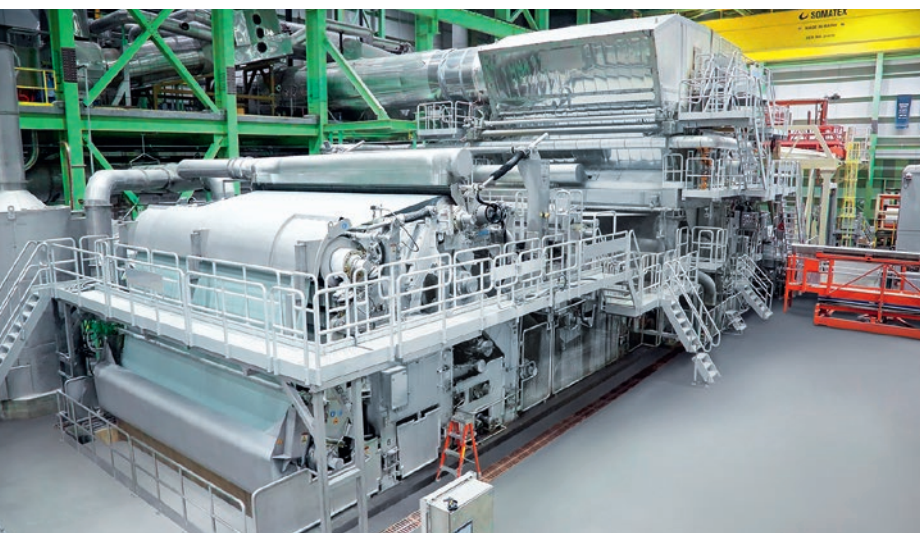


MES provides tissue manufacturer flexibility needed to optimize changing operations



When St. Croix Tissue opened their 120,000 ton yearly production capacity greenfield site in the eastern U.S., there were many operational areas to shape as production took off. With ABB's Ability™ Manufacturing Execution System (MES) for pulp and paper, the mill gained the flexibility needed to manage evolving operations from day one.

Implementation

With ABB as the automation and quality control supplier, the decision was made to capitalize on synergies and implement ABB Ability™ MES at St. Croix's mill in Baileyville, Maine.

"One thing we liked about ABB's system was that it was end-to-end," said Nellie-Jo Lee, Senior Systems Analyst and SQL Database Administrator, St Croix Tissue. "We understood you could do certain modules, but we wanted something that covered one end to the other."

"In our evaluation of suppliers, ABB offered more flexibility around changes," added Marty Richard, Mill Manager, St. Croix Tissue. "ABB's system could accommodate simple changes without significant cost increase."

The mill was a greenfield site and had to balance implementing the system, building machines and infrastructure, and executing multiple start-ups. Yet they achieved unique-to-the MES industry status when the mill went live on their own without the need for on-site support, as is typically required for MES implementations.

"The ABB team gave us all the tools we needed," said Lee. "We were very flexible to get everything up and running the way we did. And ABB was great helping us because it took a while for everything in the mill to be fully operational."

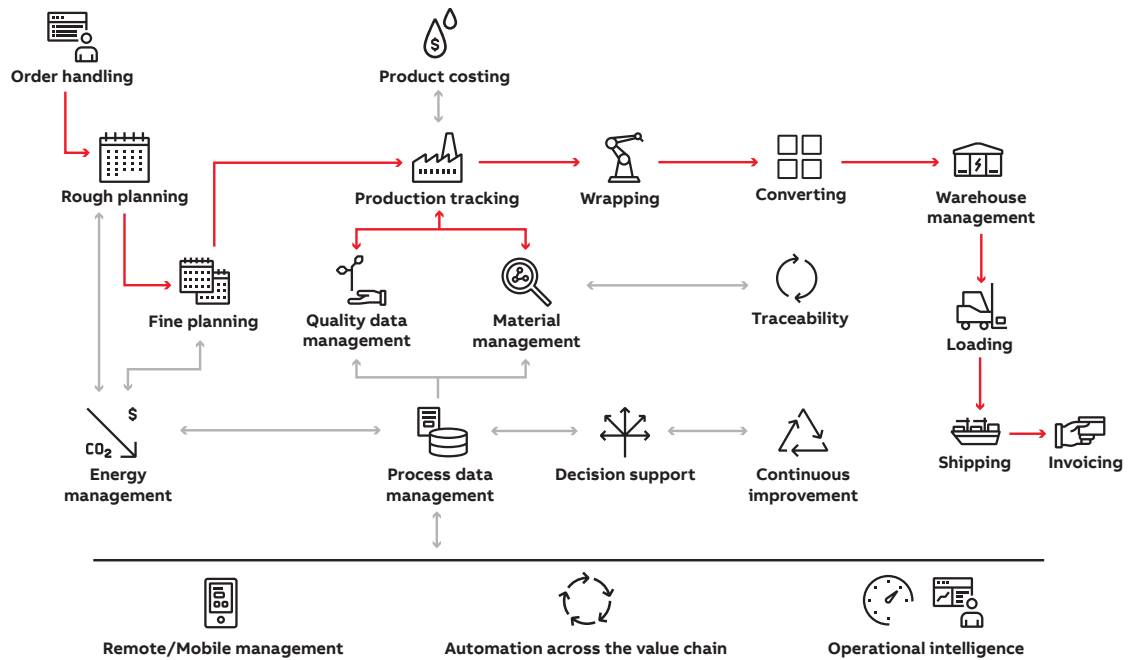
This included train-the-trainer sessions and refresher training as needed. Plus, the team benefited from Lee's own experience with these type systems, becoming the on-site, go-to person for all things MES.

Efficient end-to-end management

Once the mill was fully operational, they could take advantage of the full suite of MES modules, which covers the whole order-to-cash process and beyond. Production can be planned to help align order intake with the most efficient use of personnel time, raw material, and resources to meet their end customer delivery and quality expectations, while providing the mill the efficiency and transparency needed to optimize production.

"From my perspective, it seems very thorough," said Jesse Stephens, Operations Manager, St. Croix Tissue. "When I'm wishing I had some system in place, there is usually a feature already in ABB's MES that we just haven't realized was there. We couldn't run the business without it."

There's also the matter of making day-to-day operations easier. For instance, the mill finds value in the ability to email delivery notes, packing lists, invoices, and more from the system itself.



ABB's MES suite covers the whole order-to-cash process (red lines) and beyond, providing modules that also optimize the product value chain (grey lines)

“Other systems ‘automatic email function’ is not automatic,” said Lee. “With ABB, we can reduce steps with the built-in feature and configure it for different user needs, getting information to target in a more timely fashion.”

Finding new opportunities in what’s available

The system offers so many valuable features, it can take time and specific circumstances to uncover new helpful aspects.

Features within the Quality Data Management module is one example. Previous mill personnel had been beholden to excel-based complaint tracking. When Stephens came into the position, Lee helped augment the approach by pointing out the available features in MES.

“The quality system helps with data gathering and analyzing to track complaints better,” said Stephens. “We can use our own business objectives to create any type of reporting structure, and it sets us up to have the data we need to make improvements.”

Lee added: “There’s a lot more that we can do and will be doing in the future to help run the business better or smarter.”

Flexibility for changing operations

Key for the mill is the ability to easily make changes in the system based on what operations currently demands.

“One of the reasons we purchased ABB was because of the ability to configure a lot of different functions without requiring a program change,” said Lee.

For example, working to incorporate a buy-back process when converted goods come back to the mill to sell direct. And when new warehousing options needed to be added to the system. Or accommodating new roll size changes. Or when the business model transformed.

Changes can be made by the St. Croix team and ones that require support are covered under hours available in their ABB service agreement.

“ABB has been easy to work with and very accommodating,” said Lee. “And if you make a simple request, the whole process is simple. They don’t overcomplicate small matters and that’s really appreciated as well.”

A system made for pulp and paper

One of the things that stood out to Stephens was the specificity of which to keep track of and manage different grade and end customer requirements, something critically important to tissue, board and papermakers’ end product profitability.

“The system has a structure there to keep all unique properties assigned to a customer. From a quality specs standpoint, I can also have specifics in the system and product defaults,” said Stephens. “Having a space to keep track of all those different grades is really helpful.”

Lee, Richards, and Stephens would recommend ABB’s MES to other mills. “One of the driving factors in the initial decision was the ability to interface with the quality and automation systems also from ABB,” said Richards. “That has lived up to our expectations and support our decision to go in that direction.”

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