

Flambeau River Paper Breaks Production Records and Improves Quality with Honeywell Solutions



“Honeywell helped our mill reopen, positively affecting not just our mill but the entire town economy. Thanks to Honeywell’s ongoing support and technology we have broken our all-time production record and have identified various energy efficiency savings. With Honeywell’s quality control solutions in place we have recognized significant benefits toward making our mill profitable once again.”

Bob Byrne, President, Flambeau River Paper

Benefits

Rising energy costs, expensive sulfite processes and legacy technology led to an unplanned closure at a paper mill in Park Falls, Wisconsin, negatively affecting the local economy and the more than 300 people employed there. Thanks to William “Butch” Johnson of Johnson Timber, Wisconsin Governor Jim Doyle, the State of Wisconsin and Department of Energy Grants, the Smart Papers plant was reopened as the Flambeau River mill.

With the reopening came the challenge of updating the technology to match Flambeau’s commitment to energy efficiency. Flambeau contracted with Honeywell, a longstanding partner, to provide the monitoring equipment with automatic adjustment capabilities for improved paper quality for each of its three paper machines. Honeywell installed new Quality Control Systems (QCS) to help Flambeau realize the following benefits:

- Mill performance broke production records for the site
- Steam savings achieved in terms of increasing drying capacity
- Improved quality control allows better basis weight control across the sheet resulting in overall better paper quality
- Claims and allowances achieved the lowest levels in the past decade
- Return on investment contributed to the mill’s profitability
- Single source and onsite support provided reliability



Background

Although the Flambeau River mill has had a short history under the current name, it has been around for over 110 years. The mill is a critical purchaser of wood throughout northern Wisconsin buying 140,000 cords of wood per year as well as some softwood pulp from CellMark, headquartered in Sweden, who markets all of the mill’s 420 tons/day of uncoated paper. CellMark sells the opaque, laser, pastels, brights, book and wove papers to end users, mostly in the United States.

Challenge

While reopening under the Flambeau River name, the mill took on a renewed passion for quality control and a goal towards profitability. “The rising energy cost was the main reason the mill closed and something that we had to address upfront with our reopening,” said Bob Byrne, President, Flambeau River Paper. “A lot of people helped us restart the plant and with this came the challenge of updating the technology to match the efficiency and quality we are committed to at Flambeau.”

Solution

The company turned to Honeywell, who they had worked well with in the past, and had thorough knowledge and expertise in process and quality control solutions. Flambeau contracted with Honeywell to install new QCS systems including measurement and automatic control for improved production efficiency and increased paper quality for each of its three paper machines.

“Our mill has had a long, successful partnership with Honeywell and its commitment to Flambeau was unwavering,” said Byrne. “They were willing to take a chance on us and allowed us to lease the equipment we needed to make our first foray as a new mill.”

Honeywell installed new QCS systems on two of three paper machines, which included basis weight and moisture sensors along with couch Devronizer steam boxes. On two of the paper machines, Honeywell also installed AutoSlice slice lip control actuator systems. Results from Honeywell precision basis weight and moisture measurements, and AutoSlice and Devronizer cross direction (CD) control systems include:

- The grade-to-grade and reel-to-reel consistency has greatly improved for better machine performance, reduced roll wear and increased customer satisfaction
- Moisture consistency across sheet has been improved and there has been a significant increase in drying capacity even on harder to dry paper, contributing to either increased production capacity or energy savings in reduced steam requirements
- The improved basis weight and moisture consistency contributed to better strength characteristics
- The precisely dried paper improved the sealing process increasing the printability of the paper

More Information

For more information on Honeywell's Quality Control Solutions, visit www.honeywell.com/ps or contact your Honeywell account manager.

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Due to the extra drying capacity delivered by the Devronizers, Flambeau was able to increase production and break an all-time production record, 418.4 tons/day, from 401.1 tons/day in 1988 (when the mill was using a more easily drying formula). “This milestone, that we are very proud of, would not have been possible without Honeywell,” said Byrne. “In addition, we are making better quality paper with the lowest claims in the 110-year history of the mill.”

To minimize any disruptions to Flambeau customers, the machine crews were fully trained by Honeywell on the utilization of the new equipment prior to installation. Once all the equipment was fully operational, Flambeau was able to see significant benefits and deliver improved paper quality from each of the three machines.

“We have a Honeywell on-site representative, Roger Sykora who goes out of his way to help keep everything running and the service doesn't stop there,” said Randy Stoeckel, Vice President of Operations, Flambeau River Paper. “We have found that Honeywell, as a company, is responsive and resolves any issues in a professional and timely manner. The service is unbeatable.”

With the new QCS systems in place, the mill can add new sensor technology and additional advanced controls to each machine enabling Flambeau to adapt to ever changing customer needs as it grows the business. In fact, the next scanning system is already on order.

“Not only were we able to fit all of these upgrades into our normal production schedule but we came out ahead with a new company, employed and energized workforce, improved product quality and a more profitable mill. We couldn't ask for anything more,” said Byrne.