See it from the tissue's point of view. ABB's new HPIR-FW Sensor. 03
ABB vendor relationship has become the model at Rand-Whitney. 07
Longtime partnership with ABB improves quality at SCG Paper. 09
New L&W FSD Sensors control drainage, reduce energy use. 11
Baldor Motors stand up to the rigors of pulp production. 13
During the last few years, one thing has become very clear: papermakers are increasingly relying on their suppliers to provide more than just automation. At ABB, we have responded to our clients’ needs with everything from customized service to improved communication.

Today, most mills are trying to do more with less. The right technology can help them produce high-quality paper, ensure product consistency, keep their operation running reliably 24/7 and even reduce costs. ABB has developed a complete range of solutions, including DCS, QCS, CPM, drives, motors and electrification, that can be customized for any paper machine from tissue to board.

But while automation is critically important, other factors, like training and access to expert support, also have a real understanding of the challenges facing papermakers. This expertise has helped us develop relationships with our customers that are so close, they have turned into real partnerships.

As the new Global Manager of ABB’s Paper & Paper Group, I am focused on bringing effective solutions to the pulp and paper industry. Working with customers worldwide, I know that clients everywhere want competitive solutions with high reliability and good service. But different areas have different product and service needs, and we have positioned ourselves to meet them. For example, we have revamped our service market in North America and Europe, but more and more of our R&D work is being done in Asia, which is currently the growth engine for the industry.

The bottom line is that we are running a global business but acting locally to provide the best possible service for our clients. No matter where our customers are based, or whether they are large
or small, we know they need innovative products to stay competitive. At ABB, we invest heavily in R&D because we understand that to help our clients succeed, we have to continually improve our automation.

Some of our recent innovations include products like large screens and ergonomic screen angles that improve human machine interface and make mills more comfortable and healthier places to work.

In this edition of PerformancePartner, you can read more about our breakthrough offerings, such as a new sensor developed by Lorentzen & Wettre that improves drainage control and energy-efficient motors from Baldor. And you can see how mills like Rand-Whitney Containerboard use ABB technology to create competitive, high-quality products.

### Articles

03 **See it from the tissue's point of view**
HPIR-FW Sensor’s moisture and weight measurement provides the most precise tool available to maximize control and minimize both energy and fiber costs.

07 **Model vendor relationship**
Rand-Whitney knew it could depend on ABB’s expertise to supply state-of-the-art solutions to keep their mill competitive and profitable.

11 **Staying green at SCG**
Eco-friendly SCG, a longtime user of ABB products, chose ABB to supply new solutions to keep it of the greenest mills worldwide.

13 **L&W FSD Sensor**
Lorentzen & Wettre’s FSD sensor gives papermakers the precise measurements they need to control drainage throughout the wet end.

15 **Baldor Motors**
Baldor’s copper bar rotor design for pulper applications ensures a motor hat can stand up to the rigors of pulp production.

### Latest ABB news

17 New orders and news from around the world.

To learn more about any story or product in PerformancePartner, contact your local ABB representative and visit www.abb.com/pulpandpaper
ABB’s new HPIR-FW sensor has exceptional moisture and weight measurement that gives tissue makers superior measurement and control while reducing energy and fiber costs.

**HPIR-FW**

See it from the tissue’s point of view

issue making is an especially challenging process. Every day, mills have to meet difficult manufacturing requirements because of consumer demands. And elements like energy and resources add to the tough business environment. Robust sensors that deliver the error-free measurement that tissue mills need are crucial to every tissue making process.

Excellent moisture and fiber weight measurement are the critical parameters for tissue and non-woven processes. The HPIR-FW (High-Performance Infrared) moisture and weight measurement feature combines these two measurements in a single infrared instrument to provide the most precise tool available to measure with the confidence needed to maximize control performance and to minimize both energy and fiber costs.

ABB recently launched its new High-Performance Infrared and Fiber Weight (HPIR-FW) sensor that provides precise, high resolution moisture and fiber weight measurement. The HPIR-FW sensor directly measures the most critical parameters of MD and CD control using a single sensor module, allowing tissue makers to precisely control two

The new HPIR-FW Sensor is the latest addition to ABB’s portfolio of solutions uniquely suited to the tissue mill environment. All solutions are seamlessly integrated; every component in the entire system is linked with ABB’s System 800xA Extended Automation. Information can easily be accessed across applications and systems from any workstation connected to the network and lets you run your entire operation in the most efficient and integrated way.
of their most expensive costs – fiber and energy.

The ABB HPIR-FW sensor measures fiber weight, web moisture and web temperature simultaneously, with just one infrared instrument. It’s simple and proven design delivers safe and reliable performance. Importantly, the HPIR-FW sensor measures without radiological isotopes and the many regulations associated with them.

“The HPIR-FW sensor helps tissue makers meet today’s profitability and sustainability challenges because it gives them the ability to respond more quickly and flexibly to global customer demand,” says Steven St. Jarre, Global Sales & Marketing Manager for ABB Quality Control Systems.

Four parameters, one instrument HPIR-FW extends the capability of ABB’s infrared portfolio to deliver a single infrared instrument capable of measuring four parameters simultaneously: fiber weight, web moisture, basis weight and web temperature. These are the critical parameters for MD and CD control of tissue and non-woven processes. HPIR-FW comprises a single, field serviceable infrared instrument to simplify and remove the need for ionizing radiation sources in the measurement system, substantially reducing the costs of ownership of the system.

**Precision means confidence**

With highly precise measurements of moisture and weight, machine operators can more confidently use MD control for faster start-ups and grade changes. Papermakers can shift their targets closer to acceptable quality limits, saving energy and reducing fiber costs while remaining within the paper grade’s quality specifications. Precision depends heavily on the number of measurements made within each databox. HPIR-FW sets a new standard for this precision by calculating measurements of weight and moisture 5,000 times per second. The result is less measurement noise per databox. HPIR also continues the industry-leading accuracy performance of ABB infrared measurements.

**High resolution for greater insight**

Streaks in a tissue machine’s cross direction often indicate there are problems with felts, wires, or CD actuators. High resolution moisture and weight measurement resolves these streaks, and can also help system engineers define a better process model for improved CD control performance.

HPIR-FW comprises a single, field serviceable infrared instrument to simplify and remove the need for ionizing radiation sources in the measurement system, substantially reducing the costs of ownership of the system. The compact optical design is robust and inherently stable, ensuring high performance even in severe environments. The innovative optical design doubles the signal to noise ratio of the instrument, removing bandwidth constraints imposed by chopping to provide industry-leading moisture and fiber weight measurement rates.
The HPIR-FW sensor measures moisture and weight streaks as narrow as 4 mm and displays them clearly on the ABB QCS profile displays and contour maps.

**Broadband performance advantage**

Until now, infrared moisture sensors have been designed to mechanically block the measurement beam at high frequency to suppress background radiation. Known as beam chopping, this method reduces signal-to-noise ratio by a minimum factor of two. In addition, the chopping frequency places a fundamental Nyquist frequency limit on the measurement bandwidth. HPIR-FW measurement is different – it does not chop. While measuring, HPIR-FW continuously measures and simultaneously compensates for background radiation, boosting signal and measurement rate. This combination of high spatial resolution and high measurement rate ensures that HPIR does not miss anything while providing an accurate and precise measurement of moisture and fiber weight features.

**Elegant simplicity**

A more reliable and robust sensor design means less paper machine downtime for troubleshooting or swapping sensors. HPIR-FW is air-cooled and has no continuously moving parts. The sensor’s modular design allows for field replacement of modules, avoiding repairs at the manufacturer’s shop, and eliminating the need to stock a complete spare sensor.

HPIR-FW simultaneously analyzes multiple wavelengths of infrared energy transmitted through the web to provide accurate high-speed measurement of percent moisture.

The infrared energy is transmitted to three Indium Gallium Arsenide (InGaAs) channels housed in a temperature controlled chamber while an algorithm computes percent moisture and fiber weight using the three detected signals.

The compact optical design is robust and inherently stable, ensuring high performance even in severe environments. The innovative optical design doubles the signal to noise ratio of the instrument, removing bandwidth constraints imposed by chopping to provide industry-leading moisture and fiber weight measurement rates.

**Features**

- High bandwidth response for each wavelength channel (minimum 5,000 moisture and weight measurements per second). Each measurement is statistically-independent resulting in precise, high resolution measurements that are not affected by scan speed or web speed
- Continuous measurement while scanning with no beam chopping ensures optimum signal-to-noise ratio and maximum measurement rate
- High speed, low-noise Indium Gallium Arsenide detector technology
- Efficient optics and continuous measurement improve signal-to-noise ratio while unique low-loss fiber optics deliver the same signal to each measurement channel so that each channel is measuring exactly the same spot on the web with minimal signal loss
- Temperature measurement included
- Small measurement spot size (4mm)
- True edge-to-edge measurement within 1 cm of the edge
- Temperature control of detector and source assemblies (no water-cooling), for long life and increased stability
- Built-in heated air wipes normalize the temperature in the measurement gap, eliminate condensation and prevent dust accumulation
- Linear calibration range and excellent instrument stability minimizes online correlation for fast startups and long-term results
- Factory pre-calibration for base curve and inter-instrument agreement
- ABB diagnostic tools provides easy set-up and detailed service interface

In the consumer-driven market of tissue making, ABB’s HPIR-FW sensors give mills the tools they need to meet the unique and ever-changing demands of their manufacturing process.

For more information, contact:

**Eamon Devlin**

Global Marketing and Communications Manager

Quality Control Systems and Web Inspection Systems

eamon.devlin@ie.abb.com
New DCS surpasses expectations when ABB partners with Rand-Whitney Containerboard

Rand-Whitney Containerboard in Montville, Connecticut, US, had two goals when they decided to replace their obsolete distributed control system: they wanted system reliability and a positive relationship with their vendor. ABB was able to provide them with both – exceptional service and a DCS that increased mill productivity and product quality.

Reliability is crucial at Rand-Whitney Containerboard, and they continually try to take their mill’s technology to higher levels of dependability. Being equipped with reliable automation has helped them achieve an especially long record of success: containerboard has been produced uninterrupted at their Montville site for 145 years. Today the mill, a part of the Kraft Group, produces 100% recycled board.

When Rand-Whitney’s DCS became obsolete and system support grew increasingly difficult to obtain, the mill knew they would have to replace their outdated system. The Rand-Whitney team began to compare systems from different suppliers and assess how they would work in their mill environment.

They looked for automation that would not only have the capabilities they needed but, importantly, would also deliver reliable performance day after day. And they had another bottom-line concern: they wanted a trustworthy vendor they could build a good relationship with, and one that would provide outstanding service.

After considering systems from several suppliers, the mill’s team decided to order an ABB System 800xA with a quality control scanner, paper machine optimization controls and ABB’s best practices implementation with 1,600 I/O connections and 500 process control components.

The team was impressed by the ABB technology’s system approach, which would work well with the mill’s complex work and communication flow. But the decision finally came down to deciding which vendor the mill most wanted to work with side-by-side. And ABB was selected because they offered the best package of people, equipment and software, as well as the best partnership.

Manufacturing high-quality board
Rand-Whitney sells its products in a highly competitive market. By producing a consistently high quality sheet, and keeping costs down, Rand-Whitney has found a winning formula for remaining competitive.

The mill produces 250,000 tpy of two board grades: 26# and 42# Kraft Linerboard, and 31#, 33#, and 35# High Performance Liner every year.

Most of their customers are located within 300 miles of the mill, in the northeastern US and Canada. The mill also obtains the majority of its raw materials from the same geographic area so they are able to get finished goods out and raw materials back in just a few hours. Not having to ship long distances increases Rand-Whitney’s profitability.

A small-sized mill, Rand-Whitney operates on a tight and exacting schedule. Any supply chain interruptions can swiftly multiply into problems.
Rand-Whitney system architecture

When the mill’s former DCS system became obsolete and difficult to support, Rand-Whitney evaluated a lot of solutions and chose ABB’s System 800xA. The system includes a new quality control scanner, paper machine optimization controls, and ABB’s best practices implementation with about 1,600 I/O connections and about 500 process control components.

Operators embrace the new system
Using smart preparation techniques, Rand-Whitney and ABB helped mill personnel learn the new system, and accept it, prior to implementation. From design through testing the operators were involved.

Four teams, working consecutive 12 hour shifts during a planned outage, completed the cutover to the new system. They did everything from removing cabinets and wires to testing each loop.

Before the 800xA system was installed, eight Rand-Whitney operators attended a two week Factory Acceptance Test to they could train, test and confirm production elements. When they returned, the operators helped train other mill workers on the system, helping to build a cohesive team.

With as many as nine monitors in front of them as well as cameras, the operators now have a system in which they have confidence. They can access the system remotely, even from their homes, and they can also receive system reports on their smart phones.

Rand-Whitney counts employee ownership and trust as major benefits of the new system. Unlike the previous DCS, which they could no longer rely on, operators are embracing the new ABB system.

Using the system to its fullest
The CFO of the Kraft Group, Mike Quattromani, who was very involved in the DCS purchase, challenged the Rand-Whitney team to do everything
Rand-Whitney’s fiber handling system processes between 800-950 tpd with a fiber yield between 93-95%.

with their new system that ABB said it could do. And the team has more than responded to his dare.

They are using the system’s functions to make significant production gains. Two system features that are proving valuable to Rand-Whitney: sequencing and group starts. These allow operators to start up a sequence of actions from presets and automatic settings, giving them solid control and allowing them to make immediate changes. Rand-Whitney can now perform grade and product type changes 35% faster. Additionally, they have

35% faster recovery from sheet breaks.

The system’s speed optimization feature is being used more than the mill initially thought it would be – and the results are impressive. The mill is currently able to sustain 36 tons per hour as opposed to an average a few years ago of less than 31 tons.

Information access has been one of the greatest benefits of the ABB System 800xA. Previously the mill had a difficult time obtaining the data they needed. Today, the mill team has fast access to data such as P&I diagrams and engineering documentation. Using this information, along with data from field devices, they can accurately identify problem zones. The System 800xA is also used to connect the mill team to a step-by-step action plan for managing their improvement process. This keeps work flowing smoothly and everyone current on the status of specific tasks.

To ensure that the mill has skilled help on-site so they can make the most of their new system, ABB has also provided Rand-Whitney with in-house engineering support. Jason Belding, ABB’s on-site field engineer, has become a key part of Rand-Whitney’s engineering team.

**Reliable new system brings gains**

The new system has already exceeded the mill planning team’s original vision of what it would do. Rand-Whitney has achieved 20% weight profile improvement, 22% moisture profile improvement using 39% less water from a remoisturizing actuator, and 18% fewer quality losses.

The mill has 3% improvement in overall machine effectiveness as well as a 1.2 year ROI.

Even customers have detected the difference. Rand-Whitney is finding that they prefer their mill’s board over others, meeting one of Rand-Whitney’s most important goals.

Rand-Whitney’s partnership with ABB has proven to be so beneficial and positive, the mill says they want it to be a model for all of their vendor relationships – and they are looking forward to working with ABB on future projects.

Based on an article appearing in *Paper 360°* magazine.
Longtime partnership with ABB improves quality at SCG Paper

SCG Paper’s Phoenix Pulp & Paper (PPPC) mill has a history of turning to ABB for reliable automation. When the mill decided to update its distributed control system, quality control system, drives and electrification, they brought in their longtime supplier, ABB, to provide equipment that would ensure product quality and help them optimize energy consumption.

SCG Paper isn’t just any large paper producer: the company has a track record for not only manufacturing high quality paper, but also for being eco-friendly. By providing rock-solid automation and strong communication channels, ABB has helped them achieve their goals.

Headquartered in Thailand, SCG Paper is a powerhouse conglomerate recognized for market leadership in its home country and globally. With net sales of USD 1.7 billion in paper and corrugated containers, the company is one of the largest pulp and paper producers in Thailand. SCG Paper has a perennial spot in the middle of PPI’s Top 100 list of the top pulp and paper companies in the world.

One of the most dynamic and cutting edge of SCG Paper’s mills is PPC, located near Khon Kaen, Thailand. PPC manufactures bleached pulp, and printing and writing paper – and

Eucalyptus is used exclusively to supply fiber needs at SCG’s Phoenix Pulp & Paper mill.
they take a well-thought-out approach to their equipment purchases. PPC has worked successfully with ABB for years, and ABB has supplied the mill with DCS and QCS systems. Additionally, 90% of PPC’s drives came from ABB. Selecting ABB to provide their new technology was an easy decision.

The mill chose ABB for an order that includes electrification, boiler automation, sectional drives and process single drives, DCS, QCS, Web Imaging Solution, winder drive system, and process and drive motors.

**Going green**

With its commitment to sustainability and minimizing environmental impact ABB is a good fit for PPC, one of the greenest mills worldwide. Today the mill is looked up to for its environmentally friendly programs. However PPC hasn’t always had a stellar environmental record.

At one time the mill discharged its waste into the local waterways, polluting the water and harming the fish. Residents of Khon Kaen were horrified by the loss of wildlife and distrustful of PPC.

When SCG Paper acquired PPC in 2003, they recognized that PPC needed to stop emptying wastewater into the local rivers and rebuild trust with the people who lived near the mill. Roongrote Rangsiyopash, president of SCG Paper, said that after they reassured Khon Kaen residents that they were a socially responsible company, with ethical business practices, they acted on their determination to end the pollution problems.

Rangsiyopash says they reached out to Khon Kaen residents, increasing communication and expressing their intention to go further than just solving old problems. They wanted to partner with the local community to build a better future.

PPPC worked closely with residents to redirect the ways they disposed of wastewater – and they also provided people from Khon Kaen with business opportunities. Today local people run businesses that use cleaned wastewater constructively including fish farming, and planting rice, corn and sugarcane crops. They have even helped senior citizens teach their weaving techniques to young farmers so they can supplement their incomes during the farming off-season.

Founded in 1975, the mill is nestled into one of Thailand’s most beautiful and fertile farming areas. PPC was originally a pulp mill and gave local farmers a market for their kenaf, a jute-like plant that is grown in that region. The local farmers couldn’t keep up with mill capacity, so PPC switched to using bamboo and eucalyptus for their raw materials before narrowing their usage to eucalyptus only.

**Close working relationship**

Today the mill has a new cooking plant and fiber line upgrade with a two vessel digester that produces 180,000 tons/yr of eucalyptus pulp. With the new cooking system, PPC has been able to increase its pulp capacity while reducing environmental impact even more.

The mill’s PM1 produces approximately 200,000 tons/yr uncoated wood free paper. The two pulp lines manufacture 290,000 tons/yr bleached ECG pulp.

PPPC is such a longtime user of ABB products that they still operate some ABB control automation produced in the 1990s. PPC is slowly upgrading to the latest ABB systems. In 2006, they put into place ABB electrification sectional drives and QCS.

With the electrification in the latest ABB order, PPC is reducing its energy consumption while it optimizes energy use. The DCS and QCS on their paper machine provide more precise measurement to improve product quality, increase production levels and reduce operational costs.

Smooth communication is one of the aspects of working with ABB that PPC likes the best. Mill crews from the fiber line to the winder meet regularly with the ABB team. Issues from any area of the mill are discussed, information is exchanged and any concerns are handled before they can escalate. PPC personnel say that both ABB and PPC have found these meetings to be extremely beneficial. By working together, ABB and PPC keep the mill’s product quality high-caliber and consistent.

Based on an article appearing in Pulp & Paper International magazine.
New L&W FSD Sensors control drainage, reduce energy use

To stay on-budget and keep operations running smoothly, reliable drainage control is a mill necessity. The new L&W FSD sensor gives papermakers the precise measurements they need to control drainage throughout the wet end – and reduce energy use, web breaks, emissions, usage of chemicals, equipment wear and maintenance. These advantages add up to lower costs, better runnability and improved product quality.

The sensors can be strategically placed anywhere in the forming section to measure the water amounts in that area. To ensure levels are correct, L&W FSD sensors monitor critical properties such as fiber orientation, formation, ply bonding and distribution of fine particles.

Another benefit: since the L&W FSD Sensor uses high frequency technology instead of radioactivity, mills don’t need to obtain any special permits.

“Using this new sensor in combination with our other portable instruments, it is possible to monitor the drainage profile all the way from headbox to couch,” says Lars Kånge, product manager, Lorentzen & Wettre.

Innovative technology for papermaking

The sensors were developed by Lorentzen & Wettre, a member of the ABB Group. For decades, Lorentzen & Wettre has been a leader in developing quality control equipment for the paper industry.

With innovation as the key word in their strategy, Lorentzen & Wettre identifies papermakers’ future needs and then develops new measuring solutions to meet them. Lorentzen & Wettre
invests substantially in research, and is known for their ability to develop reliable, leading edge technology for the papermaking process.

**Accurate measurements – even in harsh environments**

Built into a durable stainless steel acid-proof body, the sensors are repeatable and reliable even in the harshest mill environments. For effective use, multiple sensors can be plugged into the same power supply and signaling processing unit. All of the water signals are then connected to a mill’s distributed control system, so operators can assess and process the measurement data.

Most papermakers use L&W FSD Sensors for single point measurements on forming fabrics between step foils or vacuum boxes. Mill personnel usually measure before the couch roll so they can estimate moisture content in the paper before it leaves the wire. In multi-layer Fourdrinier machines, all the layers can be easily monitored because you apply the instrument to each layer, obtaining a better overall picture to improve multiple ply bonding. The sensors allow you to control foils adjustments, vacuum, refining and the use of retention chemicals.

Mills that have L&W FSD Sensors report they have successfully used the sensors to improve bondings of multi-layer board products as well as improve drainage in their paper machines’ forming sections. The instruments have helped them stabilize their processes by minimizing fiber orientation and formation variations. The sensors’ response time is so fast that mills are also using them to detect unwanted pulsations and vibrations.

For more information, contact:

**Lars Känge**
Production Manager, Lorentzen & Wettre
lars.kange@l-w.com
Baldor copper bar rotors provide optimal reliability

Thermal stresses that occur during motor start up can shorten the life of your equipment, and lead to breakdowns and unscheduled downtime. Baldor’s copper bar rotor design for pulper applications ensures that your motor will have a robust material in place that can stand up to the rigors of pulp production.

The conditions in a tissue mill are among the most demanding in the pulp and paper industry. With the challenges presented by the production environment, process reliability is crucial to each mill’s day-to-day operations – and bottom line.

One aspect of the stock pulping process that can be especially tough on equipment: since the pulp is processed in batches, pulpers typically will be started three to four times per hour, and sometimes more. Frequent starting of the motor can cause rotor thermal stress that triggers unscheduled downtime for the pulper. To withstand these rigors, it’s critical that mills use robust rotor construction and materials.

To save energy, mills often shut down a pulper when it is not being used. If the induction motor has a direct on line (DOL) start, inrush currents which range from five to seven times full load current will produce rapid heating effects in the rotor. To ensure long motor life, stress-producing issues must be addressed while the rotor is being designed.

During motor start-up, the rate of temperature rise in the rotor’s end rings can be as high as a startling 20 degrees Celsius per second. This creates radial expansions of the end ring material corresponding to the rotor steel laminations. Axial forces also occur due to the expansion of the rotor bars embedded in the rotor laminations.

Both of these stresses combine to produce concentration points on the rotor bar/end ring joints. Often after multi-start applications, the high heat causes the end ring to separate from the rotor bar joints.

Copper bar rotors offer superior performance
Baldor, a member of the ABB Group, developed copper bar rotors that provide mills with the reliable performance they need. One reason why copper bar rotors perform better than cast aluminum rotor motors in pulper applications, is that copper provides better control of the material being used to construct the motor. The use of copper also eliminates the possibility of voids that can occur during the casting process of an aluminum rotor.

Copper bars and end rings also allow the use of a unique “floating cage” copper bar rotor design, which can accommodate cyclic fatigue stresses associated with frequent starting of the pulper application. These rotors use a controlled clearance between rotor bars and laminations. They are manufactured with a precisely controlled process resulting...
in a bar rotor that is free to expand axially while remaining tight enough to prevent high stresses.

Using copper bars, the rotor cage is axially secured at the bar midpoint by inserting equally spaced pins in the center of the rotor. The rotor employs two endplates to keep the rotor core under uniformly controlled pressure. The rotor end rings are non-slotted and incorporate a smooth machined radial groove that maximizes the joint contact area and reduces brazing stresses. Baldor optimizes its motor bar extensions to reduce bar radial forces. These features lower the stresses in the bar to end ring joint encountered during starting. As a result, the equipment will have a longer life. This design has been successfully used globally in hundreds of high number-start applications.

**Energy-efficiency leader**

For nearly 100 years, Baldor has provided customers with the best value and reliability in industrial electric motors. Baldor’s offerings include motors, generators and mechanical power transmission products, services and expertise that saves energy and improves customers’ processes.

Baldor began lowering the energy consumption of their motors in the 1920’s, long before others were even talking about it. Today, Baldor’s expansive line of Premium Efficiency motors extends from 1 through 11,185 kW (15,000 hp). Baldor’s motors offer customers the highest overall efficiency levels in the industry, including Baldor•Reliance Super-E® 0.7-375 kW (1 through 500 hp) motors that exceed NEMA Premium® efficiencies.

Baldor leads the motor industry in applying new technologies that improve motor reliability. The company is a proven innovator in motors for process industry applications such as pulp and paper.

For more information, contact:

**Mike Kozlowski**

Senior Principal Engineer at Baldor, a member of the ABB Group, specializing in the Paper and Forest Products Industry

mkozlowski@baldor.com
Major papermaking orders

Canada
ABB won an order from HSPP Port Mellon to upgrade their PD1 to a TLS1 basis weight sensor.

Howe Sound Pulp and Paper awarded ABB with an order to upgrade to an Optical Caliper sensor.

China
The ABB team won an order from China Tobacco Schweitzer for a new Network Platform NP700 and sensors for their PM1.
ABB achieved a win at APP GEP, when the mill purchased a Network Platform NP700 and sensors for their PM3.
ABB won a milestone order when Nine Dragons Paper Limited purchased a Filtercel in-line pressure filter – the 1,000th Filtercel ABB has installed worldwide.
ABB secured a win at Chongqing Well Mind when the mill ordered a Network Platform NP700 and sensor.

Columbia
Smurfit awarded ABB with an order for a Thermoprofiler interface for its PM6.

Finland
ABB won an order from UPM Valkeakoski for a web inspection system.

Germany
Papierfabrik Fritz Peters chose ABB for their CCM upgrade.

Papier-und Kartonfabrik Varel awarded ABB with the order for an expanded System 800xA, new QCS with two scanners, color control unit and three cross-profile control systems, flow meters and temperature controls.

Indonesia
ABB won an order for a sensor upgrade on PM3 at Pindo Deli.

Located in a remote part of Indonesia’s Sumatra Island, it is costly to deliver service to PT Indah Kiat Pulp and Paper. The mill awarded ABB with a two-year resident service contract that includes ServicePort. IKPP also chose ABB for their SteamPlus xP actuators.

India
ITC awarded ABB with an order for a Slice/Coatweight xP Profiler for their PM3.
ABB won an order from Rama News Paper for a system upgrade, Slice/Coatweight xP Profiler, Air-Water xP Profiler and Slice xP Profiler.

Italy
ABB secured a win at Cartiere Del Garda when the mill upgraded to a moisture sensor.

Cartiere di Guarino awarded ABB with an order for a new web inspection system.

Japan
ABB won an order from Taiko Paper for an Air-Water xP Profiler for their PM5.

YEC Facility turned to ABB to upgrade their mill with new sensors.

Hokutetsu Kishu Paper awarded ABB with an order for a Network Platform NP1200 and sensors.

Oji Paper Tomakomai upgraded from a Smart Platform 700 to a Network Platform NP700 and purchased two Network Platform NP1200s and sensors.

Korea
ABB scored a win at Shin Dae Yang Paper when the mill upgraded to a Network Platform NP1200 and sensors.
ABB won an order at HanSol Chunan for a Network Platform NP1200 and sensors.

Samil Paper chose ABB for an upgrade to an Induction xP Profiler on their PM4.

Malaysia
ABB secured a win at MUDA when the mill upgraded to a Slice xP Profiler on their PM6.

Romania
ABB won an order at Tosotec Romania for a new Network Platform NP700 and sensors.
The ABB team achieved a win at Romwelle when the mill purchased a Network Platform NP700 and sensors, plus a new QCS.

Saudi Arabia
Obeikan Paper purchased a sensor upgrade from ABB for their PM1.

South Africa
SAPPI SAICCOR chose ABB for their upgrade to new sensors.

Sweden
ABB won an order at Södra Cell Vårö when the mill ordered a Network Platform NP1200.

As part of its ongoing upgrade planned for all of the mill’s scanners, Iggesund chose ABB for a Network Platform NP1200 and sensors.
ABB achieved a win at SCA Ortviken when the mill ordered three Network Platform NP1200s and sensors, and upgraded their QCS with Sentinel software.
ABB scored a big win at SCA Ortviken when the mill ordered a web inspection system for PM1, and sensor upgrades for PM2 and PM5.

Thailand
ABB won an order for two Network Platform NP1200s and sensors from Thai Cane Paper.

United Kingdom
The ABB team achieved a win at James Cropper when the mill ordered a Network Platform and sensors.
ABB successfully started up 10 Filtercel LHPs on the feeding station of the new PM11 for Saica Group’s mill in Manchester.
The SCA Stubbins Mill awarded ABB with an order for a sensor upgrade.

USA
Domtar Johnsonburg purchased an ABS for their winder.
The ABB team scored a win at Domtar Port Huron when the mill ordered a Network Platform NP1200 and sensors.
Domtar Hawesville awarded ABB with an order for a sensor upgrade.
ABB won an order from H&V West Groton for one Network Platform NP1200 and sensors, and two Network Platform NP700s and sensors.
ABB achieved a win at Domtar Port Huron when the mill purchased a web inspection system for their PM8.

Thilmany Paper awarded ABB with an order for a sensor upgrade.
Green Bay Packaging chose ABB for their sensor upgrade and a new Dilution xP Profiler.
ABB won an order at Graphic Packaging Kalamazoo for a Network Platform NP1200 and sensors.
ABB scored a win at Glafelter Coater when the mill purchased a new web inspection system.

Paperworks Philadelphia chose ABB for their upgrade from a Measurement Platform to a Network Platform.
ABB secured an order from Neenah Paper for a sensor upgrade.
ABB won an order from American Eagle for a sensor upgrade.
ABB achieved a win at Rock Tenn Fernadina Beach when the mill ordered a sensor upgrade.
PaperCon 2013 surges on new energy, enthusiasm and optimism

With over 1,500 attendees, attendance was way up at PaperCon 2013, which took place April 29-May 1 in Atlanta, Georgia. Attendees learned about leveraging renewable, recyclable raw materials and developing human capital to ensure value for customers, long-term sustainability for shareholders and a future for our peers.

At PaperCon, the industry’s most knowledgeable and sought-after management professionals, papermaking engineers and coating and graphic arts experts assembled to present and discuss their personal experiences and insights on the industry’s most critical concerns and processes. Attendees enjoyed expert speakers, peer-reviewed papers, panel discussions and roundtables.

Joel Weldon, one of the most sought after corporate speakers in North America, gave the keynote address on the first day of the conference. Weldon discussed the Innovation Generation, and explained how the pulp and paper industry can adapt to changing consumer habits and cost containment pressures.

Automation & Power World 2013 helps customers learn, connect and succeed

Automation & Power World 2013, the largest ABB customer event in North America, took place March 25-28 in Orlando, Florida. Attendance topped 5,000, including customers, partners, employees and more than 60 members of the media. Many people stayed one day longer on average compared to previous years.

More than 150,000 square feet of exhibition space – called the Technology and Solution Center – anchored the event and featured products from every ABB division. During the four-day event, customers and sales partners attended more than 400 educational sessions, and interacted with ABB experts and technology.

“This event is designed to connect ABB with customers, and customers with their peers,” said Terry Jeffers, Project Manager for Automation & Power World. “Customers, partners and employees learned more about our products and services, and ABB experts showed customers how to take the technology home and use it to succeed in their industries.”

In his keynote address on day two, attendees heard CEO Joe Hogan reaffirm ABB’s commitment to North America. Hogan delivered an optimistic message that stressed a positive outlook for the US and ABB.

ABB’s North America Region Manager, Enrique Santacana, spoke about positive trends in the North American market: a housing recovery, growth in manufacturing, and an energy boom, and he observed that these growth trends are all within ABB’s sweet spot.

New for 2013 at the conference was The Brainy Bunch, a panel of ABB experts from around the world. The group led live webcasts that covered the emerging trends in power and automation. For the first time, nonattendees could participate in the event and see the show floor via The Brainy Bunch’s online program.

As with prior years, the ABB Foundation selected a local charity to support during Automation & Power World. This year’s selection was Freedom Ride, an Orlando-based organization helping children and adults with disabilities through therapeutic horse riding. With attendee contributions and a one-time corporate gift, ABB raised more than $57,000 for the charity.
Can ABB help you succeed?

Absolutely.

Today’s economic environment and global competitiveness leave you no room for risky decisions concerning processes and assets. So when it comes to managing your mill, you need the right solutions in place at all points of the operation. When you look at ABB, you see the market leader with the broadest scope of solutions available for pulp and paper making. Our automation, power and service solutions cover all areas of your value chain and operate together to ensure optimal efficiency and profitability. www.abb.com/pulpandpaper