## ANDRITZ Automation

ANDRITZ Automation is a leading supplier of machines and plant control systems operating worldwide and with headquarters in Graz, Austria.

The ANDRITZ Automation services and tools provided cover a wide range of industries, such as pulp and paper, mining, or oil and gas. Customers around the world rely on ANDRITZ Automation, which has a total of 110 different locations, in various fields like pulp and paper, separation, stainless steel or food and beverages.

ANDRITZ Automation assists customers from project concept to execution and throughout operations, starting with pre-feasibility studies and front-end engineering of controls, electrical and power systems engineering and followed by estimating, scope development, and value engineering. This also includes project management, erection work,



start-up and operator training and continues with maintenance and engineering work for expansions and improvements. ANDRITZ Automation is the full capability controls, electrical and power system integrator, filling the roles from owner's engineer to S/MAC (Simulation and Main Automation Contractor), from small improvements to turnkey projects.

With plant control systems, simulation and advanced control tools, automation experts help plants to become operationally ready within a short start-up period through comprehensive process know-how and pre-tested components. The close cooperation between ANDRITZ Automation experts and all business areas within the ANDRITZ GROUP

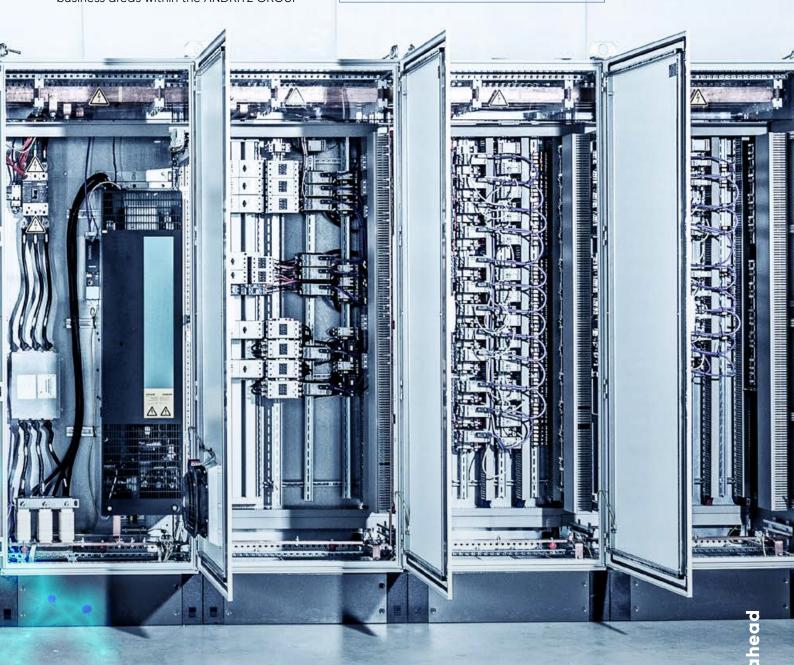
consolidates the concentrated process knowledge that creates significant advantages and customer-focused solutions.

By investing in research and development, ANDRITZ Automation drives innovation and continually improves both processes and plants. The main goal is to raise the efficiency, sustainability and profitability of the plant and its processes while reducing costs and downtimes. •

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## Hydro Automation

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ANDRITZ Hydro Automation provides innovative and competitive solutions for the complete secondary technology in power plants, thus covering the entire value chain: development, marketing, sales, engineering, design, commissioning, and after-sales service.

ANDRITZ Hydro Automation is an overall solution provider for secondary technology, its strengths being the provision of integrated solutions for all power plant subsystems: turbine governor, excitation, protection, control technology, as well as monitoring and diagnosis.

ANDRITZ Hydro Automation supplies solutions tailored to the customer's needs for large new plants in the Large Hydro business segment and highly standardized products in the Compact Hydro business segment. Rehabilitation of plants of all sizes mainly requires highly adaptable products and thorough process know-how. The NEPTUN concept, which is already in use in a large number of power plants, comes into its own throughout all applications. •

## Pulp & Paper **Automation**

The pulp, paper and power plant automation department focuses on automation, electrification and instrumentation systems, helping mills to realize their full potential. The department serves the capital and service divisions on chemical pulp mill, power boiler, paper and tissue machine projects globally.

It supplies dynamic simulation, patented advanced control solutions and operator training tools, focusing on simulation, electrical and controls, operator training, and process optimization. Engineering specialists are mainly based in the product homes and are assisted by local support staff.

The dedicated products developed for the core equipment include electrification and control systems for stacker-reclaimers used for chip storage in woodyards, K4000 digester chip level measurement, the BaleMatic<sup>™</sup> control system for bale finishing lines (automation, electrification and instrumentation), as well as the DryMatic™ dryer control system and safety related systems (SRS) for various process areas. Developments in digitalization, industry 4.0 and IIoT ensure constant further development. Maximum availability and advanced cyber-security standards and practices are key to enabling customers to use their equipment efficiently to produce pulp, paper, tissue, and steam for energy or district heat generation or methanol for biofuel. •

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# Metals Automation

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ANDRITZ Metals supplies complete, integrated electrical equipment and automation solutions for the cold rolling industry. ANDRITZ Metals stands for state-of-the-art solutions in the metal industry and provides experts for electrical equipment and automation in every section of the processing line.

The core strengths are optimum project handling, based on well-engineered and process-optimized models from L1: PLC/HMI to L2: MES, and dealing with specified and application-oriented solutions. ANDRITZ Metals E&A engineering works with data-based CAE tools and is especially known for its experience in mathematical modeling. By introducing flexible and application-oriented automation technology together with standardized hardware and software systems, customers receive all-in-one electrical and automation solutions. •

# Separation **Automation**

ANDRITZ Separation is the world's leading separation specialist with the broadest technology portfolio and more than 2,000 specialists in 40 countries. Industries ranging from environment to food, chemicals, and mining and minerals are benefitting from basic automation solutions and on to sophisticated technologies that recognize changes and imbalances within the production process.

The ANDRITZ Separation specialists use their in-depth expertise to provide scalable solutions that are individually tailored to regional and application-specific requirements, be this automation for new equipment or upgrades to prolong the equipment's life cycle. Customized upgrades, process optimizations, safety audits, and training complete the range of full services. With the aid of Metris addIQ control systems, plant performance can be enhanced measurably while keeping downtime to a minimum. As a supplier for cutting-edge automation technologies and digitalization, best-inclass performance is ensured. •

### CONTACT

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## Schuler



## CONTACT

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Schuler is the technological and global market leader in the field of forming technology. The company provides presses, automation solutions, dies, process expertise, and service for the entire metalworking industry and for lightweight automobile construction.

Schuler's customers include automotive manufacturers and suppliers as well as companies in the forging, household appliances, packaging, energy, and electronics industries. Schuler is a leading supplier of minting presses and implements system solutions for a wide range of different high-tech sectors.

From the individual press to the complete press line, Schuler is a system supplier. Schuler automates forming lines with intelligence and an eye to practical utility. In this way, Schuler boosts a line's production performance efficiently and economically. Whether customers are looking for a broad portfolio of parts, high productivity or have a need for compact equipment, Schuler automation solutions win over customers with high efficiency and reliable production processes. Schuler also modernizes existing lines, while Schuler Service offers a tailored portfolio of services covering the entire equipment life cycle. •