ADVANCED TISSUE PROCESS

Does the Through Air Drying process really use more energy?

Repulping Paper with High Wet-Strength

AF&PA Sustainability Awards
Gain—and retain—Kraft pulp brightness with Vybrant enzymatic technologies from Buckman

**Forget ClO₂ limitations**
Vybrant 700 series pre-bleach enzymatic technology works to make Kraft fibers more bleachable, so your mill can achieve a higher final brightness without additional stages or equipment and with far less chlorine dioxide, reducing costs and environmental impact.

**Stop reversion**
Vybrant 900 series post-bleach enzymatic technology safely removes chromophores in bleached pulp to help you reach your brightness targets and significantly reduce reversion, so can you reduce or even eliminate the expense of optical brighteners and other bleaching chemicals.

**Learn more**
For more information about Vybrant, contact your Buckman representative or visit buckman.com.
Correct felt conditioning through properly designed felt suction boxes is a significant factor for a paper machine’s press performance. pressMasterflex allows for adjustment of the open area for new and matured felts. When paired with vacuum control, this provides optimal felt performance at the lowest energy cost. Visit www.ibs-ppg.com for more information.

Your benefit:

- Improved felt-conditioning
- Improved start-up performance with new press felts
- Suction area regulation possible
- Retrofit for existing pressMASTER
- Stable dewatering conditions over felt lifetime

safetyMASTER™

Put safety first when monitoring the press section felt condition on a running machine. With the operator now safely outside the machine, the IBS safetyMASTER™ is the optimal solution. For more information on how safetyMASTER™ and pressMASTER can increase safety and efficiency on your machine, please visit our website at: www.ibs-america.com
You may remember the news back in June of 2014 when Virginia’s former Governor, Terry McAuliffe, announced that Tranlin, Inc., the U.S. subsidiary of Shandong Tranlin Paper Co., Ltd., planned to invest $2 billion over five years to establish its first U.S. “advanced” manufacturing operation in Chesterfield County (Virginia). At that time, “the investment represents the largest Chinese investment and job creation project in Virginia history and is the largest Chinese greenfield economic development project in the United States,” the Governor’s office stated.

The mega-project included a pulp and paper mill that would utilize Shandong Tranlin’s proprietary technology to produce tree-free, natural color, straw fiber tissue products made exclusively from agricultural field waste such as wheat straw and corn stalks. The project also included a production process to convert the mill’s black liquor into organic humus-based fertilizer products.

A little over a year after that initial announcement, everything still seemed fine as Tranlin in October of 2015 held a groundbreaking ceremony with local officials. But the promised eco-friendly tissue mill and fertilizer plant, which was expected to generate more than 2,000 direct jobs and had yet to acquire the largest, 650-acre tract of land needed to build the massive paper mill complex. By March of 2017, Jerry Zhiyuan Peng, Tranlin’s U.S. CEO, stepped down.

In May of 2017, Tranlin announced that the project would be delayed due to its parent company’s “unexpected success” with its tree-free pulping process at one of its mills in China and more time would be needed before bringing it to Virginia.

The beginning of the end came about in late-2017 when Tranlin missed payment deadlines on the $5 million grant money from the state. In January 2018, the Virginia Economic Development Partnership’s (VEDP) board of directors voted to transfer the property’s title to VEDP. Of the $5 million borrowed from the state of Virginia, Tranlin owes $4.85 million plus interest.

“The company has missed every promised deadline to repay its debt to Virginia,” stated Stephen Moret, President and CEO of VEDP in an email to the Chesterfield Observer. “We have little faith in the company’s representations at this point.”

In the Nov/Dec. 2014 issue of PaperAge, my Editor’s Note took a skeptical view on Tranlin’s mill project. From the availability of raw materials to an undisclosed pulping process to a foreign company’s ability to maneuver and meet stringent federal and state permitting requirements.

This isn’t an ‘I told you so’ moment, and I take no satisfaction in the demise of Tranlin’s project. I just keep asking, “How did this happen?”
FEATURES

20 Does the Through Air Drying Tissue Process Really Use More Energy?
TAD (Through Air Drying) makes up most of the data available for advanced tissue processes. However, do ATMOS, eTAD, NTT, or QRT have better energy efficiency than TAD?

24 Repulping Paper with High Wet-Strength
A new eco-friendly wet-strength repulping aid based on sodium percarbonate chemistry demonstrates economic benefits to tissue makers.

COLUMNS

18 AF&PA Sustainability Awards
AF&PA recently honored five member companies for their commitment to sustainability. Supporting the Better Practices, Better Planet 2020 initiative, the awards are designed to recognize exemplary sustainability successes in the paper and wood products manufacturing industry.

DEPARTMENTS

4 Editor’s Note
6 Industry News
15 Of Interest
Sofidel has opened a 280-acre greenfield tissue mill — its first integrated paper mill built from the ground up in the U.S. — in Circleville, Ohio. The new plant produces toilet paper, napkins and paper towels.

16 People
17 Calendar

26 Recovered Paper – Export Quality
The Recycling Association and CICC London launch export quality control scheme to meet Chinese paper export requirements.

30 Supplier Technology Spotlights
ESSCO provides insight into the factors that drive doctor design, and emphasizes that proper design and manufacturing procedures are crucial to successful installation, start-up, and ongoing performance.

SERVICES

29 Classified Ads
29 Index of Advertisers
Catalyst Paper Corporation announced on Oct. 9 that Paper Excellence Canada Holdings Corporation and Catalyst have entered into an agreement under which Paper Excellence has agreed to acquire all of the issued and outstanding shares of Catalyst.

Financial terms of the deal were not disclosed.

The deal includes Catalyst’s three mills located in Crofton, Port Alberni and Powell River, its Surrey distribution centre, and headquarters in Richmond, British Columbia, Canada.

“When complete, this transaction will benefit all of our stakeholders, including our customers, employees, suppliers, the communities where we operate, and BC’s pulp and paper and forest products industries,” said Ned Dwyer, President and CEO of Catalyst.

With headquarters in British Columbia, Paper Excellence has close to two million tonnes of pulp production capacity (NBSK and BCTMP) through five operating mills in Canada and two mills in France. PEC’s products are exported to Asia.

“Paper Excellence is evolving into a major player within Canada’s forest industry,” said Brian Baarda, CEO of Paper Excellence. “This announcement is a continued step towards Paper Excellence’s long-term growth plan within Canada and the province.”

Catalyst Mills

- The Crofton mill is an integrated pulp and paper mill with two operating paper machines and two pulp machines. The mill has the capacity to produce 302,000 tonnes per year of newsprint and 336,000 tonnes per year of NBSK pulp.
- The Port Alberni mill has two paper machines and produces directory and lightweight coated paper. The mill has a production capacity of 340,000 tonnes per year of specialty papers.
- The Powell River mill has two paper machines and produces newsprint and uncoated mechanical specialty papers. The mill has a production capacity of 350,000 tonnes per years of specialty papers.

The transaction is expected to close by the end of the fourth quarter 2018 or early first quarter 2019.
ADVANCING STRENGTH FOR PAPER & PACKAGING

Ultis™ Dry² Strength Technology

A sustainable solution employing a dry strength in dry form to improve your Packaging Products, Cost of Operation and Supply Chain Sustainability.

- Improve Strength quality specifications and on-machine efficiency
- Improve logistics and reduce raw material variability
- Fiber and Energy Savings due to light weighting
- Improve effectiveness of other Additives with Increased Retention Levels
Mercer to Acquire Daishowa-Marubeni for $359.2 Million

Mercer International Inc. on Oct. 4 announced that it has entered into an agreement with Marubeni Corporation, Nippon Paper Industries Co., Ltd., and Daishowa North America Corporation to acquire all of the issued and outstanding shares of Daishowa-Marubeni International (DMI) for consideration of $359.2 million (C$465 million), which includes minimum working capital of $85.7 million (C$111 million).

DMI owns 100% of a bleached kraft pulp mill in Peace River, Alberta and has a 50% interest in the Cariboo Pulp and Paper Company, a joint venture which operates a bleached kraft pulp mill in Quesnel, British Columbia.

As a result of this transaction, Mercer’s annual production capacity for pulp will increase by approximately 41% to 2.2 million ADMTs, and surplus energy will increase by approximately 8% to 890,000 MWhs.

Further, the acquisition of DMI will add NBHK pulp to Mercer’s current product mix as well as provide the company with an expanded market presence in Asia.

“The proposed acquisition significantly increases our current operations in Canada and, in particular, will complement Mercer’s Celgar pulp mill in British Columbia,” said David M. Gandossi, CEO of Mercer International. “The acquisition will additionally strengthen our presence in Asia, which we have identified as an important strategic area, and it will expand our product offering to include northern bleached hardwood kraft pulp, a product that we believe is following the same tightening market path that NBSK has experienced during the past few years.”

DMI also holds 20-year term renewable governmental Forest Management Agreements and Deciduous Timber Allocations in Alberta with an Annual Allowable Cut of approximately 2.4 million cubic meters of hardwood and 400,000 cubic meters of softwood.

The transaction is subject to customary closing conditions, including receipt of requisite regulatory anti-trust approvals. In connection therewith, Mercer has arranged a fully committed financing in the amount of US$350 million to finance the acquisition.

The transaction is expected to close in the fourth quarter of 2018.

ND Paper to Invest $300 Million in Capital Upgrades at WI and ME Mills

ND Paper will invest $300 million in its mills in Wisconsin and Maine in the next two years, sparking a transformation and new trajectory for ND Paper, the newly-formed U.S.-based subsidiary of Nine Dragons Paper (Holdings) Limited, the largest containerboard producer in Asia.

After completing the purchase of the Rumford, Maine and Biron, Wisconsin pulp and paper mills in June 2018, ND Paper immediately executed a strategic review of investment options to further enhance the long-term sustainability of these facilities. The review has led the company to a multi-faceted investment strategy that diversifies the mills’ product mix, increases their overall production capacity, and fundamentally improves their viability for the future.

In Maine, the Rumford Division will receive an injection of $111 million to finance two significant projects: (1) construction of a greenfield recycled pulp facility. The new pulp line will add approximately 1,200 air dried metric tonnes per day of manufacturing capacity to the site; (2) installation of a shoe press on the R15 paper machine, which increases the machine’s production capacity by approximately 20 percent.

In Wisconsin, the Biron Division will commission several major projects at a cost of $189 million. Planned projects include: (1) conversion of the B25 paper machine to containerboard products; (2) construction of a two-line greenfield recycled pulp facility. These pulp lines will add approximately 1,900 air dried metric tonne per day pulp dryer of manufacturing capacity to the site; and (3) construction of a water treatment and fiber recovery plant, a package boiler to provide energy, storage facilities for raw materials and a finished good warehouse.

“We invest for the long-term,” said Ken Liu, ND Paper’s CEO. “While strongly supporting our global fiber strategy, this suite of projects also dramatically improves the sustainability of these historic mills. Not only are we developing a U.S.-based containerboard business, we’re also reinforcing our commitment to existing printing and writing and specialty customers with world-class, cost-competitive assets.”
More Choices
- Representing North America’s leading industrial brands
- Access to over 7.2 million SKUs
- Convenient and simple ways to order via mobile, desktop, toll-free calling, or one of our locations

More Expertise
- More than 1,700 experienced account representatives
- Over 200 field product specialists available to solve your toughest challenges
- Unmatched technical and application support

More Solutions
- Local parts and supplies inventory for fast turnaround
- Repair and fabrication technicians
- Account representatives and hundreds of branches located throughout North America for your convenience

Expect More With Motion.

©2018 Motion Industries, Inc.
Resolute Forest Products on Oct. 2 announced that it has entered into a definitive asset purchase agreement with New-Indy Containerboard, LLC for the sale of its Catawba, South Carolina, pulp and paper mill, for a total purchase price of about US$300 million, consisting of $260 million in cash, subject to customary closing adjustments, and the assumption of approximately $40 million of balance sheet liabilities, largely net pension benefit obligations.

Catawba’s operation includes a kraft mill and a pulp dryer to produce market pulp, a thermomechanical pulp mill, as well as a lightweight coated paper machine. The facility currently employs 460 people.

In June of 2017, Resolute idled one of the mill’s two specialty paper machines, PM 2, which removed about 193,000 metric tons per year of papermaking capacity. The mill’s other machine, PM 3, produces lightweight coated paper grades.

Under the terms of the asset purchase agreement, New-Indy will offer employment to Catawba employees effective upon closing of the transaction, which is expected at or around year-end.

“This transaction will allow us to realize significant value for an asset whose greatest earnings potential lies with the investment in and diversification of the mill’s operations, as proposed by New-Indy,” said Yves Laflamme, President and CEO of Resolute.

In a press release, New-Indy said, “Going forward, we are excited about the prospects for this mill to produce a diverse array of products from existing offerings like market pulp, lightweight coated papers and specialty grades, to new offerings of high-quality, virgin, ultralightweight linerboard. The Catawba Mill will position New-Indy to fill a significant void in the domestic and international markets for these products.”

New-Indy is an independent manufacturer and supplier of recycled containerboard to the corrugated box industry. The company was formed in 2012 as a joint venture by The Kraft Group, LLC and Schwarz Partners, LP.

Private equity firm Lindsay Goldberg on Oct. 31 completed the acquisition of Glatfelter’s Specialty Papers Business Unit and rebranded it as Pixelle Specialty Solutions.

Pixelle Specialty Solutions is one of the largest specialty paper producers in North America. It maintains industry-leading positions in food contact papers, high speed inkjet papers, release liner, carbonless forms, envelopes, greeting cards, trade book paper, and playing cards.

The specialty paper producer operates two integrated mills: one in Spring Grove, Pennsylvania and the other in Chillicothe, Ohio. The business also operates paper converting operations in Fremont, Ohio and woodyard operations in Delmar, Maryland; Piketon, Ohio, and Washington, West Virginia.

Lindsay Goldberg affiliate partner Steve Klinger will serve as chairman of Pixelle Specialty Solutions, and Tim Hess will continue in his role as President.

“We are extremely excited by the opportunity to work with Pixelle to build on its great reputation with customers and strengthen its leading market position,” Klinger said. “The value we bring to Pixelle is our differentiated, customized approach to manufacturing.

“We are in an extremely competitive paper industry that requires mills to be efficient, productive, and low cost. We know how to drive operational efficiencies by engaging employees and simultaneously working safely and minimizing environmental footprints. We have already identified numerous investments to improve efficiency and productivity, and we are ready to begin executing,” Klinger concluded.

The Royal Group (TRG) on Nov. 1 announced the acquisition of Mid-Atlantic Packaging, a producer of custom packaging, corrugated boxes, display cases, and point-of-purchase displays. The company employs over 150 people and is based in Montgomeryville, Pennsylvania.

Terms of the deal were not disclosed.

The acquisition provides TRG with a manufacturing facility in the northeast corridor while complimenting TRG’s retail headquarters in Marlton, New Jersey. TRG Mid-Atlantic will be the 14th converting location for TRG and adds an array of equipment including a corrugator, three 7- Color Flexo/Die-cutters and multiple state-of-the-art gluers.

Mid-Atlantic will now operate under the name TRG Mid-Atlantic.
A champion in stability and capacity
FloWing segments

+ Significant capacity increase through patented wing-shaped design
+ Longer service life due to outstanding stability and rigidity
+ Consistently high filtrate quality
+ Minimal maintenance effort

20 years after the invention of the established BaglessPlus sectors, the breakthroughs continue. Disc filters achieve a new level of capacity thanks to the patented wing-shaped FloWing sectors. As an added bonus, FloWing is twice as strong compared to BaglessPlus.

voith.com/FloWing
OX Industries Acquires Carthage Specialty Paperboard Mill in New York

Ox Industries has acquired Carthage Specialty Paperboard located in Carthage, New York. The acquisition was finalized on October 25.

Ox Industries noted that Carthage Specialty Paperboard, Inc. filed for bankruptcy in February of 2018 and has been operating under financial pressure since that time. The mill is over 125 years old and produces various grades of uncoated recycled paperboard for industries such as pharmaceutical cap sealing, art mat board, ridged setup box, folding cartons, and protective packaging.

Kevin Hayward, President of Ox Industries, said, “Despite the difficult recent times, the mill’s equipment has great potential and the staff is knowledgeable and skilled in the industry. We are excited about this new opportunity as it expands our mill product offering and supports our vertically integrated mill system.”

Ox Industries has renamed the paper mill from Carthage Specialty Paperboard, Inc. to Ox Specialty Papers, LLC to fit in with the Ox suite of facilities.

Headquartered in Hanover, Pennsylvania, OX Industries is a vertically integrated manufacturer of 100% recycled paperboard, tubes & cores, and edge protective products.

Case Paper Opens New Converting and Distribution Facility in California

Case Paper announced that its California branch has moved into a new converting facility and office space in Rancho Cucamonga.

“Our former office in Arcadia, California was too small for our needs,” said Simon Schaffer, Chief Marketing Officer at Case Paper. “So we created a new, 103,250 sq. ft. converting and distribution center that can more efficiently serve the needs of all our West Coast customers.”

The installation of a new, Marquip twin-knife sheeter will provide stock custom-sized paper and board grades, and a new guillotine cutter will be able to trim folio sheet sizes down to smaller paper sizes. A slitter-rewinder will be installed over the coming months that will be able to trim rolls down to narrow widths.

Mondi Moves Forward with New Containerboard Machine Project

After obtaining the necessary permitting, Mondi is proceeding with an investment in a new 300,000 tonne per year kraft top white machine at Mondi SCP in Ruzomberok, Slovakia.

According to Mondi, the machine will produce a new and unique eco-friendly containerboard grade – kraft top white – which combines the strength, printability and appearance benefits of a white virgin fiber top layer with the economic advantages of a recycled fiber bottom layer.

Kraft top white will target the growing white top liner markets for applications such as shelf-ready packaging, point of sale displays, customized packaging, e-commerce, consumer durables and other specialized applications, Mondi said.

Mondi noted that a related pulp mill upgrade at the Ruzomberok mill is progressing according to plan with start-up expected in late 2019. This upgrade will debottleneck pulp production by 100,000 tonnes per year, which will be integrated into the containerboard production once the new machine ramps up.

The total project cost has been revised to EUR 340 million (up from EUR 310 million), as a result of refinements to the machine’s technical concept and higher construction costs since the project was initially scoped.

Start-up of the new machine is expected towards the end of 2020.

Mondi SCP in Ruzomberok is one of Mondi’s largest plants and is the biggest integrated mill producing paper and pulp in the Slovak Republic, with a production capacity of 560,000 tonnes of uncoated fine paper, 66,000 tonnes of packaging paper and 100,000 tonnes of market pulp. The mill operates 4 paper machines: PM 1, PM 16, PM 17, and PM 18.
EUROPE

Mayr-Melnhof to Acquire TANN Group for EUR 275 Million

A Mayr-Melnhof Packaging on Oct. 18 announced an agreement with the owners of TANN Group on the 100% acquisition of the Group, which has headquarters in Traun, Austria. The equity purchase price is approximately EUR 275 million.

Family-owned TANN Group develops and distributes tipping paper (paper used to wrap cigarette filters), which it produces by converting externally sourced fine paper. The company has eight production sites in seven countries with customers in 90 countries around the world.

According to Mayr-Melnhof, TANN Group, with 1,100 employees, has annual sales of about EUR 230 million.

Mayr-Melnhof Packaging expects to close the deal around the end of 2018 or beginning of 2019, pending the approval of the antitrust authorities.

Papierfabrik Palm to Invest EUR 500 Million in New Paper Machine Project

Papierfabrik Palm announced that it will invest EUR 500 million in a new containerboard machine at its Aalen-Neukochen paper mill in Aalen, southwest Germany. The mill site is also the location the head offices of the Palm Group and Papierfabrik Palm, along with a distribution center.

The paper machine project will replace the mill’s three existing machines with a new paper machine with a capacity of 750,000 tons per year of ‘corrugated case material.’ The investment also will provide for a new raw material and finished goods warehouse, a combined heat and power (CHP) plant and an effluent treatment facility.

The Aalen-Neukochen mill currently operates three paper machines: PM2 produces newsprint with a capacity of 90,000 tonnes per year; PM4 produces corrugated board and has a production capacity of 110,000 tonnes per year; and PM5, which also produces corrugated board, has a capacity of 150,000 tonnes per year.

The project will begin in 2019 with completion expected during 2022.

RUSSIA

Ilim Group to Invest USD One Billion at Its Pulp and Paper Mills in Russia

Ilim Group announced that it intends to invest a total of USD 1 billion at two of its three mills in Russia over the next four to five years.

At the Bratsk Mill, Ilim has slated some $700 million for a number of strategic projects, including the rebuild of the kraftlinerboard production and pulp line upgrade. The kraftliner rebuild will be completed by September 2019 and deliver 135,000 incremental tons of products per year. The hardwood pulp line rebuild will be completed in November 2020, and increase pulp output by additional 173,000 tons per year.

At the Ust-Ilimsk Mill, Ilim will spend about $300 million on a number of projects that will support a large-scale upgrade of the mill’s current pulp line that will increase its production capacity by 130,000 tons. In addition, Ilim will install a new kraftlinerboard production line with a capacity of 600,000 tons per year. As a result, by 2022, the Ust-Ilimsk Mill will acquire the status of ‘a million-ton mill’ with an annual capacity of 1.5 million tons.

“At present, our strategic project investments exceed USD 1 billion,” said Ilim’s CEO, Kseniia Sosnina. “We have entered an active stage of project implementation and we are keeping up the pace. Next year will be even more challenging. We will have to execute the second stage of the total upgrade of our mills and simultaneously start our ‘Big Ust-Ilimsk’ project.

“These projects will be executed without interrupting the operations, so we will focus on making sure that the construction work does not affect the mills’ current operation.

“Demand for both pulp and packaging products is growing. We are expecting record high financial results this year. This will give us an opportunity to invest, expand our production capacities, and keep growing,” Sosnina explained.

Sosnina pointed out that the key consumer of Ilim’s products produced by its Siberian mills is China. “In 2017, we delivered more than USD 1 billion worth of products to the Chinese market, and we are ready to move forward. Our key investment projects are aligned with what our customers need.”
Sun Paper subsidiary, Honghe Paper, has successfully started-up two Voith XcelLine paper machines, PM 36 and PM 37, at its Zoucheng site in China.

PM 36 produces low grammage, high grade testliner and PM 37 produces high quality corrugating medium. Both machines have an annual production capacity of 400,000 metric tons.

Together with the already running Voith XcelLine packaging paper machines PM 31 and PM 32, Honghe Paper will achieve an overall annual production capacity of 1.6 million tons.

Founded in 1982, Shandong Sun Paper Co., Ltd is a leading paper producer in China. The Group’s annual pulp and paper production capacity is more than 7.5 million tons.

**GLV**

Global solutions provider for the pulp and paper industry, GLV, has announced the rebranding of its formal company name and logo. Formerly known as GL&V, the new brand reflects GLV’s venerable history while aligning the company for long-term success in pulp and paper production.

“GLV equipment, parts and service bring together the people and brands that mills have trusted for decades, with the latest innovations that impact pulp and paper today,” explains Drew Humphries, President of GLV. “With projects and customers all over the world, we are committed to growing as ‘one GLV’ so that we can fulfill our mission to deliver long-term, sustainable solutions that create peace of mind forever. That is the promise we make to our customers.”

The GLV story is rooted in innovation, expansion and continuous improvement. Founded in Quebec, Canada in 1975, GL&V (Groupe Laperriere & Verreault) grew through strategic partnerships, acquisitions and new developments in equipment manufacturing. Today, GLV is pioneering technology that redefines efficiency in pulp and paper making with inventive products such as the Coru-Lok washer deck attachment system, MagTrim™ slitter positioning system and the DF-6000 Deflaker.

GLV’s new look represents a renewed, unified and global approach to delivering a top-of-the-line experience for the current and future generations of pulp and paper customers. The phased roll out of the reimagined GLV brand will be completed by December 31, 2018. All references to GL&V will be replaced worldwide effective in 2019.

**Andritz Successfully Closes Its Acquisition of Xerium Technologies**

Andritz in mid-October closed its previously announced acquisition of Xerium Technologies.

In June of this year, Andritz announced that it signed a merger agreement to acquire Xerium for $13.50 per share in cash — a deal valued at approximately $833 million, including net financial liabilities of approximately $590 million.

Xerium, headquartered in Youngsville, North Carolina, 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.

**AkzoNobel Specialty Chemicals is Now Nouryon**

The former AkzoNobel Specialty Chemicals on October 9 was relaunched as Nouryon. The move follows the recent acquisition of the business by The Carlyle Group and GIC and marks the company’s transition to becoming an independent, global specialty chemicals producer.

“Launching our new company is a significant milestone to add to our proud history and we are all looking forward to this exciting new chapter,” said new CEO Charles W. Shaver. “We are ready to leverage our experience, global presence, and strong company culture to unleash our full potential as an independent company,” he said.

Nouryon’s Pulp and Performance Chemicals division includes brands such as Eka, Expancel, Kromasil, and Levasil Colloidal Silica.
Italian tissue paper manufacturer Sofidel on Oct. 3 opened a 280-acre greenfield tissue mill — its first integrated paper mill built from the ground up in the U.S. — in Circleville, Ohio. The new plant produces toilet paper, napkins and paper towels.

A grand opening ceremony marked the major milestone for Sofidel and its growth in the U.S., the world’s biggest market for tissue paper consumption per capita.

“The United States is a crucial market for us and is where we intend to grow,” said Luigi Lazzareschi, CEO of the Sofidel Group, which owns subsidiaries in 13 countries, including Sofidel America. “This plant will help us fuel our growth significantly and further our commitment to sustainable, environmentally responsible development. We are extremely proud of this plant and look forward to being an important part of the Circleville community for decades to come.”

Sofidel has invested about $400 million in the site and, once running at full capacity, the facility will employ approximately 700 people.

The Circleville plant is an integrated facility that incorporates a paper mill, a converting plant, and a state-of-the-art warehousing facility. The plant has a total production capacity of 140,000 tons per year.

The facility is equipped with two Advantage New Tissue Technology (NTT) 200 paper machines, manufactured by Valmet. Advantage NTT 200 technology allows the production of both standard tissue and textured paper and will enable Sofidel to further increase the quality of its products, reduce water usage, and recycle heat to power driers and fuel the plant. Each machine can produce 2,000 meters of 5.5-meter-wide paper sheets per minute.

The plant has 10 lines for producing the finished products, including three Constellation lines manufactured by Fabio Perini, with advanced reeling technology that preserves the product’s softness while ensuring uniform sheet separation from start to finish of every roll.

The plant features a new system for recovering heat generated by turbines. The heat will be conveyed through extractor hoods and used to dry the rolls of paper, then produce steam. The system will supply almost all the energy needed to dry the paper and, under certain operating conditions, will power the entire machine.

In addition, an ultramodern automated system transfers paper reels from the paper mill to the converting lines using laser guided vehicles (LGVs). An automated Smart Store warehouse is capable of handling more than 50,000 pallets of finished product, creating a space savings of up to 40 percent.

The Sofidel Group is one of the leading tissue manufacturers worldwide with more than 6,000 employees and a production capacity of over one million tonnes per year (1,098,000 tonnes in 2017). Since expanding to the United States in 2012, Sofidel now has operations in seven states: Florida, Mississippi, Nevada, Ohio, Oklahoma, Pennsylvania and Wisconsin.
Athen announced that Jeff Payne has joined the company as Vice President of Packaging. Payne has been in the paper and packaging business for nearly 20 years, and most recently served as Packaging Sales Manager at Veritiv Corporation.

BillerudKorsnäs has appointed Ivar Vatne as Chief Financial Officer. Vatne will also be part of BillerudKorsnäs Group Management and will take up his post by June 1, 2019 at the latest. For the past three years, Vatne has been employed in the Arla Group, where he has served as CFO of Arla Foods Sweden AB.

Clearwater Paper recently named Steve Bowden as Senior Vice President and General Manager of the Pulp and Paperboard Division. Before joining Clearwater Paper, Bowden was the President of the America’s food and beverage division for three years. He also held key leadership roles at International Paper, including the executive vice president of marketing and strategy for xpedx, formally an International Paper division, and mill manager for IP’s Augusta, Georgia, coated paperboard facility. Bowden received his Bachelor of Science in Chemical Engineering from Auburn University and completed executive programs at Louisiana State University and the Kellogg School of Management at Northwestern University.

International Paper announced the retirement of C. Cato Ealy, Senior Vice President, Corporate Development, after 26 years with the company. His retirement will be effective December 31, 2018. Mr. Ealy has been responsible for the company’s acquisitions and divestitures. Most notably, he played a key role in developing and executing the company’s transformation plan.

Sappi North America announced the appointment of Alexander “Sandy” Taft as Director of Sustainability. Taft joins Sappi from National Grid, where he was most recently the Director of Environmental and Sustainability Policy for its U.S. subsidiary. Taft will also join the Two Sides North America Board of Directors as a member this fall.

ERIKS North America has appointed Shawn Courtney as its new President and Chief Executive Officer, effective Nov. 1, 2018. Most recently Courtney served as Regional Product Director of ERIKS North America and also is President of ERIKS Seals and Plastics.

Kemira has appointed Rasmus Valanko as Director, Corporate Responsibility, effective Feb. 1, 2019. Currently, Rasmus is the Director of Climate and Energy at the World Business Council for Sustainable Development (WBCSD).

Luigi Lazzareschi, CEO of Sofidel (Lucca, Italy), was inducted in the Paper International Hall of Fame in Appleton, Wisconsin on Oct. 4. Lazzareschi was selected for his entrepreneur and leadership skills within a niche market that has shown tremendous growth. Lazzareschi joined Sofidel in 1987, and in his more than 30 years with Sofidel, and as current CEO of the Sofidel group, Lazzareschi led expansion from a small, Italian company to a multi-national corporation with 18 companies throughout Europe and the United States. By 2017, total production exceeded one million tonnes of paper, and the company employed more than 6,000 people.

Brad Perry, Director of Sales, Merchant & Converting for Boise Inc. has been selected as the recipient of the 2018 Peyton Shaner Award by the Association of Independent Printing Paper Merchants (AIPPM). Perry joined Boise in 1990 as a sales representative in the merchant channel and has held a number of positions of increasing responsibility including Midwest Regional Sales Manager and Product Manager, facility manager of Boise’s Vancouver Specialty converting plant, and General Manager of the Salem Corrugated plant.

The Peyton Shaner Award was established to commemorate the founder of the Association of Independent Printing Paper Merchants. The recipient is recognized as someone who has shared Shaner’s passion for our industry.
FEBRUARY 4-7, 2019
PaperWeek Canada
PAPTAC
Fairmont Queen Elizabeth Hotel
Montreal, Canada
www.paperweekcanada.ca

FEBRUARY 5, 2019
Converters Expo South
BNP Media Events
Charlotte Convention Center
Charlotte, North Carolina, USA
www.packagingstrategies.com/
converters-expo-south

FEBRUARY 20-22, 2019
ASPI 2019 Spring Meeting
Assoc. of Suppliers to the Paper Industry
The Ritz-Carton
Sarasota, Florida, USA
www.aspinet.org

FEBRUARY 27 - MARCH 2, 2019
AIPPM Annual Meeting
Association of Independent Printing Paper
Merchants (AIPPM)
The Phoenician
Scottsdale, Arizona, USA
www.aippm.com

MARCH 18-20, 2019
International Biomass Conference & Expo
BBI International
Savannah International Trade & Convention
Center
Savannah, Georgia, USA
www.biomassconference.com

MARCH 24-26, 2019
Paper2019
AF&PA and NPTA
Chicago, Illinois, USA
www.paper2019.com

MARCH 25-27, 2019
Tissue World Milan
UBM
Fieramilanocity Hall 3
Milan, Italy
www.tissueworld.com/milan

APRIL 1-3, 2019
AICC 2019 Spring Meeting
Independent Packaging Association (AICC)
Trump National Doral Resort
Miami, Florida, USA
Contact: Laura Mihalick
Lmihalick@aiccbox.org
www.aiccbox.org

APRIL 3-5, 2019
PPC Spring Outlook and Strategies
Conference
Paperboard Packaging Council
Coronado Island Marriott Resort and Spa
Coronado, California, USA
www.paperbox.org/spring

MAY 5-7, 2019
International Pulp Week
Pulp and Products Council
The Hyatt Regency Hotel
Vancouver, British Columbia, Canada
internationalpulpweek.com

MAY 5-8, 2019
PaperCon 2019
TAPPI
Indiana Convention Center
Indianapolis, Indiana, USA
papercon.org

JUNE 25-27, 2019
Zellcheming Expo 2019
Zellcheming Expo 2019
Messe Frankfurt GmbH
Messe Frankfurt, Hall 4, level 1
Frankfurt, Germany
zex.mesago.com/events/

Good things come from great paper.
AND GREAT PAPER COMES FROM GREAT DOCTOR BLADES.

At Essco, our best-in-class doctor blades, holders and maintenance programs help some of the world’s largest and fastest paper machines deliver consistent, trouble-free performance. Which means more uptime, greater profitability—and the kind of quality that makes for truly inspiring paper.

920.494.3480  800.835.7134  esscoincorporated.com
AF&PA recently honored five member companies for their commitment to sustainability through our 2018 AF&PA Sustainability Awards. Supporting the Better Practices, Better Planet 2020 initiative, the awards are designed to recognize exemplary sustainability successes in the paper and wood products manufacturing industry.

A group of external sustainability experts serve as judges for member-submitted applications. The program recognizes exemplary projects in two primary categories: Leadership in Sustainability awards recognize projects that support the Better Practices, Better Planet 2020 sustainability goals; and the Innovation in Sustainability award is reserved for projects that merit recognition for their contribution to sustainable business practices, rather than a specific goal.

Clearwater Paper was recognized with the Leadership in Sustainability Award for Energy Efficiency/Greenhouse Gas Reduction for their Lewiston Pulp Optimization Project. The company replaced an old Kraft batch digester system at their Lewiston, Idaho pulp mill with a continuous digester that significantly reduced the mill’s reliance on fossil fuels. Clearwater Paper saved more than 100,000 pounds per hour of steam compared to the previous batch process — an estimated reduction of 150,000 tons of greenhouse gas (GHG) emissions per year. Their reduced energy needs are expected to avoid the same amount of GHG emissions per year going forward.

The Paper Recovery for Recycling Leadership in Sustainability Award recognized WestRock for their Advancing Foodservice Packaging Recycling project. WestRock demonstrated technical recyclability of polycoated foodservice packaging via a trial at their St. Paul, Minnesota mill. Then, their Chattanooga Recycling Facility partnered with the Foodservice Packaging Institute and the City of Chattanooga to add foodservice packaging to the residential curbside collection. Proving that foodservice packaging is recyclable prevents customers from switching to plastic alternatives and reduces the likelihood of it being subject to government-imposed extended producer responsibility measures.

Resolute Forest Products was awarded a Leadership in Sustainability Award for Safety for their Proactive Approach to Workplace Safety project. Resolute introduced a safety...
audit process focused on individual accountability, where employees are accountable for working safely at all times so as not to endanger their own health and safety or that of their co-workers. Individual accountability is achieved through the implementation of three components: pre-task risk analysis; proactive near-miss reports; and safety committee meetings. The project led 26 of the company’s operations to finish 2017 without a single recordable injury.

American Eagle Paper Mills also was recognized with a Leadership in Sustainability Award for Safety for their Shifting to a Culture of Safety project. American Eagle designated safety their main area of focus for 2017. At their Tyrone, Pennsylvania mill, the company identified issues and inadequacies with their equipment guards; upped communication at all levels; and empowered employees to stop individuals who are creating potential safety incidents. In January 2018, they completed 365 days without a lost-time injury—a record achievement in the history of the mill.

The Leadership in Sustainability Award for Water was awarded to Domtar for their Hawesville Water Conservation Project. Domtar’s mill in Hawesville, Kentucky mill made 17 upgrades, repairs and process changes that conserved vital water resources for their operations and the mill’s surrounding ecosystem. These small, relatively inexpensive projects amounted to collective water savings of nearly 2,200 gallons per minute or 3.2 million gallons per day. The mill’s total water intake decreased 34 percent, contributing to cost savings to pump, treat and heat process water, boiler feed water and effluent.

This year’s Innovation in Sustainability Award was given to WestRock for developing TechniFlute™. TechniFlute™ is a cost-effective alternative to conventional corrugating medium used in the manufacture of corrugated containers. Through a proprietary lamination process, it uses multiple lightweight papers to produce a corrugating medium with high unit strength and up to 20–40 percent fiber savings. Due to its lower basis weight, TechniFlute™ allows for greater transportation efficiency and reduced associated greenhouse gas emissions.

AF&PA’s 2018 Sustainability Report shows that the industry continues to make significant, measurable progress toward achieving the Better Practices, Better Planet 2020 sustainability goals. These winning projects are prime examples of how our members are improving their business practices and contributing to these advancements and we applaud their success.

For more information about the 2018 AF&PA Sustainability Award winners, visit afandpa.org/sustainability.
Tissue making – through air drying

Does the Through Air Drying Tissue Process Really Use More Energy?

TAD (Through Air Drying) makes up most of the data available for advanced tissue processes. However, do ATMOS, eTAD, NTT, or QRT have better energy efficiency than TAD?

By Bruce Janda, Fisher International

Tissue machine energy consumption triggers a frequent topic of debate, especially between European and North American tissue engineers. There is general agreement about the tactics and best practices to operate any given machine, but the strategic questions of process and product design rarely achieve consensus.

The large percentage of advanced tissue processes in North America tends to elicit negative comments when considered regarding energy costs and carbon footprint, but North American consumers seem to crave the performance of advanced tissue products.

The most common advanced tissue process is TAD (Through Air Drying), and it is well known for the increased energy demand per ton. Newer advanced tissue making processes that also create a structured sheet have been introduced, such as
ATMOS, NTT, eTAD, and QRT, with the expectation that they will reduce energy demand per ton.

Tissue Machine Energy Cost per Ton

Figure 1 takes a high-level look at average regional energy costs in USD per FMT (Finished Metric Ton) for just the tissue machine energy. The width of the bars indicates the relative production volume for each region. This comparison is relevant for most business decisions, but it doesn’t allow comparisons or conclusions as to energy efficiency. North America enjoys plentiful and low-cost natural gas that makes its energy efficiency appear higher than expected. That is probably a key reason that TAD has become so popular.

Tissue Machine Energy Consumption per Ton

The FisherSolve™ database offers an opportunity to separate these issues out and look at machine configuration and product design independent of local pricing. Figure 2 shows the same regional data expressed as gigajoules (GJ) per ton. Electric power consumption as MWh was converted to equivalent GJ/FMT to allow summation of fuel and power in one chart. Most regions require about four gigajoules of electrical energy per finished metric ton, but North America stands out with five GJ/FMT. The differences in heat energy are more substantial as Europe consumes 11.4 GJ/FMT, and North America consumes about 16 GJ per FMT.

A benchmark from the literature¹ suggests a well-run modern design tissue machine should require 10.44 to 12.60 GJ/FMT. Most of the world is running higher than that target in practice, and North America is consuming about twice as much as the benchmark. This striking difference in energy consumption between regions requires further exploration.

Of course, consumers don’t buy and use tissue by the ton, and this tends to complicate the discussion. Energy costs for electric power and fuel vary between and within regions making the cost per ton comparisons less useful for understanding the effects of the machine or product design. Pulp cost varies depending on site location, furnish type, and mill integration. This also clouds energy use comparisons between different products and processes operating under different fiber costs.

North American Tissue Production

Almost 40% of North American tissue production uses the advanced structured processes. TAD is still the predominant type of advanced process, and we know that the drying load imposed by no or limited mechanical dewatering has an energy cost. Vacuum dewatering before the TAD requires several times the electrical energy of conventionally pressed tissue. The air flow supply fans needed in the TAD section are another significant energy draw. The incremental cost of TAD electricity can be higher than the TAD fuel gas cost depending on the local pricing.

Alternative advanced technologies such as ATMOS, NTT, eTAD, and QRT also avoid excess direct pressing to maintain bulk to various degrees. This results in somewhat higher water loads per finished ton to the dryer in most cases.
These processes also create a structured three-dimensional pattern in the sheet that impedes good Yankee dryer contact and drying rates. Again, the increased percentage of structured tissue production in North America tends to skew the energy consumption comparisons to other regions.

FisherSolve data plotted in the Figure 3 shows that electrical energy is slightly higher for the consumer or retail grades averaged for all tissue technologies in North America. This is expected as the consumer grades tend to place a higher value on softness and tend to overdry the sheet to get more effective creping versus most commercial or away-from-home products. Specialty grades drying heat energy is low due to less or no creping and much slower speeds resulting in lower intensity.

Figures 4 and 5 provide a direct comparison of North American tissue production energy consumption per ton of the finished products. The consumer tissue grade was selected as it is the most common grade with a large number of data points for both conventional and advanced tissue technology.

The first chart is for advanced structured tissue technology showing the increased energy consumption for each product format. The second chart is for conventional wet pressed technology and shows much lower electrical and heat energy values per ton as expected. Note that the scales on both charts are the same to allow direct visual comparisons. This confirms the original debate point that advanced tissue technology is an energy hog (at least per ton).

Tissue Machine Costs per Case

We’ve seen that energy consumption per ton of consumer or retail advanced tissue is significantly higher than a conventional tissue of the same grade and product format. However, this isn’t the end of the story. People buy and use tissue products by the sheet and not by the ton.

FisherSolve offers a better way to compare the tissue making processes than energy consumption per FMT. The Statistical Case Cost feature allows the basis weight of finished products to be adjusted to reflect the higher bulk and typical lower basis weight of advanced structured tissue products as the tissue is packaged and delivered a case of product.

Figure 6 shows the cash manufacturing cost per case for conventional wet pressed tissue products in
North America and Europe by grade (Commercial and Consumer). North America enjoys a cost advantage over Europe as expected due to lower local energy and fiber costs.

Advanced Technology structured tissue Statistical Case Costs shown in Figure 7 are lower than conventional in the previous chart for all grades in both Europe and North America, indicating an advantage in both costs environments. A casual retail store shelf audit also indicates that the advanced technology tissue products enjoy a higher price, although the preference appears much stronger in North America.

This is probably due to both cultural and product design differences between these markets. This is why we see such a keen focus on advanced tissue technology in spite of the apparent counterintuitive higher energy consumption per ton. Each product format and application is different, and markets are different due to cultural factors. However, the advanced technology must be considered in specific situations and not in blanket averages per ton.

TAD tissue processes always use more energy per ton of tissue produced. They may use less energy per sheet or consumer use depending on the product format and consumer application. The product furnish cost determines the overall economic impact as extra fiber can be used in a conventional dry creped tissue process to improve consumer performance.

Opportunities for Further Study

• This analysis used regional averages for simplicity. Each specific location, equipment design, and product configuration must be considered for best decisions for tissue production. The FisherSolve platform provides a powerful tool for exploring the details for optimal decision making.

• TAD makes up most of the data available for advanced tissue processes. Do ATMOS, eTAD, NTT, or QRT have better energy efficiency than TAD? There is no simple answer as we know from TAD technology that structured tissue products have reduced Yankee dryer contact, reducing overall drying capacity. What is the energy efficiency of the non-TAD advanced structured processes?

• A direct comparison of similar product formats and tissue making technologies energy consumption per ton and case across regions and countries. It is reasonable to assume that regions with lower cost energy may have lower efficiencies than higher cost regions. Can we quantify each area’s tissue making energy efficiency?

Reference


Bruce Janda is a Business Intelligence Consultant at Fisher International. He can be reached at bjanda@fisheri.com. Fisher International, by virtue of its deep expertise in the pulp and paper industry, provides insights, intelligence, benchmarking, and modeling across myriad scenarios. To learn more, please visit: www.fisheri.com
Repulping Paper with High Wet-Strength

A new eco-friendly wet-strength repulping aid demonstrates economic benefits to tissue makers.

By Dr. Vladimir Grigoriev and Dr. Tea Hannuksela, Kemira Chemicals Germany GmbH

Wet-strengthened paper grades often require a use of oxidative repulping aids. Traditional hypochlorite is undesirable due to its hazardous nature and a contribution to AOX. New stricter regulations, especially in Europe, will restrict its use even further. Alternative persulfate powders are more eco-friendly, but often limited in their effectiveness and have some drawbacks, e.g., alkaline yellowing of pulp.

A new eco-friendly repulping aid, FennoSpec 9368, was developed by Kemira. This product is based on sodium percarbonate chemistry and provides an economic alternative without significant drawbacks.

RISKS AND LIMITATIONS OF CONVENTIONAL REPULPING AIDS

Handling wet-strength broke or recycled fibers with high wet-strength can be a challenging task. Conventional tools such as high mechanical shear, high temperature and caustic soda are not always sufficient to provide uniform fiber stock within a reasonable pulping time, especially for aged converting broke. For difficult wet-strength papers, additional oxidative chemicals are required that can break down strong covalent bonds of a wet-strength resin [Ref 1].

Sodium hypochlorite has historically been used to aid in repulping of wet-strength papers, although its use is currently less desirable. Hypochlorite is a hazardous chemical that requires special handling. It is also a source of free chlorine, which can cause metal corrosion as well as contribute to AOX in paper and effluent. If the residual levels after repulping are not carefully controlled, the Cl carryover to the wet end can destroy some of the wet-strength resin and reduce its efficiency. High level of free Cl can also negatively impact Yankee coating and machine runnability.

Due to its poor environmental and safety profile, the use of hypochlorite for repulping has been trending down, but surprisingly there are still many tissue manufacturers that use it. The upcoming changes in the AOX regulations will force tissue makers to look for alternatives — at least in Europe.

The EU Directive 2010/75/EU, effective September 2018, will reduce the AOX limit in effluent in the wet-strength paper production from 150 to 50 g/t of paper produced [Ref 2].

Until recently, persulfate has been the only alternative chemistry. Various persulfate salts are available in the powder form. Their eco-profile is more favorable compared to hypochlorite (no Cl), yet with several drawbacks. The powder does not dissolve fast and the oxidation potential is lower compared to hypochlorite; therefore, it requires longer pulping times and higher temperatures. Caustic soda must be added to achieve the desired effect from persulfate, which causes alkaline yellowing of fibers. There have also been reports of a negative impact on Yankee coating performance.

A NEW ECO-FRIENDLY REPULPING AID

Kemira has developed FennoSpec 9368 as an eco-friendly alternative to hypochlorite. This product is based on the sodium percarbonate chemistry and is supplied as a granulate, shown in Figure 1. The uniqueness of this chemistry comes from a combination of both alkaline and oxidative components in one product. The fast dissolving FennoSpec 9368 releases sodium carbonate and hydrogen peroxide into a solution. This brings both alkalinity (pH 9-10) and oxidative power to the system, creating favorable conditions for effective break-down of the wet-strength resin in paper.

The key advantage of this chemistry is its excellent eco-profile as it does not form any harmful residuals. Only water and sodium carbonate remain after repulping. Therefore, this...
product has no contribution to AOX and has every major eco- and regulatory approval.

Other advantages of FennoSpec 9368 over persulfate include a fast dissolution, which helps reduce repulping time. Figure 2 demonstrates an increased repulping rate when the persulfate powder was replaced with FennoSpec 9368.

FennoSpec 9368 does not require additional caustic soda as it alone can bring pH to 9-10. When working with difficult fibers, e.g., aged converting broke or tetra pack recycled fibers, additional caustic soda could further boost the effect of FennoSpec 9368. This is demonstrated in Figure 3 showing the results from an industrial trial of FennoSpec 9368 against the reference persulfate chemistry.

A high temperature in the repulping stage is beneficial. The product will dissolve faster, and the peroxide will be more reactive. In general, a sufficient effect can be seen from FennoSpec 9368 above 35°C and pH 9.5 or higher. In general, the higher the temperature, the faster the reaction will be. The temperature requirements for FennoSpec 9368 are still lower than for persulfate powders, which require hot alkaline conditions, 70°C or above and pH 10 or higher [Ref. 1].

**INDUSTRIAL EXPERIENCES WITH FENNOSPEC 9368**

FennoSpec 9368 has proven successful in repulping of not only tissue and towel grades, but also tetra pack, decorative papers or even labels. It naturally works well for repulping of converting broke. Under proper repulping conditions, FennoSpec 9368 reacts fast and can either shorten the repulping time or allow more difficult wet-strengthened recycled raw materials in the pulper. FennoSpec 9368 may not bleach the pulp like hypochlorite but, thanks to the in-situ release of hydrogen peroxide, it will prevent alkaline yellowing of the pulp, unlike persulfate and other alkaline powdered products. A case study demonstrating the use of FennoSpec 9368 for wet-strength broke is shown in Figure 4.

**SUMMARY**

FennoSpec 9368 is a new eco-friendly wet-strength repulp- ing aid that can provide economic benefits to tissue makers. It should be strongly considered as an alternative to hazardous and eco-challenging hypochlorite, especially in Europe in view of stricter AOX regulations. FennoSpec 9368 has also demonstrated advantages over other powder alternatives, such as persulfates.

**References**


Vladimir Grigoriev is Senior Manager, applications and marketing, Pulp & Paper EMEA; and Tea Hannukse is Manager, applications laboratory, Pulp & Paper EMEA. Both authors work for Kemira.
The Recycling Association and CCIC London Launch Export Quality Control Scheme to Meet Chinese Paper Export Requirements

A new Quality Control (QC) scheme has been jointly developed by The Recycling Association and CCIC London to meet Chinese paper export requirements. CCIC London is an independent third-party certification and inspection organization solely-funded by and affiliated to China Certification & Inspection Group Co., Ltd (CCIC Group Company).

With China requiring 100% inspection of containers before dispatch, this scheme implements an additional inspection regime at depot level to ensure the material meets Chinese specification.

Some export countries have been subject to significant delays and costs as a result of the inspections. However, because the UK was able to quickly improve quality to meet China’s 0.5% maximum outthrow limits, it has been given the time and opportunity to develop a new process to meet the inspection requirements.

A new QC system will be introduced at the depot level for companies that wish to take part, and this can simply be added to the current quality control systems most depots already have in place. This will be recorded and made available to CCIC London using an app developed by them.

Companies that do not wish to take part in this scheme would face the alternative of CCIC London physically inspecting all consignments to China. It is likely that the QC scheme will also be used to assist with future exports to other global destinations. The next stage of the partnership will involve the development of blockchain technology that will be used to provide transparency to all those who need to see the inspection data and export paperwork.

This could mean that the depot, exporter, shipping line, CCIC, UK environment agencies, end destination customs authorities and the purchaser of the material would be able to see all of the data associated with a load. However, competitor companies would not be able to view the data.

CCIC London managing director Shouyun Huang said, “Thanks to The Recycling Association Quality First campaign, UK material has seen a huge improvement to meet the quality standards set by the Chinese Government.”

The Recycling Association chief executive Simon Ellin said: “This partnership with CCIC London to develop this Quality Control system is proving the UK commitment to high quality fibre exports. With other export destinations also increasing their quality requirements, this QC system will prove to be beneficial to exporters in ensuring their material meets the rules of the export destination.”

CCIC London and The Recycling Association held regional seminars in November that explained how the system works, enabling depots to start implementing it.

“The Recycling Association represents more than 80 UK recycling organizations producing more than 2 million tonnes of recyclate per year. To learn more, visit: www.therecyclingassociation.com.
Register online at Paper2019.com/registration.
Early registration closes February 15, 2019.

Reserve your Official Paper2019 Suite
by contacting Nicole Boland at Nicole.Boland@gonpta.com or at (312) 673-5828.
Reach Decision Makers
Place an ad in the Paper2019 Convention Daily

Due to comprehensive networking of Paper2019 attendees, the Paper2019 Convention Daily offers a unique advertising opportunity for:

- Pulp producers
- Paper manufacturers
- Tissue manufacturers
- Paperboard producers
- Paper converters
- Paper merchants
- Suppliers of equipment and service

The Paper2019 Convention Daily will be distributed to all attendees at the convention and feature editorial content such as:

- A complete, up-to-date schedule of meetings and activities
- Program reviews
- Session reports
- Industry news and statistics
- Hospitality suite locations and contact information

Paper2019 will take place in the Trump Hotel Chicago, March 24-26, 2019

For information on advertising, please visit: www.paperage.com
or contact: Mike O’Brien, Publisher, O’Brien Publications, Inc./PaperAge
phone: 781.923.1016 or e-mail: mobrien@paperage.com
Take out a classified ad and reach thousands of paper industry readers. We set up your ad free of charge.

Contact Mike O’Brien: 781-923-1016, or email: mobrien@paperage.com

**Statement of Ownership, Management, and Circulation**

Publication Title: PaperAge
Publication Number: 0031-1081
Frequency of Issue: Bi-Monthly for a total of 6 issues published annually. Mailed free of charge to qualified recipients. To all others: $54.00 in the U.S., $60.00 in Canada and Mexico, and $90 in other countries.


Known Bondholders, Mortgages, and Other Security Holders Owning or Holding 1 Percent or More of Total Amount of Bonds, Mortgages, or Other Securities: None

Tax Status: Has not changed during preceding 12 months.

Issue Date for Circulation Data Below: Sept/Oct. 2018

Extant and Nature of Circulation: a. Total Number of Copies; Average No. Copies Each Issue During Preceding 12 Months – 9,455; b.(1) Outside County Paid/Requested Mail Subscriptions – 7,021; b. (2) In County Paid/Requested Mail Subscriptions – 0; b. (3) Sales Through Dealers and Carriers, Street Vendors, Counter Sales, and Other Non-USPS Paid Distribution – 417; b. (4) Requested copies distributed by other mail classes through the USPS – 17. c. Total Paid and/or Requested Circulation – 7,455; d.(1) Outside County Nonrequested copies – 1,845; d.(2) In County Nonrequested copies – 0; d.(3) Nonrequested copies distributed through the USPS by other classes of mail – 1,845; e. Total nonrequested distribution – 1,845. f. Total distribution – 9,350. g. Copies not Distributed – 105. h. Total – 9,455. i. Percent Paid and/or Requested Circulation – 79.7%.

Extant and Nature of Circulation: a. No. Copies of Single Issue published Nearest to Filing Date – 9,400; b.(1) Outside County Paid/Requested Mail Subscriptions – 7,030; b. (2) In County Paid/Requested Mail Subscriptions – 0; b. (3) Sales Through Dealers and Carriers, Street Vendors, Counter Sales, and Other Non-USPS Paid Distribution – 416; b. (4) Requested copies distributed by other mail classes through the USPS – 50. c. Total Paid and/or Requested Circulation – 7,496. d.(1) Outside County Nonrequested copies – 1,819; d.(2) In County Nonrequested copies – 0; d.(3) Nonrequested copies distributed through the USPS by other classes of mail – 1,819. e. Total nonrequested distribution – 1,819. f. Total distribution – 9,315. g. Copies not Distributed – 85. h. Total – 9,400. i. Percent Paid and/or Requested Circulation – 80.4%.

I certify that all information furnished is true and complete.

John F. O’Brien, Jr., Managing Editor
Doctor Design Considerations

Doctor design is dependent on many factors. Proper design and manufacturing procedures are crucial to successful installation, start-up, and ongoing performance.

Doctor Backs and Blade Holders
Essco’s engineering department designs a doctor support beam (the doctor back) of the size, balance, strength, deflection, and vibration resistance sufficient to meet, or exceed, a customer’s application needs.

Essco selects from structural angles, pipes, specially fabricated weldments, scoop backs, or apron backs to suit the space and requirements. Carbon steel, 304, 316, or special stainless steels in solid or clad construction are selected, fabricated, stress relieved and machined.

Machining of the blade holder-mounting surface is critical and Essco takes great care to ensure that this important surface will conform to a customer’s roll, whether straight or crowned. Essco charts the machining results in thousandths of an inch, and maintain this chart as a permanent quality control record of the doctor.

With the integrity of the critical mounting surface now assured, the appropriate blade holder can be securely attached. Essco offers a wide variety of standard and custom holders designed to meet a paper machine’s needs.

Application
Doctors are used to perform a variety of functions. Depending on machine position, a doctor may be required to remove water, clean the roll, remove the sheet, direct the sheet, or some combination of these functions. Proper doctor design must take all of these factors into account, as well as many others.

Doctor Size
Doctors must be properly sized for the application. Considerations include roll width, machine speed, harmonics analysis, and space constraints on the paper machine. Doctor back sections increase in size as width and machine speed increase. However, there are often alternative designs that can achieve strength requirements in tight applications.

Roll Crown
Doctors are designed to match the roll crown where applicable. Proper crown information is critical to the performance of the doctor. Changes in roll crown may require modifications to the doctor, although Essco’s ETUniform blade holder does provide some flexibility to changing crowns.

Loading Pressure
Proper loading is a critical element of doctor performance. Doctors with rigid holders such as the KF-35A must be designed with a proper natural balance in order to achieve proper loading pressure, particularly when equipped with pressure rig loading. Pneumatic holders generate loading independent of the doctor balance. However, for safety considerations, doctors are designed with a slight positive natural loading whenever possible. This reduces the risk of the doctor rotating backwards during maintenance procedures.

Oscillation
Most doctors clean rolls more effectively when oscillated. Stroke length and frequency are not particularly crucial. It is simply necessary to minimize dwell time at the end of each stroke in order to keep the oscillation continuous. Oscillation improves the cleaning effectiveness of the doctor and reduces the risk of scratching or grooving a roll.

Essco offers both pneumatic and electromechanical models. The pneumatic model can also be run on water pressure, and includes the option of a closed loop recirculating system.

Corrosion Protection
Machine position normally dictates doctor back construction material. Essco can supply painted carbon steel doctors, solid stainless steel doctors, or in some instances, stainless steel clad doctor beams.

For longest life, painted carbon steel doctor backs and components are shot blasted, primed with a zinc-based primer, sprayed with a 2-part epoxy top coat, and then post-cured.

All stainless steel doctor backs are virgin-bead blasted, passivated, and handled with dedicated equipment to prevent contamination from contact with carbon steel or other rust inducing materials.

From a one-man sales agency in 1939, Essco has grown into an industry leader in precision, high-performance doctor technology. To learn more about Essco, visit: esscoincorporated.com
Pulp & Paper Industry Vendor of Choice for Over 25 years

Papertech is the industry-leading machine vision system supplier for web-based production lines. Papertech’s unified TotalVision™ platform, combining event capturing (WMS) and web inspection (WIS), helps papermakers and tissue producers around the world optimize paper quality and production efficiency. See more at: www.papertech.ca

Your Benefits:

- quickly find the root cause of breaks and defects
- reduce machine downtime due to web breaks
- easily maintained with off-the-shelf components
- high efficiency WebLED lighting for all applications
- scalable systems for all paper and tissue applications
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