



CMPC Tissue Enjoys Greater Efficiencies Through Implementation of System 800xA

CMPC Tissue recently upgraded and combined disparate control systems with System 800xA Extended Automation. This and ABB drives solutions add up to enhanced efficiencies for this leader in the cellulose and papers markets.

Client: CMPC Tissue

Location: Puente Alto and Talagante, Chile

Scope of Work: ABB's System 800xA Extended Automation and Drives System

"ABB's Investment Enhancement Through Evolution control system upgrade strategy gives you the possibility of maintaining, or "porting-over" a whole engineering process, rather than having to start over. It doesn't make sense to spend again on what you have already invested in. We never have the opportunity to change everything at once. The ability to make incremental improvements over time is very important. This is the way you protect your investment and your company. From the beginning, ABB has met all our requirements."

Sr. Reinaldo Uribe
Project Manager
CMPC Tissue, Puente Alto Plant



CMPC's upgrade project has enabled their Puente Alto and Talagante plants to combine and integrate formerly disparate control schemes for greater efficiencies and visibility of actionable data.

The Background

CMPC Tissue SA (CMPC) was established in Chile in 1920. It is a pioneer in cellulose and paper manufacturing, and a leading player in the papers market. CMPC is active in over 50 countries on five continents. As an ongoing goal of constantly improving efficiencies and utilizing the most advanced control technologies, they recently saw the need to upgrade the control system in their Talagante plant, and to add distributed control to their Puente Alto plant.

The Solution

"We initially chose ABB approximately ten years ago," Puente Alto Maintenance Supervisor Marco Donoso told us. "At that time, we carefully considered several companies. ABB was finally selected because it could provide a turn-key solution - not only the distributed control system, but also Drives Systems. It was also a good choice economically, and offered a good engineering solution."

"Prior to the Talagante and Puente Alto projects, a project had taken place in Peru," Puente Alto Project Supervisor Reinaldo Uribe said. "A non-ABB distributed control system arrived with a paper machine as a bundled

package. Our task was - how to handle installation and how to communication with the ABB system that was already installed there. The solution, developed by ABB Chile, was achieved through direct communication - without having to send hard signals between the systems. It was a very good experience."

"The way that ABB Chile has supported us has made a fundamental difference," said Uribe. "ABB has been a strong supporter, particularly of our domestic paper business. Our business has grown, and so competitors are eyeing the market more closely. Obviously that is of concern. This is why ABB is a business partner we have relied on continuously - so that you have the support of a partner when there are market challenges to be overcome. It's difficult to face difficulties with someone with whom you don't have a relationship. The engineering staff at ABB Chile has not only supported us in here, but also in Argentina, and Peru. This is the main reason we are working with ABB - not just because they have good equipment, good screens and good engineering to work with, but also because of their experience with the tissue process."

All of this successful past history of support and confidence-building, in particular the partnership developing between CMPC and ABB Chile's engineering team, encourages CMPC to continue with ABB.

CMPC's Talagante, Chile plant had been operating successfully with an ABB Masterview control system. But CMPC decided to reduce maintenance costs with a control system upgrade and with this upgrade, to include the control of a new plant expansion. "It was feasible to reduce the cost of implementing a system by means of new templates that replaced the old ones at a low, engineering level. Adding a new expansion typically means that it cannot have direct communication with the existing systems. In this instance, an evolution to System 800xA Extended Automation was a way to achieve direct communication.

In the Puente Alto Plant, CMPC installed System 800xA Extended Automation from ABB. This provided them with a robust system that would handle everything related to the paper machine, the stock preparation and everything related to the paper machine Drives System (also from ABB).



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Why Choose ABB?

- Reducing Time to Decision and Action
- Engineering for Maximum Performance
- Investment Enhancement Through Evolution
- Integrating Information for Improved Visibility

Evolution

Uribe again: "ABB's *Investment Enhancement Through Evolution* control system upgrade solution obviously gives you the possibility to take advantage of that which exists. It gives you the possibility of maintaining, or "porting-over" a whole engineering process, rather than having to start over. We never have the opportunity to change everything at once. Therefore, we are always working on it step by step. The ability to make incremental improvements over time is very important for us as clients. It doesn't make any sense to spend again on what you have already invested in. This is the way you protect your investment and protect your company. From the beginning, right up until today, ABB has been meeting all our requirements."

ABB Drives

In papermaking applications, a multidrive configuration often is used. Such a multidrive is built from industrial drive modules that are connected to a common DC bus bar. The common bus bar is used to supply the drive modules with DC power, and each module then inverts the DC to AC and powers an individual motor. The DC power is derived from a single supply unit (rectifier) that is built into the front end of the same multidrive configuration.

This construction simplifies the total installation and results in many benefits: savings in cabling; reduced line currents and simpler braking arrangements; energy distribution over the common DC bus bar, which can be used for motor-to-motor braking without the need for a braking chopper or a regenerative supply unit; reduced component counts; increased reliability; and space savings; and there is no need for a separate Motor Control Center (MCC).

For more information on how ABB's System 800xA Extended Automation can be employed to solve your control issues, visit us at www.abb.com/controlsystems.

For more information on how ABB can be employed to solve your pulp and paper processing issues, visit us at www.abb.com/pulpandpaper.