Overview
ABB offers complete power distribution and process electrification solutions for the pulp and paper industry. Our scope includes basic and detailed engineering, supply management, site management, supervision, and implementation and commissioning of the entire electrical systems and solution. The product range covered includes everything from incoming power supply to motor control centers and motors, as well as all main power distribution, electrification components and cabling.

Process electrification
- Network configuration and design
- Medium and low voltage switchgears
- Distribution transformers
- Motors
- Frequency converters
- Cable trays
- Installation materials

Facility electrical systems
- Building electrification
- Lighting

Project services
- Project management
- Basic and detailed engineering
- Installation supervision
- Commissioning, startup and training

ABB Ability™ for Electrical Systems
- Remote access
- System and equipment monitoring
- Preventive maintenance initiation

For almost 40 years, ABB has supplied complete power distribution and electrification solutions to mills worldwide. This experience is essential in putting together robust systems – so is our expertise working in the pulp and paper industry. By focusing on customer values like profitability, functionality, environmental sustainability, and quality, ABB designs and supplies complete solutions for pulp and papermakers.
**Design services**
A broad scope of design services can be applied from early conceptual stages through the entire project delivery. ABB Electrification solutions can be tailored for an entire mill or focused on a single process area. In the initial stages of a project, only a small amount of data for the electrification concept is needed from the customer. The basic engineering done by ABB specialists includes fact finding, cost calculations, comparisons and detailed material analysis. All tasks from initial concept layout and design to as-built drawings are supplied as part of ABB’s detailed engineering capability.

**Network configuration and design**
The success of the project depends on decisions made in the very early stages. ABB can create the optimal design for the basic network structure, including voltage levels, short-circuit capacity and electrical supply design. ABB has insight into the technical options and limitations of alternative network solutions, as well as an in-depth understanding of the impact design decisions have on lifecycle costs.

**Power network managing**
Electricity usage management ensures energy availability at an optimum level for all equipment in the entire mill and improves the control of secondary reactive energy. The management concept covers control, supervision, data collection, maintenance, voltage regulation, simulation and operator support.

**Power network protection**
By combining network analysis applications with a deep understanding of the process, ABB can design and install the best possible model of a mill’s electrical network to protect it from harmful disturbances. This solution includes even the most demanding power management applications like reactive power control and more.

**Load shedding**
The load shedding function can be utilized to save the most essential processes from electrical disturbances. As one of the most challenging elements of a well-designed system, it is based on the integration of versatile protection functions and automation systems.

**Integrated solutions**
ABB offers a wide range of fieldbus compatible electrical products. IEC61850 and Profibus-DP provide direct access to remote I/O, intelligent sensors, motor drives and switchgear. Connecting switchgear equipped with ABB’s intelligent motor controllers to the control system by fieldbus simplifies everything, from installation, through operation, to maintenance.

**Project execution services**
World-class project execution and on-site support requires dozens of tasks to be coordinated and executed for a successful start-up. ABB provides professional project management to ensure on-time delivery and successful completion. Highly qualified ABB personnel make sure your mill has smooth and effective project implementation from installation through start-up.

**Customer training**
Customer training on-site and in ABB’s training centers ensures that operators get the maximum advantage from products and systems.

**Service**
ABB provides customers with service solutions to operate, maintain and optimize their mills. ABB is present in more than 40 major pulp and paper countries. While we maintain a global perspective on the industry, we deliver services with a local touch.