Success Story: Georgia-Pacific

Manufacturing firm trusts reliability of Eaton 9390

Product:
Eaton® 9390 UPS

Location:
Crossett, Ark.; Conway, N.C.; and Columbus, Ohio

Market Served:
Manufacturing

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- Bill Agerton, contact project manager

Background

Headquartered in Atlanta, Georgia-Pacific is one of the world's leading manufacturers of tissue, pulp, paper, packaging, building products and related chemicals. With approximately 300 manufacturing facilities across North America, South America and Europe, the company's facilities range from large pulp, paper and tissue operations to gypsum plants, box plants and building products complexes.

Founded in 1927 as a wholesaler of hardwood lumber, Georgia-Pacific has grown over the years through expansion and acquisitions, and currently employs more than 45,000 workers companywide.

Challenge

Georgia-Pacific depends on a quality power protection solution to keep its manufacturing processes operating around-the-clock. With a variety of uninterruptible power systems (UPSs) responsible for safeguarding critical equipment such as distributive control systems, servers and computers that run plant operations, it is imperative that the company deploy units offering the highest reliability.

"The UPSs support the network backbone for the plant," explains Bill Agerton, contact project manager for Georgia-Pacific. "Reliability is essential."

Even more important is meeting the company's safety requirements. "Process safety management deals with critical equipment and especially the computer DSC controls," explains Agerton. "They have to be backed up, that's not an option. You have to have a very reliable system to do that."

A desire for high efficiency is another factor that influenced the company's choice in power protection, coupled with the need for a small footprint that can accommodate the often-packed equipment rooms at the plants.

Based on that criterion, five years ago, Agerton, along with Project Managers Huy Nguyen and Jonathan Gates, selected the Eaton® 9390 UPS for Georgia-Pacific's Conway, N.C., plant, and has since deployed several additional units at other company locations, including Crossett, Ark., and Columbus, Ohio. "We couldn't be more pleased," Agerton reveals.

Solution

Indeed, the best-in-class, three-phase 9390 UPS delivers the level of reliability that Agerton was seeking. The unit's double-conversion topology shields equipment from all nine of the most common power problems, including outages, sags, surges, spikes, brownouts, line noise, frequency variation, switching transients and harmonic distortion.

Further enhancing reliability is the 9390's exceptional battery management system, which relies on advanced technology to extend battery life and optimize recharge time. In addition, the integrated battery management system tests and monitors battery health, relaying the information monthly to a central monitoring station for trending and action, if needed.

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"I just trusted the reliability of the Eaton brand name," Agerton says of his initial decision to commission the 9390. In fact, the project manager's faith in the brand dates back several decades. At one point, he was overseeing 32 UPSs that were all either IPM or Powerware, both legacy brands that have been rolled under the Eaton name. "From past experience, I felt this brand would be the most reliable," Agerton explains.

Furthermore, with the smallest footprint in its class—35 to 50 percent less than competitive units—the 9390 preserves valuable real estate within Georgia-Pacific's equipment rooms. Just 597 square inches and a compact 72-inch height, the unit encompasses a fraction of the space required by comparable UPSs.

Georgia-Pacific was especially impressed by the Eaton Integrated Distribution Cabinet (IDC), which is specifically designed to complement the 9390. Constructed with a maintenance bypass, transformer options, panel boards, distribution breakers and other related electronics equipment, the optional cabinet facilitates a complete, one-stop shop for power protection and distribution that is easy to design, install, customize and manage – while delivering pay-as-you-grow scalability for future expansion.

"That's the best thing that's happened in years," Agerton enthuses. "That saved us an enormous amount of time."

Deploying the 9390 with the IDC in its Crossett facility in 2009 enabled Georgia-Pacific to install the complete power protection solution in a very small space where the collection of individual components would never have fit. "The footprint is not as large, so we were able to get everything into a smaller area," Agerton confirms.

Most recently, the company installed a 9390 with the IDC in its Columbus plant, where the solution once again garnered accolades. "This was a retrofit project, where we go into these old IO rooms, and you don't have much room to deal with," notes Agerton. "Especially with the integrated system, the 9390 makes for a great installation."

Another boon for Georgia-Pacific is the scalability afforded by the 9390, which was designed to meet the demands of today's frequently expanding data center environments. Up to four equivalent UPS modules can be paralleled for additional capacity or redundancy without having to utilize a central bypass cabinet. Plus, the capacity of units can be scaled with a simple software upgrade in the field. "That was a big factor in the sale," notes Agerton. "They are all scalable so we can grow into them."

Even more, by offering the industry's best efficiency, the 9330 is helping Georgia-Pacific save in energy costs. The unit's transformer-less design and sophisticated sensing and control circuitry combine to deliver up to 94 percent efficiency, which significantly lower power and cooling costs. Enhanced efficiency also prolongs battery runtimes and produces cooler UPS operating temperatures, resulting in extended component life while increasing reliability and performance.

Implementation

As a pre-wired, integrated module, the 9390 alleviates both time and costs for installation, as does the unit's small footprint, which offers several flexible installation options, including against walls and using top- or bottom-entry cabling. Convenient front-panel access increases the UPS's serviceability, while also reducing repair time.

"It helped tremendously because we didn't have to tear out doors like we've had to do in the past," explains Agerton. "The overall depth of the unit fit right through a standard door with room to spare, and that really made a difference."

To preserve the ongoing health of the 9390, every unit includes on-site startup service and training, a full year of 7x24 parts and labor, and a service protection plan. "The startup was excellent on every one of them," Agerton reports. "Eaton's technical folks were very knowledgeable."

Agerton was especially impressed that Eaton's customer service engineers encouraged Georgia-Pacific's technicians to participate hands-on in the UPS training. "They had them flip switches and do the things they were supposed to do, which I thought was great, instead of just having them stand back," he shares.

Contracting for ongoing UPS service is non-negotiable for Agerton. "I saved $200,000 the first year we put those 32 units under one service contract, compared to what we had spent previously on spare parts costs and labor alone," he reveals. "Preventive maintenance provides peace of mind. It's one thing you don't have to worry about."

Additional peace of mind is afforded to the project manager through Eaton's eNotify Remote Monitoring Service, which is included with every 9390. Providing real-time monitoring of more than 100 UPS and battery alarms, the service also includes a monthly report detailing the status of the 9390. With both the units and the batteries remotely monitored at all times by Eaton technicians, Agerton is resting easy. "If anything happened with the UPS and I was 100 miles away, I'd get a phone call," he reports.

Result

Thanks to 9390 UPSs safeguarding operations at numerous locations, Georgia-Pacific is free to focus on more important matters—such as paper and pulp. With the units in place, the company is able to:

- Ensure the continuous uptime of equipment powering its plants
- Easily expand its power protection solution to accommodate future growth
- Preserve space in equipment rooms with the 9390's small footprint
- Save money on power and cooling costs with the 9390's high efficiency

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