CUSTOMER CASE STUDY

A cut above: Sappi Fine Paper improves system reliability and efficiency with real-time resource management

Sappi Fine Paper - www.sappi.com
Industry - Forest and paper products

Goals

- Improve environmental reporting to meet regulatory requirements
- Make operations data visible in order to make real-time energy consumption decisions

Challenge

- No visibility into operations data
- Pressure from regulatory agencies and profit demands from shareholders required a better understanding of energy use

Result

- Sappi's Somerset mill optimizes power that it buys from the grid, which reduced costs and emissions
- Recognition as a sustainability leader helped Sappi win new business

Solutions

- AVEVA™ PI System™

The pulp and paper industry is incredibly competitive – retention and expansion of market share is key to success. Not only is this industry capital-intensive, it also requires the balanced management of multiple resources. Add to that the fact that customers increasingly want to know more about where their paper comes from, and the business need for reliable, real-time data is clear. Sappi Fine Paper North America turned to AVEVA PI System to enable real-time data collection across its facilities to meet its efficiency and sustainability goals. Headquartered in Boston, Massachusetts, Sappi Fine Paper is the preeminent producer of coated fine paper on the continent – with a production capacity of 1.3M tons of paper annually and marquee customers ranging from some of the world's leading fashion magazines to premium catalogs.

Sustainability requires good data access

Fluctuating commodity prices, fierce competition for market share, and increased scrutiny on forestry management practices have put pressure on pulp and paper companies to improve environmental performance. Ensuring that its facilities are not only up and running all of the time, but running efficiently, requires access to data, which is also crucial to Sappi's ability to continue to share its progress with customers.

With real-time data across its facilities, Sappi not only sees operational efficiencies and reduces waste, it also increases profits. Sappi's Somerset Mill has been using AVEVA PI System since 1984. The company currently has 150,000 to 160,000 active AVEVA PI System tags, the majority of which come from shop floor devices in its mill facilities. "Operational staff look at this data and make minute-by-minute decisions based on what they're seeing," said Thomas E. Bolen, Sappi Global COE Manager for AVEVA PI System.

Sappi established itself as an early leader in sustainability in the pulp and paper industry, a role that has helped the company to win more business, but which also requires it to continually improve its operations and to report on those improvements regularly. "Our sustainability program is grounded in facts and science," said Laura M. Thompson, Ph.D., director of sustainable development for Sappi North America. "Access to data is really the baseline of all of that information."

"When you have these sorts of capital assets in place, you have to get the most out of them in terms of efficiency," said Thompson. "Access to data helps us understand how we're using resources."

Running on renewables

Part of Sappi's commitment to sustainability includes achieving optimum up-time in its facilities while reducing the company's power consumption and overall carbon footprint. By running in the "four 9s" – 99.99 percent up-time – environment, AVEVA PI System has been instrumental in supporting that goal.

In addition to supporting Sappi's day-to-day Somerset Mill operations, access to real-time data through AVEVA PI System has delivered measurable cost reductions and improvements to environmental performance.

> "I use the PI System every day to make sure that the demands of the mill are met – whether it be electricity, steam, air or water."
>
> **Todd Anderson**
> Utilities Operations Manager, Sappi Fine Paper, Somerset Mill

Sappi staff in various departments at the Somerset Mill use AVEVA PI System daily to be more conscious of environmental impacts and operational costs, and to make real-time decisions that often reduce both.

In the case of power consumption, for example, AVEVA PI System enables operational staff to determine whether to buy more energy from the grid or to ramp up steam production in its own boiler. Using data from AVEVA PI System, Sappi continuously balances the power it generates with the power it purchases which often keeps both costs and emissions low. This not only delivers bottom-line savings, it has also helped the company deliver on its goals to use more renewable energy. Over 80 percent of Sappi's total energy usage in North America now comes from renewable sources. Because Sappi North America leads in the use of renewable, their greenhouse gas emissions are the lowest amongst their domestic competitors.

Delivering on its sustainability commitments has also helped Sappi to win new business. "We've been told by many customers that we're winning business because of our sustainability performance," Thompson said.

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