SCA: Greenfield tissue expansion in Mexico
Metso: Improving efficiency in stock preparation
Heimbach: Energy savings in the press section
Sovellusmestarit: roll handling with silent control

Forest Bioenergy Review supplement with this issue
Maximizing the performance of your mill by adding cutting edge technology or simply fixing what’s broken is what you should expect from your automation and electrification partner. As an industry pioneer and leader in pulp and paper, ABB will always meet or exceed your expectations regardless of the age or history of your system. We did it yesterday and we will do it tomorrow. That is our pledge.

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ABB acquisition to firm up fibre and pulp analysis

Power and automation technology group ABB has agreed to acquire Lorentzen & Wettre from Assa Abloy AB for SEK750 million (US$119 million), to strengthen its business in the pulp and paper industry.

Swedish-based Lorentzen & Wettre manufactures equipment for quality control, process optimization and test instrumentation. It has production facilities at Kista and at Kajaani in Finland, and sales and service offices across Europe and in Canada, China, Japan, Singapore and the US. The company has around 190 employees, and will be incorporated into ABB’s Process Automation division.

“This acquisition will nicely complement our existing portfolio of pulp and paper industry offerings,” said Veli-Matti Reinikkala, ABB’s Process Automation division chief. “This is an excellent strategic fit as Lorentzen & Wettre’s products and services will enable us to address the broad spectrum of pulp and paper production challenges.”

Founded in 1895, Lorentzen & Wettre has technology that contributes to improving paper quality, reducing manufacturing costs, and cutting the consumption of raw materials and energy. The company’s products include automated fibre and pulp analysis devices, consistency transmitters, moisture sensors, laboratory paper testing instruments, automated paper testing systems, and industry specific services. Sales were expected to be about SEK 335 million ($53 million) in 2011.

“We are very excited to continue to develop our business as part of the global Process Automation business of ABB,” said Patrik Stolpe, chief executive of Lorentzen & Wettre.

Iggesund to cut more fossil carbon emissions

Fossil-based carbon emissions will be eliminated from the Iggesund Paperboard mill in northern England with an investment of £108 million to switch the whole of the mill’s energy supply from natural gas to biofuels.

Owned by Holmen, the Swedish forest products group, Iggesund is already investing in a new recovery boiler at its mill at Iggesund in Sweden to enable the mill will also be self-sufficient in electricity. The investment in Workington in Cumbria means that the company will now implement the same approach at its UK facility.

“Our two paperboard mills will have a unique position in the market,” said Ola Schultz-Eklund, managing director of Iggesund Paperboard’s UK operations. “Whether a customer wants Incada, the folding box board we produce here in the UK, or our Swedish-made solid bleached board Invercote, we will offer a world-class product in all respects.”
Reel building conditions improved at Sappi

In a bid to continually improve its reel building quality, Sappi’s mill at Somerset in Maine, USA, is using Optical Caliper Sensors from ABB to manage optimum reel-building conditions in real-time.

Uniform caliper is extremely important for good roll-building on coated and calendered papers. Because the paper is so dense and smooth, very little caliper profile deviation can be tolerated before the effect is seen on the hardness profile of the reel, and subsequently in the quality of the rolls coming off the winder. The Somerset Mill’s PM2 machine once relied on manual off-line testing of reel hardness profiles using a hand-held hardness tester to assist with the process of troubleshooting reel-building. While this approach was sufficient to enable Sappi to meet its quality targets, the infrequency of these hardness tests represented an opportunity for Sappi to further optimize reel-building conditions, and their available manpower.

“The stability and repeatability of the Caliper Sensor allows the operator to trust the profile shape and make reel-building corrections in real-time rather than wait for an off-line hardness profile test,” says Dave Moore, senior process engineer at Sappi Somerset Mill.

The Optical Caliper Sensor contacts the sheet on one side using a smooth ceramic stabilizing plate with vacuum applied by concentric rings. On the other side of the sheet is a unique optical (confocal) measurement. The confocal measurement is combined with a magnetic reference measurement, and the result is caliper measurement. The simplicity of this design provides reliable performance day after day in the harsh paper mill environment, says ABB.

Even with the sensor applied very soon after the calendering process on high-gloss grades, Moore adds that, “We have not seen any sheet marking issues with this design.”

Art paper line starts up in China

Shouguang MeiLun Paper Co’s PM6 fine paper line in Shandong province in China started up successfully in June.

Supplied by Metso, the PM6 includes a complete OptiConcept paper making line from headbox to reel, as well as two winders. It produces double-coated woodfree paper within the basis weight range of 70-128 g/m². Annual production capacity of the 11.15m (wire) line is around 800,000 tonnes with a design speed 2,000 m/min.

Shouguang MeiLun Paper is part of Shandong Chenming Paper Holdings Limited, one of the biggest paper producers in China. The group is made up of more than 10 subsidiaries with a capacity of 4 million tonnes per year.

Russian order for an Andritz tissue machine

LLC Pulp Invest at Kazan in Russia has ordered a PrimeLine Compact II tissue machine from Andritz Pulp & Paper with its start up scheduled for the end of 2012.

The machine has a design speed of 1,700 m/min and a width of 2.80m. The order includes complete stock preparation plant for virgin fibre, including a high-precision PrimeDry Steel Yankee dryer which provides higher drying rates than conventional cast cylinders.
Massive pulp mill in Uruguay to be powered by ABB infrastructure

A new pulp mill that with an estimated cost of US$1.9 billion is Uruguay’s biggest private investment has ordered process electrification and power distribution infrastructure as well as equipment from ABB.

The Montes del Plata pulp mill is a joint project between Finnish pulp and paper manufacturer, Stora Enso, and the Chilean forestry company, Arauco. Stora Enso, and the Chilean pulp and paper manufacturer, is a joint project between Finnish process electricity

The mill is scheduled to be begin production in the first quarter of 2013, and will have an annual capacity of 1.3 million tonnes of bleached eucalyptus kraft pulp sourced from Montes del Plata’s own forestry plantations. The project includes the pulp mill, a deepwater port and a biomass-based power generation plant to convert waste from pulp production into electricity.

“ABB has delivered and managed large, complex electrification projects for the pulp and paper industry for more than 40 years,” said Veli-Matti Reinikkala, head of ABB’s Process Automation division. “Our advanced technology can also help customers efficiently tap into local renewable energy sources, ensuring this state-of-the-art mill has a reliable, self-sufficient electrical supply.”

ABB will provide power distribution and process electrification for the pulp mill, including the main transformers, 33kV power and control, smart motor control switchgear, all motors and frequency converters. ABB will also deliver the sectional drive systems for the two pulp dryer machines, including hardware and software engineering, as well as on-site services for customer training, start-up and commissioning.

New containerboard mill for Norampac at Niagara Falls

Canada’s largest containerboard manufacturer Norampac has ordered a $94 million production line from Metso for its new Greenpac Mill site at Niagara Falls in New York State.

With expected start up in the second quarter of 2013, the order includes a complete linerboard machine from headbox to roll handling, including air systems, machine pulpers, a broke collection system and a quality control system. The delivery will also comprise board machine clothing under a long-term agreement. Production speed of the PM1 9.05-m-wide (356.3 in wire) board machine, will be 915 m/min (3,000 ft/min) giving a capacity of about 430,000 tonnes of linerboard in the basis weight range of 97.6-170.9 g/m² (20-35 lb/2), out of 100 per cent recycled fibre.

Norampac is a division of Cascades and operates a number of containerboard and boxboard mills, corrugated product plants, folding carton plants and a graphic centre in Canada and the United States.

Expansion for SCA deinking line in Austria

SCA Hygiene Products has ordered equipment for the expansion of the de-inking plant for PM4 at its Ortmann mill in Austria.

Andritz Pulp & Paper will be supplying a complete dispersing and high-consistency bleaching stage, comprising a pulp screw press, a CompaDis disperser and high-consistency bleach tower including screw conveyor transport system, rebuild and service packages for the low-consistency cleaner plant and the disc filter, as well as process pumps, complete installation, start-up, and training.

The pulp will be used to produce toilet tissue. The investment in expansion to a two-loop deinking system will improve brightness in the tissue grades produced entirely from waste paper. In addition, it is possible to replace bright waste paper grades used so far by raw materials with lower ash content and further improve the water management of the deinking plant.

Rebuild order for BM3 at Kolicevo Karton

Kolicevo Karton in Slovenia is having the wet end (wire and press section) of its BM3 rebuilt by Andritz to improve the quality and extend the grade range to include GC qualities (chromo board).

The existing cylinder mould formers will be replaced by a multilayer Fourdrinier wire for top, back, and filler. Andritz Pulp & Paper will supply three headboxes (PrimeFlow SW), the multiple Fourdrinier wire section (PrimeForm SW) for three layers, and the hybrid former (PrimeForm HB) for filler dewatering. The existing press section will be complemented by a pick-up-roll for closed web run to the Kombi-press.

Kolicevo Karton is a member of the Austrian Mayr-Melnhof Group, the largest producer of folding box board in Europe and a leading manufacturer of coated recovered cartonboard worldwide.