ANDRITZ GROUP

INNOVATIVE TECHNOLOGIES FOR THE PLANET

A GLOBAL PARTNER FOR KEY INDUSTRIES THAT SHAPE THE WORLD

MARCH 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 2023

ORDER INTAKE
8.6 billion EUR
(2022: 9.3 billion EUR / -8%)

GROUP REVENUE
8.7 billion EUR
(2022: 7.5 billion EUR / +15%)

ORDER BACKLOG
9.9 billion EUR
(2022: 10.0 billion EUR / -1%)

EBITA
742 MEUR
(2022: 649 MEUR / +14%)

EBITA MARGIN
8.6%
(2022: 8.6%)

NET INCOME
(incl. non-controlling interests)
504 MEUR
(2022: 403 MEUR / +25%)

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

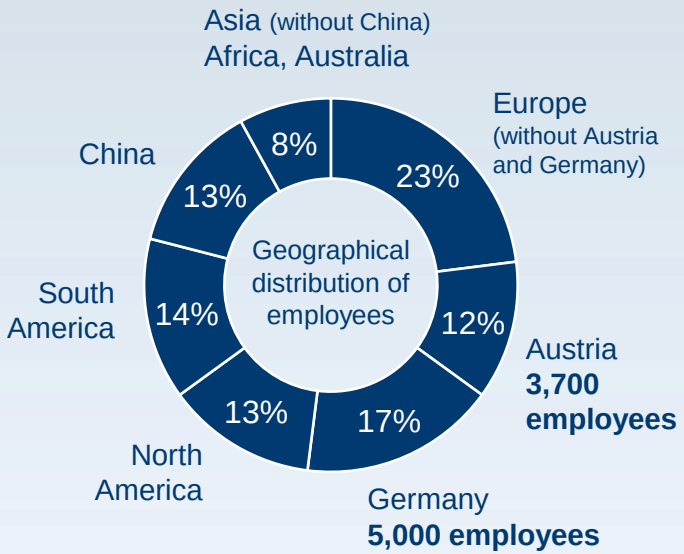
COUNTRIES

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

Around **30,000**

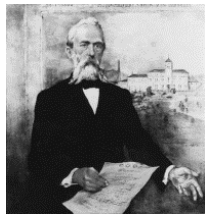
employees within the ANDRITZ GROUP

- Approx. 65% white-collar and 35% blue-collar
- >33% are working in engineering, technology or project management

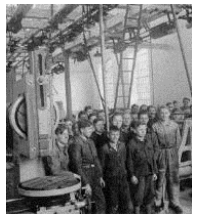


A JOURNEY OF 170 YEARS FROM A FOUNDRY TO GLOBAL TECHNOLOGY LEADERSHIP

1852
Established by Josef Körösi as a foundry and machine works

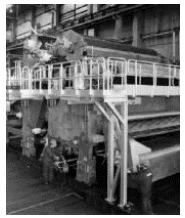


1922
Foundation of ANDRITZ apprentice workshop



1948
Expanded to big turbines (Escher-Wyss)

1951
Start of manufacturing of complete paper machines



1997
ANDRITZ China founded

2000
Pulp technology (Ahlström Machinery)

2001
ANDRITZ Brazil founded

2006
Hydropower (VA TECH Hydro)

2013
Advanced metals technology (Schuler Group)

2018
Fabrics and Rolls (Xerium Technologies)

2022
Battery production (Sovema)

OWNERSHIP

1852 Established by Josef Körösi

1900 Gutmann Group

1938-1949 Expropriation

1950 Creditanstalt-Bankenverein

1987 AGIV AG

1999 Financial investors and the Custos private foundation

2001 IPO – Listing on the Vienna Stock Exchange

2003 Custos private foundation increased its stake to 30%

Wolfgang Leitner
former CEO of ANDRITZ

WE EXPAND OUR PORTFOLIO IN ALL BUSINESS AREAS

Acquisitions by business area since 2002

PULP & PAPER

2002	ABB Drying	2012	AES
2003	IDEAS Simulation	2013	MeWa
2003	Acutest Oy	2016	SHW CastingTech
2004	EMS (JV)	2017	Paperchine
2005	Cybermetrics	2018	Novimpianti
2005	Universal Dynamics Group	2018	Diatec
2006	Küsters	2018	Xerium
2006	Carbona	2019	Kempulp
2006	Pilão	2020	Enviroburners
2007	Bachofen + Meier	2021	Laroche
2007	Sindus	2022	Bonetti Group
2008	Kufferath	2022	ĐURO ĐAKOVIĆ TEP
2009	Rollteck	2023	Dan-Web
2010	Rieter Perfojet	2023	SciTech Service
2010	DMT/Biax	2023	Imagine That Inc.
2011	AE&E Austria (Boiler)	2024	NAF (closing pending)
2011	Iggesund Tools		
2011	Tristar Industries		
2011	Asselin-Thibeau		

METALS

2002	SELAS SAS Furnace Div.
2004	Kaiser
2005	Lynson
2008	Maerz
2012	Bricmont
2012	Soutec
2013	Schuler
2013	FBB Engineering
2014	Herr-Voss Stamco
2016	Yadon
2016	AWEBA
2018	Farina Presse
2018	ASKO
2022	Sovema Group

HYDROPOWER

2006	VA TECH HYDRO
2007	Tigép
2008	GE Hydro business
2010	GEHI (JV)
2010	Precision Machine
2010	Hammerfest Strøm
2011	Hemicycle Controls
2018	HMI

ENVIRONMENT & ENERGY

2002	3SYS
2003	Fiedler
2004	Bird Machine
2004	NETZSCH Filtration
2004	Fluid Bed Systems
2005	Lenser Filtration
2006	CONTEC Decanter
2009	Delkor Capital Equipment
2010	KMPT
2010	Ritz
2011	AE&E Austria (Clean Air Technologies)
2012	Gouda
2013	Shende Machinery
2015	Euroslot
2016	ANBO
2021	GE Steam Power
2022	J. Parpala
2023	Dedert

OUR STRATEGY: LONG-TERM PROFITABLE GROWTH

DECARBONIZATION

DIGITALIZATION

CUSTOMER SERVICE

LONG-TERM PROFITABLE GROWTH

- Grow revenue
- Grow profitabilty
- 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

DIGITALIZATION:
SUPPORTING CUSTOMERS THROUGHOUT PLANT LIFE CYCLE

PROCESS OPTIMIZATION

Maximize plant process performance

PLANT MANAGEMENT

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

ASSET OPTIMIZATION

Maximize productivity, efficiency and availability for all assets

CYBERSECURITY

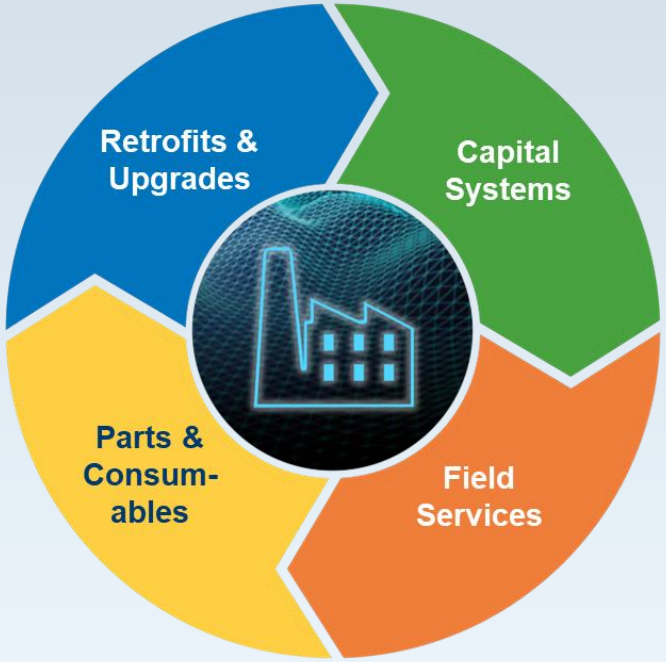
Proactively manage digital security risks

TRAINING

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 CO_2 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

ENVIRONMENT

45% Share of **revenue from sustainable solutions and products**

2025 target: 50%

18% Reduction in **water consumption**

2025 target: 10%*

36% Reduction in **greenhouse gas emissions** (Scope1+2)

2025 target: 50%*

19% Reduction in **waste volume**

2025 target: 10%*

SOCIAL

7% Reduction in the annual **accident frequency rate** (>1 day of absence) y/y

y/y target: 30%

17% **Share of women** in the workforce

2025 target: 20%

5% Yearly **fluctuation rate** as a result of voluntary resignations

2025 target: <4.5%

GOVERNANCE

90% **Procurement volume** covered by **assessed suppliers**

2025 target: 85%

0 No **infringements**, achieved by implementing the highest corporate compliance standards

y/y target: 0%

0 No event-driven **profit warnings**, achieved by detecting company risks at an early stage

y/y target: 0%

Note: * Reference year 2019

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.

ANDRITZ

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

METALS

ENGINEERED SUCCESS FOR FLAT PRODUCT PROCESSING

MARCH 2024

ANDRITZ

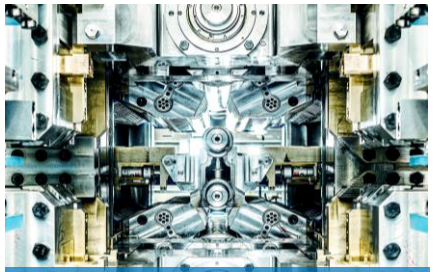
ENGINEERED SUCCESS

ANDRITZ METALS

Carbon and stainless steel, aluminum and copper

INDUSTRIAL FURNACES

PICKLING, ACID REGENERATION


ROLLING

ANNEALING, HEAT TREATMENT

COATING

FINISHING

STAMPING

LASER AND RW WELDING

ELECTRIC AND AUTOMATION

SERVICE SOLUTIONS,
PLANT REVAMPS & UPGRADES

FUNDMENTALS OF OUR EXCELLENCE

Soutec AG

Schuler AG

Selas France SA

Thermtec

FBB GmbH

Lynson

United Utilities

ASKO

Sundwiger Eisenhütte Maschinenfabrik

Herr-Voss Stamco

MAERZ-Gautschi Industrieofenanlagen GmbH

Davy-Swindell

HiTEQ

Otto Kaiser GmbH

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 geed safety numbers during the projects

SUSTAINABILITY - VISION

Sustainability is the main driver for innovation.

Strategic Focus:

- CO_2 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:

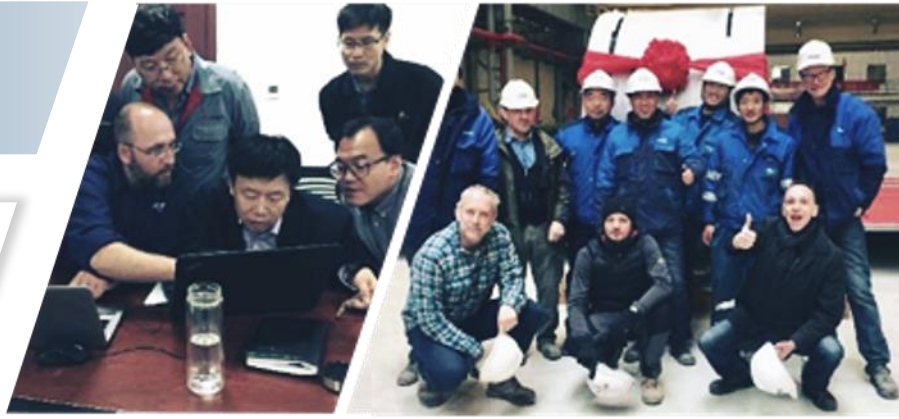
- Environmentally sustainable production, circular economy: solutions for recycling waste acid and waste water, reducing CO_2 and NO_x emission and contributing to a toxic free environment
- Lightweight material for the automotive industry: new process technologies to produce also future generations 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)

Siemens

Rockwell

ABB

Industrial PC/Edge

LEVEL 0
(Field)

ANDRITZ
IIoT Sensors

ENGINEERED SUCCESS FOR FLAT PRODUCT PROCESSING

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

Metris
ANDRITZ Digital Solutions

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

Metris
ANDRITZ Digital Solutions

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 (CO_2, NOx)
- Intelligent acid management
- Cyber security

CO_2 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

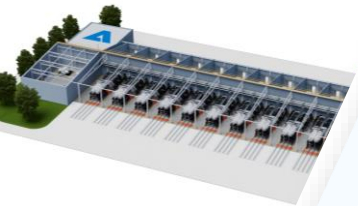
1,400 EMPLOYEES

150+ YEARS EXPERIENCE

6 INNOVATION CENTERS

400 EMPLOYEES IN SERVICE

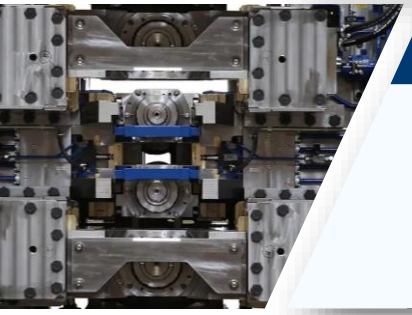
ANDRITZ METALS NEWS



2023/09/20

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

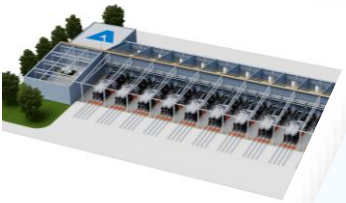
The Salzgitter Group has selected technology group ANDRITZ to supply one of Europe's largest green hydrogen plants for the SALCOS® program, which aims to achieve virtually CO_2-free (green) steel production. Read more



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

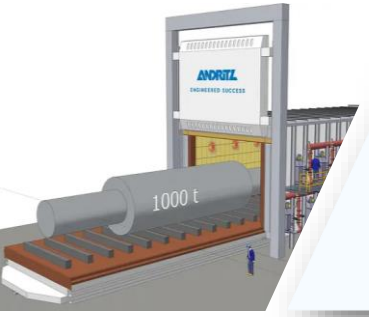


2023/07/25

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

ANDRITZ METALS NEWS



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

2023/05/26

ANDRITZ to supply three aluminum alloy process lines to Shandong Nanshan Aluminum, China

Shandong Nanshan Aluminum Co., Ltd, China has entrusted international technology group ANDRITZ with the supply of two continuous heat treatment lines (No. 3 and No. 4) and one continuous process treatment line (No. 4)... Read more

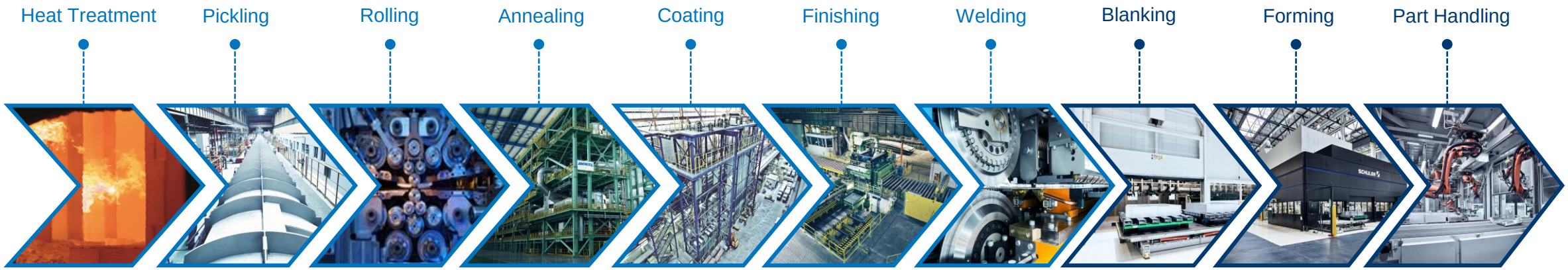
2023/05/25

ANDRITZ to supply new MonoBlock cold-rolling mill, skin pass mill, and annealing & pickling line upgrade to NAS

International technology group ANDRITZ has received an order from North American Stainless, Ghent, Kentucky, USA, to supply a 20-high cold-rolling mill, a 4-high skin pass mill, and an upgrade of the existing annealing and pickling line #2. 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

LEGAL DISCLAIMER

© ANDRITZ AG 2024

This presentation contains valuable, proprietary property belonging to ANDRITZ AG or its affiliates (“the ANDRITZ GROUP”), and no licenses or other intellectual property rights are granted herein, nor shall the contents of this presentation form part of any sales contracts which may be concluded between the ANDRITZ GROUP companies and purchasers of any equipment and/or systems referenced herein. Please be aware that the ANDRITZ GROUP actively and aggressively enforces its intellectual property rights to the fullest extent of applicable law. Any information contained herein (other than publically available information) shall not be disclosed or reproduced, in whole or in part, electronically or in hard copy, to third parties. No information contained herein shall be used in any way either commercially or for any purpose other than internal viewing, reading, or evaluation of its contents by recipient and the ANDRITZ GROUP disclaims all liability arising from recipient’s use or reliance upon such information. Title in and to all intellectual property rights embodied in this presentation, and all information contained therein, is and shall remain with the ANDRITZ GROUP. None of the information contained herein shall be construed as legal, tax, or investment advice, and private counsel, accountants, or other professional advisers should be consulted and relied upon for any such advice.

All copyrightable text and graphics, the selection, arrangement, and presentation of all materials, and the overall design of this presentation are © ANDRITZ GROUP 2024. All rights reserved. No part of this information or materials may be reproduced, retransmitted, displayed, distributed, or modified without the prior written approval of Owner. All trademarks and other names, logos, and icons identifying Owner’s goods and services are proprietary marks belonging to the ANDRITZ GROUP. If recipient is in doubt whether permission is needed for any type of use of the contents of this presentation, please contact the ANDRITZ GROUP at welcome@andritz.com.