SEAMAN PAPER COMPANY
The producer of specialty papers attributes its success to experienced mill personnel and suppliers.

DIGITAL TECHNOLOGY
The shift towards digital technology is beginning to gain speed within the forest products industry.
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Busperse® 2449 dryer fabric cleaning chemistry can be applied directly to fabrics while the dryer is still warm to significantly reduce the downtime needed for batch cleaning and the costs that come with it. It tackles the most challenging stickies to get fabrics remarkably clean. Yet its nonflammable, low odor solvent is easy on fabrics and people and won’t cause seam failure the way other cleaners can. This bio-based, low VOC product has a neutral pH. You get more fabric and dryer performance at a lower total cost and environmental impact.

Heat up your productivity and profitability.
Learn more about Busperse 2449. Scan the QR code to watch our video, or contact your Buckman representative.
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The paper recovery rate has nearly doubled since 1990, when 29,112,000 tons of paper and paperboard were recovered (33.5%). In 2017, 50,822,000 tons were recovered (65.8%).

Reduce greenhouse gas emissions by at least 20%. In 2016, AF&PA member GHG emissions — measured in carbon dioxide equivalents (CO2 eq) per ton of production — were 19.9 percent lower than in 2005. Reductions in GHG emissions intensity are driven by decreased coal and oil use, as well as by increased use of less carbon-intensive natural gas.

Improve safety incidence rate by 25%, while working to achieve zero injuries. In 2016, AF&PA member company recordable incidence rate was 36.3 percent lower than in 2006.

Increase fiber procurement from certified forestlands and certified fiber sourcing programs; decrease illegal logging. The amount of wood fiber AF&PA members procured from certified sourcing programs increased from 87 percent in 2005 to 99.1 percent in 2016. Wood fiber that members sourced from third-party certified forestlands increased from 23 percent in 2005 to 29.1 percent in 2016.

Reduce pulp and paper mill water use by at least 12%. In 2016, AF&PA member pulp and paper mill water use per ton of product decreased by 6.6 percent from the 2005 baseline year. Statistically, mill baseline performance in 2005 was 11,281 gallons (per ton of product). In 2016, mill water use performance measured 10,540 gallons (per ton of product).

In 2011, Donna said the following about Better Practices, Better Planet 2020, “By challenging ourselves across the different categories, we are reinforcing our leadership as THE sustainable industry. Our actions to better our sustainable practices will pay dividends for our businesses, our workers and the communities in which we operate for generations to come.” Indeed.
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- Increased drying efficiency
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Monadnock Paper Mills, Inc. has entered into an exclusive licensing agreement with HS Manufacturing Group, LLC (HSMG) for the use of their proprietary HS SILVA™ plant-based coating and additive chemistry. The functional characteristics afforded by HS SILVA, combined with well-formed fiber-based substrates, result in products with oil and grease-resistant properties and/or significantly improved water resistance for applications like outdoor signage, horticultural labels and tags. While having improved durability these substrates will be 100 percent recyclable, 100 percent biodegradable and 100 percent compostable.

“We’ve partnered with HSMG over the last several years and have successfully used their unique chemistry to produce uncoated and coated paper products in a wide variety of applications.” said Paul Ciccone, Vice President of Research and Development for Monadnock. “We can create paper based products tailored to meet your needs while meeting the market requirements of recyclability and biodegradability.”

“Monadnock is a leader in crafting high performance, cost effective and environmentally advanced products across a broad range of applications” said Samuel Mikail, Chairman of HS Manufacturing Group. “With their innovative culture, Monadnock is helping us achieve our goal of taking HS Manufacturing Group to the forefront of the sustainable packaging industry.”
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Graphic Packaging Acquires Assets of Paperboard Converter PFP

Graphic Packaging International has agreed to acquire substantially all the assets of PFP, LLC and its related entity PFP Dallas Converting, LLC. PFP is an independent converter focused on the production of paperboard-based air filter frames, and operates two manufacturing facilities in Lebanon, Tennessee and Lancaster, Texas. The business converted approximately 18,000 tons of paperboard, primarily CUK. Synergies from the acquisition will be driven by the integration of additional CUK paperboard tons and cost efficiencies.

“The PFP acquisition extends our leading position in the growing paperboard-based air filter frame market, which we established with the acquisition of Carton Craft in July 2017,” said Graphic Packaging’s President and CEO Michael Doss.

“The transaction is consistent with our strategy to pursue acquisitions that allow us to increase our mill to converting plant integration levels into growing markets at compelling post-synergy EV/EBITDA multiples,” Doss added.

WinterBell Converting Becomes a Division of Case Paper

Case Paper announced that WinterBell Converting in High Point, North Carolina has become a division of Case Paper Co., operating as Case Paper WinterBell, effective July 2.

“Case Paper has had a presence in Charlotte, North Carolina since 1966,” said Robin Schaffer, President and CEO of Case Paper. “The addition of WinterBell reestablishes converting in an important marketplace and represents Case Paper’s fourth converting facility.”

Todd Greenwood, Case Paper’s Vice President of Paperboard Sales, added, “We are fortunate that Richard Lewis, the third-generation owner of WinterBell, will stay on as General Manager, along with key members of his management team and experienced employees.”

The WinterBell facility is over 100,000 sq. ft., has two precision sheeters and six rewinders, and is well known and respected throughout the region as a quality converter of paper and paperboard.

According to Simon Schaffer, Chief Marketing Officer at Case Paper, “The addition of the WinterBell operation is the fulfillment of a key part of our long-term strategy to enhance our service platform for Case Paper customers in North Carolina and surrounding states. This includes opportunities in both paperboard and commercial printing papers.”

U.S. DOC Announces Termination of Supercalendered Paper CVD Order

Resolute Forest Product announced that the United States Department of Commerce is formally revoking the countervailing duty order on supercalendered (SC) paper from Canada, retroactive to August 3, 2015. Collection of cash deposits on imports of SC paper from Canada will cease, and all cash deposits that have been collected from importers of record since August 3, 2015, will be returned with interest.

Resolute’s cash deposits as of June 30, 2018, total $60 million. The company will also receive accumulated interest on these deposits.

The precise timing of the refund will be set out in a Federal Register Notice to be published in the upcoming days.

Revocation of the countervailing duty order is pursuant to issuance [on July 6] of a final determination in the Changed Circumstances Review that the Department initiated on May 14, 2018.

The Department initiated the Changed Circumstances Review after Verso Corporation, the principal remaining producer of SC paper in the United States and the only remaining petitioner, wrote to Commerce Secretary Wilbur Ross on March 21, 2018, that it was no longer interested in the continuation of the countervailing duty order. All other interested parties in the SC paper proceedings, including the federal and provincial governments in Canada, notified the Department that they supported Verso’s request for a Changed Circumstances Review.
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Verso Corporation announced that it will make strategic investments in its Androscoggin Mill in Jay, Maine, focused on technology upgrades that will increase the release liner paper capacity of its No. 4 paper machine. Made over the next 18 months, these investments will better position Verso to meet the growing needs of pressure sensitive laminators worldwide.

The investments will be spread across two project phases which include technology upgrades in pulping and refining systems, stock flow piping and paper winding capabilities. The first project phase is scheduled for completion in the third quarter of 2018 with completion of the second project phase expected in 2019.

Verso’s release liner and pressure sensitive label paper portfolio includes over 60 highly engineered paper grades made across four Verso U.S. mills.

The Androscoggin Mill has the capacity to produce about 250,000¹ tons of paper per year. The mill makes coated, uncoated and specialty papers.

¹ On February 15, 2018, Verso announced plans to upgrade and restart the No. 3 paper machine in the third quarter of 2018, increasing annual paper production by approximately 200,000 tons.

EUROPE

SCA Begins Production at Expanded Östrand Pulp Mill

SCA announced that production at the expanded Östrand pulp mill began according to plan during the midsummer holiday. SCA is investing SEK 7.8 billion in the operation and the project is on budget and schedule.

SCA decided in 2015 to invest in an increased production capacity at the Östrand pulp mill — from 430,000 tonnes per year to about 900,000 tonnes per year of northern bleached softwood kraft pulp (NBSK). Following an extended maintenance stop, which began in April of this year, the expanded pulp mill is now in operation.

Production capacity in the mill is expected to increase successively during 2018 and 2019. SCA expects the mill to reach its full production capacity of 900,000 tonnes per year in 2020.
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Collaborative Operations

ABB Collaborative Operations Centers around the world, dedicated to the pulp and paper industry, are a part of the ABB Ability™ portfolio of industry leading digital solutions. Solutions that will connect pulp and paper mill operators, control-room experts and ABB’s domain expertise in pulp and paper automation and electrification. People in production facilities and enterprise headquarters can, with ABB’s technology and expertise, do more, do better, together. To find out more contact your local ABB account manager or visit: abb.com/pulpandpaper
Glatfelter to Acquire Georgia-Pacific’s European Nonwovens Business

Glatfelter on June 19 announced it had signed a definitive agreement to purchase Georgia-Pacific’s European nonwovens business (the “Business”) for $185 million, subject to customary purchase price adjustments.

The proposed transaction includes Georgia-Pacific’s operations located in Steinfurt, Germany, along with sales offices located in France and Italy. The Steinfurt facility produces high-quality airlaid products for the table-top, wipes, hygiene, food pad, and other nonwoven materials markets, competing in the marketplace with nonwoven technologies and substrates, as well as other materials focused primarily on consumer based end-use applications.

The Steinfurt facility is a state-of-the-art, 32,000-metric-ton-capacity manufacturing facility that employs approximately 220 people.

“Glatfelter’s agreement to acquire the European nonwovens business demonstrates our commitment to building leading positions in global growth markets for engineered materials,” said Dante C. Parrini, Chairman and CEO of Glatfelter.

“Steinfurt’s products and technologies complement our current airlaid business very well and the acquisition provides synergistic capacity increase opportunities and an improved cost structure to support our ability to serve customers in growing consumer and industrial markets. From a financial perspective, the investment provides an attractive return on capital, is immediately accretive and will deliver attractive EBITDA margins in a growing market.”

In 2017, the Business generated net sales of $99 million and EBITDA of $18 million. Glatfelter expects to realize synergies in excess of approximately $6 million per year within three years, and expects to incur one-time costs of approximately $7 million for transaction fees and integration.

The proposed transaction is subject to customary closing conditions, including receipt of required regulatory approvals. The closing is expected to occur during the fourth quarter.

Smurfit Kappa Completes Acquisition of Reparenco

Smurfit Kappa Group on July 3 announced that it completed the acquisition of Reparenco, a paper and recycling business in the Netherlands, for EUR 460 million.

According to Smurfit Kappa, Reparenco’s strong strategic fit with SKG’s existing European businesses is expected to deliver synergies of in excess of EUR 30 million.

“We are very pleased to complete the acquisition of Reparenco and to welcome their 315 employees to Smurfit Kappa. There is a strong cultural fit between our businesses and we are excited about the potential for Reparenco within the Smurfit Kappa integrated system,” said Smurfit Kappa, CEO, Europe, Saverio Mayer.

“Reparenco represents early delivery of a central element of our Medium Term Plan — to increase our European recycled containerboard capacity. It is ideally situated in our core European operating region where we continue to see strong demand driven by growth in e-commerce and increased substitution of plastic with paper-based packaging. The mill is also very well placed on the cost curve and specializes in producing basis weights from 80 to 120 grams which caters for the market’s growing demand for lighter-weight materials,” Mayer said.

Laurent Sellier, Smurfit Kappa COO, Paper Europe, added, “The acquisition of Reparenco will strengthen our integrated business model and adds 405,000 tonnes of recycled containerboard capacity to our system. We are also pleased to have acquired a high quality graphic paper machine very well positioned in its market. While the machine offers the potential for conversion to containerboard over the medium-term, our intention is to continue to produce graphic paper for our customers for the foreseeable future.”

Reparenco operates a two-machine paper mill in the Netherlands with a capacity of 675,000 tonnes together with a 750,000 tonne recycled fibre operation. The mill comprises two machines with capacity of 405,000 tonnes of recycled containerboard and 270,000 tonnes of graphic paper (with the potential for conversion to containerboard).
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EUROPE

Sequana to Sell Arjowiggins Graphic and Arjowiggins Creative Papers

Sequana in July announced the planned sale of its subsidiaries Arjowiggins Graphic and Arjowiggins Creative Papers to Fineska BV, the parent company of Eska Group, the Dutch-based graphic cardboard business controlled by Andlinger & Company, a private investment group which also owns Crown Van Gelder (CVG), a Dutch specialty papers manufacturer.

Sequana expects the gross amount of the deal to be EUR 125 million.

The businesses to be divested reported sales of EUR 528 million in 2017, or 19% of Sequana Group’s consolidated sales, of which 61% comprised recycled graphic and specialty (i.e., laminated and transfer) papers and 39% premium fine papers and specialty papers (i.e., bookbinding and tracing paper). The businesses operate a total of eight mills located in France, the UK, Spain and China and employ over 2,000 people.

The deal is expected to be completed by the end of October 2018. The transaction is a major milestone for Sequana, marking its exit from all paper manufacturing activities with the exception of Arjobex.

Since 2008, Sequana has been refocusing on its paper distribution business where its subsidiary Antalis holds leading positions in Papers, Industrial Packaging and Visual Communication in Europe.

Former Bankrupt Idempapers Renamed Virginal Paper

A Norwegian company has acquired the assets of bankrupt specialty paper producer Idempapers. The deal includes Idempapers’ paper mill in Virginal-Samme, Brabant, Belgium.

The new company, named Virginal Paper SA, started production in July.

According to a press release from Virginal Paper, the operations started on specialty papers such as one side coated label, clay coated kraft, flexible packaging, poster and wet strength papers.

“We will manufacture from a competitive cost base and focus on products with positive growth," said Terje Haglund, CEO of Virginal Paper. “We are pleased to invest in paper businesses in Europe. With a strong team of industry professionals, we will be part of restructuring the industry by implementing innovative and cost efficient operations”.

Idempapers was a paper company located in Walloon Brabant region of Belgium. It produced and marketed high-value specialty papers such as carbonless and one-side coated products. The company had operations at two sites: Virginal, (manufacturing), and Nivelles (logistics).

Stora Enso Begins Feasibility Study for Conversion of Oulu Mill to Packaging Grades

Stora Enso has started a feasibility study and an environmental impact assessment (EIA) for a possible investment in its Oulu pulp and paper mill in Finland. The feasibility study and the EIA evaluate a potential conversion of the Oulu paper mill into packaging board production.

The feasibility study is expected to be concluded by the end of 2018, and the EIA process is expected to take a minimum of 6 months.

Currently, Oulu Mill has an annual production capacity of 360,000 tons of chemical softwood pulp and 1,080,000 tons of woodfree coated papers on two paper machines. The potential investment would include a new chemi-thermomechanical pulp (CTMP) plant, a brown-based cartonboard line with a capacity of 450,000 tons per year, and a kraftliner line with a capacity of 400,000 tpy.

The potential conversion of Oulu Mill would enable Stora Enso to further improve its position in the growing consumer board and packaging solutions businesses and take a major step in its transformation. The other option is to continue the current fine paper production.

Capital expenditure for the potential conversion is estimated to be approximately EUR 700 million during years 2019–2021. This would fall within the Group’s long-term capital expenditure policy of keeping capital expenditure into fixed assets approximately at the level of depreciation.

The production on the potential new lines would start during 2020. Paper production at Oulu Mill will continue at least until early 2020.
RUSSIA

Ilim Group Begins Kraftliner Capacity Expansion Project

On June 21, Ilim Group Chairman Zakhar Smushkin and Irkutsk Oblast Governor Sergey Levchenko took part in the official launch of the integrated investment project Big Ust-Ilimsk at Ilim’s Mill in Ust-Ilimsk, Irkutsk Oblast, Russia.

The Big Ust-Ilimsk project includes construction of a new line for the production of kraftliner and other packaging materials with a capacity of 600,000 tons per year.

Total investments in the project will be around USD 1 billion with implementation to be completed by the end of 2021.

Ilim Group will also perform a large-scale upgrade of the existing operations in order to increase pulp output by 130,000 tons per year.

Project implementation will drive the Ust-Ilimsk mill’s capacity up to 1.5 million tons of finished products per year with an initially installed capacity of 550,000 tons per year.

“Delivery of the Big Ust-Ilimsk project will help us to reinforce our presence in the packaging segment, primarily in the growing Asian markets,” said Kseniia Sosnina, CEO of Ilim Group. “Upon completion of the project in Ust-Ilimsk and upgrade of the Bratsk Mill, Ilim will become one of the largest manufacturers of unbleached packaging materials globally with a total board output of 1.5 million tons per year, bringing an aggregate production output of Ilim Group to over 4.3 million tons per year.”

INDUSTRY SUPPLIERS

Andritz to Acquire Xerium Technologies for $833 Million in Cash

Andritz AG, headquartered in Graz, Austria, announced that it has signed a merger agreement to acquire Xerium Technologies, Inc., headquartered in Youngsville, North Carolina. The transaction is valued at approximately $833 million, including net financial liabilities of approximately $590 million.

The agreement, which has been unanimously approved by Xerium’s Board of Directors, is subject to the approval of Xerium’s shareholders and the satisfaction of customary closing conditions, including applicable regulatory approvals. Shareholders representing approximately 20% of Xerium’s outstanding common stock have entered into an agreement to vote in favor of the merger. Closing is expected in the second half of 2018.

Xerium is a global manufacturer and supplier of machine clothing (forming fabrics, press felts, drying fabrics) and roll covers for paper, tissue, and board machines, including maintenance and aftermarket services. With its Smart® technology, the company provides a sophisticated digital software tool to optimize pressing performance by means of sensors integrated into the roll covers.

Wolfgang Leitner, President and CEO of Andritz, said, “With Xerium, we will be acquiring a high-tech global supplier providing essential services and wear parts to the paper industry. The acquisition fits squarely with our long-term strategy to execute complementary acquisitions and to grow our aftermarket business with its stable source of revenue and earnings.”

Xerium has around 2,850 employees and operates more than 28 production facilities worldwide, including a site in Gloggnitz, Austria.

Valmet to Supply New Tissue Machine to Lila Tissue

Valmet will supply a complete Valmet Advantage DCT 200 tissue line to the Turkish tissue manufacturer Lila Tissue in Corlu, 100 km west of Istanbul.

Valmet’s delivery includes the tissue machine itself (TM3), along with stock preparation equipment and an extensive automation package with DCS, QCS and Softness sensor.

Start-up, commissioning and training are also part of the delivery.

Valmet has previously delivered two Advantage DCT 200 tissue lines to the same mill. TM1 started up in 2007 and TM2 in 2012. Currently, Lila Tissue has the capacity to produce 150,000 tons per year of tissue. The new TM3 will add 70,000 tons per year of tissue making capacity for Lila Tissue’s domestic and export markets.

Start-up of TM3 is planned for 2020.
Golden West Packaging Group LLC has named Brad Jordan as President. Previously, Jordan was President of one of the Golden West companies, Fleetwood-Fibre Packaging & Graphics. He has more than 24 years of experience in the packaging industry.

Holmen has appointed Lars Lundin as Senior Vice President Paper. He will take up his new role no later than December 1, 2018. Lundin succeeds Nils Ringborg, who will remain part of Group management as advisor to the CEO. Lundin’s most recent post was CEO of Swedish paperboard manufacturer Fiskeby Board.

International Paper announced that Timothy S. Nicholls has been appointed Senior Vice President and Chief Financial Officer, succeeding Glenn R. Landau who is leaving the company for personal reasons. Nicholls, who currently serves as Senior Vice President - Industrial Packaging the Americas, previously served as Chief Financial Officer of IP from December 2007 through November 2011. IP also announced that Jean-Michel Ribiéras, currently Senior Vice President - Global Cellulose Fibers, has been appointed Senior Vice President - Industrial Packaging the Americas, succeeding Nicholls; and that Catherine I. Slater has been appointed Senior Vice President - Global Cellulose Fibers.

Liberty Diversified International (LDI) has promoted Lewis Shipp to General Manager of its Liberty Carton Company Texas business unit. Most recently, Shipp was Director of Manufacturing in LDI paper/packaging operations in California and Mexico.

Nine Dragons Paper (Holdings) Limited announced that Ken Liu has been appointed as an executive director and Deputy Chairman of the Company. Liu has also been appointed as the Chief Executive Officer (North America) of a subsidiary of the Company in charge of business in North America. Both appointments became effective June 15. Since March 2016, Liu has been the vice chairman of America Chung Nam (ACN).

SCA announced that Magnus Kangas will be the new Mill Manager of Ortviken paper mill in Sundsvall, Sweden, effective January 1, 2019. Kangas comes Ortviken from a position as manager of BillerudKorsnäs’ paper mill in Gävle. Kangas will succeed Kristina Enander, who takes on the role of President of SCA’s new business area Pulp on November 1, 2018.

The American Forest & Paper Association (AF&PA) announced the election of Resolute Forest Products President and CEO Yves Laflamme and Sonoco Products Company President and CEO Robert Tiede to serve on its Board of Directors. Laflamme fills the seat left by the retirement of Resolute President and CEO, Richard Garneau, and Tiede fills the seat left by the retirement of Sonoco President and CEO, M. Jack Sanders.

AMETEK Surface Vision has expanded its senior management team with two key appointments. Ben Wileman has been promoted to the newly created position of Divisional Vice President of Global Sales and Marketing for AMETEK Surface Vision and for AMETEK Land; and Lucy Lambertsen has been appointed to the newly created position of Global Marketing Communications Manager for both AMETEK Surface Vision and AMETEK Land.

Steve Voorhees, Chief Executive Officer of WestRock, has been named RISI’s 2018 North American CEO of the Year. Voorhees became CEO of RockTenn in November 2013, succeeding Jim Rubright. After the merger of MeadWestvaco and RockTenn was completed in 2015, he was appointed CEO of the newly formed WestRock.
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Indianapolis, Indiana, USA
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OCTOBER 1-3, 2018
Specialty Papers US 2018
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Red Lion Hotel Paper Valley
Appleton, Wisconsin, USA
www.specialtypaperconference.com

OCTOBER 2-5, 2018
Tissue 2018
TAPPI and RISI
Fox Cities Exhibition Center
Appleton, Wisconsin
tissue2018.com

OCTOBER 4, 2018
Hall of Fame Induction Dinner
Paper International Hall of Fame
Radisson Paper Valley Hotel
Appleton, Wisconsin, USA
www.paperdiscoverycenter.org/hall-of-fame

OCTOBER 10-12, 2018
RISI North American Conference
RISI
Parc 55 Hotel
San Francisco, California, USA
www.risiinfo.com/events

OCTOBER 10-12, 2018
MIAC 2018
Edipap
Lucca Fiere Exhibition Centre
Lucca, Italy
www.miac.info

OCTOBER 16-17, 2018
Paper & Beyond 2018
(formerly European Paper Week)
CEPI
Solvay Library
Brussels, Belgium
www.cepi.org

OCTOBER 17-19, 2018
Paper & Plastics Recycling Conference
Recycling Today
Marriott Chicago Downtown Magnificent Mile
Chicago, Illinois, USA
paperplasticsna.recyclingtodayevents.com

OCTOBER 24-26, 2018
PPC Fall Meeting and Leadership Conference
Paperboard Packaging Council
The Whitley Atlanta Buckhead
Atlanta, Georgia, USA
www.paperbox.org

NOVEMBER 12-14, 2018
International Containerboard Conference
RISI
InterContinental Chicago Magnificent Mile
Chicago, Illinois, USA
www.risiinfo.com/events

2019
MARCH 24-26, 2019
Paper2019
AF&PA and NPTA
Chicago, Illinois, USA
BillerudKorsnäs and Uppsala University Collaborate in Development of Paper Batteries

BillerudKorsnäs and Uppsala University are making paper batteries a reality, paving the way for energy storage in packaging materials.

BillerudKorsnäs and researchers at Uppsala University have together taken an important step towards the future’s paper batteries. Together they have taken basic research based on pure cellulose from algae and developed it to work with the same type of fibre that BillerudKorsnäs usually uses to manufacture packaging material. This development opens up for both inexpensive and eco-friendly batteries. The long-term aim is to enable large-scale production and the future use of paper batteries for applications in areas such as smart packaging.

Technology for Large-Scale Production Processes

The development work is being carried out by one of Sweden’s foremost research teams under Maria Strömme, collaborating with BillerudKorsnäs, as a leading company in the development of sustainable packaging technology, in a completely new form.

“What’s special in this case is the model for collaboration between BillerudKorsnäs and Uppsala University that has resulted in technology adapted to large-scale production processes. We’re combining the deep theoretical expertise of the researchers with our understanding of innovation and production technology. By successfully creating a joint platform, we can focus our work on the future, on creating an advanced product that can still be produced in an effective way,” says Lars Sandberg, project manager for innovation at BillerudKorsnäs.

Smart, Connected Packaging

In the long term, the paper battery opens up possibilities for developing packaging that is both smart and more sustainable. Small paper batteries with sensors can in the future open up for packaging that can be traced through the entire transport chain. This includes, for example, packaging that measures temperature or position in real time and provides information on what is happening with an item during transport.

A paper battery entails many new ways of using packaging and can thus offer exciting opportunities for the packaging industry and BillerudKorsnäs customers that wish to establish systems that safeguard quality and delivery reliability. For example, a light sensor along with a BillerudKorsnäs paper battery could provide information on where in the transport chain a product disappeared from its packaging.

With electrodes based on cellulose from wood fibre, the ambition is that in the future, it will be possible to recycle batteries along with their boxes and make them into new boxes or paper batteries.

“The paper battery is a key piece of the puzzle in efforts to produce smart packaging that requires small, sustainable power sources. By enabling this type of sustainable packaging, the work on the paper battery is fully in line with BillerudKorsnäs’ vision of challenging conventional packaging for a sustainable future. Storing energy in paper instead of in lithium batteries, for example, allows for bio-based batteries that can form part of a circular system, which provides major sustainability benefits,” says Magnus Wikström, technical director at BillerudKorsnäs.

BillerudKorsnäs is a leading manufacturer of packaging papers, including: kraft and sack paper, liquid packaging board and cartonboard, containerboard (fluting and liner), and market pulp. The company has 8 production sites in Sweden, Finland and the UK.
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**Let’s make waves.**
Sound waves, sound data, and sound decision-making! That’s ECHOWISE 360, specially designed to work in concert with Buckman’s comprehensive pulp and paper technologies and mill-specific solutions to help you improve productivity and profitability. Contact your Buckman representative or visit buckman.com for more information about this and other new ECHOWISE monitoring solutions.
The Better Practices, Better Planet 2020 sustainability initiative is the most extensive collection of quantifiable sustainability goals for a major U.S. manufacturing industry, demonstrating AF&PA members’ commitment to sustainability across the entire industry value chain.

By Donna Harman, President and CEO, American Forest & Paper Association

The American Forest & Paper Association’s (AF&PA) recently-released 2018 Sustainability Report shows that our members surpassed their Better Practices, Better Planet 2020 sustainability goal on energy efficiency ahead of the 2020 deadline, maintained strong safety performance and nearly reached a new greenhouse gas reduction goal. They also made measurable progress on the remaining goals.

The Better Practices, Better Planet 2020 sustainability initiative is the most extensive collection of quantifiable sustainability goals for a major U.S. manufacturing industry, demonstrating AF&PA members’ commitment to sustainability across the entire industry value chain. Established in 2011, the six goals focus on improving energy efficiency; increasing paper recovery for recycling; reducing greenhouse gas emissions; improving workplace safety; promoting sustainable forestry; and reducing water use.

Our industry’s commitment to sustainability reaches far beyond fulfillment of the Better Practices, Better Planet 2020 goals. We work with our members, government agencies, communities, and other stakeholders to employ advanced sustainability practices benefitting the economy, the environment and society.

Progress on Our Goals

Members are making great strides in improving their energy efficiency. Their purchased energy consists of fuel to run their boilers, electricity to drive manufacturing equipment and steam to provide heat needed to make pulp, dry paper and produce wood products. Member purchased energy per ton of production was reduced by 11.6 percent — surpassing our goal of at least 10 percent improvement in purchased energy efficiency ahead of the 2020 deadline.

Paper recovery for recycling allows paper and paper-based packaging to go to their highest end-use: the manufacture of new products. The annual recovery rate has nearly doubled since 1990, thanks to voluntary industry efforts and the millions of Americans who choose to recycle at home, work and school every day. Our goal is to exceed 70 percent paper recovery for recycling by 2020. In 2017, the U.S. paper recovery rate reached 65.8 percent.
Efforts to reduce greenhouse gas emissions from manufacturing processes are an inherent part of our industry’s environmental stewardship. Members reduced greenhouse gas emissions from their facilities by 19.9 percent, nearly reaching the 20 percent reduction goal.

Reductions in both purchased energy and greenhouse gas emissions from facilities are driven by reductions in coal and oil use; increased use of less carbon-intensive natural gas; and other energy efficiency projects undertaken at mills.

Our industry’s employees are our most valuable resource. Workplace safety is of utmost importance and any injury to our employees is unacceptable. Members continually work to develop innovative methods to improve the safety of their facilities, so that workers can go home safe and sound after their shifts. The recordable incidence rate of AF&PA members was 36.3 percent lower than in 2006. We first surpassed this goal in 2014 and maintained our strong performance in 2016, surpassing our worker safety goal of a 25 percent reduction in incidences ahead of the 2020 deadline.

We remain committed to reaching our industry vision of zero injuries in the workplace. Members assigned safety training for 100 percent of their new employees in 2016. They also provide useful and timely safety updates and invest in programs to promote the well-being of their employees and the communities where they operate.

Sustainable forestry practices keep forests plentiful and support the sustainability of our entire industry. Members increased the amount of wood fiber they procure from certified forestlands to 29.1 percent, and fiber procured through certified sourcing programs to 99.1 percent. In addition, members that own forestland conform to credible forest management program standards.

Members also continue their efforts to combat illegal logging by safeguarding against fiber procurement from illegally-logged sources by documenting fiber sources; requiring suppliers to sign agreements; and using third-party certification of chain-of-custody systems.

Water is an essential part of the pulp- and papermaking process, and members seek ways to reduce water use by reusing and recycling the water they use in their manufacturing processes. Our goal is to reach a 12 percent reduction in member pulp and paper mill water use, and their water use decreased by 6.6 percent so far.

We are proud of the progress we’ve made together advancing economic, environmental and social values. We are committed to continuing our industry’s sustainability leadership while making essential products for everyday life.

For more information about our industry’s sustainability progress and to download a copy of the 2018 AF&PA Sustainability Report, visit http://sustainability.afandpa.org.
Clear Sailing: Seaman Paper Company Navigates the Niches

Through calm seas and storms, a privately held lightweight specialty paper producer has used vertical integration and long-term supplier partnerships to navigate its way into profitable niche markets.

By Bob Puhr, President, Ad Hoc Communications

Seaman Paper Company competes on a global scale to supply lightweight and value-added specialty papers. In addition to its Otter River mill in Massachusetts, Seaman operates a global supply chain with operations in Asia and Europe. What has enabled Seaman to survive as a domestic manufacturer are the strong relationships that Seaman has developed with its suppliers to control costs and maximize efficiencies.

Seaman purchased the Otter River mill in 1946. George Jones II, returning from the Navy during World War II, was asked to manage the one-machine mill. Under his leadership, the mill was upgraded and a second machine was added. The machines were configured to produce the highly technical grade of one-time carbonizing paper.

SPECIALTY PRODUCTION

As the demand for carbonizing fell off in the 1980s, Seaman Paper began developing value-added products for retail packaging, consumer products, and industrial markets – enhancing its capabilities through acquisition and internal innovation of our product line with a strong focus on sustainable manufacturing.”
– Gene Reardon, Vice President of Manufacturing.

“We have grown globally through continuous
growth. Currently, the company converts 90% of its production into a variety of finished products via its in-house expertise in sheeting, folding, coating, slitting, waxing, and printing.

During the last 15 years, Seaman has expanded its papermaking, converting, and distribution on a global basis. “We have grown globally through continuous innovation of our product line with a strong focus on sustainable manufacturing,” says Gene Reardon, Vice President of Manufacturing.

In a “typical” week, the Otter River mill runs a variety of grades and colors with their own unique specifications, according to Peter Manca, Assistant Superintendent. “Sometimes we’ll run four grades in a single day on a single machine!”

“We have separate stock prep and white water systems for each machine,” says Kevin Mallet, Superintendent. “Our pulpers, beaters, and tanks are small by design so that we can change over to a new grade fast and clean up for the next run. Chemical additives are typically added at the machines, and our transition periods are measured in minutes. Chemical suppliers tell us that we can’t do what we’re doing – until they come here and see it for themselves.”

LONG-TERM SUPPLIER RELATIONSHIP

The Otter River mill operates two machines producing up to 100 t/d of machine-finished or machine-glazed lightweight papers. The furnish is a mix of virgin and recycled fibers. Both machines have Fourdrinier formers and run a wide basis weight range.

“This mill is unique in many ways,” Reardon says. “A lot of companies talk about people being their most important asset. But here, it’s not just lip service.”

Reardon came to Seaman about nine years ago from Republic Paperboard in Oklahoma, a manufacturer of gypsum wallboard facing paper. Prior to that, he worked with Glatfelter in the U.K. (specialty papers) and Ahlstrom (filtration papers). “I’ve had the good fortune to work with several outstanding individuals and mentors. I felt it was the right
time in my career to help develop and mentor some younger people in the industry, and give some of my knowledge back. So, it was a good fit for me to join Seaman Paper.”

That process and machinery knowledge is very important since there is very little automation at the Otter River mill. Reardon explains, “We rely on experienced human operators for proper setup, quality production, and even things like color-matching from run to run. It’s very hands-on here. We also rely heavily on the experience and hands-on assistance from our top supplier-partners.”

One of those top partners is AstenJohnson. Even the veterans working at the mill can’t remember when AJ first came in as a supplier of paper machine clothing. Ron Herrin, AJ’s Sales/Service Representative for the region, confirms that in his 21 years with AstenJohnson, Seaman Paper has been a consistent and good customer, and that relationship pre-dates him.

“AJ would not be one of our preferred suppliers unless they delivered good products,” explains Kevin Mallet, Superintendent. “Equally important is the expertise and service they provide. We view them as an extra set of eyes and ears to help us run our machines the best we can.”

Like many mills, Seaman Paper likes to keep its options open and chooses not to single-source. “I like to have a primary supplier and a backup just in case there is a delivery issue,” Mallet says. “We make our decisions based on price, performance, and service, and price is not the most important consideration. But it seems that over time, AJ is winning more and more positions on our machines.”

The Otter River mill started years ago with AJ dryer felts, specifically the MonoTier series, where AJ is well-proven. Next came forming fabrics, such as PrintStar. “We’re getting good formation and runnability with PrintStar, and fabric life is consistent,” Mallet says. “The fabric has an ArmorTec treatment that improves cleaning. With all the colored dyes we use, the treatment really helps keep the dyes from filling in on the wire, minimizing cleanup and transition time to a new grade.”

Most recently, the mill switched to AJ’s press felts for the pickup position on PM1. “We’ve been asking AJ to supply us with a seamed pickup felt for the bottom position for years,” Manca says. “Unfortunately, our length (44 ft or 13.4 m) was too short for them to manufacture. When Ron first
approached us with an idea to trial their new FlexFlow X fabric, with a seam specifically for tissue, we were skeptical at first because we didn’t want a fabric that would mark the sheet. However, that has not been an issue. The FlexFlow X is the best seamed press fabric we have ever run in terms of seam marking.”

Herrin explains that the FlexFlow-X press fabric is a seamed press fabric engineered specifically for tissue machines. “We made a step-change with this product,” he says. “It has a compressible structure for quick break-in and an open design for easy cleaning. We did a lot of work on our pilot machine before releasing this seam, and today my customers tell me that it is the best seam in the industry for tissue applications, where sheet marking is major potential quality problem.”

“We also achieve excellent life out of this fabric,” Mallet says. “Normal life was about 50 days from other suppliers. The first time we ran FlexFlow X, it ran for 80 days.”

MORE THAN FABRICS

“When I first came here, we were doing business with a lot of machine clothing suppliers,” Reardon says. “Too many to have solid relationships with. Frankly, I was not that familiar with AstenJohnson before I joined Seaman, but AJ has worked on the relationship to truly become an extension of our operations team. Ron is here quite often and knows our setup, products, and people well.”

The turning point, according to Reardon, was when AstenJohnson brought its FlexFlow X press fabric to the mill. “We wanted and needed a seamed felt for our machines and for our grades,” he says. “AJ would not have much of an opportunity to grow with us if they couldn’t deliver what we needed. They did with the FlexFlow X design and it has really made a difference.”

“We see Ron on a frequent basis and appreciate the support he gives us,” Mallet says. “If we encounter a problem or require anything special, he can bring in an AJ expert to help us. One thing I can say about AJ is that their depth of experience is reassuring. There are experts in all our supplier companies, but AJ seems to have more of them on staff.

If we need them, we call them, and they are here. That’s what we are looking for from our supplier-partners.”

Manca recently attended a session on papermaking at AJ University (AJU) in Charleston. “It gave me a good overview on forming, pressing, and drying and the various fabric requirements for each section of the machine,” he says. “It was also an opportunity to meet papermakers from other mills as well as the AJ experts. The informal discussions were as valuable to me as the classroom sessions.”

This ability of AJ to talk “papermaking” and not just “machine clothing” is a value-added to Seaman Paper, according to Mallet. An example was the reconfiguration of the dryer section on PM1. “We had four dryer felts on PM1, with two of them in the top section,” he explains. “It was a nightmare to seam up a new fabric on the catwalk at the top of the machine – not to mention extremely hot if we needed to do something in a hurry.”

Herrin came up with a solution to put the first and second top sections together by removing three rolls and changing the wrapping configuration. The end result was going from four positions to three. “It’s been a complete success as we can now seam our dryer felts from a lower, more accessible location,” Mallet says. “Also, we have less inventory to carry, which saves us money.”

Bob Puhr is President of Ad Hoc Communications. He can be reached by email at bob@adhocom.com.
Forest Products: The Shift to Digital Technology Accelerates

While the digital revolution has transformed many industries, its impact on forest products companies has been relatively limited, as the industry has lagged behind others in making investments in digital technology. But that appears to be changing, according to recent Accenture research.

In an Accenture survey of industry executives, a large majority of respondents — 82 percent — said that their investments in digital have been increasing, and 88 percent said they plan to continue to grow those investments in the next three years. About 1 in 5 expect those investments to increase by 25 percent or more.

Executives foresee a range of benefits from those investments. But they also appear to be driven by a recognition that the technology is rapidly reshaping the industry landscape. When asked about the downside of not investing enough in digital, they most often cited “lost opportunities for market share growth” and “loss of competitive advantage due to cost.” In short, digital technology is becoming a fundamental necessity in the industry.

THE INDUSTRY’S APPROACH TO DIGITAL TECHNOLOGY

Today, forest products companies are investing in digital technology across the organization. However, they are most often focusing their digital efforts on quality management and IT, followed by production execution and the supply chain.

By Laura Bochnak and David Rossi, Accenture.
ficial intelligence (AI) and advanced process control (APC). Executives see these three technologies as being strategically important and having a positive impact across a wider range of activities (e.g., quality management, maintenance, etc.), compared to other technologies. They also see them as having the greatest potential for overall return on investment. Not surprisingly then, analytics, AI and APC are expected to be the top areas of digital investment over the next three years.

These findings suggest that the executives feel that the shift to the cloud is well in hand, and they now are focused on the next phase of digital adoption. For example, forest products companies have been capturing large amounts of data from process control systems for years, especially in paper mills. Analytics and AI will enable them to make effective use of that data to improve operations. And by extending the use of APC from paper mills to downstream converting operations, they will be in a better position to take advantage of data-driven intelligent automation, which will not only increase efficiency, but also help address growing shortages of skilled production labor.

When asked about the potential benefits they see from digital technology, executives most often cited predictability in manufacturing, and greater service differentiation. These were followed by improved ecosystem collaboration, more effective operations and plant management, and faster process/reduced lead time to market.

But executives also see challenges to realizing these benefits, such as a lack of internal data management capabilities or the immaturity of digital technology. However, data security concerns topped that list, with operational reliability being viewed as a key area of cybersecurity risk.

Forest products companies are not especially confident about their ability to deal with growing cybersecurity threats. More than half of the respondents said their organizations are not able to execute various cybersecurity activities, such as
managing financial risk from breaches, minimizing disruption from a cybersecurity breach, and identifying the cause of a breach. Most forest products companies (83 percent) track cybersecurity breaches. However, while 39 percent said breaches were successfully detected within hours, more than half (55 percent) said that it took days, weeks or months to do so.

TAKING ACTION
As forest products companies proceed with their digital initiatives, they need to think not only about the technology itself, but also about how that technology works in the organization. That means employing change management techniques to help employees succeed with new tools; re-thinking operating models to take advantage of new capabilities; and finding ways for people and technology to work in concert.

Take, for example, the emerging concept of the connected industrial worker. Using mobile, sensor, analytics and wearable technologies, companies can track workers’ locations, and provide them with vital information and expert advice about procedures as they work. This approach — which has already found success in other asset-heavy industries such as mining, oil and gas and chemicals — promises to improve productivity, decision making and safety, while helping to increase asset efficiency and reduce operational costs.

At the same time, forest products companies need to keep an eye on evolving digital technologies. For example, rapidly emerging blockchain technology now allows parties across the value chain to work with one set of shared data that is accurate, secure and automatically updated. Blockchain could be used to track and certify fiber from the wood yard through processing, the customer and back, which is key to sustainability and circular economy efforts.

To stay ahead of it all, forest products companies need to move beyond piecemeal approaches and develop comprehensive digital strategies. Typically, these should take a two-pronged approach: using digital to enhance and expand today’s existing technology core; and using digital to create entirely new business models and new revenue streams enabled by a collaborative value chain.

Digital technology promises to disrupt the forest products industry, but at this point, no forest products company has wholeheartedly made the move to digital. As the research shows, however, the technology is taking root. When one company embraces digital across its organization, others are likely to follow quickly. This disruption is likely to be sudden and deep — which means being ready to move quickly will be key to staying competitive.

ABOUT THE SURVEY
Accenture conducted an online survey of 200 C-level and top management executives and functional leaders in the forest products industry. The survey focus was on the use of, and investment in, digital technologies in the forest products industry. Data for this study was carried out through a global quantitative online survey that focuses on companies with global annual revenues greater than $500 million and who currently leverage digital technologies and/or are pursuing digital transformation, including but not limited to cloud, analytics (including big data and edge computing), mobility (including wearables), advanced process control, artificial intelligence/machine learning, collaboration and social tools, intelligent/smart sensors, robotics and industrial cybersecurity.

The survey was fielded between October and November 2017 and included executives from forest products companies headquartered in Australia, Brazil, Canada, Finland, Indonesia, Malaysia, Norway, Singapore, Sweden and the United States.

Laura Bochnak is Managing Director – Natural Resources, Accenture and David Rossi is Managing Director – Natural Resources Global Lead, Accenture.
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Winder Upgrade by Voith

New damping bearing system effectively reduces vibrations during the winding process and allows for higher operating speeds.

Voith’s new SmoothRun hydropneumatic damping bearing system for winders effectively reduces vibrations occurring during the winding process. Hydropneumatic damping allows for higher operating speeds and better winding results. Overall, capacity increases of up to 15 percent are possible. This compact upgrade solution is suitable for Voith and Jagenberg two-drum winders.

In conventional winders without special damping, vibrations can occur at higher production speeds for certain paper grades, and these vibrations can impair winding quality. To minimize the disruptive effect of vibrations during the winding process, the production speed and accelerations rates are reduced below the maximum capability of the winder.

The Solution
With SmoothRun hydropneumatic damping bearings from Voith, the vibrations can be effectively reduced even at high speeds, allowing the equipment to operate at consistently high production speeds. At the same time, SmoothRun improves the winding results and reduces the overall mechanical stress on the machine.

Eliminating Bottlenecks through Capacity Upgrades
Papier- und Kartonfabrik Varel (PKV) based in Varel in Lower Saxony, Germany produces high-quality corrugating medium and testliner on its PM 5. Until now, the existing VariFlex M had to be run at a lower speed when producing paper grades sensitive to vibrations. As a result, the winder could barely keep up with the production of the paper machine.

The purpose of the hydropneumatic damping bearings is to allow the winder to be operated at the maximum speed.

“Following commissioning of the new bearing system we were able to reduce vibrations for all paper grades and increase speeds,” explained Michael Wolff, Line Manager Equipment at PK Varel. “We are currently optimizing the settings of the bearing system with intensive support from Voith.”

“Following this optimization phase we assume that the speed of the winder can be increased. While further enhancements together with Voith are being made the winder can keep pace with the production of the PM 5,” Wolff added.

Voith noted that it is helping the company achieve this goal by providing intensive support, e.g. by performing vibration measurements.

Wide Range of Winder Upgrades
Voith offers a wide selection of upgrades enabling existing winders to be specifically adapted to today’s requirements. For further information have a look at http://voith.com/winder-upgrades.

About Papier- u. Kartonfabrik Varel
Papier- u. Kartonfabrik Varel is a family business with about 540 employees. The company produces cardboard and corrugated board from recovered paper. The mill has an annual production capacity of over 850,000 tonnes on four modern production lines.
The FabriCare™ ECOfficiency design uses high-pressure needle jets to clean the paper side of the fabric directly on a roll. The needle jet has the highest cleaning capacity while using low cleaning pressure and low water consumption. The rebound of the water jet from the fabric and roll surface carries the released contamination into the cleaning head. The vacuum created directly inside the head transports the debris further to the save-all pan.

- No moving parts on the head = low maintenance.
- Roll specific radius to keep the cleaning head to fabric distance as small as possible = high vacuum level and efficient discharge of impurities.
- Needle jet consumption of water and energy both very low.
- Vacuum produced by using low amount of mill air supply - no need for additional evacuation sources like vacuum pumps or regenerative blowers in combination with a water separator.
- The application prescribes the quantity and size of the nozzles – variable adaption.
- The FabriCare™ design does not require a suction hose inside the beam to avoid clogging.
Kemira TCM (Total Chemistry Management) is a system that enables pulp and paper makers to improve operational efficiency and save costs through the optimized use of chemicals. With this strong partnership you get a full range of chemicals from a single supplier and benefit from the best-in-class application know-how and technical service.

In addition, we provide you with direct access to our smart process management technologies and the latest innovations from Kemira R&D.

Let's work together to build value into paper.

tcm.kemira.com