safety Electric and Automation systems from in-house automation know-how combined with expertise in process and mechanical design.

- Complete automation solutions from one source
- State of the art and consistent
- Short start-up times
- Smooth operations of ANDRITZ plants and technologies
- Supported by simulation models, digital twins, advanced process control technologies, and special sensors.
- Comprehensive lifetime services
- Global services network
- **Industry 4.0 READY**





ANDRITZ METALS AUTOMATION

LEVEL 3 (ERP)



LEVEL 2
(MES/AFC)



LEVEL 1
(PLC/OCS)



LEVEL 0
(Field)



ENGINEERED SUCCESS FOR FLAT PRODUCT PROCESSING

ANDRITZ combines domain know-how with automation and digitalization expertise!

Domain know-how

150+ years experience with more than 1040 processing lines, 342 rolling mills, 330 furnaces in the carbon steel, stainless steel, aluminum, welding and stamping industry.



Automation

Integrated technology solutions for our domain products with more than 35 years of experience in using automation software independent of the automation hardware supplier, e.g. Siemens, ABB, Rockwell, Yokogawa, and many more.



Digitalization

Metis UX platform with more than 50 apps for optimizing the quality and performance of our customers production with more than 50 reference



INTELLIGENT FLAT PRODUCT PROCESSING

For a world-class, flat steel producer who delivers the product exactly as requested, on time and with consistent quality

Increase asset value



- Risk-based maintenance
- Condition monitoring
- Anomaly detection
- Process change tracking
- Logbook
- Digital twin

**Increase asset availability
by up to 25%**

> 50 references, thereof
> 15 in Metals

Increase product quality



- Intelligent CGL
- Coil quality mgmt.
- Data analytics
- Advanced furnace control
- Process model (picking, annealing)
- Intelligent rolling mill optimization
- Control performance assessment (CPA)

**Minimize yield losses
by up to 5%**

> 60 references, thereof
> 45 in Metals

Improve production performance



- Manufacturing execution system (MES)
- Overall equipment efficiency (OEE)
- Cost/resource management
- Statistical process control (SPC)
- Plant floor management
- Alarm management
- Control performance assessment (CPA)
- Production information (PID)

**Increase production output by
up to 15%**

> 40 references, thereof
> 20 in Metals

Secure sustainable production



- Utility and energy consumption
- Emission reduction (CO₂, NO_x)
- Intelligent acid management
- Cyber security

CO₂ reduction by up to 25%

> 30 references, thereof
> 15 in Metals

ANDRITZ METALS LIFE CYCLE FULL SERVICE

SERVICE ABILITY

- Outstanding service product portfolio - from spare parts to mill-wide maintenance outsourcing agreements
- Close cooperation with the mill's and service center operation and maintenance personnel
- Contribute to improved reliability, availability, and production while reducing overall operating costs

Service products and solutions

- Automation & control
- Engineered wear products
- Mill improvement
- Studies & field services
- Mill maintenance
- Remote Assistance
- Spare & replacement parts
- Upgrades & modernizations
- Rebuild & Retrofits
- Tooling



ANDRITZ METALS WORLDWIDE



1,400
EMPLOYEES

150+
YEARS
EXPERIENCE

6
INNOVATION
CENTERS

400
EMPLOYEES
IN SERVICE



ANDRITZ METALS NEWS



2024/06/12

ANDRITZ starts up new surface treatment line for aluminum strip at AMAG

International technology group ANDRITZ has successfully completed the delivery, installation, and start-up of the new continuous surface treatment line and integrated wastewater treatment plant at AMAG rolling GmbH in Ranshofen, Austria. [Read more](#)



2024/03/19

ANDRITZ to supply new pickling section for heavy-duty push pickling line to Salzgitter Flachstahl, Germany

International technology group ANDRITZ has received an order from Salzgitter Flachstahl, Salzgitter, Germany, to supply a new pickling section for the existing push pickling line designed for heavy-duty steel grades. [Read more](#)

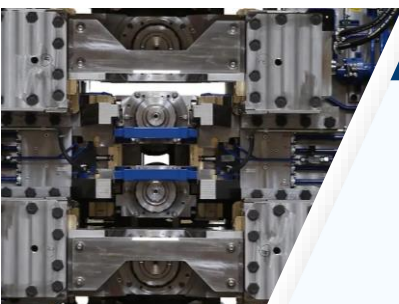


2023/09/20

Salzgitter orders one of Europe's largest green hydrogen plants from ANDRITZ

The Salzgitter Group has selected technology group ANDRITZ to supply one of Europe's largest green hydrogen plants for the SALCOS® program, which aims to achieve virtually CO₂-free (green) steel production. [Read more](#)

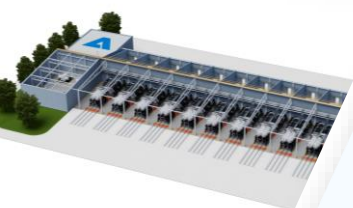
ANDRITZ METALS NEWS



2023/09/06

ANDRITZ to supply new 6-high cold rolling mill to ArcelorMittal, France

International technology group ANDRITZ has received an order from ArcelorMittal, France, to supply a reversible 6-high cold-rolling mill for processing high grade non-oriented silicon steel strip (NGO) for use in electric motors. [Read more](#)



2023/07/25

ANDRITZ wins first order in green hydrogen sector

Koppö Energia of Finland has selected international technology group ANDRITZ to perform the Front-End Engineering Design (FEED) for a large-scale plant to produce green hydrogen. [Read more](#)



2023/06/26

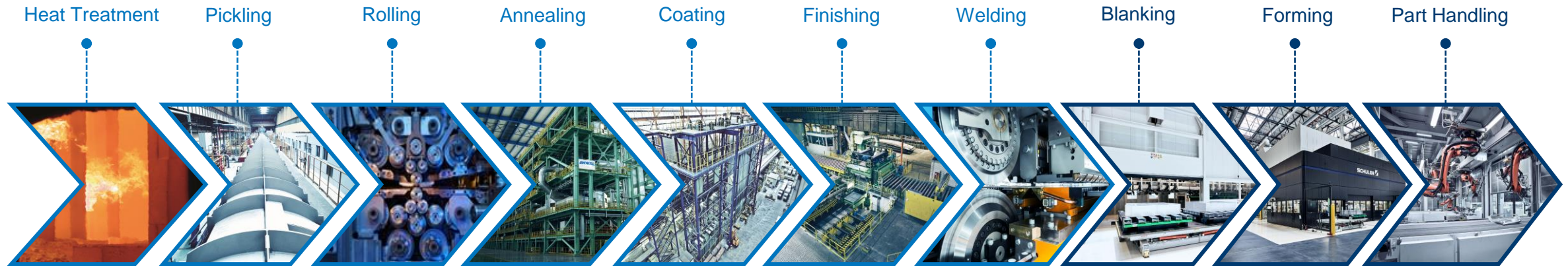
ANDRITZ to supply seven car bottom furnaces to Sheffield Forgemasters, England

International technology group ANDRITZ has received an order from Sheffield Forgemasters, England, to supply seven new car bottom furnaces for UK's largest open die forge. [Read more](#)



ANDRITZ METALS – SCHULER

Entire process chain from hot rolled strip to finished parts



ANDRITZ METALS core competences

Processing lines steel and aluminum strips, industrial furnace systems, and welding systems

Schuler core competences

Press shop solutions

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