

PULP AND PAPER

## ABB Ability™ Manufacturing Execution System

Real-time insight and automation in the value chain for maximum overall mill performance



Today's economic environment requires paper producers to make continuous efforts to improve their mill operations, while increasing production efficiency and product quality. To a great extent, the productivity of a paper mill depends on management having a clear view of actual performance levels. ABB Ability™ Manufacturing Execution System (MES) provides real-time insight into the manufacturing process to create efficient solutions to maximize overall mill performance.

### Overview

Based on almost four decades of experience in supplying information technology to the pulp and paper industry, ABB Ability™ MES consists of integrated enterprise software modules that bring together business and manufacturing information to help papermakers make decisions based on the financial impacts of production choices.

MES solutions are flexible and scalable, providing visibility to enable fast and informed decision making. This means transparency throughout your mill operations and closing the gaps between corporate management and production processes. By providing a reliable basis for the calculation of true performance metrics, MES enables a solid platform for optimization.

### Features

- Order management
- Production planning, scheduling and trimming
- Production management
- Quality data management
- Customer service management
- Enterprise connectivity integration platform
- Standard integration with ERP

### **Benefits**

- Optimizes the use of capacity and materials
- Reduces production losses
- Improves inventory turns
- Optimizes quality
- Increases manufacturing transparency and predictability
- Improves the ability to react to production changes
- Increases customer satisfaction
- Maximizes productivity and mill performance

### **Standard integration with ERP**

ABB offers seamless integration of manufacturing and business information in an ERP system, enabling a single point interface. This interface, based on standard methods, shortens implementation, is easy to maintain, and helps maximize the investments you've already made.

### **Production planning**

Production planning enables the real-time planning and optimization of production blocks, runs and orders. All production steps, including the paper machine, winder, rewinder and sheeters are accounted for. Production schedules can be reoptimized after change orders or process disruptions. The system is easily configured to cover restrictions set by orders, such as the maximum number of rolls per set or edge roll restrictions. This helps decrease production costs while ensuring on-time delivery.

### **Production management**

Production management covers all operational functions that deal with the manufacturing of customer products in a paper mill. It can handle the most complex production processes involving multiple paper machines and multistage product routes. Production tracking functionality covers all operational functions including order management, pulp production, jumbo reel tracking, roll production tracking, sheet production tracking, tissue production, warehouse operations, delivery and load planning, loading operations and material management. By using optimized production schedules and real-time information, production management allows you to control and streamline the manufacturing process.

### **Quality data management**

Quality data management performs quality control in real time against product standards and customer specific requirements. The system immediately identifies any non-conformance in quality and provides mill personnel with actionable information for more effective process development, laboratory work and customer service.

### **Order management**

Order management covers all order entry and invoicing functions for end-customer products to effectively streamline the order entry flow. It performs multiple different checks to ensure the entered orders can be delivered in time, and provides the status of ordered, planned, produced, delivered and invoiced orders. Sales or mill personnel only need to enter the minimum information, since pricing and production reservations are handled by the system.

### **ABB Ability™**

Pulp and paper companies are looking to digital solutions for new ways to automate and optimize their mills. ABB Ability™ is a unified, digital platform that extends from device to edge to cloud. It securely collects data from devices at mills, applies advanced analytics and generates actionable insights for customer operations at all levels of the enterprise. ABB Ability™ Manufacturing Execution System for Pulp and Paper is an application suite that leverages the Ability platform to connect ABB and customer experts to actionable data and predictive analytics in a collaborative environment. Our Ability™ solutions enable mills to know more, do more, and do better, together.

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