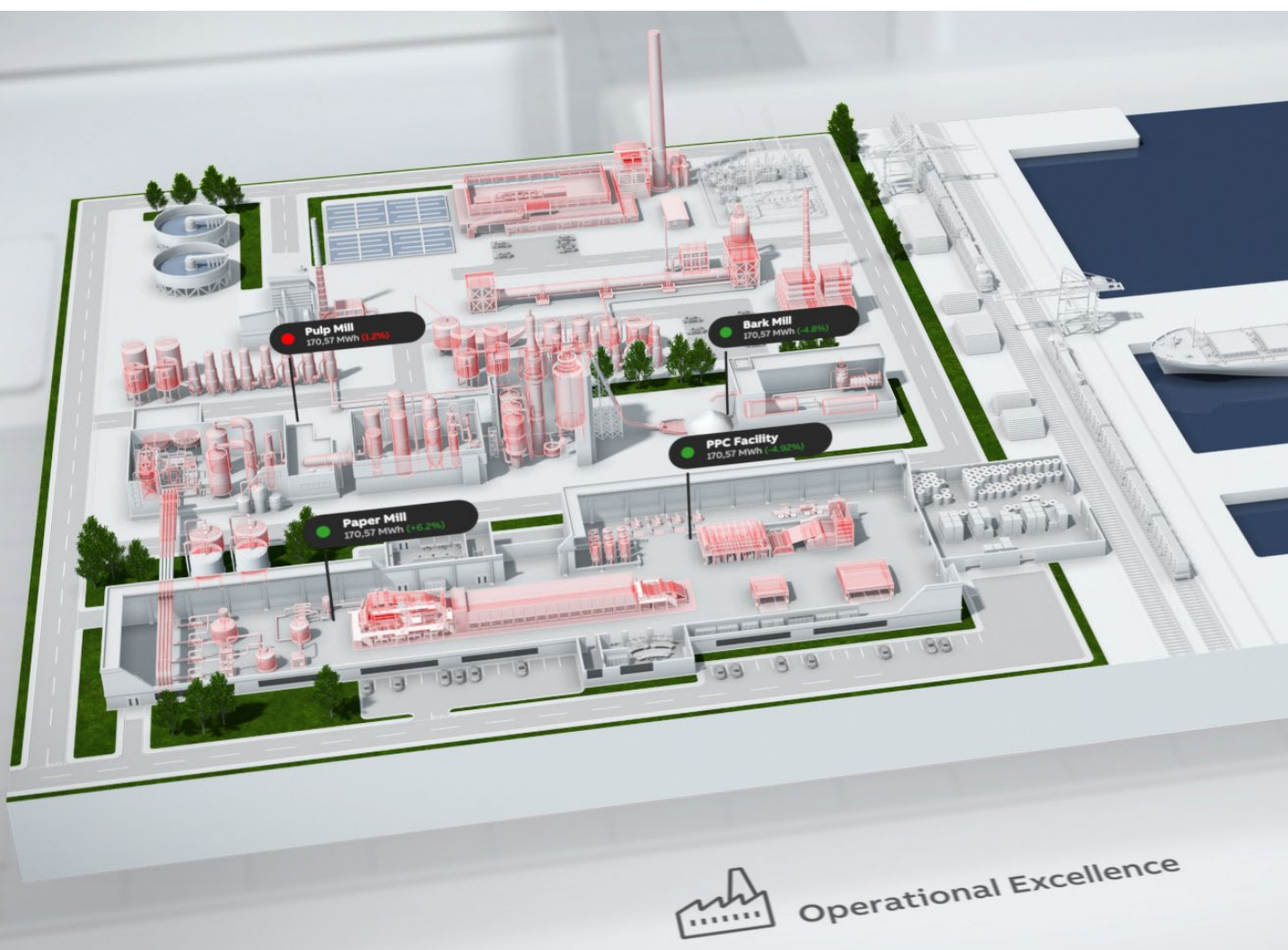


ABB Ability™ Manufacturing Execution Systems for Pulp and Paper

The intelligent foundation for order-to-invoice optimization and beyond



In today's competitive globalized marketplace, pulp and paper operators are facing the conflicting challenges of optimizing production processes to improve efficiency and quality control to gain an advantage. While at the same time being asked to reduce raw material use, energy, consumption, and waste.

ABB Ability™ Manufacturing Execution Systems for Pulp and Paper is the intelligent operational foundation for order-to-invoice optimization providing a flexible modular design to deliver real-time visibility and automation throughout the value-chain to maximize performance and efficiency.

Why MES is critical to Mill digital transformation

Evolving market demands and competition require pulp and paper producers to continuously improve the agility and efficiency of their operations for the delivery of products of the right quality at the right time. Bringing in a new age of digital transformation to further tap into the full potential of pulp and paper process optimization.

However, as digitalization progresses, it brings a free flow of data from both information technology (IT) and operational technology (OT) applications across the value chain, making interoperability an inevitability.

With digital and automation technologies, such as manufacturing execution systems (MES), organizations gain a critical competitive advantage by obtaining unprecedented real-time visualization and control of the production chain, from raw materials to finished product.

An effective MES solution is a key step to a pulp and paper manufacturer's digital transformation journey. Working with a proven partner who has the competency and clear focus of the entire pulp and paper operation, from mill floor to enterprise level planning, is the best approach to convert digital data into world-class business results.

Key pain points



Visibility

Lack of operational visibility across mill and enterprise.



Data

Insufficient access to data to remain competitive and agile in challenging market.



Knowledge

Home grown solutions and aging workforce leading to knowledge gap.



Optimization

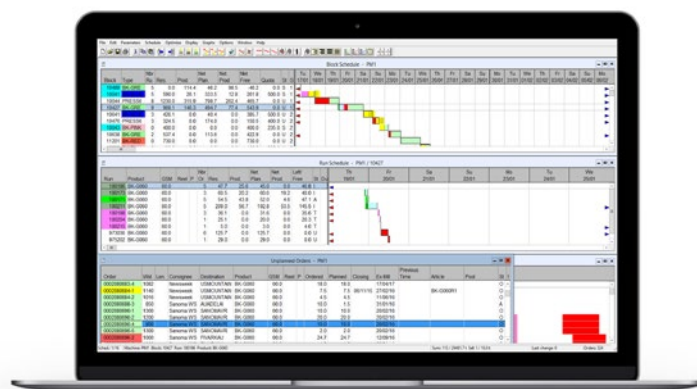
Poor customer satisfaction due to inability to fulfill orders optimally.



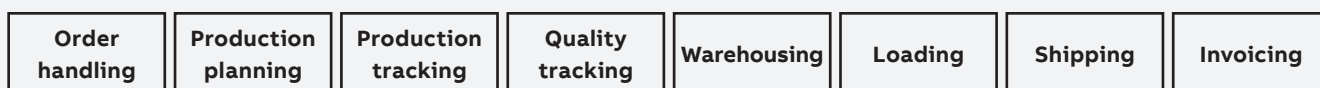
Introducing ABB Ability™ Manufacturing Execution Systems for Pulp and Paper

Understanding and managing the intricacies of the pulp and paper industry can seem like an overwhelming task, but with ABB you can rest assured our manufacturing execution system is up for the challenge. Specifically designed to meet the requirements of the pulp and paper process with decades of collaboration with, and delivering informational and operational technologies to the pulp and paper industry.

ABB Ability™ Manufacturing Execution Systems for Pulp and Paper provides the operational foundation for the next generation of pulp and paper optimization with a comprehensive order-to-invoice solution designed to meet and grow with your business.



Our solution is purpose built for the pulp and paper industry to excel mills into the new digital age with real-time visibility, and automation throughout the value-chain from a flexible modular approach. By providing organizations with valuable data-driven insights to the right people at the right time, mills can achieve new levels of efficiency and performance to make better decision faster.



Order-to-invoice optimization



Real-Time Visibility

Gain real-time visibility through a modern, intuitive web-based user interface with actionable reports – enabling data-driven insights to be distributed to the right people at the right time for better decision making and collaboration.



Intelligent Automation

Simplify and automate the production value chain to seamlessly bridge the gap between business systems and the shop floor layers, establishing a robust and comprehensive solution to achieve new levels of efficiency and performance.



Flexible Design

Built on decades of pulp and paper industry knowledge, the ABB comprehensive and modular solution is configurable to your business requirements and designed to accommodate the complexities from order handling through customer service management.

Flexible modules from order-to-invoice

Our comprehensive and modular solution covers all of the core MES functionalities across the value chain, from order handling, through production, warehousing, shipping, and customer service management (Figure 1). These modules work seamlessly together and can be integrated with ERP systems and other ABB Ability™ applications to help you achieve new levels of operational efficiency.

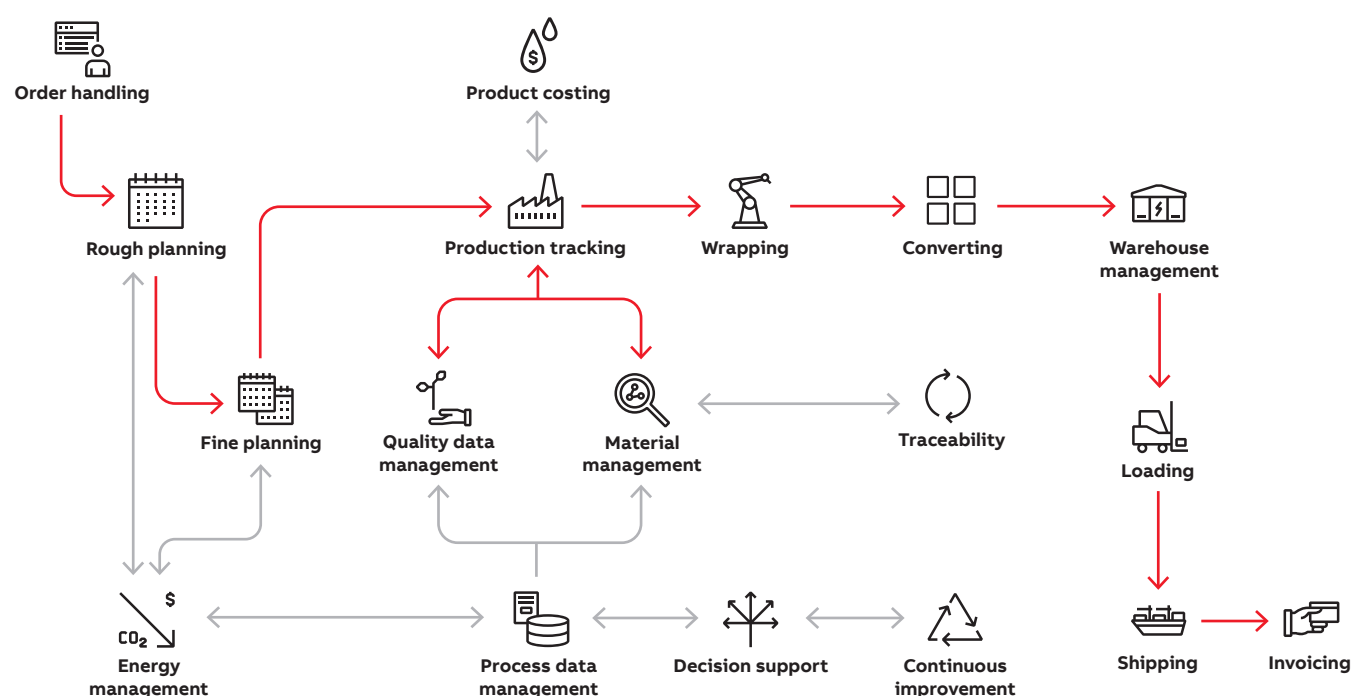


Figure 1: ABB Ability™ MES for Pulp and Paper covers the whole order-to-invoice process (red lines) and beyond, providing modules that also optimize the product value chain (grey lines).

Order Management Module

Streamline all sales order entry and invoicing functions in a paper mill for efficient paper product production with the Order Management module. This module consists of several applications and sales-related extensions that can be implemented separately or together – offering full visibility into the manufacturing and shipping processes with user friendly tools for easy tracking of customer orders.

Production Planning Module

Optimize paper machine capacity, time, and resource utilization with the Production Planning module. This module creates schedules for all machines (paper machine, paper finishing machine, and pulp processing machine) that require planning and production sequencing while systematically reoptimizing in the event of change orders or process disruptions, providing real-time planning and optimization of paper trim losses for blocks, runs, and orders.

Production Management Module

Remove silos, reduce waste, and maximize production by executing plans efficiently with the Production Management module. By integrating shopfloor data and material stock into one platform, our Production Management module provides the visibility and traceability required to optimize any product at the right quantity and quality with the lowest cost.

Quality Data Management Module

Easily manage and collect all quality related data into one interface to provide real-time assurances that both the product quality standards and customer-specific requirements are being met with the Quality Data Management module. This module provides the genealogical quality measurements, tracking and tracing during the entire production cycle from raw materials, to intermediate, and end-products.

Optimize your operations today!

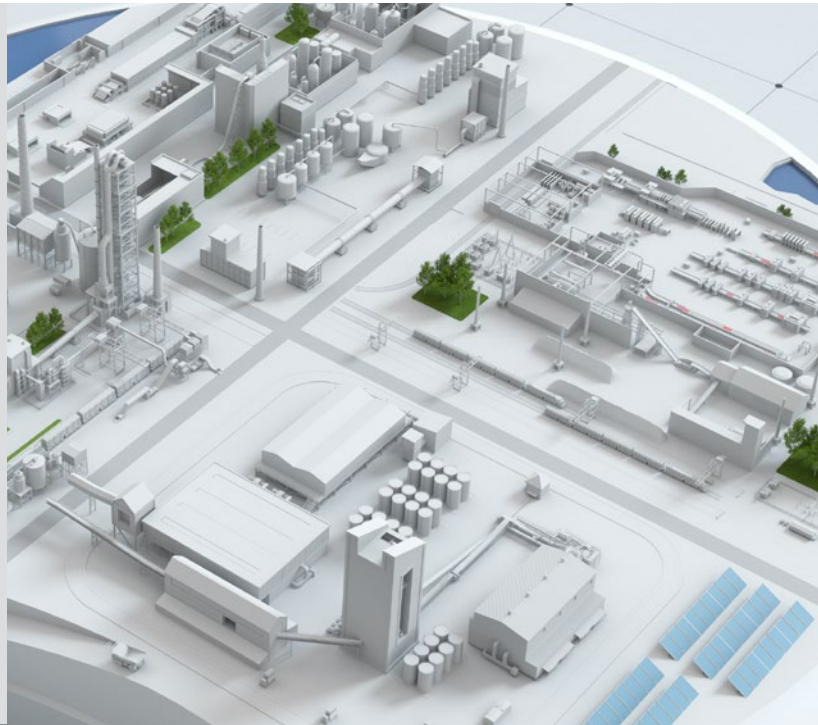
No matter how your operations change whether it's different grades, production types, or the manufacturing footprint from numerous production lines to multiple mills; ABB Ability™ Manufacturing Execution Systems for Pulp and

Paper has the real-time visibility, intelligent automation, and flexibility to provide the intelligent foundation to optimize your operations from order-to-invoice and beyond.

ABB Ability™ Industrial Software

Solutions that revolve around you

Combine ABB deep domain expertise with connectivity and software innovation to empower real-time, data-driven decisions for safer, smarter operations that maximize resource efficiency and contribute to a low-carbon future.



Contact an ABB Expert



Or learn more on how ABB Ability™ can provide the intelligent operational foundation for order-to-invoice optimization to excel your mills into the new digital age.

