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Connecting expertise to improve operations
Collaborative Operations
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Mr. Plywood

By John O’Brien, Managing Editor
jobrien@paperage.com

In 1927, just out of Hargrave Military Academy in Chatham, Virginia, a 24-year-old named Owen Robertson Cheatham used his $6,000 in savings, borrowed another $6,000 from friends and opened Georgia Hardwood Lumber Company, a wholesaler of hardwood lumber headquartered in Augusta, Georgia – “headquarters” being a tiny bungalow-style building. Within ten years, the company operated five sawmills in the South.

Cheatham was an adept salesman. In his first year alone he sold some $250,000 worth of lumber and netted $24,000.

Cheatham has been referred to as “Mr. Plywood” because in 1947 he pushed his lumber company into the plywood business by purchasing several plywood plants on the West Coast. And in 1956, it was the West Coast that influenced a name change that is so well-known around the world today, Georgia-Pacific.

For 40 years, Cheatham guided Georgia-Pacific’s growth and prosperity. He left active management under the company’s mandatory retirement plan on December 31, 1967, at the age of 65. Under his tenure, GP became a $750 million enterprise with a $1 billion+ asset base.

“I can’t say that the 40 years were any bed of roses but they were a lot of fun,” Cheatham said around the time of his retirement. “Working with trees is working with life. It is always a great thrill to me to see tiny seedlings grow into magnificent forests – and to realize that this cycle will go on forever.”

Owen Robertson Cheatham died of a heart attack at a football game in Eugene, Oregon. He was 67 years old.

On Sept. 26 of this year, the Georgia Historical Society (GHS) recognized Georgia-Pacific with a historical marker as the latest honoree of the Georgia Business History Initiative. Each year, the GHS initiative recognizes iconic companies that have had an impact on the economic, cultural and social development of Georgia and the United States.

The historical marker was unveiled at a ceremony outside the Georgia-Pacific Center, the company’s downtown Atlanta headquarters location for the last 35 years, and four days after the company turned 90.

Standing next to Georgia-Pacific’s historical marker in downtown Atlanta: (l-r) Past Chairman and CEO, A.D. “Pete” Correll; immediate Past President and CEO, Jim Hannan; and president and CEO, Christian Fischer.

The historical marker tells the story a company’s contribution to the development of the state and nation, and is erected at a site of historical significance to the company.

This issue of PaperAge includes a feature story about Georgia-Pacific and how the business has evolved since Owen Cheatham first put into action his idea to sell lumber 90 years ago. It’s a success story based on vision, determination, and ultimately the hard work of thousands people.

It’s a story Mr. Plywood can be proud of.
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Graphic Packaging to Close Santa Clara Paperboard Mill by Year End

Graphic Packaging International announced that it will close its coated recycled paperboard mill in Santa Clara, California by year end. Graphic Packaging said the decision was made as a result of a thorough assessment of the facility’s manufacturing capabilities and associated costs in the context of the company’s overall mill operating capability.

The closure will affect approximately 120 employees.

“The closing of the Santa Clara facility was a difficult decision. We are working closely with the affected employees to provide support and assistance,” said Michael Doss, President and CEO of Graphic Packaging Holding Company.

“Following the closure, we expect to meet our external and internal paperboard commitments previously serviced by our Santa Clara mill by redistributing production across our lower cost Midwest coated recycled mills, as well as our West Monroe, Louisiana, and Macon, Georgia coated unbleached kraft paper mills,” Doss explained. “Our ability to redistribute our production underscores the flexibility that we have across our mill system that has been greatly enhanced over the last several years through targeted and strategic capital investments.”

Irving Consumer Products to Build New Tissue Production Plant in Georgia

Irving Consumer Products is pleased to announce the expansion of its U.S. business operations with the construction of a new $400 million tissue plant in Macon, Georgia. The new plant will create over 200 jobs and allow the company to double its ThruAir Dry capacity, increasing it by 75,000 tonnes — the equivalent of 15 million cases.

“We’re pleased to be expanding our business in the United States. We’re excited by the opportunity in Macon and in Georgia. We’re looking forward to building a strong relationship with the wonderful people of this community,” said Robert K. Irving, President of Irving Consumer Products.

“Selecting Macon for our new facility provides us with an opportunity to establish a footprint in a region that has proven itself as being a strong supporter of business. It will allow us to reach key markets, and will help to continue to drive our growth,” Irving added.

Engineering and planning for the facility is well underway with construction ready to begin. Completion of the project is expected in 2019.

PCA to Acquire Sacramento Container, Convert PM at Wallula Mill to Linerboard

Packaging Corporation of America (PCA) has entered into a definitive agreement to acquire substantially all of the assets of Sacramento Container Corporation, and 100% of the membership interests of Northern Sheets, LLC and Central California Sheets, LLC in a cash-free, debt-free transaction for a cash purchase price of $265 million.

The company also announced that it will discontinue production of uncoated freesheet (UFS) and coated one-side (C1S) grades at its Wallula, Washington mill in the second quarter of 2018 to begin the conversion of its 200,000 tpy No. 3 paper machine to a 400,000 tpy high-performance 100% virgin kraft linerboard machine.

The acquisition transaction is structured as a purchase of assets resulting in a full step-up of the assets to fair market value. Under the terms of the agreement, PCA will acquire full-line corrugated products and sheet feeder operations in McClellan, California and Kingsburg, California.

Closing is expected early in the fourth quarter of 2017. The company plans to finance the transaction with available cash on hand.

The conversion of the No. 3 paper machine at the Wallula Mill is planned for the second quarter of 2018 with an initial production rate of approximately 60 percent of capacity. Ultimately, production will increase to 1,150 tons per day once a new headbox, forming section, and shoe press are added in the fourth quarter of 2018.

The capital cost of the conversion is expected to be about $150 million.

The Mill’s No. 2 paper machine will continue to produce 150,000 tons-per-year of semi-chemical medium.

PCA Chairman and CEO Mark Kowzan said, “Our strategy is to improve the overall profitability of the paper business for PCA by focusing our people and investments on increasing our competitiveness and ensuring a sustainable future in the office and printing & converting markets with our mills in International Falls, Minnesota and Jackson, Alabama.

“In addition, at our current containerboard integration rate of 95%, the low-cost conversion of the No. 3 paper machine at our Wallula Mill provides us with much needed linerboard capacity, allows us to integrate over 200,000 tons of containerboard to our Sacramento Container acquisition, and enables further optimization and enhancement of our current mill capacity and box plant operations. The conversion will significantly enhance the mill’s profitability and viability.”
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NORTH AMERICA

**Appleton Coated Files State Petition for Receivership**

Appleton Coated on Aug. 17 said that it filed a voluntary state Chapter 128 petition for receivership to allow the company’s operations to continue under the supervision of a court-appointed receiver named by the Outagamie County Circuit Court.

Company officials said the petition and appointment of a receiver will allow the company to continue operations under the direction of the receiver, who will lead a process aimed at selling the company’s assets to a buyer who will continue operations.

“Despite the best efforts of our employees and ownership group and the introduction of new products, this step is the best option at this point,” said Doug Osterberg, Appleton Coated’s president and chief executive officer. “While the company has made significant progress in diversifying its product offerings and entering new markets, the overall business climate is very challenging, and operating under a state court-appointed receiver is the best route to transition the business to sustained profitability.”

Osterberg added that profitability in the North American graphics paper sector has deteriorated in recent years due to digitization of communications and currency exchange rates that favor imports. These factors produced a decline in domestic demand, excess capacity and aggressive price competition in the company’s traditional coated and uncoated paper businesses. He also noted that these market conditions combined with recent increases in raw material costs, especially market pulp, yielded lower sales volumes and declining profit margins.

Osterberg said the filing will also relieve the company’s burdensome debt and help attract an appropriate buyer. He said the company’s bank has agreed to fund operations during the receivership and that the business will continue to operate during the transition, and added that the company will be able to pay salary and wages and fund benefits for current employees.

“The strategic location of Appleton Coated, coupled with the experience, knowledge and work ethic of its employees and the size and capabilities of its paper making machines and equipment, make it a logical candidate to transition to high value segments of the packaging market. We, therefore, expect, but cannot guarantee that a suitable buyer will be identified who will value the company’s strong workforce and be willing to invest in the future,” stated Osterberg.

“This has not been an easy decision for the ownership group that bought Appleton Coated three years ago, but market changes and world-wide economic conditions have forced our hand, and as difficult as this decision is, it’s the best move at this point,” Osterberg concluded.

**Domtar Inaugurates Its Second Power Generating Unit at Windsor Mill**

Domtar on Aug. 24 announced the inauguration of its second generating unit with a power output of 18 MW at its Windsor (Quebec) Mill.

The start-up of its second generating unit, built for $36 million, will improve the energy efficiency of the mill produced from renewable resources while reducing production costs. In 2001, the Domtar Windsor Mill inaugurated its first 32 MW generating unit.

“With the addition of its second generating unit, the Windsor Mill will become one of the major producers of renewable energy in the Eastern Townships,” said Eric Ashby, General Manager of Domtar’s Windsor Mill. “Our total production capacity will reach nearly 50 MW and will allow us to feed the equivalent of the annual energy consumption of 12,800 single-family dwellings. By using forest biomass as a fuel to produce green energy, Domtar demonstrates its commitment to innovation and sustainable development.”

**OX Industries Opens New Converting Plant in Fort Worth**

OX Industries announced the opening of their new converting plant located in Fort Worth, Texas. The 100,000-square foot facility will house the newest manufacturing technology in paper tube, core, and protective packaging production equipment to service OX customers in the Midwest region.

According to OX, the new facility will also serve as a distribution center for the company’s engineered building products including Ply structural sheathing, ISO Red residential insulation, and SI Strong structural insulated sheathing, adding greater support to its current distribution network in the Midwest markets.

The Fort Worth facility is the ninth location for OX as the company expands its national footprint for vertically integrated end use converted products.
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NORTH AMERICA

Cascades to Build New Corrugated Packaging Plant in New Jersey

Cascades Inc. recently announced an investment of US$80 million for the construction of a new 400,000 sq. ft. containerboard packaging plant in Piscataway, New Jersey. According to Cascades, the new plant will manufacture corrugated packaging products and create 120 jobs. Once all equipment is installed, total annual production capacity will be 2.4 billion square feet. Ultimately, this represents an increase in the integration rate of approximately 5%.

“The investment, which is already included in our capital expenditure budget, is part of the deployment of our strategic plan that aims specifically to modernize our assets and increase the integration rate between our primary production and conversion activities,” said Mario Plourde, President and CEO of Cascades. “It is also part of our continuing process to reorganize and consolidate our containerboard and packaging activities in the northeastern United States.”

Charles Malo, President and Chief Operating Officer of Cascades Containerboard Packaging, added, “The Piscataway conversion plant will have state-of-the-art technology and will be among the fastest in the industry. It will offer increased flexibility and allow us to provide more efficient and innovative products to meet our customers’ needs. Located close to the major urban centers along the eastern seaboard of the United States, the site was also chosen because it has room for subsequent development.”

Cascades expects the new plant to begin operations in the second quarter of 2018.

SOUTH AMERICA

Fibria Produces First Eucalyptus Pulp Bale at Três Lagoas Mill

Fibria’s pulp expansion project, Horizonte 2, at the company’s Três Lagoas mill in the state of Mato Grosso do Sul, Brazil, started operations of a new production line of bleached eucalyptus pulp on Aug. 23 and produced the first bleached eucalyptus pulp bale on August 26, 2017. According to Fibria, the pulp produced has Forest Stewardship Counsel (certificate number FSC-C104120) and Cerflor/PEFC.

The new line — the largest single line of pulp production in the world — will add 1.95 million tons of pulp per year to Fibria’s production capacity and expands the pulp mill’s production capacity to a total of 3.25 million tons of pulp per year. With the new line, Fibria’s pulp production capacity increases to 7.25 million tpy.

Fibria noted that its suppliers and other business partners of the Horizonte 2 Project will continue working together during the ramp-up period of the new line.

Georgia-Pacific to Sell Pine Chemicals Business to Ingevity

Georgia-Pacific LLC announced on Aug. 22 that it reached an agreement to sell its pine chemicals business to Ingevity for $315 million, including certain pine chemicals-related assets at the Crossett, Arkansas plant. The acquisition is subject to regulatory clearance and Ingevity and Georgia-Pacific expect to close on the transaction in late 2017.

Separately, Ingevity will enter into several contract manufacturing arrangements for oilfield and mining products currently produced at other Georgia-Pacific facilities. The parties will also separately enter into a 20-year, market-based crude tall oil (CTO) supply contract.

“Although the pine chemical business has been profitable and our employees have done a great job running safe, productive assets and meeting our customers’ needs, we believe this sale to an established player in the industry is in the best interest of our customers and stakeholders,” said Rick Urschel, president, Georgia-Pacific Chemicals.

Ingevity will not acquire the merchant crude tall oil or crude sulfate turpentine business; this business will be retained and operated by Georgia-Pacific. In addition to these two pine-related segments, Georgia-Pacific’s non-pine chemicals businesses, which serve mainly the wood panels and general industrial markets, are not impacted by the sale. GP will continue to operate its ten chemical facilities within the Americas to service customers in these segments.

Editor’s note: Ingevity was formerly a business unit of WestRock. In April of 2016, WestRock’s Board of Directors approved the completion of the separation of the specialty chemicals business from the remaining businesses of WestRock to form Ingevity Corporation. On May 15, 2016, WestRock completed the separation of Ingevity as an independent public company.
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**SOUTH AMERICA**

**Suzano Starts-Up New Tissue Production Line at Mucuri Mill**

Suzano Papel E Celulose S.A. announced that it has started the production and sale of jumbo rolls of tissue paper at its mill in Mucuri, in the state of Bahia in Brazil.

Suzano also said that another new tissue production line at its mill in Imperatriz in the state of Maranhão is expected to start production in the fourth quarter of 2017.

Total estimated investment in the new tissue lines is R$540 million, the result of which is a total tissue paper production capacity of 120,000 tons/year (each mill having a production capacity of 60,000 tons/year).

The ramp-up of tissue production will be gradual, Suzano noted.

**EUROPE**

**BillerudKorsnäs Invests in Cold Chain Packaging Company, Vericool**

BillerudKorsnäs announced that it has acquired a minority holding in Vericool Inc., a cold chain packaging company headquartered in California. The company’s products offer sustainable and compostable packaging solutions for unbroken cold chains in the grocery and pharmaceutical market, intended as an alternative to non-sustainable packaging solutions, such as polystyrene (EPS).

The investment is being made by BillerudKorsnäs’ wholly owned subsidiary BillerudKorsnäs Venture AB, which develops new business for the Group by linking up with young and innovative companies in a relatively early phase and gradually generate and develop new business.

Terms of the deal were not disclosed, but BillerudKorsnäs said “this is a small investment.”

“Within the cold chain segment, for decades, there has been a need to find products that can replace fossil based packaging solutions. Vericool’s market disruptive products are examples of such ones, which goes completely in line with what we work for within BillerudKorsnäs,” said BillerudKorsnäs Venture Managing Director Anders Persson. “Together we intend to build tomorrow’s sustainable packaging solutions and through an expanded offer with alternatives to polystyrene.”

Vericool’s customers currently include a number of companies within the fast-growing “meal kit” market in the United States and leading pharmaceutical and biotech companies.

**Mondi to Postpone New Specialty Kraft Paper Machine Investment at Steti Mill**

Mondi has decided to postpone its EUR135 million investment in a new 90,000 tonne per year machine glazed specialty kraft paper machine at its Steti mill in the Czech Republic.

In January of this year, Mondi announced plans to invest a total of EUR 470 million in the modernization and expansion of the Steti mill. The project includes the installation of a new recovery boiler, the rebuild of the fiber lines, the debottlenecking of the paper machines and an investment in a new 90,000 tpy machine glazed kraft paper machine.

Commenting on the paper machine segment of the investment, Mondi’s CEO, Peter Oswald, said, “We have decided to postpone the machine glazed specialty kraft paper machine investment after a careful review of market conditions. While the proposed new machine remains an exciting investment opportunity, offering the lowest cost production of its sort in Europe, recently announced industry capacity expansions are expected to result in a market imbalance over the period in which the new machine was planned to come on line.

“There is no change to our EUR335 million investment in modernizing the mill including rebuilding the fiber lines, debottlenecking the existing packaging paper machines and a new recovery boiler, which is progressing as planned,” Oswald added.

**Södra to Invest SEK 100 Million to Produce Biofuel at Pulp Mill in Mönsterås**

Södra plans to invest more than SEK 100 million in the production of biomethanol, a sustainable fuel from forest raw material. The aim is to produce 5,000 tonnes of biomethanol per year at the new facility to be situated at Södra’s pulp mill in Mönsterås, Sweden. The long-term aim is to further increase production for passenger, truck and ship transport.

The project will begin this fall and is expected to be ready for operation by spring of 2019.

According to Södra, the biomethanol will be made from the crude methanol produced by the manufacturing process at the Mönsterås pulp mill.

“If Sweden is to achieve the fossil-free climate targets, there must be viable alternatives to the fossil-fuel products that are currently available. This will be a major milestone in that development,” said Henrik Brodin, Business Developer for fuels at Södra. “It’s also in line with Södra’s own strategy to be totally fossil-free by 2030.”
Super Steam Vac integrates IBS expertise in high vacuum applications with Transphase’s patented Z-Diffusor Plate and rotary retraction technology to create the SSV module for advanced Fourdrinier dewatering. The SSV produces faster paybacks, higher sheet temperatures, a dryer sheet, better profiling, and the elimination of water sprays. Numerous simulations are performed to guarantee the accuracy and precision of the SSV. Models based on low velocity steam jets, adjustable cover design, higher vacuums, and proprietary airflows can provide accurate expectations of the system.

SSV module with the Transphase Z-Box Steam Profiler with its 60 degree rotation/retraction, mounted over the IBS Super High Vac

Hotter & Drier Off The Press

Super Steam Vac integrates IBS expertise in high vacuum applications with Transphase’s patented Z-Diffusor Plate and rotary retraction technology to create the SSV module for advanced Fourdrinier dewatering. The SSV produces faster paybacks, higher sheet temperatures, a dryer sheet, better profiling, and the elimination of water sprays. Numerous simulations are performed to guarantee the accuracy and precision of the SSV. Models based on low velocity steam jets, adjustable cover design, higher vacuums, and proprietary airflows can provide accurate expectations of the system.

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• No steam spillage
• Shut off air/water spray
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• Increased couch solids
• Substantial reduction/elimination of couch vacuum
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RUSSIA

Smurfit Kappa Acquires Russian Corrugated Packaging Company, Soyuz

Smurfit Kappa has acquired the Russian corrugated packaging company, Soyuz, based in Moscow. The company has about 300 employees. Smurfit Kappa already has three plants in Saint Petersburg, Russia producing paper-based and Bag-in-Box® products for customers across Europe.

Pim Wareman CEO of Smurfit Kappa North East Europe, said, “Russia is an attractive growth market for us with exciting potential. We are pleased to expand our footprint in this market and in particular within the growing Moscow region.”

Saverio Mayer, CEO of Smurfit Kappa Europe, added, “This acquisition supports our continued drive to increase our customer offering, and our unique packaging business applications will help further develop the Soyuz operations. Our wide range of corrugated products, along with our innovative and rapidly growing Bag-in-Box business, opens up many opportunities for both Smurfit Kappa and our customers in Russia.”

CHINA

IP Completes the Sale of Its Foodservice Business in China to Huhtamaki

International Paper on Sept. 7 completed the sale of its foodservice business in China to Huhtamaki Group. The deal includes two manufacturing units located in Shanghai and Tianjin, employing altogether approximately 200 employees.

Huhtamaki said the acquisition expands its manufacturing footprint into the Eastern China region and strengthens its capacity and capability to serve customers operating in Northern China. Net sales of the acquired business in 2016 was approximately EUR 19 million.

The debt-free purchase price was EUR 15 million, Huhtamaki added.

The business will be consolidated into Huhtamaki’s Foodservice Europe-Asia-Oceania business segment as of September 1, 2017.

INDUSTRY SUPPLIERS

Kemira Successfully Started Up New Sodium Chlorate Production Line in Finland

Kemira has finalized its approximately EUR 50 million investment into a new sodium chlorate production line in Joutseno, Finland. The production of sodium chlorate as well as customer deliveries have started, well ahead of the original schedule. Full capacity is expected to be achieved by the end of the year.

The new production line is based on Kemira’s proprietary in-house technology and it will significantly increase Joutseno site’s current sodium chlorate capacity. Sodium chlorate is the raw material for chlorine dioxide (ClO2), which is produced on-site at the pulp mills and it is the primary bleaching agent for kraft pulp.

“The consumption of bleaching chemicals is increasing due to the recent pulp mill expansions and the announced greenfield projects in the Nordics,” said Kim Poulsen, President, Pulp & Paper segment. “We are ready to respond to the new demand and can now even more effectively serve our customers with high quality products for many years ahead.

“Our strategy is to grow faster than the market and to strengthen Kemira’s position as the leading chemical supplier for the pulp and paper industry, and our investment in Joutseno supports these targets,” Poulsen added.

After the accomplishment of the expansion, Joutseno site is employing 80 persons and produces a wide range of chemicals for pulp and paper industry.

Voith to Supply Bohui Paper Group with New XcelLine Board Machine

Voith will supply Bohui Paper Group with a new board machine in China. The new machine, BM 4, will be built at Dafeng in the Chinese province Jiangsu. According to Voith, BM 4 will be one of the largest board machines in the world.

Voith’s scope of supply includes the complete XcelLine process line, from the wet end process to the winder.

Voith Financial Services also helped secure the project by developing and organizing an attractive financing concept tailored to the customer’s needs.

Voith noted that it previously supplied Bohui Paper Group with two board machines, BM 1 and BM 3. BM 4’s operating speed will be 1200 m/min and will produce folding boxboard with a basis weight of 250 g/m2.

Start-up is expected in December 2018.
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Andritz announced that it has successfully started up the TM5 tissue machine delivered to Guizhou Chitianhua Paper Industry Co., Ltd. at its mill in Chishui, Guizhou Province, China.

The new PrimeLineST tissue machine, with a design speed of 2,000 m/min and a paper width of 5.6 meters, will produce high-quality facial wipes, toilet paper, and paper tissues based on bamboo furnish.

The machine is currently unique on the Asian market because it combines a high-performance Yankee with a steam-heated hood that enables a high drying capacity. The Yankee is made entirely of steel, has a diameter of 20 feet, and is among the largest in the world.

The Yankee was manufactured at the Andritz plant in Foshan, China, which offers customers state-of-the-art manufacturing, local field service and quality management.

ABB has opened a new collaborative operations center in Westerville, Ohio that will function as the central focal point for resources and for systems that are equipped with ABB technology. It will leverage ABB’s pulp & paper expertise to provide true data-driven solutions for its customers by providing remote connectivity, secure access to process performance information, and technical support.

“The new center demonstrates our leadership in delivering the real benefits of big data to our customers, changing insights into actions to improve their processes,” said Jim Fisher, Global Product Group Manager for Pulp and Paper. “ABB remotely monitors and provides real-time support to close to 150 mills worldwide today, and we are expecting that number to rise with this new offering.”

According to ABB, countless sensors and operation-critical systems transmit data on the health and performance of paper machines to the centers, where sophisticated software performs advanced data analytics on a 24/7 basis. The insights gained will allow engineers to quickly diagnose potential issues, advise on preventive maintenance or suggest measures to improve performance. ABB experts and customers work in close collaboration, taking data-driven decisions in real time that increase operational performance and business profitability.

Later this year, ABB will open two additional centers with focus on the pulp and paper industry in Helsinki (Finland) and Singapore, leveraging the “follow the sun” principle to support customers anywhere in the world.

Kadant Solutions announced the launch of its Genuine Parts Program to raise awareness of the importance of using OEM genuine repair parts when maintaining equipment.

According to Steve Fielding, vice president of applications and technology at Kadant Solutions, “Using genuine parts ensures the highest product quality and integrity is maintained when repairing OEM equipment. We have witnessed numerous cases of aftermarket parts used incorrectly leading to equipment damage, production losses, and increased safety risks. These outcomes can be avoided when Kadant Solutions genuine parts are used.”

Kadant Solutions, based in Auburn, Massachusetts, is a leading supplier of doctor blades, doctor blade holders, and doctoring systems for papermaking and other industrial processes. The company’s cleaning and conditioning products are applied to the cleaning of forming and press fabrics and the filtration of process water as well as engineered wet-end products for papermaking.
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Above: Defect identified and synchronized to the exact sheet position on a paper machine.

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INDUSTRY ALLIES

Two Sides Global Anti-greenwash Campaign: 278 Companies Remove Misleading ‘Go Green’ Claims

Two Sides research into more than 600 of the world’s leading corporations, including banks, utilities, telecoms and insurance providers, has shown that a total of 460 of those companies have been using misleading and unsubstantiated environmental statements, despite specific advertising legislation to protect consumers in many countries. To date, 278 of those companies have removed such statements as a result of ongoing engagement by Two Sides.

“We’re really pleased that Two Sides is having such a significant effect on some of the world’s largest and most influential organizations. But there is no room for complacency, and there is still a great deal of work to do with the remaining companies that continue to mislead their customers,” says Martyn Eustace, Chairman of Two Sides UK.

Internationally, Two Sides teams are continuing to tackle greenwash in their respective countries, and this has yielded positive results.

North America

Phil Riebel, President of Two Sides North America, said, “Over 88 major corporations, including many of the Fortune 500, have now changed or removed misleading environmental claims about print and paper to comply with country-specific environmental marketing guidelines. Thanks to an overall better understanding of the unique sustainable features of paper products, “go green - go paperless” and “save a tree” claims are gradually disappearing from the marketplace.”

Australia & New Zealand

Kellie Northwood, Executive Director, Two Sides Australia and New Zealand, comments, “It is our responsibility as an industry, but also as part of broader environmental education, to challenge misinformation about the impact of communication channels. Greenwashing is a threat to our industry and we work very hard to ensure companies making the wrong claims correct their communications. Of the companies we have contacted in Australia, 73% have altered their anti-print messaging, and the remaining we continue to engage with.”

Brazil

“This year Two Sides Brazil has chosen the fight against greenwashing as a number one priority,” says Fabio Arruda Mortara, Country Manager for Two Sides in Brazil. “Reaching an agreement with the public sector, towards the withdrawal of several instances of misleading content on websites or public declarations, was probably our best achievement in 2017. Brazil has just become the second largest pulp producer in the world, showing the importance for widespread environmental education in such a large country.”

Colombia

“During the first year of the campaign, we collaborated with the Government to remove any mention of ‘zero paper’ from their National Development Plan for the next four years,” says Isabel Riveros, Executive Director, Two Sides in Colombia. “However, the challenge continues. We must contact every company that is using greenwash, and make them understand that the process of paper production can be a sustainable one.”

UK

Jonathan Tame, Country Manager, Two Sides UK, said, “We have an active campaign to research and remove greenwash in the UK, with a very encouraging response. 83% of all companies we have engaged have agreed to remove misleading messages, and in many cases, we have helped organizations amend their marketing communication guidelines.”
WATER IS A VALUABLE RESOURCE

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Kruger Inc. announced a $377.6 million transaction to diversify operations at its Brompton and Wayagamack Mills into specialty niches, such as flexible food packaging, labeling and digital printing. The announcement was made on Sept. 8 in the presence of Philippe Couillard, Premier of Quebec; Dominique Anglade, Minister of Economy, Science and Innovation; and Joseph Kruger II, Chairman and Chief Executive Officer of Kruger, as well as Ministers Luc Blanchette, Julie Boulet, and Luc Fortin.

Kruger and the Government of Quebec have formed a partnership by which Investissement Quebec, acting as the government’s agent, will grant loans and a loan guarantee totaling $59.8 million and acquire an equity participation of 37.5%, or $44.6 million, in the new entity Kruger Specialty Papers Holding L.P. The new entity comprises the assets of the Brompton and Wayagamack Mills, as well as the Biomass Cogeneration Plant adjacent to the Brompton Mill.

According to Kruger, this major project will help to maintain more than 500 jobs in the Mauricie and Estrie regions. To carry out this diversification project, Kruger Specialty Papers Holding L.P. will invest $107.5 million over the next three years to enable the Brompton and Wayagamack Mills to gradually reduce the production of some publication paper products that are in decline, such as newsprint and magazine paper, while accessing new markets that are on the rise around the world.

Investments will be distributed as follows:
- Wayagamack Mill: $32.9 million;
- Brompton Mill: $47.5 million;
- Trois-Rivieres Mill: $22.3 million; and
- Biomass Cogeneration Plant (Brompton): $4.8 million.

The project’s other significant benefits include an additional 100,000 metric tonnes of wood chips procured annually, which will have a direct positive impact on Quebec’s sawmill sector.

Maximizing Operational Complementarity
The Mills’ diversification strategy is based on the complementarity of the company’s various operations, which is why the project calls for investments in the Biomass Cogeneration Plant next to the Brompton Mill and in the Thermomechanical Pulp Mill at the Trois-Rivieres Mill, which will supply the Brompton and Wayagamack Mills with raw material.

The amounts invested will be used to acquire new production equipment, modify existing equipment, make technical improvements to boost productivity, and for various energy efficiency measures.
Adjusting to Changing Markets

The new Kruger Specialty Papers entity will supply products that are in high demand due to changing market trends around the world, specifically increased demand for sustainable packaging and the growing popularity of e-commerce. New specialty products include food packaging paper, labeling products (backing paper) and coated paper for digital inkjet web presses to print mass-circulation catalogues and flyers that can be customized for targeted mailings.

By the end of the project, the Brompton Mill will focus exclusively on specialty products and therefore will no longer manufacture 200,000 metric tonnes of newsprint annually.

Green Technology and Innovation

The innovative specialty papers developed by Kruger will offer several competitive advantages, including the use of cellulose filaments (CF). This new-generation biomaterial is Kruger’s proprietary strengthening additive that is manufactured at the world’s first CF plant built by Kruger in Trois-Rivières in 2014. Tests conducted by the company have shown that adding CF helps to make products stronger, lighter and more sustainable.
Accrol Group Holdings, one of Europe’s largest independent tissue converters, announced that Gareth Jenkins has been appointed Chief Executive Officer, effective September 11, 2017. He replaces Steve Crossley, who left the company to pursue other interests.

BillerudKorsnäs said that President and CEO, Per Lindberg, has announced his decision to leave the company to become the President and CEO of Epiroc. He will continue in his position during his notice period until the beginning of 2018. Lindberg has been President and CEO of Billerud and later BillerudKorsnäs since 2005. BillerudKorsnäs is in the process of recruiting a new President and CEO.

JP Gould International announced the appointment of Jörgen Ohlander as Senior Vice President of Packaging for the Sweden operation.

Kotkamills appointed Sails Kettunen as Director, Barrier Board in the company’s Consumer Board business. Kettunen has held various positions during her career with Kotkamills, most recently as Operation Development Manager of Board Machine 2 since the start-up of the new machine.

Monadnock Paper Mills announced that Lee Corson has joined the company as Director of Supply Chain Logistics. Corson joins Monadnock from Schweitzer-Mauduit International where he led their U.S. purchasing operations.

Resolute Forest Products has named Patrice Minguez as President of the company’s tissue group. Minguez is founder and former president of Cellynne Holdings, Inc.

Södra has named Håkan Larsson as Director of Strategy. Formerly, Larsson served as Director of Forestry and President of Södra Skog.

**INDUSTRY SUPPLIERS**

Kemira announced that Dr. Heidi Fagerholm, Chief Technology Officer and member of its Management Board will leave Kemira to take up the position of Head of Advanced Technologies of PM-Performance Materials division of Merck KGaA. Fagerholm will continue in her current position and as a member of Kemira’s Management Board until the end of October at the latest.

Valmet has announced changes to the responsibility areas of some of its Executive Team members to support continuous individual and business development. The changes will become effective, Oct. 1. Jukka Tiitinen, currently Business Line President, Services, is appointed Area President, Asia Pacific. Aki Niemi, currently working as the Area President, China, is appointed Business Line President, Services Business Line. In addition, Hannu T. Pietilä, currently working in the position of Area President, Asia Pacific, returns from his six year assignment back to Finland and is appointed Vice President Sales, Asia Pacific reporting to Jukka Tiitinen.

Voith announced that Stephan Schaller will succeed Dr. Hubert Lienhard, long-standing President and CEO of Voith’s Management Board. Schaller, currently, is a member of Voith Shareholders’ Committee and head of the global motorcycle division of BMW Group. Lienhard, who has served as President and CEO since 2008, will retire on April 1, 2018 upon completion of his second term in office at the age of 67.
2017

OCTOBER 3-6, 2017
Tissue2017 – Conference & Expo
TAPPI and RISI
Eden Roc Miami
Miami, Florida, USA
www.risiinfo.com

OCTOBER 4-6, 2017
PPC Fall Meeting and Leadership Conference
Paperboard Packaging Council
Omni Scottsdale Resort & Spa at Montelucia
Scottsdale, Arizona, USA
www.paperbox.org

OCTOBER 11-13, 2017
MIAC Exhibition
Edipap Srl
Fiere Exhibition Centre
Lucca, Italy
www.miac.info

OCTOBER 12, 2017
Hall of Fame Induction Dinner
Paper International Hall of Fame
Radisson Paper Valley Hotel
Appleton, Wisconsin, USA
www.paperdiscoverycenter.org/hall-of-fame

OCTOBER 16-18, 2017
RIIS North American Conference
RIIS
Seaport Hotel
Boston, Massachusetts, USA
www.risiinfo.com/events

OCTOBER 16-18, 2017
CorrExpo 2017
TAPPI
Rhode Island Convention Center
Providence, Rhode Island, USA
www.correxpo.org

NOVEMBER 7-9, 2017
International Bioenergy & Bioproducts Conference
TAPPI
Hilton Norfolk The Main
Norfolk, Virginia, USA
www.tappi-ibbc.org

NOVEMBER 28-30, 2017
European Paper Week
CEPI
Radisson Blu Royal
Brussels, Belgium
www.cepi.org/EPW

2018

FEBRUARY 28 - MARCH 2, 2018
ASPI 2018 Spring Meeting
Association of Suppliers to the Paper Industry
Diplomat Beach Resort
Hollywood, Florida, USA
www.aspinet.org

FEBRUARY 5-8, 2018
PaperWeek Canada 2018
PAPTAC
Fairmont Queen Elizabeth Hotel
Montreal, Quebec, Canada
www.paperweekcanada.ca

MARCH 11-13, 2018
Paper2018
AF&PA and NPTA
New York City, New York, USA

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we know how
Consider the coffee in the paper cup you picked up on the drive to work headed to the office where your first task was to print off a to-do list from your computer. Then at lunch, you grabbed a paper napkin before pulling a sandwich from a paper bag. Later, at home before putting your children to bed, story time for a favorite book. Just another day, but one in which pulp, paper, packaging, tissue and wood products emerged as a common theme.

From sunrise to sunset, opportunities surround us with ways to appreciate how a long list of forest products are intertwined with our lives. That’s why we especially look forward to the third week of October when National Forest Products Week (NFPW) puts our industry and its products center-stage for a well-deserved round of applause.

So, mark your calendars for October 15 – 21, and get ready to join in the 57th anniversary of the celebration. Throughout the week, AF&PA has a dynamic communications campaign in place to highlight the central role our sustainable manufacturing industry plays in society, economic competitiveness and job creation.

Our companies and their dedicated employees produce essential products that make our lives more convenient, safe, efficient and memorable. And, we’ll be joining other industry representatives, employees and advocates in Washington and around the country to share that story.

The numbers are impressive. In rural and urban communities across 45 states, we are among the top ten manufacturing sector employers of approximately 900,000 men and women and support about 2.4 million total jobs. Our companies meet a roughly $50 billion payroll every year and account for approximately four percent of total U.S. manufacturing GDP.

NFPW is a great platform to increase awareness about our work and help expand our industry’s footprint. That’s where AF&PA’s mission to advance a sustainable U.S. pulp, paper, packaging, tissue and wood products manufacturing industry comes into play. Through fact-based public policy and marketplace advocacy, we’re keeping decision makers in Washington and around the country aware of the need for common-sense, effective public policy.

That means pushing for regulatory reforms that do more good than harm so that companies can have the benefit of operating with the certainty that allows them to better plan for the future. Spending unnecessary time and money responding to Washington’s ever-changing and mounting regulations is inefficient and better utilized for innovation and investment in the future.

This past May, that focus paid off when the House and Senate passed and the President signed into law legislation including language clarifying federal regulatory policy to reflect the carbon-neutrality of forest-based biomass energy. We’re grateful to have led the advocacy for policy that can foster growth in U.S. manufacturing.

Looking ahead, we’re working to ensure consumers have the right to choose paper-based communications for essential federal government services. And, by highlighting the importance of paper recovery – like the record 67.2 percent recovery rate in 2016 – we educate about the importance of paper recycling in extending the useful life of paper and paper-based packaging products.

These advocacy priorities, in combination with comprehensive tax reform, transportation efficiency from safely increased truck weight limits and freight rail reform as well as trade measures that recognize our strong global market position continue to have our strong backing.

That’s a long list, and we’re eager to accomplish it to provide our industry every chance to do what it does best — innovate, provide good jobs and make exceptional products.

But as the saying goes, there’s nothing like a celebration to bring people together, so let’s get back to the occasion at hand. From October 15 – 21, we’ll be using press releases, blogs, advertising, social media, a dedicated AF&PA website and more to tell our industry’s story during National Forest Products Week.

We hope you’ll be joining us in the conversation. You can stay up to date with latest information by tuning in to www.afandpa.org and following @ForestandPaper, #CelebrateFP and #withpaper on Facebook and Twitter.

Let’s all celebrate together!
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With Box Shipments Growing at a Faster Rate Than GDP, Are We Entering a New Era?

By Chip Dillon, Analyst, Vertical Research Partners

Our Packaging & Forest Products team at Vertical Research Partners covers a wide array of sub-industries: Timber REITS, wood products, rigid & flexible packaging as well as traditional paper and pulp companies. Yet nothing in recent months has garnered as much attention as companies engaged in the production and manufacturing of containerboard and corrugated boxes.

For decades, these activities did not generate adequate returns on their investors’ capital on a consistent basis. The real price of US linerboard is only now approaching its mid-1990s peak, and, while following a clear upward trend since the early 2000s, the real price of linerboard was higher in the three decades preceding 2000 than in the years after the turn of the millennium.

Since the Great Recession, however, increased consolidation (vertically as well as horizontally) and capacity-expansion discipline have helped containerboard producers realize significant cost savings while also obtaining more-stable pricing. Not only have producers’ investment returns improved, but customers have also benefited from greater price stability, some sharing of producers’ real cost savings in pricing, and an improved supply-chain. Yet it is not just the supply side of the equation that is on boosting the fortunes of the containerboard companies. We are currently experiencing unusually strong demand for corrugated boxes.

2016 was a significant milestone; corrugated box shipments in the US expanded by 2.1% on an annual basis, to 376 billion square feet, surpassing the country’s GDP growth of 1.6%. Historically, box shipment growth has trended below GDP growth; from 1984 until 2016, US GDP expanded at an annualized rate of 2.6% while box shipments grew by just 1.1% per year. For decades, the manufacturing base of the country has been eroded, gradually at first, more rapidly later. This development is clearly seen on box shipment volumes.

Drivers of Box Demand

Let’s take things one step at a time. From the 1950’s to the mid-1980’s, US corrugated box demand grew at a slightly faster pace than real GDP. Specifically, from 1984 until 1999, US GDP grew at a 3.4% rate, ahead of the 2.8% volume growth seen in corrugated boxes. Shifting towards a more service-oriented economy, the US needed fewer boxes. Manufacturing as a percentage of GDP fell from 19.3% in 1984 to 15.5% in 1999.

Aided by China joining the World Trade Organization in 2001, outsourcing of manufacturing became more prevalent as we exited the last millennium. As more and more industrial activities moved overseas, demand for boxes declined. From 1999 until 2009, box shipments actually fell by a cumulative 7.7%. The resulting 1.1% annualized box-shipments decline significantly trailed US GDP annual expansion of 1.8% per year over this 10-year period. Not only did box volume shipments stopped closely following economic expansion, but they actually declined. Put differently, containerboard and corrugated boxes was a shrinking industry within the US. During this “lost decade” of 1999 to 2009, demand for boxes from producers of food and other consumer-related non-durable items continued to grow. However, a more than one-third implosion in box demand from industries impacted by “outsourcing” more than offset this growth — causing the overall demand to decline.
But the story did not end there. Starting in 2009, in the immediate aftermath of the most severe post-war recession experienced in the US, demand for corrugated boxes started growing again. Even though it still trailed GDP growth (growing at 1.2% per year compared to GDP growth of 2.1%), the gap was clearly closing. Enter 2016. US box shipments outpaced the country’s economic expansion, with this trend continuing so far in 2017.

Is this an anomaly? Data so far this year do not suggest so. US box shipments are up 2.8% year-on-year from January until July. Our view is that we are shifting to a new era where box demand and shipments will again move closer to GDP growth, and for the first time in decades may run ahead of economic expansion on a consistent basis. Two factors are contributing to this paradigm shift: The first one is the end of outsourcing. The second is the continued rapid expansion we see in e-commerce — which has now reached critical mass.

**Box Prices Hinged to OCC**

Assuming we are correct, and that US box demand continues its recent trend of growing close to the rate of general economic growth, customers likely will see their box costs rise in line with, or possibly greater than, the rate of inflation. The future of box prices will in large measure be a function of the cost of recyclable old corrugated containers (OCC) which, in turn, could be impacted by the degree of future growth in kraft (or virgin-fiber) linerboard capacity. Over the past quarter-century, as the global corrugated box industry has doubled, virtually all of the capacity built to supply this growth has been recycled (or OCC) based. As a result, close to 80% of global containerboard capacity is predicated on the use of recycled fiber (and thus cannot process wood).

Despite high OCC collection rates, the world’s supply could be approaching structural tightness given the “loss” of roughly 1 in 6 fibers as OCC moves through the process of being converted into new containerboard. This suggests the need for more kraft (or virgin-fiber) capacity. However, the regions with attractive softwood trees for containerboard production are limited, and gaining environmental permits for new mills is quite challenging. While we see a handful of mill conversions from white paper production in the US, it could be challenging for kraft linerboard capacity to grow sufficiently to allow for ample supplies of OCC. As a result, global corrugated box prices could rise a bit faster than inflation. That said, we see relatively few opportunities for substitution in ways that would save box customers money.

C.A. (Chip) Dillon, III is a Partner at Vertical Research Partners (www.verticalresearchpartners.com) covering the Global Paper and Packaging Industry. He is a Chartered Financial Analyst (CFA) and consistently ranks highly in the major polls/surveys of U.S. Packaging & Forest Products analysts, including a #1 ranking on eight occasions in the Institutional Investor (II) poll.
Four Technologies Poised To Disrupt the Specialty Paper Market

A new report offers a look into four technologies that are set to increase capacity and enable new product opportunities for manufacturers of specialty papers across the next five years.

The new Smithers Pira market report, *The Future of Speciality Papers to 2022*, provides a comprehensive overview of this important sector of the paper industry. It incorporates both higher volume applications, like flexible packaging and label stocks, and more niche segments like electrical insulation, filtration, and security papers.

Smithers Pira analyses the different fortunes to chart how global consumption of speciality papers in 2017 has reached 24.16 million tonnes. Steady growth will continue through the end of the decade at 2.2% per year to push this figure to 26.98 million tonnes in 2022.

**US Perspective**

Unsurprisingly the US dominates specialty paper demand in the Western hemisphere. In 2017 US market share for the Americas is 64% (by volume); or just over 16% of global demand. Expansion in the US, will continue across the next five years, but at a slower rate to less mature markets in the region, principally Brazil. Across the next five years the US will also be displaced by China as the world’s single largest national market for specialty papers.

The plummet in printing and writing paper demand linked to the emergence of the Internet began in the US, and it continues to reshape the papermaking landscape. Speciality papers have become attractive for stranded assets that are new and can be economically refocused — filtration and battery insulator papers in particular are showing good resilience in the face of the broader industry competition with polymer alternatives.

Simultaneously, the paper industry continues its consolidation trend, which is carrying over into the speciality business. As a diverse, high-value sector, the specialty papers market provides a strong forum for the initial deployment of technical innovations, to open new market applications and realise production efficiencies.

Smithers Pira research has identified four key developments that will help underpin future growth in specialty papers both in the North America and further afield across 2017-2022.

- Foam forming
- Precision control on large format machines
- Industry 4.0
- Stretchability

**Foam Forming**

First developed in the 1970s, foam forming is a papermaking process that can produce nonwoven-type materials on paper machines with excellent formation uniformity, bulk and porosity. Critically successful commercialisation will allow paper machines to produce nonwovens substitutes at lower costs than the current slow airlaid or wetlaid nonwoven production platforms.

Foam forming is a multi-phase fluid system structured by the presence of gas bubbles separated by thin liquid films. The bubbles impart increased sheet bulk and porosity to the paper.

As the process has undergone a series of recent technical refinements, new systems employing foam forming are now entering commercial production for specialty paper types. A key focus is maintaining sheet strength while not compromising the enhanced paper bulk; one process is employing cellulose nanofibrils (CNF) to give a reported 16-19% improvement in tensile strength.

The first product to come from the 21st-Century foam forming development is Paptic’s extensible paper bag stock which offers a more environmentally friendly substitute for plastic.

**Precision in Papermaking**

State-of-the-art precision technology developed for the commodity grades will steadily find a wider use on speciality machines too. These platforms offer multiple benefits with reduced product variation, resulting in tighter specifications with less waste from changeovers, rejected lots, or over-designed products that use excess fibre to cover poor variability and reproducibility.

In practice this means lighter paper grades from high-precision machines can compete with the same performance as heavier-weight papers from less precise machines. Simultaneously, superior coater designs are facilitating quick changes of coating formulations between grades with little time or material waste.

Improved product quality and costs will allow increased penetration of speciality paper grades into new applications and markets. However, a more disruptive impact will be the implementation of precision technology on faster and wider
papermaking machines allowing them to compete in the speciality spaces that have hitherto relied on slower, labour-intensive papermaking.

**Industry 4.0**

Running in parallel to greater precision, paper making is also adapting its systems to enable greater automation and data exchange. Across all manufacturing sectors this has been dubbed Industry 4.0.

While computers have been used on paper machines since the 1960s, new systems are integrating technical processes, quality systems and supply chain management in automated harmonised systems that reduce cost and will allow larger production lines to behave like small and nimble producers of the past. In combination with new on-line sensors for real-time monitoring of product attributes these will enable owners of larger and wider machines to deliver the precision required in many speciality grades.

A fine example of this trend is the evolution of headboxes with online CD basis-weight profiling. The headbox slice is kept as straight as possible, but the excess weight in a small area is corrected by injecting water in narrow segments to displace just the excess fibre. This is finally a robust control system for headbox fibre weight distribution. It matches the precision of the new high-resolution sheet scanner systems, correcting fibre weight differences in the cross direction of the tissue sheet.

**Stretchable Papers**

Initially developed in Europe by Gruppo di X, and beta tested with Innventia in Sweden, the capacity to develop stretchable papers is now a commercial reality via a licensing deal with BillerudKorsnäs in Europe. The mould paper produced using Gruppo di X’s trademarked Papermorphosis process relies on mechanical treatment to achieve a base sheet with 20% stretchability in the machine direction and 16% in the cross direction.

Stretchable papers are a new concept intended to replace plastics with natural paper webs, aligning with brand desires for a more sustainable persona, especially for single-use packaging. They can be supplied in reels that can be printed, coated and otherwise processed on traditional converting lines previously used for polymers. The key end products include tray-format packaging and pharmaceutical blisters for stiffness and advertising, paper cups and other liquid containers, and decorative foils for furniture.

Smithers Pira is a worldwide authority on the packaging, paper and print industry supply chains. For further information, visit: www.smitherspira.com.
Trending Now in Paperboard Packaging Design

The Paperboard Packaging Council says packaging customers are asking manufacturers to create designs that would disrupt the store shelf – and designers are up for the challenge.

The Paperboard Packaging Council (PPC) shared several current trends in folding carton and rigid box design, as distilled from the recently-adjudicated 2017 North American Paperboard Packaging Competition. While the winners will be revealed in October during PPC’s Fall Meeting, the overall trends should help converters and brand owners today in considering where their own recent work fits in — and how they can pivot from these trends in order to discover what’s next.

**Disrupter Structures**

This year, many customers asked their paperboard packaging manufacturers to create designs that would disrupt the store shelf. These converters took advantage of paperboard’s sturdy, sculptural qualities to formulate unique structural designs that stand out at retail. For example, many entries incorporated “arcuate” or circular scoring to create an additional panel on the front of their packages. This not only provides a unique bow-shaped structural element that interrupts monotony at retail, it also creates additional space for branding and graphics. Other disrupter designs incorporated sweeping curves and pyramidal shapes. A few packages were also intentionally designed to be taller or wider than the average folding carton.

**Sustainability Comes Standard**

Paper is renewable and recyclable by its very nature, and because of that, the paperboard packaging industry has always had a great sustainability story to tell. Yet over the years, converters have been working diligently to perfect that story by embracing sustainable manufacturing practices like material reductions, use of clean energy and sourcing from managed forests.

Today it seems the industry has reached a tipping point: nearly every entry in the 2017 Carton Competition incorporated sustainability in some way. For instance, many entry forms revealed that the cartons were converted using paperboard that came from FSC and SFI certified responsibly-managed forests. However, in most cases, this environmental accolade was not revealed on the package. This suggests that sustainability has become so integral to paperboard packaging design that no special mention is necessary. Sustainability is business as usual. It comes standard.

**Expanding the Senses**

Today, packaging is about experience. Brands don’t only want to engage consumers visually, they want to immerse them in multisensory experiences that elongate and deepen their interactions with the packaging, product and brand. Many cartons entered into the competition this year really upped the ante when it came to heightened sensory experience. In terms of tactile experience, soft touch coating was king. Nearly 100% of the cosmetics cartons and about 30% of the entries overall were finished with soft touch, which imparts
a rich, velvety feel to the package. Five years ago, there were perhaps three or four entries with soft touch — all of which probably merited a special award because of it. Now it has become a go-to choice for adding tactile appeal, especially in the cosmetics segment.

Some entries also incorporated audible elements into their designs. Several cartons had open and reclosure features that click when the consumer closes the package. The judges were pleased with this unique feature for two reasons: first, because the audible click gives consumers assurance that the package has closed properly; and second, because it allows for smooth and aesthetically pleasing interactions with the carton — the consumer can open and close the pack over and over without tearing it.

(Even) More Digital

Last year, PPC reported an increase in the number of digitally printed folding cartons entered into the competition. 2017 saw even more digital converting grace the judges’ table. Many of these cartons were made for smaller customers who desired speed to market and fast turnarounds. As technology becomes more sophisticated and accessible, more and more converters seem to be turning to digital presses to provide customers with speed and flexibility. If digital entries continue to increase at the same rate over the next years, PPC might even introduce a special category for digital.

Another point of interest is the use of laser cutting as opposed to traditional die-cutting. This new equipment allowed converters to add extremely detailed and intricate cutting embellishments to their cartons. In many cases, if one doesn’t look carefully, these cuts simply look like printing because they are so fine. Here, technology has expanded what is possible.

For more information about PPC’s North American Paperboard Packaging Competition, visit: paperbox.org/cc.

Now in its 88th year, PPC is the North American association for converters of paperboard packaging and their suppliers. To learn more, please visit: paperbox.org.
Creating Value for the Consumer

In a span of 90 years, Georgia-Pacific has evolved from a traditional forest products commodity business to a consumer products company with a focus on creating value for its customers.

By John O’Brien, Managing Editor

“This is not your father’s Georgia-Pacific” was the frequent response Georgia-Pacific’s former boss, A.D. “Pete” Correll, used to give when asked about the many changes that were taking place at the Atlanta-based forest products company during his tenure as president, CEO and chairman from 1993-2005. Correll also used to describe GP as a “maverick company . . . not afraid to embrace change and its benefits to the company.”

Since being acquired in late-2005 for $21 billion by Koch Industries, Inc., a private company based in Wichita, Kansas, GP could still be described in Correll’s terms as a maverick company. It has been reported that under Koch’s ownership, about 90 percent of the company’s profits are reinvested, and according to GP, $13.5 billion has been invested into its operations since 2006.

Headquartered in Atlanta, Georgia, GP is one of the world’s leading manufacturers of paper, pulp, packaging, tissue, building products, and related chemicals. The company has about 35,000 employees globally, self-generates 50% of the energy it uses, and utilizes 3.4 million tons of recovered paper to produce paper products each year.

IN THE BEGINNING

Georgia-Pacific’s forerunner, Georgia Hardwood Lumber Company, was established in Augusta, Georgia by Owen R. Cheatham in 1927. What began as an ordinary but very successful wholesale lumber business expanded, and by 1938 the Georgia Hardwood Lumber Company operated five lumberyards in the South. Through the first half of the 1940s, the company was the largest supplier of lumber to the U.S. armed forces.

In 1947, Georgia Hardwood Lumber Co. purchased a plywood plant on the Pacific Coast in Bellingham, Washington, and a year later was renamed Georgia-Pacific Plywood and Lumber Company. The company was listed on the New York Stock Exchange in 1949.

In 1953, Georgia-Pacific Plywood and Lumber Company moved its headquarters from Augusta to Olympia, Washington. A year later, headquarters were once again relocated, this time to Portland, Oregon.

In 1956, Georgia-Pacific Plywood and Lumber Company became Georgia-Pacific Corporation.

As Georgia-Pacific headed into the 1960’s, the company saw opportunity outside of the lumber business and acquired Puget Sound Pulp and Timber Co. in Bellingham, Washington, including Hopper Paper Division. It also acquired Vanity Fair Paper Mills in Plattsburgh, New York, and St. Croix Paper Co. in Woodland, Maine. With the Bellingham and Plattsburgh mills, Georgia-Pacific entered the tissue business. If you grew up in the 60s you may remember singer and actress Rosemary Clooney promoting GP’s first line of tissue products, Coronet®, in a series of television commercials.

By 1973, Georgia-Pacific had grown substantially and sales reached $2.2 billion. In 1975, the company operated more than 140 distribution centers and more than 200 plants and mills with some 33,500 employees. Those operations included saw mills, timberlands, pulp and paper mills, converting facilities, and chemical plants, to name a few.

Corporate headquarters returned to Georgia (Atlanta) in
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1982, after being based on the West Coast for almost thirty years. GP continued its aggressive expansion throughout the 80s with most acquisitions involving pulp, paper, and paperboard mills, along with capacity expansion projects at its existing mills.

**GREAT NORTHERN NEKOOSA**

On October 31, 1989, Georgia-Pacific’s chairman at that time, Marshall Hahn, announced a $3.2-billion bid for Great Northern Nekoosa Corp. Great Northern, headquartered in Norwalk, Connecticut, termed the bid “uninvited” and rejected the initial offer. GP, however, wouldn’t take no for an answer and upped the ante. On February 20, 1990, Great Northern’s board of directors agreed to a revised bid and a month later GP completed the $3.74 billion deal, adding 55 paper mills and paperboard converting plants, 83 paper distribution centers, one plywood plant and two sawmills to its growing portfolio.

Acquisitions settled down a little during the 1990’s, while GP evaluated then sold a number of non-strategic assets. In 1993, Pete Correll was named president, CEO, and chairman of the board. He had been hired by Hahn in 1988 as a senior vice president for pulp and paper and it has been said that Hahn considered Correll his potential successor.

Under Correll’s leadership, GP began gradually moving away from what was primarily thought of as a cyclical timber and building products giant to a more balanced company with strong consumer brands. An integral part of that strategy was the acquisition of tissue producer Fort James in the second half of 2000. With Fort James came well-known brands such as Quilted Northern, Soft ‘N Gentle, Brawny, Mardi Gras, So-Dri, Vanity Fair and Dixie.

“We’ve been moving away from a commodity, raw material-based strategy, and you can expect us to continue that,” Correll said.

And he wasn’t kidding. The $11 billion Fort James deal was followed by the spin-off of the company’s 4.7 million acres in timberlands, a half dozen major pulp and paper mills, and two major distribution businesses.

During his time at the helm of GP, Correll would also bolster the company’s safety practices and substantially advance its environmental stewardship measures.

**PUBLIC TO PRIVATE**

It has been reported that Koch Industries – brothers Charles and David Koch – first showed interest in Georgia-Pacific in 2003 when executives from Koch arranged a meeting with GP executives at GP’s headquarters in Atlanta to talk about the company’s operations. In 2004, Koch bought Georgia-Pacific’s pulp division and renamed it Koch Cellulose, taking it private.

The more Koch Industries familiarized itself with Georgia-Pacific, the more appealing it became. In November of 2005, Koch Industries offered to buy Georgia-Pacific Corp. for $13.2 billion in cash and assume $7.8 billion in GP debt. GP agreed. Correll reasoned that operating as a private company would allow Georgia-Pacific to invest in areas – particularly its packaging and building products businesses – where it had not previously because of concerns that Wall Street would not approve of such expenditures. Operating as a private company also would allow Georgia-Pacific managers to “avoid the distraction of quarterly reports,” better weather the industry’s cyclical downturns and execute strategic decisions much faster, Correll said.

Koch Industries executive vice president, David Koch, around the time of the offer talked about a few of the advantages of operating as a private company under Koch. “They were taking a large portion of their money and using it to pay down debt,” Koch said. “We can reinvest a lot more of that cash flow into improving their manufacturing facilities. In addition, process technology is something we are good at. We can make them operate a lot more efficiently.”¹

As for the consumer products aspect of GP’s business, Mr. Koch added, “Normally, we sell to the wholesaler, so this is a different dimension. But we are acquiring terrific capability with Georgia-Pacific. They don’t need us to inject people to help market. They are terrific at doing it already.”¹

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¹ Source: Georgia-Pacific Company Report.
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JIM HANNAN
The person in the top post at Georgia-Pacific for the past (nearly) ten years was Jim Hannan. He joined Georgia-Pacific in 2005 as chief operating officer, and was promoted to CEO and president in 2007.

Hannan came to Georgia-Pacific from Koch Industries, where he started in 1998 in a business development role in Koch’s mineral services unit.

He then held positions of increasing responsibility in the minerals group and became president of INVISTA Intermediates, another Koch company, before joining Georgia-Pacific.

During his tenure at GP, Hannan steered the company’s growth through acquisitions, innovations and investments in existing operations. Since 2006, Georgia-Pacific has also been able to pay down approximately $9 billion in debt (as of end-2014).

Hannan also played an integral role in putting together acquisitions of strategic significance for GP. In July of 2013, GP completed the asset acquisition of the Temple-Inland Building Products business from International Paper. The deal included 15 U.S. facilities strategically located near large, growing regions of building products customers across eight states: Alabama, Arkansas, Georgia, Louisiana, Oklahoma, Pennsylvania, Tennessee and Texas. The facilities manufacture products including fiberboard, gypsum products, lumber, medium density fiberboard (MDF) and particleboard.

Just a month later, Georgia-Pacific closed the acquisition of Buckeye Technologies, a manufacturer of specialty fibers and nonwoven materials — a deal that compliments GP’s Cellulose business with a product portfolio “aligned with our strategy to operate in the growing specialty pulp business.”

The Buckeye acquisition delivered five manufacturing facilities, global sales offices and approximately 1,200 employees. Buckeye’s manufacturing assets included a specialty pulp mill at Perry, Florida, cotton cellulose mills at Memphis, Tennessee and Lumberton, North Carolina, and mills producing nonwovens at Mt. Holly, North Carolina and Steinfurt, Germany.

A year later, (August of 2014), Georgia-Pacific acquired all of the equity of SPG Holdings LLC held by investors in the company. SPG, a paper goods company that manufactures and converts products for the foodservice industry, came with three manufacturing facilities in Green Bay, Wisconsin; Hattiesburg, Mississippi; and Augusta, Georgia; as well as a sales and administrative office in Dallas.

This past March, Hannan returned to Koch as executive vice president and CEO – Enterprises. Succeeding him as president and CEO of Georgia-Pacific is Christian Fischer. Fischer joined Georgia-Pacific in 1989, and has served in many leadership roles within that company, including executive vice president of the packaging and cellulose segment, a role he has held since 2007.

AN EVER-EVOLVING GEORGIA-PACIFIC
After over a decade of ownership, Koch Industries has empowered Georgia-Pacific to grow, evolve, and continue to be profitable. As Charles Koch says, “Good profit results from products and services that customers vote for freely with their dollars; products that help improve people’s lives.”

Today, Georgia-Pacific is a manufacturer of tissue, pulp, paper, packaging, building products and related chemicals. Within those segments, the company operates a number of businesses that in one way or another are inter-related.

Georgia-Pacific Professional is a leading provider of hygienic dispensing systems, towels, tissues, soaps, air fresheners, wipers, cups, cutlery and napkins, providing a range of products to market segments including office buildings, healthcare, education, manufacturing and foodservice.

Georgia-Pacific’s Building Products business is North America’s No. 1 producer of wood panels — namely plywood and oriented strand board — and is a leading producer of gypsum products and lumber.

Georgia-Pacific’s Cellulose business is a top producer of fluff pulp used in products such as diapers and incontinence items and market pulp used for papermaking.

Georgia-Pacific Chemicals is a global performance chemicals manufacturer and marketer. Its products are used in a diverse range of industries including building products, oil & gas, mining, paper, and packaging.

Georgia-Pacific’s Consumer Products offers brands like Brawny®, Dixie®, Angel Soft®, Quilted Northern® and Vanity Fair®.
Over the years, our customers have continually asked us, “Does IBS make a deckle board, is there anything better than what we have today?” With the introduction of the new iDeckle edge control system, we are proud to answer “Yes” to both of these questions.

IBS recently made the decision to reinvent this area of the paper making process. Over the last few years we have worked with our papermaking experts and customers to develop the most advanced and user friendly edge control system ever, this system is called the iDeckle.

The next generation in edge control systems

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and is one of the world’s leading makers of tissue, including paper towels, bath tissue, napkins and facial tissue. The company sells both branded and private-label products in retail and commercial markets in North America.

**Georgia-Pacific’s Nonwovens** produces airlaid nonwoven materials used to enhance the quality of hygiene and personal care products, cleaning supplies, baby wipes, cloth-like napkins, towels and tissues, and disposable table cloths.

**Georgia-Pacific Packaging** is one of North America’s leading suppliers of containerboard and corrugated containers. GP’s Color-Box™ business is the largest litho-laminate corrugated manufacturer in North America. GP Packaging produces bleached board used in food service items, such as disposable cups and plates, and kraft paper used to make bags for pet food and fertilizer.

**CONTINUED GROWTH IN 2017**

Heading into 2017, Georgia-Pacific continued true to its reinvestment strategy. In May, the company announced plans to invest $400 million to grow its (retail) tissue and towel business with a new tissue machine at its mill in Palatka, Florida.

Also in May, GP announced that it had completed a two-year, $388 million energy project at its Brewton Mill in Alabama and also plans to invest another $50 million for product improvements at the mill. The completed project at Brewton modernized and streamlined the mix of equipment in the mill’s recovery boiler system and now provides the mill with the ability to generate its own energy using natural gas and biofuel residuals from the paper-making process.

The additional $50 million investment is headed towards upgrades to the mill’s paperboard machine. The project will rebuild part of the machine and will improve the quality of the mill’s white-top linerboard product and increase the mill’s competitiveness. The mill is the largest employer in Brewton, with approximately 450 employees.

In August, Georgia-Pacific announced an expansion of its corrugated packaging business with the acquisition of Ohio-based PAX Corrugated Products. PAX operates a corrugated sheet plant with more than 100 employees in Lebanon, Ohio.

GP’s Color-Box™ business is the largest litho-laminate corrugated manufacturer in North America.

**CLOSE TO THE CONSUMER**

Charles Koch has said the key to being successful over a long period of time is creating value for others. “Why would customers pay you anything over a long period unless you’re creating value for them?” he asks.

It’s interesting. Back in February of 2005, PaperAge interviewed Pete Correll. He was our “Executive Papermaker of the Year” that year. During the interview, he talked about a different approach to business that Georgia-Pacific was taking. “We’re moving closer to the consumer . . . let us know what you want and we’ll bring it to you.”

It’s probably safe to say that Charles and David Koch would agree.

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Tomorrow’s Package
33 companies joining forces with VTT to develop new generation sustainable forest products

Together with a large industrial consortium, VTT Technical Research of Finland has launched a EUR 4.5 million project to speed up the development of fiber-based products as alternatives to oil-based materials like plastics. The project, funded partly by the European Regional Development Fund ERD, has brought together 33 companies, ranging from small to large, global companies.

The Future Fibre Products project coordinated by VTT will transform laboratory-scale results into pilot-scale demonstrations for products and processes with a low carbon footprint. It will also explore how the current paper and board production infrastructure can be utilized in the field of new packaging solutions, non-woven materials, porous insulation materials, or even as replacements for EPS-based materials.

Global awareness of climate change is driving the search for sustainable and environmentally friendly alternatives to oil-based products and materials. The forest industry is looking for energy-efficient and low-carbon solutions to improve production. In addition, they are looking for new applications and solutions to adapt the production infrastructure to changes in the market.

Excellence Through Long-Term Development of Competence and Infra
The new initiative continues the development of advanced solutions for fiber products and processes, which has been VTT’s strategic priority for a long time. It will strengthen the position of Central Finland as the global leader in the development of fiber-based products. The three-year project received approximately EUR 1.3 million in funding from the European Regional Development Fund, via the Regional Council of Central Finland and the Council of Tampere Region.

In order to answer the increasing piloting needs of companies in the development of novel solutions for future fibre products, VTT is investing in another pilot line facility in the city of Jyväskylä. The new line will enable the production of lightweight, porous materials, as it can be operated without a wet-pressing unit. The line will be ready for trials in early 2018.

“The new pilot, together with the current piloting environment, will have a central role in demonstrating the alternatives with the most potential. We hope that it will be used as efficiently by industrial partners, universities, and other research organizations as the current one”, says Harri Kuiskinnen, project manager of the Future Fibre Products project.

Faster Success by Combining Forces
The project attracted considerable industrial interest already when it was under preparation. In the end, 33 industrial companies from Finland, North America, Europe, and Asia decided to join. The project brings together actors from small enterprises to global leaders in the field, to tackle major challenges through open innovation.

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VTT Technical Research Centre of Finland Ltd is the leading research and technology company in the Nordic countries. To learn more, please visit: www.vtt.fi.
The Czech company PAPCEL Litovel is a leading supplier of complete technology for production of all commercially available paper grades. In the last three years, the Czech company PAPCEL completed the acquisition of several competing companies from Western Europe, thus significantly strengthening its market position. Today, PAPCEL Group is comprised of the companies: PMT S.R.L. Italy; GapCon tissue S.r.l. Italy; ABK Groupe France; Erma Elan engineering Czech Republic, PAPCEL A.S. Italy (former Comecart Italy); Gorostidi Spain. PAPCEL Group is a highly qualified supplier of paper machines with strong references worldwide and more than 70 years of tradition in the paper-making market.

Through the acquisition of PMT S.R.L., which was carried out in 2017, PAPCEL has advanced its position among the world leading players supplying technology for the papermaking industry. By merging with the Italian PMT S.R.L., PAPCEL Group gains references in the USA and in China. This year, PAPCEL Group expects to exceed the magical limit of revenues over 2 billion CZK = 74 mio. EUR.

By merging with PMT S.R.L., the number of employees has increased by 80 for the whole Group. The design “know-how” of the company has broadened, including direct sales. The Italian PMT S.R.L. is a specialist in the supplies of machines with width over 9,000 mm. Over the last decade, the company has built more than 20 new paper machines and has carried out more than 100 refurbishments. The company has very strong references on the markets of Latin America, in China and the USA. The US and Australian markets where PMT has its sales agencies expanded the business portfolio of the entire Group.

The first joint success of PAPCEL, a.s. and PMT S.R.L. is the signed contract with a customer from Turkey to supply a new headbox and press part modernization for the paper machine 7,700 mm wide. The contract was signed in June 2017.

PAPCEL's acquisition of PMT Italia SpA is a win-win for everyone. For our North American customers, PMT has provided advanced technology, high quality manufacturing, and custom, comprehensive projects that are very commercially competitive. The acquisition of PMT Italia SpA by PAPCEL, a.s. provides financial strength and stability to the business, while the addition of GapCon tissue S.r.l. opens new and innovative opportunities for our Tissue manufacturers.

In 2015, the Czech company PAPCEL founded a manufacturing division PAPCEL A.S. Italy, based in the town of Cuneo, thanks to the purchase of the Italian company Comecart (former Burgo Group). The acquisition of GapCon tissue S.r.l., Italy and PMT Italia SpA, Italy has set up a very strong group of companies and Italy has become a very strong technical-manufacturing “competence” center for production of tissue papers, printing & writing papers and packaging paper grades. The purchase of manufacturing facilities from PMT S.R.L. premises expanded the manufacturing park and increased the production capacities.

The Italian company PMT S.R.L. is a world-known manufacturer and specialist in the supplies of technology for the production of graphic papers and packaging paper grades.
Packaging has a critical role in protecting products as well as enhancing the brand and product experience. Through innovative chemistry and application expertise, Kemira works together with packaging & board makers to improve desired board properties such as strength and stiffness, weight and volume reduction, printability and functionality, and safety and hygiene for food packaging.

We are committed to the pulp and paper industry, and continue to help you create value through improved process efficiency, productivity and end product quality.

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