

Electrification for the Pulp and Paper Industry



Industrial<sup>IT</sup>  
enabled

# Lifecycle Reliability

## Expertise

ABB offers complete Industrial<sup>IT</sup>-enabled power distribution and process electrification solutions for the pulp and paper industry. The total electrification solution covers basic and detailed engineering, supply, site management, supervision, erection and commissioning of the entire electrical solution. From incoming power supply to motor control centers and motors, including all main power distribution, electrification components and cabling.

ABB is the recognized leader in power technologies. Profitability, functionality, quality and reliability as well as environmental compatibility are the five major customer needs to which ABB offers best electrification solutions.

### For power distribution ABB offers

- Network calculation and dimensioning services
- Substations and power transformers
- High voltage switchyards
- Medium voltage switchgears
- Protection systems
- Network control systems

## Experience

For over 30 years ABB has supplied electrification solutions to green field mills as well as modernizations to major pulp and paper producers worldwide.

Based on wide experience, ABB has extensive expertise and understanding of pulp & paper processes and related electrical solutions.

Unrivalled cost efficiency, absolute functionality and high availability are our values.

### For process electrification ABB offers

- Network configuration and design
- Medium and low voltage switchgears
- Distribution transformers
- Motors
- Frequency converters
- Installation materials
- Building electrification
- Lighting





# Economically and Technically Tailored

## Expert Services

An ABB electrification solution delivery to an entire pulp and paper mill involves tens of sub-suppliers. On-time delivery is then crucial. On-time deliveries mean increased bonuses and faster production.

Electrification solutions can be tailored for an industrial site or configured for a process area. Customer requirements and special local conditions always guide the solutions.

When starting a project, only a brief 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 lay-out design to as-built drawings are covered in detailed engineering.

Power distribution network control including load shedding is our special area of expertise. As a leading manufacturer of electrical equipment, ABB has real insight into the technical possibilities and limitations of alternative network solutions, as well as up-to-date comprehension of life-cycle costs.

## Valuable Benefits

- Profitability - maximum value during the entire life cycle time
- Functionality - designed to work seamlessly together
- Quality and reliability - systems and equipment provide the required performance
- Environmental compatibility - ABB products and systems reduce energy consumption and optimize energy usage
- Local support - ABB is present in all major pulp and paper countries





# to Meet Your Needs

## Network Configuration & Design

Superior knowledge and experience are needed from the first phases of network design.

A right choice for a basic network structure, voltage levels, short-circuit capacity and electrical supply are essential to guarantee the best solutions in terms of technical reliability.

## Managing the Network

Electricity usage management ensures electricity availability at an optimum level for all equipment in the entire pulp and paper mill and improves the control of secondary reactive energy.

The management concept covers control, supervision, data collection, maintenance, voltage regulation, simulation and operator support.

## Network Protection

ABB knows the special requirements of the pulp and paper industry, its processes and equipment. ABB has also knowledge to measure and analyze the industrial electrical network, and knowledge how to design and install the best solutions and devices to protect the network against harmful phenomena.

ABB's versatile network analysis applications and deep understanding of them, result in the best possible model of the mill's electrical network, including even its most demanding features like the load shedding

## Load Shedding

Load shedding function can be utilized to save the most essential processes in various disturbances. It is based on integration between versatile protection functions and automation systems.

## Integrated Solutions

ABB offers a wide range of fieldbus compatible electrical products. Profibus-DP and Foundation Fieldbus provide a 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.





# Site Services and Support

## Services

An extensive electrification project requires dozens of tasks to be co-ordinated and executed in a professional way. Professional project management secures your success. ABB's project managers have long experience and full control of every project detail.

Highly qualified ABB personnel ensure smooth and effective project execution from installation to start-up. Customer training at site and in ABB's training centers ensures that operators get maximum advantages from the products and systems.

## After Sales Services

ABB provides customers with service solutions to operate, maintain and optimize the mill.

Our global knowledge is available to you locally. ABB is present in more than 40 major pulp and paper countries.

Throughout the entire lifecycle, ABB is dedicated to optimize the performance of electrification solutions by continuous improvement and expansion of services. At ABB, we know that the key of providing the highest levels of service is to be able to respond in the shortest amount of time by highly skilled engineers.





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