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MARCH/APRIL 2018

The independent news provider for the global tissue business

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TISSUE WORLD MAGAZINE

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FrontIssues looks back, and forward – Page 3

INSIDE: **MEXICO 'needs more tissue' – RETAIL - CONVERTING – DISTRIBUTION - PULP**

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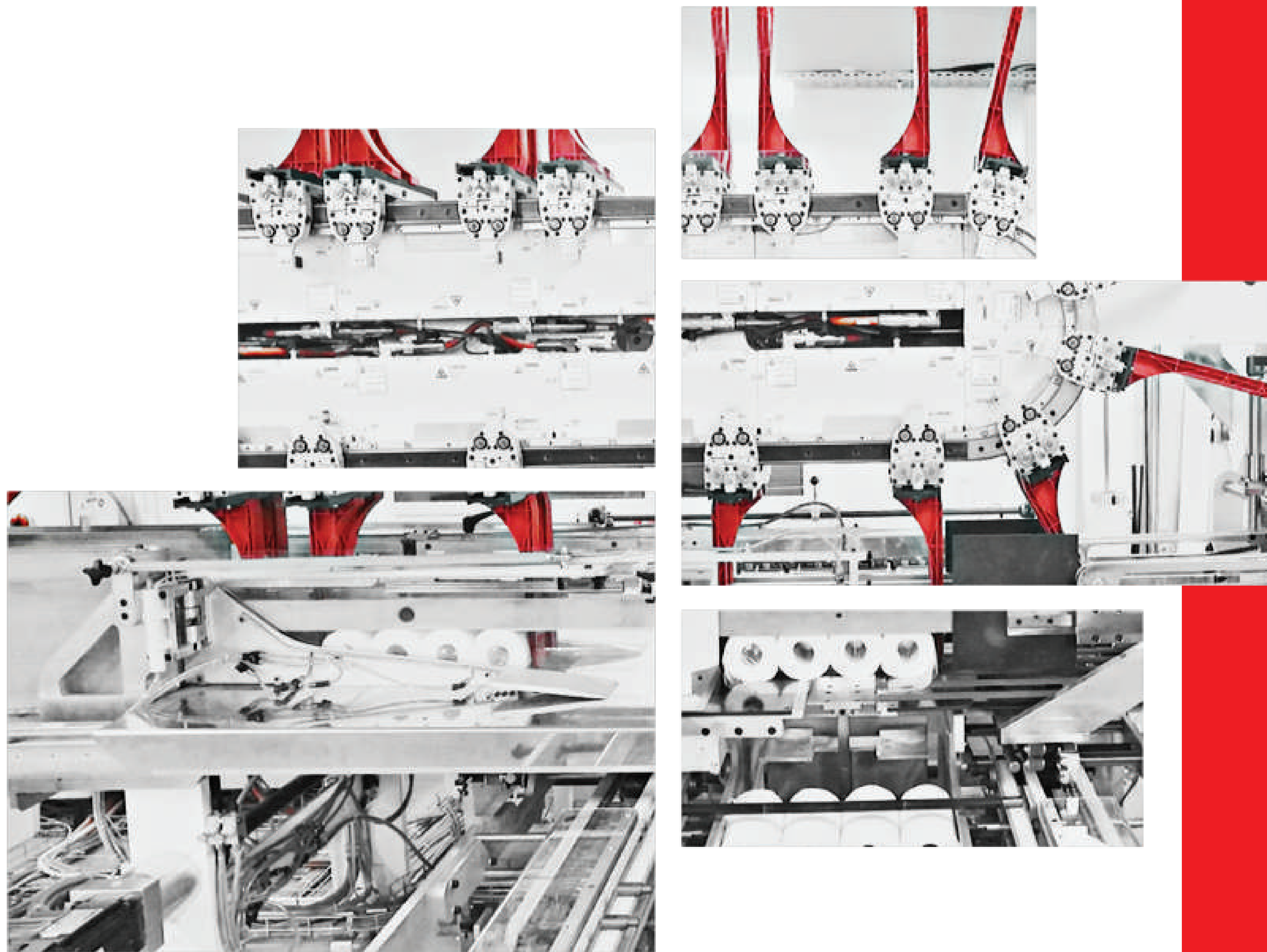

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The company STAX Technologies, following the values it sets to itself - to see any challenge as an opportunity, a possibility to improve its attitude towards business partners, employees and clients, used its experience to create special development teams, with the idea to work continuously on improving and updating its products.

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'Mexico has what it takes to be the South American tissue giant': TWM meets Convertipap (pictured top) and Absormex CMPC.

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TWM
TISSUE WORLD MAGAZINE

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www.tissueworldmagazine.com

Cover: Tissue World celebrates 25 years of bringing together the tissue world.

Tissue World – 25 years bringing the world's tissue businesses together

It began in Nice in March 1993 ... the first ever trade show exclusively dedicated to tissue. There were 700 attendees and 49 exhibitors. Now, attendance at TW Milan 2017 reached almost 4,000, with participants coming from 91 countries and 220 exhibiting companies. In Nice, conference preprints were given to delegates. Now, Tissue World TV broadcasts from the show floor with live interviews posted on YouTube and distributed online through all marketing and social media channels. TW's website has 50,170 unique users making 264,890 page views.

Après-show has always been important to TW ... it helps to iron out the fine details. In Nice, cocktails celebrated deals done at the Hotel Negresco on the Promenade des Anglais. In Milan, a relaxation zone offered yoga and massage sessions, and guests at the gala dinner luxuriated in the splendid Villa Necchi Campiglio where they were entertained by opera singers from La Scala.

2002 saw Tissue World Americas launched in Miami. Tissue World also launched the first global independent magazine in the industry, TWM, with comprehensive news and analysis and four, now six, Country Reports which crucially promote growing links between company leaders across the world and the shows themselves. There are now 3,500 magazine subscribers, and online 200,747 impressions annually. Now, too, our "Focus Reports" magazines offer detailed regional trading analyses of Western Europe and North America.

No less than four hurricanes - Charley, Frances, Ivan, and Jeanne – severely impacted TW Milan 2004, but of course the show must go on and it did. Many delegates staying on a further week until the airport re-opened. For 25 years then, Tissue World has become the industry's essential event by reaching across the five continents ... to China in 2004, at the Convention Center SNIEC in Pudong, Shanghai, to Barcelona, Milan, to New Orleans, and in response to industry demand with launches in Istanbul in 2014 and São Paulo in 2015, and soon in Bangkok. Across TW portfolios 8,300 unique industry professionals attend the trade shows.

The 25th anniversary year celebrated at TW Miami in March 2018 is going to be very special. Here are just some of the highlights: over 200 exhibitors, 40 conference speakers in our new-look conference ... Plus, the TWM Mill Awards 2018, the Most Sustainable Exhibitor Award, Happy Hour, our Show Floor Tech Talks, and our fabulous Gala Dinner at the grand Temple House ... All helping the tissue world do business since 1993.

Mexico: Innovation and new product niches become vital

Mexico is a classic story of big untapped tissue potential. The second largest economy in Latin America, and yet growing slower than other large Latin American countries for more than a decade and continuing to grow at a modest pace.

Yet there are surprising statistics about this net tissue exporter. It has free trade agreements with 50 countries, although trade with NAFTA neighbours Canada and the US represents the bulk of external tissue flows. The average technical age of a tissue mill in Mexico is 21 years compared to the US at 31 years and Canada at 33 years. Its mills are slightly smaller but newer.

Mill production averages about 83,000mty, ahead of Canada, but behind the US at almost 102,000mty. Mexico outpaced NAFTA's total capacity growth up to 2017 by about 22%, stalling a little only in the last couple of years. To take the usual drivers of tissue consumption growth – rising population, increased spending power, new products, niche range targeting – the last two will be vital as competition is fierce.

Inside, Absormex CMPC's general manager Humberto Narro Flores says Mexico has what it takes to be the South American tissue giant, poised to benefit from steady population growth, improved productivity and infrastructure, and a slowly growing economy.

Helen Morris

Senior Editor,
Tissue World magazine

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The squeeze on tissue margins is getting tighter

From rocketing raw material prices to cost conscious consumers with faltering brand or retailer loyalty – to discounting grocers and 'shrinkflation' – the market faces tough challenges. Report by Simon Creasey.

High volume, low profit, promotionally driven – the household paper category is intensely competitive. There is very little differentiation between brands and it's a mature category where the leading operators have been able to maintain their dominant market share for decades making it incredibly difficult for challenger brands to gain a foothold.

What makes it even tougher for branded operators of all sizes at the moment is the combination of the growth of private label products, the rise of the discounter grocery groups and the sky-rocketing price of raw materials, which has caused the cost of production to increase significantly over the last 12 months.

However, brands are struggling to pass these increases onto their retail customers because they in turn are coming under intense pricing pressure from the discounters and from cost conscious consumers who increasingly have little brand or retailer loyalty.

So how has the household paper product market been performing in retail during this turbulent period and what are the major challenges and opportunities facing brand owners in the UK, Europe and further afield?

Although there are similarities between many of the retail markets across Europe, there are subtle differences. In countries where the grocery discounter chains have managed to gain significant retail market share – for instance, Germany – they have had a major impact on pricing.

And in some markets – again like Germany – private label products are dominant, whereas in other areas – like the UK – brands account for the majority of sales, although this gap is slowly closing.

The overriding picture across European markets at the moment, according to the experts, appears to be relatively sluggish retail sales. There haven't been major falls experienced, but nor has there been major gains made. The current situation in the UK is pretty typical of the wider Eurozone.

According to Mintel, in 2016 value sales of household paper products hit an estimated £1.7bn – down marginally on the previous year. The company anticipates that due to population growth and the growing proportion of sales going through discounter grocers, by 2021 the market will have enjoyed modest growth and be worth around £1.72bn. The dominant factor on activity in UK retail at the moment is the growing influence of the discounter groups.

"At a total paper market level the rise of the discounters (Aldi and Lidl) have grown to have 10% of the market from 6.9% three years ago," says Julia Fine, analyst at Kantar Worldpanel. "Also at a total paper level, and linking with the growth of discounters, is the increase in private label paper across all three sectors (tissues, paper towels and toiler rolls). Private label has gained 6% of market share from the brands over (the last) three years."

Simon Creasey

Freelance journalist

One of the key reasons for this trend is the growing economic uncertainty in a number of different Eurozone countries, including the UK. Oday Abbosh, founder of Better All Round, which manufactures the Ora 'round' paper towel brand, says concerns about the general state of the economy remains an issue for any manufacturer or brand owner and continues to create a challenging retail environment.

"As household income continues to be squeezed, consumers remain concerned about living costs, which encourages a more promiscuous shopper," explains Abbosh. "Consumers are now much more prepared to flip between stores than they ever used to be and the more aggressive price discounting and positioning of private label is an important feature of that trend."

What makes it even tougher for branded operators of all sizes at the moment is the combination of the growth of private label products, the rise of the discounter grocery groups and the sky-rocketing price of raw materials, which has caused the cost of production to increase significantly over the last 12 months.

Branded or otherwise, no manufacturer of household paper products has been immune from the raw material price inflation that blighted the sector last year. The spiralling price of pulp was one of the main factors behind Accrol – which specialises in supplying private label products to retailers including Lidl – being forced to issue a profit warning and temporarily suspending its listing on the AIM stock exchange late last year.

Accrol may be the most severe example, but other manufacturers haven't escaped unscathed from the price hikes. In its recent financial results Essity announced higher raw material costs had a negative impact of SEK713m. "Organic sales were negatively impacted by lower market growth due to such factors as price pressure and as a consequence of Essity's decision to discontinue certain underperforming market positions and contracts as part of the company's focus on profitable growth for increased value creation," said the company.

It's a scenario that's all too familiar to Paul Fecher, chairman of Northwood. "Whether you're an international operator, an independent converter, or as we are a reasonable sized business, there is cost inflation at a level that is very painful for everybody if you have not taken steps to mitigate," he says.

Accrol may be the most severe example, but other manufacturers haven't escaped unscathed from the price hikes. In its recent financial results Essity announced higher raw material costs had a negative impact of SEK713m.

"There are certain things you can do with optimising manufacturing, there are certain things you can try to do with your products, but at the end of the day pulp for paper is such a high percentage of the value of these products that everybody is in a pincer movement.

"Whether you're K-C, Essity, Sofidel or Northwood you've got cost inflation that's already come through. Everything is increasing in price. We have to improve the quality and service, but historically you did not get paid value for your products."

Fecher says it's been difficult for companies to pass on the rising price of production to their retail customers who want the household paper product manufacturers to absorb the costs themselves.

That's why some companies have resorted to shrinking the size of their rolls – a tactic that's been branded 'shrinkflation'. But going forward retailers may have little choice in the matter because Brexit is going to hit all manufacturers and retail groups across the Eurozone hard – depending on the severity of the final terms of the UK's departure from the EU.

There are essentially two prongs to this. The UK imports more paper products than it exports, however, the weak pound means imports have become more expensive whether that's from Eurozone countries or further afield.

The UK imports more paper products than it exports, however, the weak pound means imports have become more expensive whether that's from Eurozone countries or further afield. So there is a business case for manufacturers to step up production in the UK to service the domestic market, and given the weak strength of the pound they may additionally benefit from increased demand for cheaper exports overseas.

So there is a business case for manufacturers to step up production in the UK to service the domestic market, and given the weak strength of the pound they may additionally benefit from increased demand for cheaper exports overseas.

As Brexit inches ever closer many experts also believe there could be a shift in consumer sentiment, with UK consumers keener than ever to buy British made goods – in a poll of UK consumers undertaken last year one in seven said they were more likely to buy British as a result of the outcome of the EU referendum.

The political and economic uncertainties surrounding Brexit aren't the only issue manufacturers of household paper products have to contend with at the moment. Any changes in the Chinese paper market have the ability to distort markets elsewhere around the globe, says Fecher.

"When the Chinese government interferes with waste paper qualities being imported and those factories who have invested in huge capacities cannot use the cheapest raw material, they go up the food chain and if they go up the food chain they put a squeeze on the next grade up which is somebody else's raw material," he explains.

"This means that (particular type of) pulp becomes more desirable in China and if they suck in hundreds of thousands of tonnes of extra pulp it puts more pressure on the rest of the market."

It's a factor that Ken Messud, country research analyst at Euromonitor, also highlights, although he believes the market is well placed to absorb any potential fallout.

"The impact of potential changes in trade policies on retail tissue markets in Asia Pacific, including China – currently the world's largest market for tissue and hygiene products – can be mitigated by the expanding domestic production and locally sourced supply base built by domestic, regional and global players to increase cost efficiencies as well as shield the industry revenues from the impact of currency fluctuations."

It's clear that manufacturers of household paper products face some major challenges in the months ahead. However, there are also some exciting new avenues emerging in retail.

Despite consumers becoming more and more cost conscious, there has also been a move towards premium tiers of toilet paper, such as quilted and lotioned, which are showing some of the fastest value growth percentage wise and is where many manufacturer are focusing their NPD efforts.

There's the opportunity for brand owners to do more direct-to-consumer selling through their own online sales platforms, or through an operator like Amazon, and there is also the opportunity for brands to innovate and create new product development (NPD) in response to one of a number of emerging consumer trends.

"In toilet tissue the growing trend is towards bigger packs with a reduction in sales of packs with fewer than six rolls and a rise in sales of packs with 16 plus rolls," says Kantar's Julia Fine.

"Within kitchen roll the movement has been towards rolls with more sheets – a good example is Plenty moving all its rolls to having 100 sheets in July last year."

Anecdotally, despite consumers becoming more and more cost conscious, there has also been a move towards premium tiers of toilet paper, such as quilted and lotioned, which are showing some of the fastest value growth percentage wise and is where many manufacturer are focusing their NPD efforts.

"This tightening (consumer spending) environment could provide a boost to manufacturers selling more innovative – and expensive – products as the pricing gap would be reduced," says Messud.

"Specifically, bamboo-focused brands such as The Cheeky Panda Ltd, which is already meeting a growing audience in the UK, could gain even more momentum in the coming years."

Momentum is the operative word here. The retail market for household paper products is undergoing a period of change, and going forward it's anticipated that consumers in economies that are struggling will continue to trade down to retailers' own private label offering or even to the discounters, which would see the market share of branded operators reduced.

But for those manufacturers who are prepared to throw the dice and gamble there is a potentially lucrative opportunity to woo consumers with more premium oriented products that private label and discount grocers struggle to deliver. So although stern challenges lie ahead it's not all doom and gloom for the sector.

US market

The US household paper product market has been relatively flat over the last few years, according to the latest data from Mintel. The $18.2bn market has endured "lackluster" or declining sales across all segments – except for wipes – and Mintel anticipates that "limited gains" will be made between now and 2022.

While branded operators have struggled due to cost conscious consumers, private label products have enjoyed strong growth and now account for 25% of the market.

"The premiumisation of private label offerings has squeezed profit margins and limited sales growth," noted Mintel in a report on the US market published earlier this year. "Sales have also fallen in smaller segments, such as facial tissues and napkins, due to pricing pressure from private label compounded by declining engagement among younger consumers."

The future outlook for manufacturers of branded paper products is unlikely to improve as the grocery discounter groups, which have had a significant impact on European markets, look to scale up their US operations. In 2017, Lidl opened its first US stores and aims to eventually have a 100-strong estate countrywide, and rival discounter Aldi which opened 150 stores in The States last year alone. The impact on the market was immediate. Kantar data showed Lidl's goods were often cheaper than US grocery behemoth Walmart's, so to combat the threat Walmart lowered its own prices. How long the different parties can sustain this price war remains to be seen.

The other major question mark looming large over sales of household paper products in the US is President Donald Trump.

"With potential changes in trade policies discussed by the new US administration, Euromonitor International's Industry Forecast Model anticipates the impact of the trade wars on retail tissue products to be felt in the Mexican market, due to the extent of trade and imports between the US and Mexico," says Euromonitor's Ken Messud.

The future outlook for manufacturers of branded paper products is unlikely to improve as the grocery discounter groups, which have had a significant impact on European markets, look to scale up their US operations. In 2017, Lidl opened its first US stores and aims to eventually have a 100-strong estate countrywide.

GLOBAL

K-C to cut 5,500 jobs and close 10 plants amid "challenging environment"; restructuring to impact all business segments

The restructuring is expected to impact all of K-C's business segments and organisations in each major geography and will see the company exit or divest some low-margin businesses in its consumer tissue business segment.

Tissue giant Kimberly-Clark (K-C) has announced a global restructuring plan that will cut 13% of its workforce and sell or close 10 manufacturing facilities.
In its year-end results, the company said its 2018 Global Restructuring Programme is expected to reduce its structural cost base and enable it to invest in its brands, growth initiatives and "capabilities critical to delivering future growth".
Savings will be driven by workforce reductions – anticipated to be in a range of 5,000 to 5,500 – and some 10 manufacturing facilities will be shut down or sold.
The restructuring is expected to impact all of K-C's business segments and organisations in each major geography and will see the company exit or divest some low-margin businesses in its consumer tissue business segment.
A spokesman for K-C told TWM that the company is not providing specifics on the status of any of its production facilities or the proposed job reductions until final decisions are made and announced.
He said: "The timing of those announcements will be determined by the needs of the business and appropriate consultation and/or negotiations with unions, works councils and other labour stakeholders."
Production capacity at several other sites will be expanded to improve overall scale and cost.
Once completed, it's expected that the programme will generate annual pre-tax cost savings of $500 to $550m by the end of 2021.
K-C reported fourth quarter 2017 net sales of $4.6bn, an increase of 1% year-on-year, and full-year 2017 net sales of $18.3bn which were up slightly.
Operating profit for the three months ended 31 December 2017 was down 3% to $812m.
Its consumer tissue segment recorded fourth quarter sales of $1.5bn, a drop of 1%.
Volumes and net selling prices for the sector each fell 1%, while currency rates were favourable by less than 2%.
Fourth quarter operating profit decreased 13% to $258m, impacted by lower sales and input cost inflation.
Sales in North America decreased 4% and volumes were down 2%, driven by lower bathroom tissue volumes.
Sales in developing and emerging markets increased 4% and volumes increased 3%.
In developed markets outside of North America, sales increased more than 3% although volumes declined 3%, primarily in Western/Central Europe.
Chairman and chief executive Thomas J. Falk said: "In 2017, we delivered bottom-line growth in a challenging environment.
"Although we expect market conditions will remain challenging in the near-term, we plan to deliver better results in 2018 while we begin to implement our new restructuring.
"We expect organic sales to return to growth while improving our margins and delivering double-digit growth in adjusted earnings per share.
"In addition, we will increase investments in our brands, our growth initiatives and the capabilities we need for long-term success."
He said the restructuring programme was "the biggest restructuring we have undertaken" since the introduction of the Global Business Plan in 2003.
"It will make our company leaner, stronger and faster. The changes we are making will improve our underlying profitability, provide more flexibility to invest in growth opportunities and help us compete even more effectively," he added.

Clearwater Paper has said it expects to layoff upwards of 100 staff at its Lewiston, Idaho-based mill. The move is in a bid to restructure the company's tissue operations amongst tough competition in the consumer tissue market.

Kemira increases prices globally

Kemira has increased the prices of its key sizing chemicals for paper and board industry across the globe.
The company implemented price hikes of 10-25% across its main sizing product lines and FennoSize-products.
It said the price adjustments of the AKD-wax and – emulsions result from "a challenging raw material situation and increased costs within the AKD-wax supply chain".
The price increases of the ASA-sizes are driven mainly by increased raw material costs and tight olefin supply globally. Olefins are the main raw material of the ASA-products.
The hikes came into effect on 1 January, or as contracts allow.

Clearwater Paper restructures Lewiston mill; 100 redundancies

Clearwater Paper has said it expects to layoff upwards of 100 staff at its Lewiston, Idaho-based mill.
The move is in a bid to restructure the company's tissue operations amongst tough competition in the consumer tissue market.
A spokeswoman for the company said: "We are restructuring our Lewiston tissue operation to align with changing market conditions, which include a reduction in conventional tissue volume as a result of increased competition in the consumer tissue industry.
"We are currently working with the union through this process and will have more details at a later time."

Amazon Papyrus announces price hike

Amazon Papyrus Chemicals has increased its prices by 5-15% depending on the products.
The hike is in effect immediately, or wherever contracts allow.
The company said it was necessary due to "a significant increase in raw

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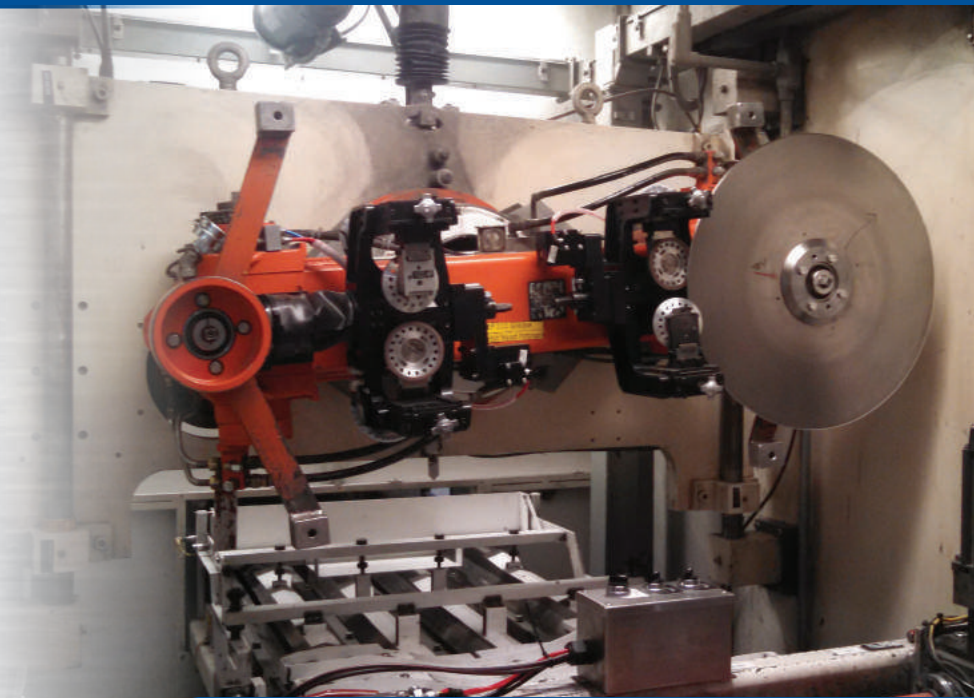

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material, manufacturing, packaging, transportation and regulatory costs".

It added it will continue to "work proactively with our customers to further optimise applications related to process and functional chemicals".

Founded in 2000 and headquartered in Hong Kong, Amazon Papyrus is a specialty chemical company that has established a presence in 11 countries.

OMET targets dispenser napkin market with FV.6: launch

OMET has launched its latest version of the FV line, a high-performance vacuum folding machine that's dedicated to the production of dispenser napkins.

According to the supplier, the FV.6 is a vacuum folding line that has six lanes and provides high-performance, automatic process and enhanced efficiency during the entire productive process.

The whole converting process can be controlled from the main panel due to a group of cameras installed inside the machine which allow real-time inspection and control, zoom and images rewind.

It features a new transfer unit with two deliveries working alternately.

The stacking system is more efficient and enables the production of dispenser napkins with 1/8 folding.

Due to the guided sliding system, it can produce packets up to 350mm. It can also be integrated with different type of packing machines.

The machine can produce sizes up to 17x17 inches at the maximum speed of 250 metres per minute and it can also use more than one reel or wider reels.

OMET said that despite a reduced production speed, it has the same production capability of a mechanical folding machine with less possible mistakes.

The FV.6 completes the range of OMET machines based on vacuum-folding technology.

Essity has reported an 8% increase in net sales to SEK 109,265m in its 2017 year-end results. The company attributed the increase to a rise in sales of higher priced products and growth in emerging markets, which it said helped it to offset rising pulp costs.

Essity reports increase in net sales in 2017 results

Essity has reported an 8% increase in net sales to SEK 109,265m in its 2017 year-end results.

The company attributed the increase to a rise in sales of higher priced products and growth in emerging markets, which it said helped it to offset rising pulp costs.

Net sales for the fourth quarter of 2017 increased 7.1% to SEK 28,664m compared with the corresponding period a year ago. Organic sales for the quarter increased 1.8%.

The company said it was negatively impacted by lower market growth due to such factors as price pressure and as a consequence of the discontinuation of "certain underperforming market positions and contracts".

It said: "The global market for hygiene and health products was challenging in 2017. Emerging markets noted higher demand.

"The European market for consumer tissue demonstrated low growth and increased competition. The Chinese consumer tissue market noted higher demand."

In its consumer tissue segment, net sales for the year were up just 1% to SEK42,014m compared to the same time a year earlier. Adjusted EBITA was down 8% to SEK4,084m.

In emerging markets, which accounted for 44% of net sales, organic sales increased by 6.2%. The increase was related to Asia, Latin America and Russia.

For the fourth quarter, the consumer

High-performance: *OMET's latest version of the FV line vacuum folding machine*

Speciality chemical company Buckman has said it will increase its prices on select paper and pulp product lines as of 1 March, or as contracts allow. The price increase will be 10-25% depending on geographic location, and products and services sold.

tissue segment reported a net sales decrease of 0.8% to SEK11,026m.
The decline was mainly related to lower prices and lower volumes.
In emerging markets, which accounted for 45% of net sales, organic sales increased by 8.3%. The increase was mainly related to Asia, Russia and Eastern Europe.
The company added that thigher raw material costs were mainly the result of significantly higher pulp prices.
It said: "Better price/mix, higher volumes, cost savings and lower energy costs had a positive impact on profit. Selling prices were higher in Asia and lower in Europe."

Buckman announced global price increase

Speciality chemical company Buckman has said it will increase its prices on select paper and pulp product lines as of 1 March, or as contracts allow.
The price increase will be 10-25% depending on geographic location, and products and services sold.
In some areas, increases may be higher where exchange-rate-based adjustments are necessary.
The company said the hikes are being driven by the rising cost of raw materials, energy and transportation.
Buckman is a privately-held, global specialty chemical company with headquarters in Memphis, USA.

Körber announces new CFO

Körber has appointed Stefan Kirschke as its chief financial officer.
He succeeded Harald Vogelsang as group CFO as of 14 December.
The company said Vogelsang left the group by mutual agreement, a premature release from his current contract, due to personal reasons.
Kirschke has held various leadership positions within the Körber Group. Most recently he served as CFO in the business area Körber Tissue.
His successor in the role of chief executive of the business area Körber Tissue will be Oswaldo Cruz.
Cruz joined Fabio Perini Brazil in 1994 as a sales manager and was appointed as managing director there in 2007.
Cruz, Markus Fröhlich (CFO) and Luca Frasnetti (CTO and COO as dual responsibility) will form the new management team for the business area Körber Tissue.
The Business Area Körber Tissue includes the brands Fabio Perini, Casmatic and MTC.

Södra announces price hikes

Södra Cell has increased the price of its NBSK in Europe to USD 1,070/tonne.
The hike was made effective 1 January 2018.
Magnus Björkman, VP Marketing and Sales Södra Cell, said: "The global pulp market is searching for an equilibrium, but it has clearly not reached that point yet," commented Björkman, "On the contrary the market remains exceptionally strong and this latest announcement is a reflection of the continuing market sentiment."

SWEDEN

Svenska Pappersbruket quadruples production

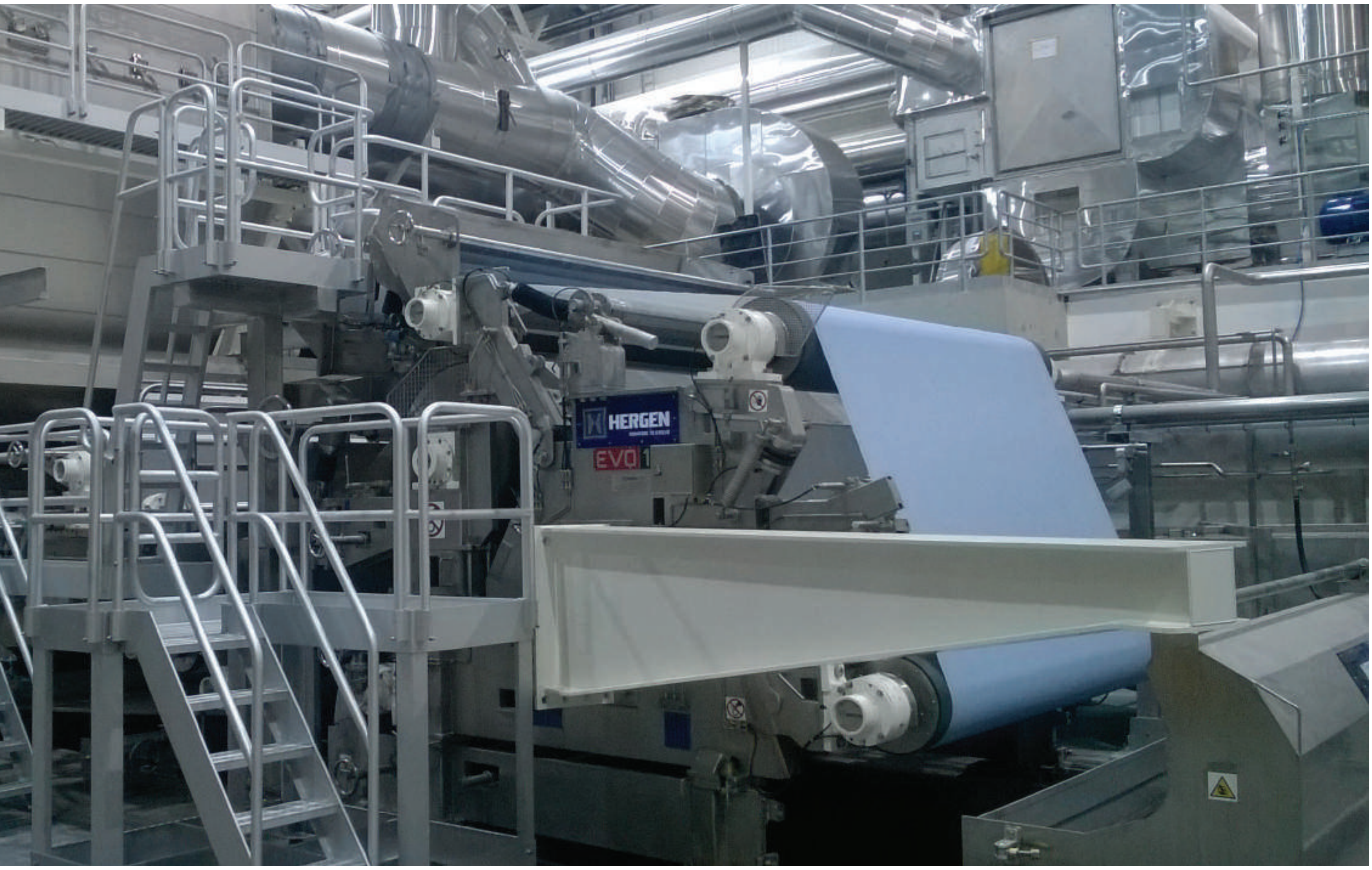
Svenska Pappersbruket has boosted its tissue capacity by 30,000tpy after investing in a tissue machine.
Supplied by Recard, start-up of the line at the company's Klippan-based site is planned for the second quarter of 2019.
The mill produces coloured tissue base paper reels used mainly for napkin production, and supplies customers worldwide.
The SEK150m investment will mean new recruitments of 20-25 staff.

POLAND

Polmak diversifies into tissue production

Polmak has moved into tissue production after acquiring a tissue machine with a production capacity of 90tpd.
Based in Batorowo, Poznań, the company is a leading manufacturer of superior quality printed table napkins, decorative paper bags, paper plates and cups. It moved into the tissue market after it started up an EVO 12, supplied by Hergen.
The machine has a width of 2.8m, a design speed of 1,700m/min, and is producing tissue from 13g/m2 up to 30g/m2 from virgin pulp.
The scope of supply included complete stock preparation equipment, approach

Körber has appointed Stefan Kirschke as its chief financial officer. He succeeded Harald Vogelsang as group CFO as of 14 December. The company said Vogelsang left the group by mutual agreement, a premature release from his current contract, due to personal reasons.



Diversifying into tissue: *Polmak starts up an EVO 12 TM*

flow, a EVO 12 Crescent Former unit, complete press section, Steel Ribbed Yankee dryer, Aerodry gas hood reel equipped with shaft puller and engineering.
The company has also purchased land in Iława city to set up the green field mill.

AMERICAS

Cascades finalises sale of New York plant

Cascades has completed the sale of the building and land of its Maspeth, New York-based plant, for US$72m.
The company accepted an offer from a private buyer and will continue to use the facility until 31 December 2018, the date the plant is scheduled to close.
Last August, as part of the modernisation plan for its operations in the Northeastern USA, Cascades announced it had decided to shut down the Maspeth packaging plant due to the physical limitations of the site.
The volumes will be progressively redeployed to other Cascades units over the course of the year.
Charles Malo, president and chief operating officer of Cascades Containerboard Packaging, said: "The reorganisation of our activities in the region will be done gradually to ensure a smooth transition for our customers, thus continuing to reinforce our commitment and ability to act as a preferred partner in their ongoing development."
Founded in 1964, Cascades produces, converts and markets packaging and tissue products that are composed mainly of recycled fibres.

K-C to close two Wisconsin facilities; 600 redundancies

Kimberly-Clark will close its Neenah facility and Cold Spring plant as part of its announced global restructuring programme.
Some 100 staff will be made redundant at the Neenah plant, which makes nonwoven fabric products, while 500 staff will lose their jobs at the Cold Spring plant, which makes personal care products including Depend adult incontinence products.
A spokesman for K-C told TWM: "As part of the recently announced global restructuring programme, which is occurring within the next three years, Kimberly-Clark can confirm that it has informed employees at the Neenah (WI) Cold Spring Facility, and the United Steelworkers Local 2-482 leadership, of its proposed plan to close this facility.
"No specific timing has been announced, and any final decisions relating to this facility will be announced by the company after appropriate consultation

Cascades has completed the sale of the building and land of its Maspeth, New York-based plant, for US$72m. The company accepted an offer from a private buyer and will continue to use the facility until 31 December 2018, the date the plant is scheduled to close.

and/or negotiations with the union and other labour stakeholders."

However, K-C informed staff at the Neenah Nonwovens facility of its plan to close the site within the next 18 months.

The spokesman added: "Business decisions that impact our employees are among the most difficult ones to make – we don't take such decisions lightly.

"We remain committed to treating our employees fairly and respectfully.

"Further, Kimberly-Clark remains committed to the community as one of the largest employers in the Fox Cities, and Neenah will continue to be the headquarters for our North American consumer business."

Tissue Italy appoints Marco Dell'Osso as executive vice president

Tissue Italy - the network behind the It's Tissue event - has appointed Marco Dell'Osso to the role of executive vice president.

The organisation said the position enhances its advocacy of "made in Italy" technology for the worldwide tissue market.

Massimo Franzaroli, Tissue Italy president, said: "Marco has been a strong contributor to the creation and success of It's Tissue as a representative of one of the network members – Futura. He was therefore the natural candidate for this important new post."

Marco Dell'Osso added: "We now have a world-class event without parallel, but to grow we need to evolve.

"The new role I am honoured to accept shows the commitment of all the network members to growth and innovation."

Resolute reports preliminary 4Q and 2017 results; appoints Yves Laflamme as president and CEO

Resolute Forest Products has reported sales of $898m in the fourth quarter of 2017, an increase of $9m compared to a year earlier.

Net income for the quarter ended 31 December was $13m compared to a net loss of $45 million in the same period in 2016.

For the year, the company reported a GAAP net loss of $84m compared to a net loss of $81m in 2016.

Sales were $3.5bn, down 1%.

Richard Garneau, the then president and chief executive, said: "An otherwise solid quarter was impacted by the ongoing restructuring at our Calhoun paper operations, as well as maintenance outages at several locations.

"Also, the appreciation in our share price in the quarter, and company performance increased our share-based compensation expense."

The company reported operating income of $49m in 2017 compared to a loss of $26m in 2016, mostly due to higher selling prices.

Operating results of the tissue segment – which continues to include only the former Atlas tissue operations – improved by $1m compared to the third quarter, reflecting higher overall pricing of $50 per short tonne, largely because of product mix.

Despite the improvement in manufacturing costs, mainly attributable to the impact of Hurricane Irma in the third quarter, the delivered cost remained essentially unchanged due to lower volumes.

For the year, the segment reported an operating loss of $6m, an improvement of $4m over 2016.

The difference reflects primarily a decline in delivered cost of $164 per short tonne, or 9%.

Garneau added: "Market fundamentals remain favourable in our pulp and lumber segments.

"In paper, we expect positive price momentum to carry into the first quarter. Additional gains are also anticipated from our restructuring initiatives at Calhoun and the restart of a paper machine at Alma.

"Initiatives undertaken in 2017 to redefine our tissue sales and marketing strategy, including broadening our product offering, rebranding as Resolute Tissue, and reinforcing the sales force, are beginning to yield results, with additional sales volume secured for 2018."

The company has also appointed Yves Laflamme as president and chief executive. He is succeeding Richard Garneau, who the company said has retired.

Laflamme currently serves as senior vice president, Wood Products, Global Procurement and Information Technology for Resolute.

He is a 37-year veteran of the industry, as well as Resolute and its predecessor companies. He began his career in finance working at Donohue Inc.'s Saint-Félicien integrated pulp mill and wood products operations in 1981, and moved on to serve as controller for the company's integrated newsprint and wood products facilities in the Abitibi region of Quebec.

Resolute Forest Products is a manufacturer of forest products including market pulp, tissue, wood products, newsprint and specialty papers, which are marketed in close to 70 countries.

It owns or operates some 40 manufacturing facilities, as well as power generation assets, in the United States and Canada.

CHINA

Hengan International boosts capacity with Changji start-up; targets high quality tissue market

Hygiene and sanitary products manufacturer Hengan International has successfully started up its Modulo-Plus PM26 at its Changji mill in Xinjiang.

Supplied by Toscotec, it is the second PM to be recently started-up at the site, boosting the company's capacity by 50,000tpy.

As with PM25 which started up in November 2017, PM26 has a production speed of 1,600m/min and a width of 2.8m.

It is equipped with a single layer headbox, one large diameter TT SuctionPressRoll, second generation TT SYD with improved rib design, TT Milltech natural gas high efficiency hood and steam and condensate removal system.

The machine is now producing high quality tissue products.

Ready to roll: *Lee & Man's new Voith-supplied XcelLine tissue machine set to produce 60,000tpy of household tissue*

Lee & Man boosts latest TM start-up

China's Lee & Man has successfully started up its fourth Voith-supplied XcelLine tissue machine.

Based in Guangdong, the machine has a wire width of 5.6m and is designed for an operational speed of 2,000m/min.

It will produce 60,000tpy of household tissue from virgin fibre.

Scope of supply includes the Voith BlueLine stock preparation unit, approach flow system, broke handling, a white water system and the entire XcelLine tissue machine.

It features the NipcoFlex T shoe press to offer energy savings, a 5.5m Steel Yankee dryer cylinder and a high-performance steam-heated hood.

The company has started up four high-quality tissue paper lines at its site in Jiangxi and Guangdong.

With five production sites in China, it mainly produces packaging paper and tissue paper.

Vinda International boosts capacity by 120,000tpy

Vinda International Group has purchased four AHEAD-2.0M tissue machines to be installed in its new production base in Xiaonan district, Xiaogan, Hubei.

Toscotec will deliver the first two lines in mid-March and the second two in mid-May 2018.

PM1, PM2, PM3 and PM4 will have similar configurations, including second generation large diameter TT SYD and Toscotec's most recent technological developments in dryness efficiency.

The four AHEAD-2.0M are scheduled to come online by the end of 2018 leading to a total production increase of over 120,000tpy for Vinda.

Toscotec is also delivering two AHEAD 2.0M tissue machines to Vinda's new Yangjiang mill in Guangdong.

Overall, the six lines will add a total of over 180,000 tonnes to Vinda International's annual production output.

ITALY

Lucart invests in tissue; secures commitment to Italian tissue market

Lucart Group has strengthened its presence in the tissue market after investing in an AHEAD-2.0S tissue machine.

Supplied by Toscotec, PM12 will be installed at the company's Porcari mill and will produce high quality tissue paper starting from pure cellulose and recycled paper.

The scope of supply includes the new automatic rewinder equipped with three unwinding stations, the maximum operating speed is 2,000mpm, with technology aimed at preserving paper thickness during reel winding.

Installation will be finalised in the second quarter of 2018.

The forming section is designed for the future installation of a new system aimed to increase the dry content and thickness of the finished product.

The dry section includes the TT DOES solution with the shoe press TT NextPress, a TT SYD-16FT second-generation Steel Yankee dryer and high-efficiency hoods that target high quality paper with the lowest possible energy consumption.

The line has an operating speed of 2,000mpm and the total production is approximately 35,000tpy.

Massimo Pasquini, Lucart chief executive, said: "This important investment allows us to strengthen our presence in the tissue market.

"We believe that the growth of the company in the market of paper for hygienic-sanitary use in Europe is strategic, and the new PM will foster the development of all the business units of our group.

"We are pleased to look at the world without forgetting our origins; for this reason, installing cutting-edge technology at our historical Porcari mill, in the province of Lucca, should be seen as a message of trust towards Italy as a whole."

Lucart produces MG paper, tissue products and airlaid products, and was founded in 1953 by the Pasquini family.

Substantial investment: *SPS Corporate responds to the "ever-growing global market"*

INDONESIA

SPS Corporate eyes global growth with TM investments

SPS Corporate has boosted its presence in the global tissue market after investing in two tissue machines.
The lines will be installed at the company's Indonesian-based subsidiary companies, Sopanusa Tissue and Packaging Saranasukses, and will more than double the group's current capacity to 185,000tpy.
Supplied by Over Mechanica and Recard, both machines are Crescent Former and designed to produce up to 60tpd.
They will manufacture tissue products from 11gsm to 30gsm to accommodate the "ever-growing global market", producing all grades of virgin pulp tissue, recycle tissue, and brown tissue.
They have a maximum operating speed of 1,200mpm, with a max trimmed sheet width of up to 2.7m. Both are expected to be fully operational by mid-2018.

Indonesia's SPS Corporate has boosted its presence in the global tissue market after investing in two tissue machines. The lines will be installed at the company's Indonesian-based subsidiary companies, Sopanusa Tissue and Packaging Saranasukses, and will more than double the group's current capacity to 185,000tpy.

SPS Corporate has previously focused mainly on pure virgin pulp tissue lines, with materials fully compliant to environmental standards including FSC certification.
However, the company said it also intends to innovate further and include mix grades and fully recycled lines of tissue products.
The existing PM12 and PM14 will be dedicated to run mix grade and full recycle grade tissues, while the new PM15 will be dedicated for pure virgin pulp line and producing premium grades of facial, napkin, toilet, and kitchen towel tissue.
Two additional tissue machines are also in the pipeline in order to expand the group's tissue capacity and address the ever-growing demand for the products globally.

AUSTRALIA

Encore Tissue boosts capacity with a Steel Yankee start-up

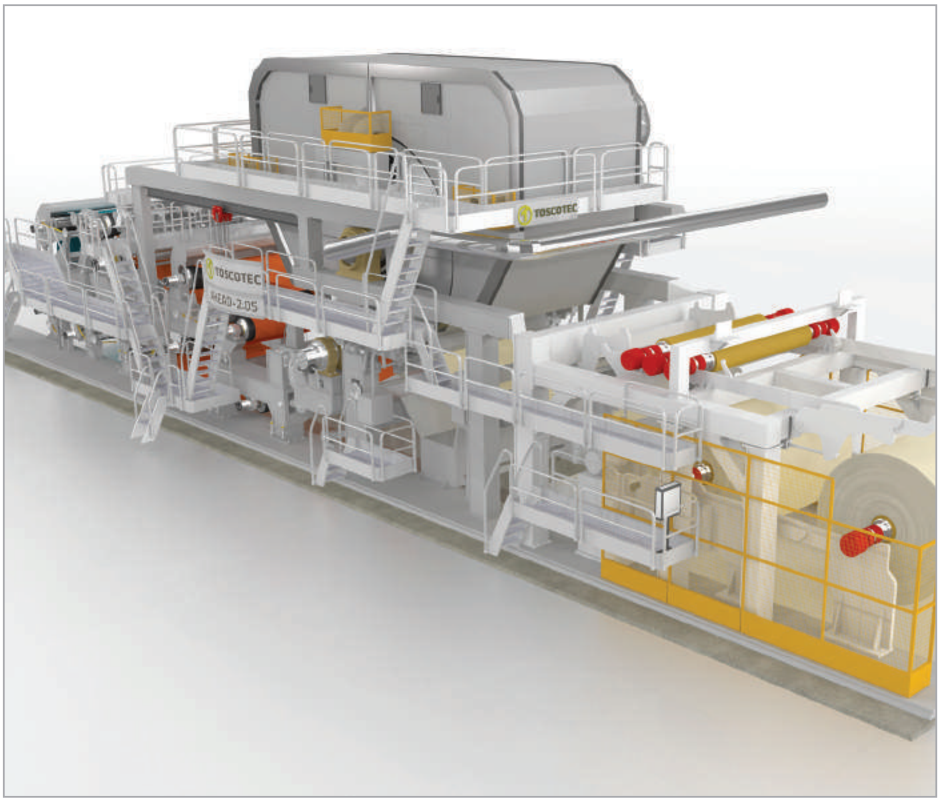
Encore Tissue has started-up a Steel Yankee Dryer TT SYD line at its Laverton North mill. Supplied by Toscotec, the rebuilt tissue machine has a width of 3.6m and replaces a cast iron Yankee. It will produce high quality tissue paper.

Encore Tissue has started-up a Steel Yankee Dryer TT SYD line at its Laverton North mill.
Supplied by Toscotec, the rebuilt tissue machine has a width of 3.6m and replaces a cast iron Yankee. It will produce high quality tissue paper.
Following installation, Encore Tissue expects to increase the machine's operating speed from 1,400mpm to 1,900mpm.
The company is a manufacturer of toilet tissue and paper towel and supplies retailers and wholesalers.

FRANCE

Lucart boosts tissue production capacity

Lucart has started-up a tissue rewinder TT WIND-P at its facility in Laval sur Vologne.
Supplied by Toscotec, it features two unwind stands and handles parent rolls with a width of 2.9m, 2.6m diameter, at a maximum speed of 1,400mpm.
It is equipped with a slitting unit, automatic control of all unwinding and rewinding operations and sectional drive system.
This turnkey project includes Toscotec's proprietary automation and control system, which the supplier said "guarantees a significant increase in efficiency and productivity".
Lucart's history goes back to the 1930's when the Pasquini family set up a papermaking factory in Villa Basilica, Lucca.
Today the group's total production capacity is over 300,000tpy with 10 paper machines and 58 converting lines.



Maximum speed of 1,400mpm: *Toscotec's TT WIND-P set for Lucart's facility in Laval sur Vologne*

HERGEN with ASME Certification

HERGEN is qualified to produce pressure vessels with ASME Certification (Section VIII Division 1)

In a constant search to improve the quality of its product, Hergen has now the ASME Certification for pressure vessels.

What is ASME Certification?

It is the accreditation given by ASME to companies that fit to the strict quality standard defined by them.
The ASME standard is accepted in 80 countries and it is mandatory for supplies to USA and Canada.

Constant evolution

The ASME Certification is a result of hard work and investment done by Hergen to accredit its Drying Cylinders, Yankee Dryers for paper industry and pressures vessels manufacturing facility.

Quality guarantee

This certification gives to Hergen's customers the assurance that they are acquiring products which meet the toughest quality control, that ranges from design, purchase of raw material, manufacturing process to the use of modern tools to assure the quality of the welded joints.

TISSUE WORLD Miami

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ASME SETTING THE STANDARD

HERGEN CONVERGE TO EVOLVE

Mexico: Exports – and NAFTA renegotiations – are becoming vital

Mexico's tissue business continues to evolve to take advantage of the North American Free Trade Agreement (NAFTA) since implementation in 1994. Mexico has free trade agreements with over 50 countries, but trade with NAFTA neighbours Canada and United States represents the bulk of external tissue flows.

This article will focus on reviewing the Mexican tissue industry and identifying potential issues and opportunities with its trading partners.

Figure 1, derived from FAO data, profiles the evolution of Mexico's tissue trade flows. The data show a reversal in tissue trade flow in 2009 when Mexico become a net tissue exporter and the trend lines reveal a gradual reduction in imports with a more rapid growth in exports.

Mexico's total tissue trade tonnes represent about 20% of Mexico's total tissue capacity.

Production capacity from Q4-2007 to Q4-2017 increased by 33%, while NAFTA's total capacity growth was about 11% (Figure 2).

Mexico's capacity increase occurred earlier in this period with new projects in 2010 and 2015. It has remained essentially flat since 2015.

NAFTA tissue capacity growth has picked up more recently, driven by several projects in the United States and a few in Canada. Project announcements support the continued NAFTA growth in the United States while Mexico capacity's outlook remains flat.

There are 244 operating tissue machines among the three countries (Figure 3). Mexico has more machines than Canada (37 versus 26) but these numbers are dwarfed by the machines in the United States.

Figure 4 provides a comparison of Mexico's tissue mill size and technical age to its NAFTA partners. Mill production in Mexico averages about 83,000 MT per year. This is ahead of Canada, but lags behind the US at almost 102,000 MT per year. Comparing capacities against technical age shows that Mexico has an advantage within NAFTA in Technical Age of its T&T machines.

The average technical age of a tissue mill in Mexico is 21 years compared to the United States at 31 years and Canada at 33 years. Mexico's tissue mills are slightly smaller but newer than its neighbours'.

Bruce Janda

Senior consultant, Fisher International

Kimberly-Clark de Mexico operates several uncreped TAD machines equivalent to the most advanced Kimberly-Clark Corporation machines in the United States, Europe, and Australia.

Mexico's production capacity from Q4-2007 to Q4-2017 increased by 33%, while NAFTA's total capacity growth was about 11% (Figure 2). Mexico's capacity increase occurred earlier in this period with new projects in 2010 and 2015. It has remained essentially flat since 2015.

Source: Fisher*Solve*™

***Figure 1:** Mexicos' T&T trade Flow*

By Fisher International's **Bruce Janda**

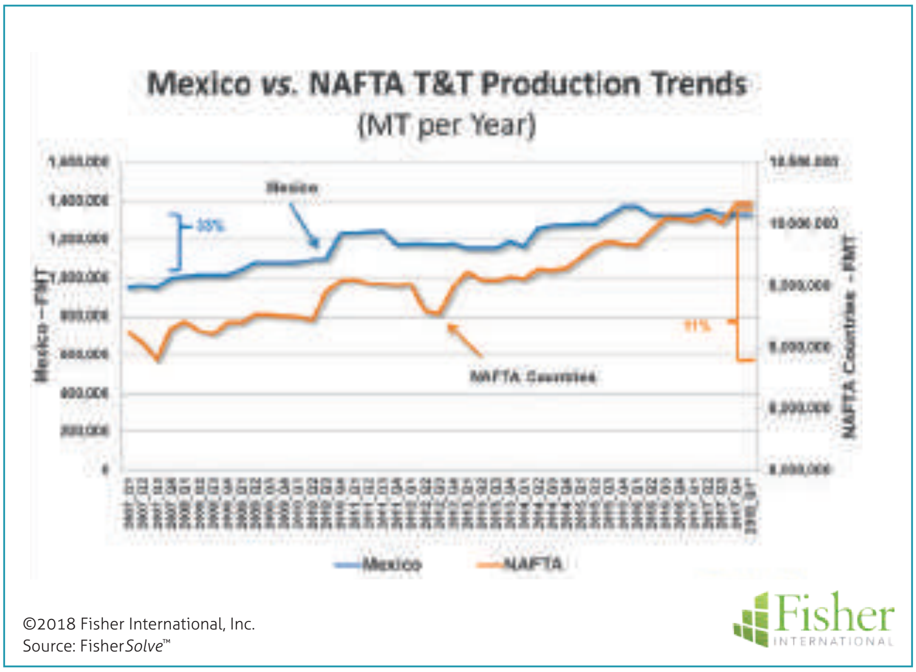

***Figure 2:** Mexico vs NAFTA T&T Product Trends*

Analysis reveals the growing value of exports as embodied in NAFTA and adjacency to United States markets in the ongoing development of Mexico's lower cost tissue business.

The company appears to use this capability to support the production of high-end products seen in Mexico City stores and exports to the United States and Canada.

Mexico's T&T cost position is strongest among the NAFTA partners: low materials, pulps and labour rates are an advantage to Mexico. Raw material

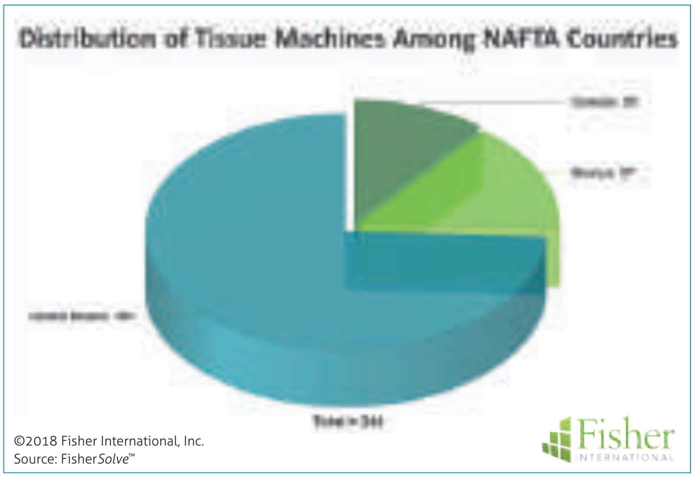

***Figure 3:** Distribution of Tissue Machines among NAFTA Countries*

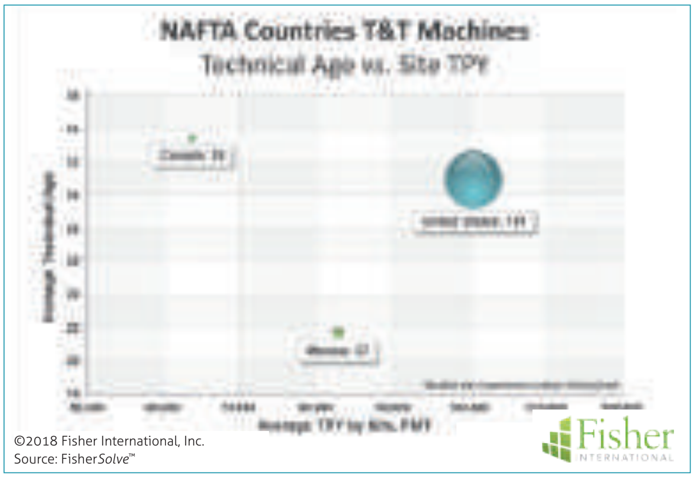

***Figure 4:** NAFTA Countries T&T Machines*

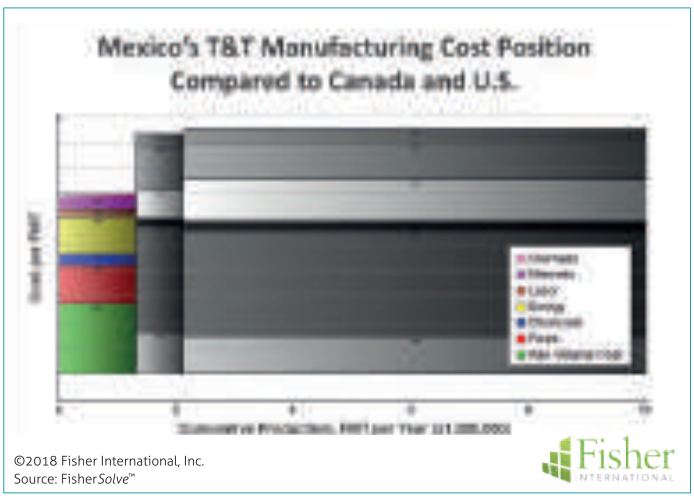

***Figure 5:** Mexico's T&T Manufacturing Cost Position Compared to Canada and US*

***Figure 6:** Mexico's T&T Producers Market Share*

fibre costs are Mexico's only significant cost disadvantage before considering transportation and proximity to market as shown in Figure 5.

Canada and the United States have more trees and some integrated tissue mills to support lower cost raw material fibres.

Mexico's tissue production is dominated by K-C de Mexico, with Essity in distant second place as shown in Figure 6. There are five other companies operating tissue machines in Mexico with market shares ranging from 1 to 11% of the total.

The Mexico tissue manufacturing analysis reveals the growing value of exports as embodied in NAFTA and adjacency to United States markets in the ongoing development of Mexico's lower cost tissue business.

Investments in tissue assets have exceeded that required to keep up with domestic demand. Going back to Figure 1, Mexico has a tissue trade surplus of about 160,000 tonnes.

Investments in tissue assets have exceeded that required to keep up with domestic demand. Going back to Figure 1, Mexico has a tissue trade surplus of about 160,000 tonnes. This is approximately the size of two average Mexican tissue mills per Figure 4. It also prompts the question of what will happen if NAFTA renegotiations underway radically alter or cancel the pact, forcing Mexico's tissue exports to travel further or not at all.

This is approximately the size of two average Mexican tissue mills per Figure 4. It also prompts the question of what will happen if NAFTA renegotiations underway radically alter or cancel the pact, forcing Mexico's tissue exports to travel further or not at all. The source for market data and analysis in this article is Fisher*Solve*™.

About Fisher International, Inc.

Fisher International supports the pulp and paper industry with business intelligence and strategy consulting. Fisher International's rich databases, powerful analytics, and expert consultants are indispensable resources to the industry's producers, suppliers, investors, and buyers worldwide. FisherSolve™ is the pulp and paper industry's premier business intelligence resource. Complete and accurate, FisherSolve is unique in describing the assets and operations of every mill in the world (making 50 TPD or more), modeling the mass-energy balance of each, analysing their production costs, predicting their economic viability, and providing a wealth of information necessary for strategic planning and implementation. FisherSolve is a product of Fisher International, Inc. For more information visit: www.fisheri.com or email info@fisheri.com USA: +1-203-854-5390

Mexico consumer tissue: fundamentals and soft drivers – what does the future hold?

Mexico – the second largest economy in Latin America – has grown slower than most other large Latin American countries for more than a decade and continues to grow at a modest pace. Growth of private consumption has slowed down, and fears of a disorderly renegotiation of NAFTA weigh on the growth outlook. Disposable income per capita in Mexico amounted to USD6,211 in 2016, with projected increase by a cumulative value of 43.8% in real terms over 2017-2030 at an average annual rate of 2.8%. According to the latest statistics, poverty in Mexico has risen to 46.2%, mainly in urban areas.

Mexico's population growth is decelerating over time, while Mexican society is ageing. The number of those over 65 is expected to reach 15.4 million by 2030, or 11% of the total population, up from 6% in 2011. Mexican fertility presently stands at 2.2 births per female and is expected to fall to 1.9 births by 2030. The decline began with the introduction of family planning in the 1980s but demographers argue that the real reason for the fall is a change in family values. Emigration is also an important determinant of demographic structure in the country with its long history of emigration. According to the US Census Bureau, Mexicans account for around one-third of the foreign-born population in the USA.

With GDP and population being the top two drivers of consumer tissue growth in the country, threats to economic growth, including the potential impact of Trump policies, and slowing population growth are a cause for concern over future growth and industry revenues. To balance off the impact of these fundamental drivers of growth and in the conditions of still low per capita consumption compared to developed regions, the industry is seeking to innovate and expand product ranges to cater to both lower income and higher income segments of the consumer in the country.

Economy and price vs opportunities in premium value-added products

In 2016 retail tissue started feeling the increasing pressure of the devaluation of the Mexican peso against the US dollar. By mid-November 2016 it had hit its historic lowest value, following the results of the presidential elections in the US. The highest impact was on the price of cellulose and imported fibres. One of the chronic problems of the Mexican paper industry is the lack of virgin fibre, which makes the industry heavily reliant on recycled fibre and as a result, on imports. The depreciation of the local currency throughout 2016 put manufacturers under strain, forcing them to implement different strategies to cope with increasing manufacturing costs in an already highly competitive environment.

C E Svetlana Uduslivaia

Euromonitor International's head of tissue & hygiene industry

Annual per capita consumption of retail tissue in Mexico stands at a little over 4kg in 2016, well below the per capita consumption of developed markets. Although low per capita consumption

Retail Volume Sales Growth		
Quarterly Update		1.9%
Driver effects, 2016-2021		
GDP Per Capita		0.5%
Product Price		0.1%
Habit Persistence		0.0%
Population		1.0%
Demographics		-0.2%
Share of Households of 4+ persons	-0.2%	
Urbanization	0.0%	
Market Environment		0.0%
Time trend	0.0%	
Passenger Cars in Use per Capita	0.0%	
Soft Drivers		0.6%

Table 1: *Retail consumer tissue in Mexico – growth drivers decomposition:*

Note to the table above:

Source Euromonitor Industry Forecast Model

The percentage market growth – quarterly update 1.9% projected CAGR growth of retail tissue volume – is broken down into positive and negative percentage point effects for individual demand drivers.

Euromonitor

By Euromonitor International's **Svetlana Uduslivaia**

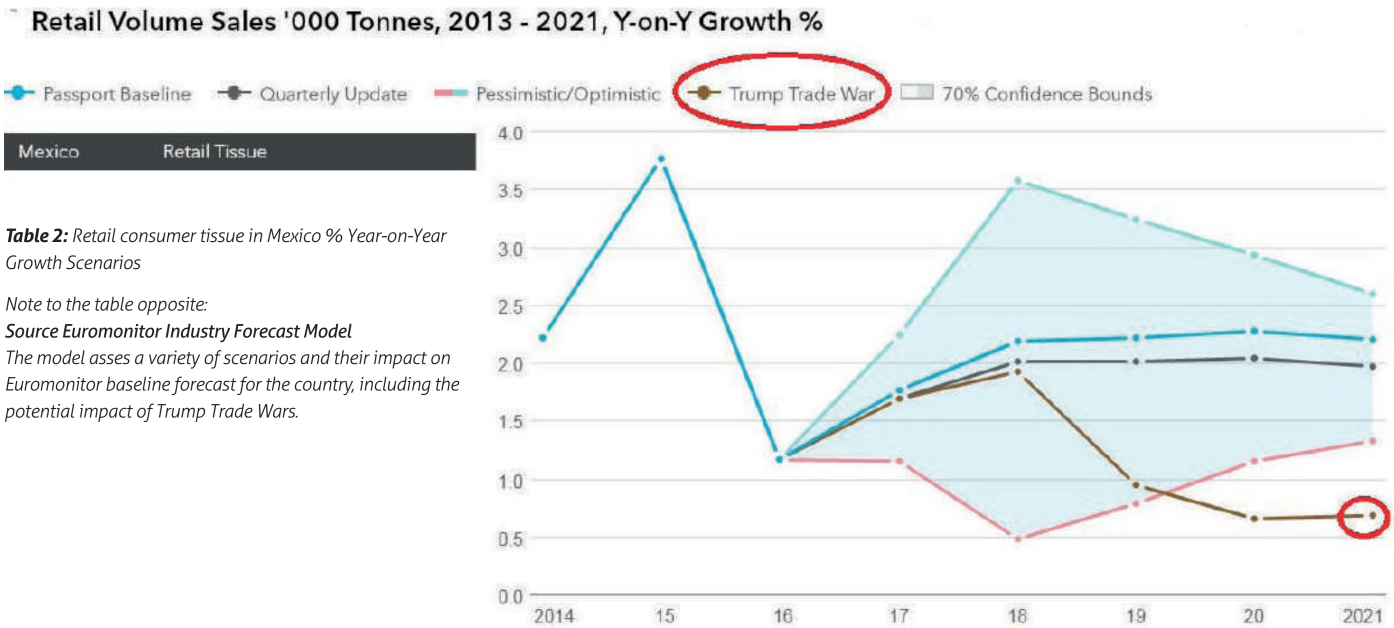

Table 2: *Retail consumer tissue in Mexico % Year-on-Year Growth Scenarios*

Note to the table opposite:
Source Euromonitor Industry Forecast Model
The model asses a variety of scenarios and their impact on Euromonitor baseline forecast for the country, including the potential impact of Trump Trade Wars.

still offers significant room for growth, retail tissue is becoming a commoditised category in Mexico, with many consumers' purchasing decisions often driven by price rather than by quality or brand loyalty; a trend further exacerbated by economic uncertainties. Toilet paper remains the biggest category within retail tissue, representing 79% of overall value sales in Mexico. It has seen prices decline and quality and availability improve. The category is highly competitive, with regular discounts and promotions offered throughout the year, as well as the wide availability of multipacks to offer value for money.

Economy toilet paper remains popular with lower-income consumers, and such products are also widely accessible at the large number of informal establishments and street stalls available across the country. At the same time, the Mexican market has seen quite a bit of development in higher quality and premium toilet paper. Key trends see brands seeking to leverage softness, delicate textures, moisturising ingredients (such as essential oils, macadamia cream and vitamin E), and special fragrances from natural ingredients such as chamomile and coconut, amongst others. Recent years saw a number of launches positioned in premium toilet paper, such as Kimberly-Clark's Kleenex Cottonelle Prestige, featuring Nordic cotton and natural silk for softness. The primary consumer base for premium toilet paper is consumers in the middle – and high-income segments. Other developments include toilet paper products positioned as more eco-friendly, such as Essity's (formerly SCA's) Opción Verde line and Kimberly-Clark's Kleenex Cottonelle Bio Compact toilet paper. These brands are presented as manufactured using environmentally-friendly processes.

Kimberly-Clark was the first company to enter moist toilet wipes, with its Cottonelle Fresh brand. Although a small number of competitors and private label ranges have since entered the category, the limited number of products available on shelves reflects how the category is encountering difficulties in being accepted by Mexican consumers; mostly because of high pricing and lack of habit. The only innovation observed in the category concerned Cottonelle Fresh, and was the launch of a pouch presentation featuring a cap, aimed at providing more comfort during use. Kimberly-Clark is trying to position its product as complementary to its Kleenex Cottonelle Unique dry toilet paper, presenting them in advertising as "La Pareja Perfecta" (the perfect couple).

In other categories, paper napkins saw healthy growth in retail volume, with growth supported by wide distribution through modern retail as well as thousands of informal stalls and taquerias across the country. Facial tissue saw a more modest increase and continues to appeal mainly to middle – and high-income consumers. Innovation in the category focuses on natural ingredients, scents, modern designs (especially for boxed facial tissues) as well as characters from well-known cartoons, such as Looney Tunes. At the same time, in paper towels consumers tend to select products based on price rather than value-added special features.

In the next few years through to 2021, retail consumer tissue in Mexico is expected to post a CAGR of 2% in volume terms. As the level of household penetration continues to rise, and private label has been improving its standing with consumers, retail tissue will come under further pricing pressures. Threats to growth are mainly linked to the economic growth being below expectations, increasing inflationary pressures due to the strong volatility of the Mexican peso against the US dollar, which erodes consumers' purchasing power, and concerns over trade policies of the new US administration.

As in many other markets and consumer product categories under competitive and pricing pressures, cost efficiencies will become an important consideration to ensure a good balance of price and innovation to drive growth and build consumer brand loyalty.

Mexico needs more tissue – and one family-owned company is ready to respond

With consumer growth figures up to 6%, there is currently not enough tissue to supply the population. Luis Alberto Reséndiz, general director of family firm Convertipap, explains what he plans to do about it. Report by Helen Morris, Senior Editor Tissue World Magazine.

Luis Alberto Reséndiz, the general manager of the family-owned Convertipap, arrives fresh-faced and relaxed at the company's Tlaxcala-based plant, despite a four-hour drive to the facility during Mexico's infamous rush hour traffic.

His lengthy journey only starts to hint at the dedication he has for the family-owned business, which he operates alongside his brother, Lezly Reséndiz. Before his arrival, TWM is also greeted by the very welcoming Eng. Antonio Falcón, general manager of the Tlaxcala plant, and during our visit we also meet the chief executive and founder of the business, the brother's father Mr. Nicolás Reséndiz.

Mr. Nicolás Reséndiz established the company in 2000. At the time, it produced kraft paper and just 10tpd of napkins. Now, it's strategically expanded and has two plants located in the Mexican Republic; one in Ixtapaluca, State of Mexico, and the other in the state of Tlaxcala. There are four machines, one of which produces kraft paper and the other three produce

Helen Morris

Senior Editor,
Tissue World magazine

more than 55,000 tonnes of tissue paper, towel or napkins per year. The most recent tissue machine supplied by Recard started-up in June 2017,

Mr. Nicolás Reséndiz established the company in 2000. At the time, it produced kraft paper and just 10tpd of napkins. Now, it's strategically expanded and has two plants located in the Mexican Republic; one in Ixtapaluca, State of Mexico, and the other in the state of Tlaxcala.

L-r: *Luis Alberto Reséndiz, Antonio Falcón, Ignacio Martínez and Nicolás Reséndiz*

By Tissue World Senior Editor **Helen Morris**

Annual investment: *every year Convertipap makes an investment in infrastructure, machinery or the training of its 600 employees*

boosting the company's production capacity by 25,000tpy. In November, a PCMC Amica Matrix line expanded production further. It is dedicated to the production of toilet rolls, widening the company's range of converted products to include serviettes, hand towels, facial tissue, industrial rolls, toilet paper and kitchen towels.

The business operates in three different markets: 30% of its production is in the AfH market, 40% in consumer and the remaining in private label.

"The consumer tissue market here is growing very rapidly, it's growing faster than Mexico's population," Reséndiz says. "We're also seeing that GDP growth is slowing down, but demand for tissue products continues to grow."

And grow it does – the consumer tissue market is forecast to continue to grow at 5% year-on-year, while private label products are growing at 6% year-on-year.

"There are a lot of opportunities to be taken," he says. "Mexico needs more tissue: there's not currently enough to supply the population, we have a lot of empty market."

He adds that private label products aren't currently very popular in Mexico, although interest is growing.

Mexico is an increasingly competitive market and home to some of the world's largest global as well as local tissue players: Kimberly-Clark, Essity, Chilean player CMPC as well as Papel San Francisco.

Every year, Convertipap makes an investment in infrastructure, machinery or training of its 600 employees. It's aim is to be committed to the changing economic and social development of the country as well as the preservation of the environment, developing various manufacturing processes that reduce the size of its ecological footprint. One of the most important is its wastewater treatment plant from OMC-Collareda, which has a recirculation system based on biological agents, allowing the company to recover up to 98% of the water used during the manufacturing process.

Some 95% of its products are manufactured using recycled raw materials. Convertipap produces a "popular" range for the economy market as well as some high-quality products, 3ply and 2ply, but just for private label. "We're generally seeing more demand for high quality and expensive products, but the growth in this market is slow," Reséndiz says.

Mexico is an increasingly competitive market and home to some of the world's largest global as well as local tissue players: Kimberly-Clark, Essity, Chilean player CMPC as well as Papel San Francisco.

By Tissue World Senior Editor **Helen Morris**

Above: *Convertipap's most recent TM started-up in June 2017 and increased the company's production capacity by 25,000tpy;*

Right: *CEO and founder Nicolás Reséndiz (pictured left) and his son and company general manager, Luis Alberto Reséndiz*

One of its competitive advantages he adds is the company's customer service: "Service is very important for us throughout our value chain, giving confidence and security to our customers trying to adjust to their needs... This helps us to establish a very close and positive business relationship."

"Our main challenge is to consolidate the company despite the many challenges we face every day, such as the fluctuating economic conditions. We just have to adapt and pay close attention to the changes in the industry in order to be able to react on time to them. Even with the fluctuating trends in the economy and population, the population is increasing and is expected to reach 130.7 million in 2018. We must keep all this in mind; we are a family business that has grown because of a lot of effort and work and therefore everything we do is done with love and our own means. We are looking to continue consolidating and growing with a firm step in the tissue paper market in Mexico."

"The population is increasing – it's expected to reach 130.7 million during 2018. We need to take all this into account. We are a family business, so all we do is made with love and with our money and energy. We want to continue to stabilise and grow steadily."

And with that, TWM is back on the road contributing to the heavy traffic ... winding through mountains, down roads surrounded by bright yellow and orange houses and cacti ... Banda MS's Por Este Amor is blasting out from the radio ... heading back to the upscale shops, world-renown museums, and tissue potential of the country's megacity capital, Mexico City.

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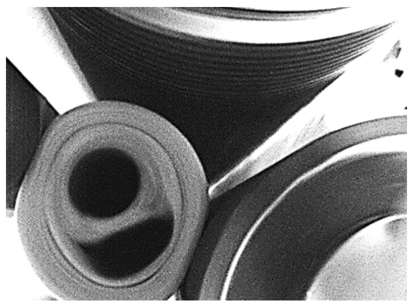

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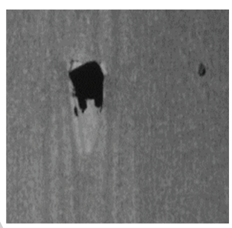

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'Mexico has what it takes to be the South American tissue giant'

In a classic market of huge untapped potential, general manager Humberto Narro Flores says Absormex CMPC – with a history of double digit growth - is poised to benefit from steady population growth, improved productivity and infrastructure, and a growing economy. Report by TWM Senior Editor Helen Morris.

Helen Morris

Senior Editor,
Tissue World magazine

The drive through the financial and industrial hub that is the city of Monterrey takes us past row after row of food outlets, air-conditioned shops, streets lined with orange trees, and high-rise office blocks made up of heavyweight international and local businesses. And it's the location of Absormex CMPC Tissue's office that helps further sum up the opportunities for the Mexican tissue market: on one side are brightly coloured, efficient and urbanised slums, scattered across the city's hills. And on the other, a wealthy neighbourhood of houses surrounded by a high-rise guarded wall.

Monterrey is a sprawling business and industrial centre; surrounded by mountains, it is the capital of the northeastern Mexican state of Nuevo León and has hosted the United Nations summit on financing for development. In the past, Fortune Magazine has also rated it as one of the best Latin American cities in which to do business.

Not surprising then that it was the choice for an office for Empresas CMPC. The Chilean pulp and paper giant started operations in Mexico in 2006 when it acquired Absormex. In 2011, after seeing further potential in the market, the subsidiary started operations in the AfH market, thus further consolidating its business and presence in Mexico.

In 2015, a Valmet-supplied complete tissue production line started production, adding 60,000 tonnes of high quality toilet and towel grades to the site's annual production.

Absormex now has three plants in Mexico; one for paper, one for tissue (which has four TMs producing 150,000tpy… converting facilities are on site, as well as a second converting facility in Monterrey).

Absormex now has three plants in Mexico; one for paper, one for tissue (which has four TMs producing 150,000tpy… converting facilities are on site, as well as a second converting facility in Monterrey). The tissue site produces high-quality hygienic and sanitary products including tissue paper, baby diapers, incontinence products and wet towels. Its main brands include Elite, Babysec, Softdreams, Premier, Brazil and Cotidian. CMPC also has a diaper plant in Mexico and an additional office in Mexico City.

Humberto Narro Flores – general manager for Mexico and Central America – greets TWM with a big smile and a firm handshake at his Monterrey

Substantial investment: *the company's Altamira-based plant is home to the latest tissue technologies*

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By Tissue World Senior Editor **Helen Morris**

Responding to customer demand: *the new TM that started-up in 2015 boosted the company's Mexican tissue production by 60,000tpy*

office. He discusses the many reasons that make Mexico such a vital market for CMPC to be present in: "It's such a key market in terms of the potential of its population and demographics," he says. "It has it all."

Some 60% of the company's production is from recycled paper and 40% virgin fibres. "We don't have problems sourcing paper as we can get that from CMPC's sister companies either from the US, Brazil or Chile," Narro says. It operates mainly in the consumer and AfH markets and there is a small amount

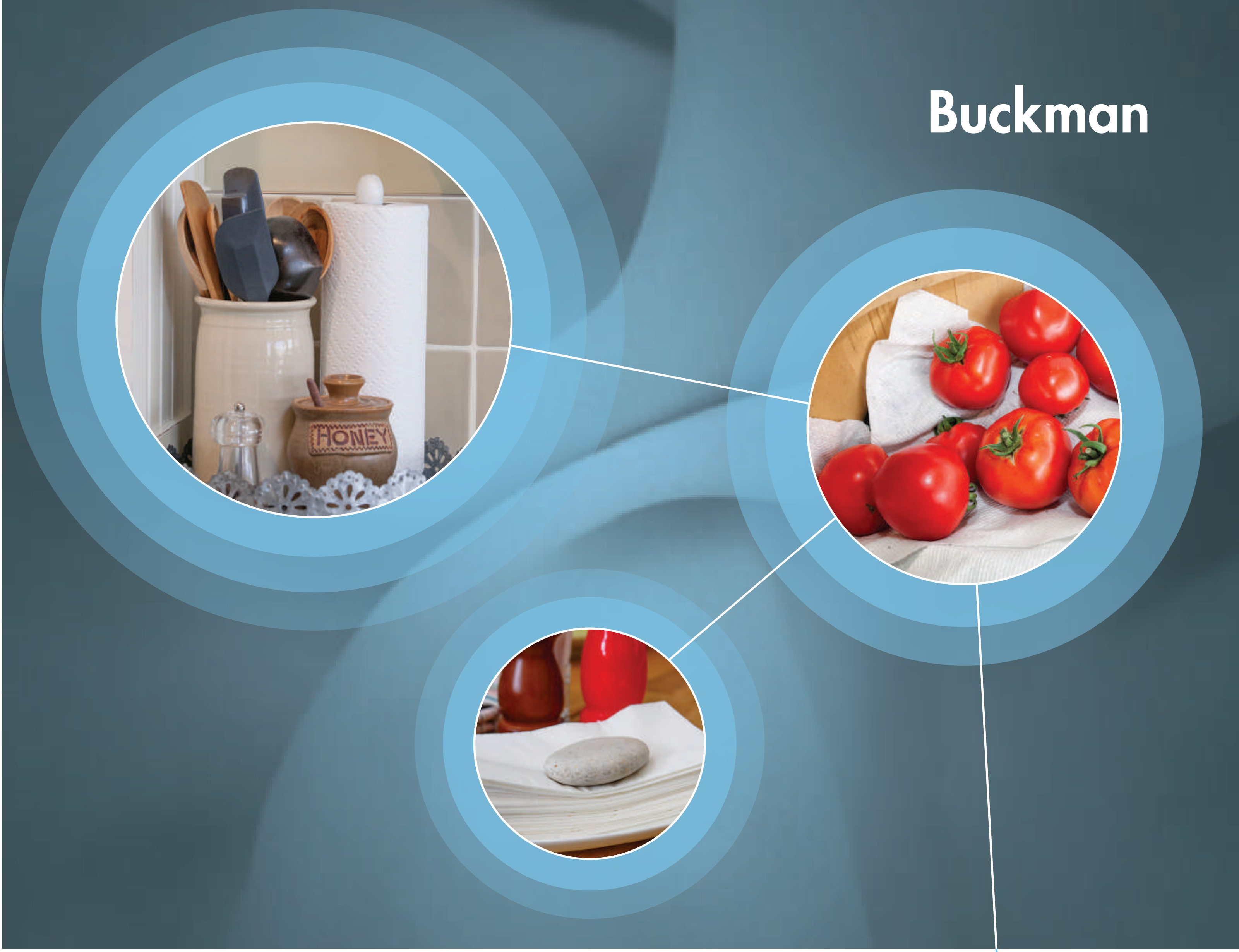
of private label, although he adds it's nothing like the percentage share seen in some countries in Europe. "I see the appeal of private label, it's more rational for the consumer," he adds. However, Absormex's main strategy in the Mexican market is to build its brands and innovate: "Since we entered this market, our aim is to be a highly efficient producer of innovative branded products. We have to be innovative with our branded products. That's the challenge. And the demand for high quality tissue products is steady."

Narro speaks easily and fluently in English, something he (humbly) attributes to his having just arrived back from a business trip in America. He talks at length about how Mexico is an ever-increasingly competitive market, in part because of its potential. "Demand for tissue products is forecast to continue to grow at around 3% in the long term," he says. "Per capita consumption is still low which brings many opportunities. As product penetration is low, the more the economy keeps on growing and the population increases, and the infrastructure gets better, the more potential there is for the tissue market."

Is the Mexican tissue market in an overcapacity situation? "We are seeing an increase in installed capacity. There will also be more and more new uses that you can use the products for." The company currently mainly sells its products in the Mexican market, although it also exports a little into the Central American and Caribbean market.

This year will present some uncertainty, he adds. The region has and continues to be hit with new trade barriers as well as fluctuating economies. "We do foresee some uncertainly in the market. NAFTA negotiations, tax reforms and Mexican elections... as yet, it's unclear the effect it will have on the economy. There's certainly added uncertainly for all players in the tissue market. But there are always some variables we can't have control over, there's always some uncertainty and volatility."

Does Mexico have what it takes to become the Southern American tissue giant? Narro believes so. "What sets Mexico apart from South America is its steady population growth and its potential for the tissue market. We will continue to be innovative here. Productivity is key to building our brands and it's working, we have double digit growth since we set up here in 2006. CMPC has a strong commitment to Mexico."



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By Tissue World senior editor **Helen Morris**

Strong investment is key for Papel San Francisco

The Mexican pioneer will target AfH to keep ahead of a tissue market growth trend up to 4.5% annually. By Helen Morris, Senior Editor, Tissue World magazine.

It was no surprise when the world's first Advantage NTT tissue line was started up by a Mexican company in 2013. Located in Mexicali on the Mexican/US border, TWM speaks to PSF operations director Dario Palma y Meza Espinoza and sales and marketing director Juan José Helú Villavicencio to get the latest.

TWM/1 What have you invested in 2017/2018 and why?

Palma: "We invest in every sector – At-Home, AfH – when sales volume demands. Last year we invested in paper machine capacity to support our sales and converting growth. Our new No. 7 tissue machine started up on 30 January 2018. Last year we also invested in commercial (At-Home), bath and towel converting capacity for the same reason. Our new converting plant in the city of Monterrey, Mexico, started up production with two bath and towel converting lines and one napkin converting machine in March 2017. This year we are investing in commercial (At-Home) napkin converting capacity and in AfH bath and towel capacity due to sales demand."

TWM/2 What main trends are you seeing in the Mexican tissue market? Is it growing, and why?

Helú: "The growth trend as we've seen for the past few years is between 4% – 4.5% annually. Tissue is a commodity, and growth is in concordance with population and income. We believe our focus must continue to be on the AfH market because, beside Kimberly-Clark Mexico (KCM), the main competitors in the Mexican market are not the big global tissue manufacturers. This means there's an excellent opportunity for us to become the natural choice to KCM to supply the market."

TWM/3 Are you seeing an increase in private label products in Mexico?

Helú: "The sale of private label products is growing faster than the regular ones because every retailer with buying power is looking for a share of the market with their own brand to increase the profit margin. We are a big supplier in the PLP market and we are investing to get closer to the big retailers to provide a better service for growth."

Investing in response to customer demand: *PSF has invested in every sector when sales volume demands*

Product variety

TWM/4 Has there been much merger and acquisition in the Mexican tissue market recently?

Helú: "The last M&A activity in Mexico was KCM buying GP's assets for the AfH market about five years ago. It's very difficult to forecast more because the main suppliers are global companies."

TWM/5 How is the Mexican economy impacting the tissue market?

Helú: "The main impact is not on sales, but on profit margins. Everyone is losing margins, both the retailer and supplier."

TWM/6 What opportunities are there for you in terms of Mexico's population and demographics?

Helú: "The population grows around 1.3% every year, but the core of sales is still in the economy products market. However, everyone is trying to make a difference with better quality at the same price level."

TWM/7 Are you looking to grow further, and if so, how?

Palma: "We are always looking to grow further. At this moment, we are only considering growing by more machinery investment as needed."

TWM/8 What are the main opportunities and challenges for you in the next few years?

Helú: "To maintain the pace of the huge investment required to grow at a higher rate than the market."

Our top priority is quality – one high-quality product does the job of two or three economical products

Cenk Guner lives in Istanbul and works as a country manager for Industrial Process Products sales and business development in Turkey and Europe. He tells TWM about his tissue choices for cooking, his pets, seeing before buying, and the importance of a brand's environmental mentality.

TWM/1: What tissue products do you use in your house?

"We use kitchen towel, napkins, loo roll, and some wet towels (especially for our pets). Because I love cooking, the major tissue consumption in our household is kitchen towels. I don't like to use fabric towels or cleaning towels in the kitchen so I use more consumable kitchen towels which I find more hygienic and of course more practical.

"As kitchen towels are so versatile and adaptable, we don't just use them in the kitchen. We also use them in the bathroom for some small cleaning or drying. We consume a big pack per month which includes 24 rolls."

TWM/2: Do you prefer private label or branded tissue products?

"Based on the experience of the brands that we use, we prefer to use specific brands. Based on the quality and design (3 ply, etc), we always prefer branded products for toilet paper towel and napkins. But this also means that we're not just buying all our tissue products from one brand; quality is the most important for us, and we believe that high-quality products are cheaper in the end because one high-quality product can do the job of using two or three economical products."

TWM/3: How do you buy tissue products?

"We buy big packs from our local supermarket in Istanbul. Buying online can be a little cheaper, but we prefer to see before we buy anything. Sometimes supermarkets make promotions for big packs so we can decide on the preferred brands (we usually have two brands for each product)."

"As kitchen towels are so versatile and adaptable, we don't just use them in the kitchen. We also use them in the bathroom for some small cleaning or drying."

TWM/4: Do you try and buy "green" products, is this important to you?

"Definitely. We always check that all our tissue products are recyclable. We not only check or buy products based on their green efforts, the product can be environmental but we also look at the product's manufacturer or brand's general environmental structure or mentality. This also affects our selection. If the brands do not care about environmental issues, but a specific product has an environmental-certification on its label, we will still not purchase it."

TWM/5: How accessible are tissue products in Turkey?

"It changes according to the products. For example, kitchen towels are mostly used in cities. In small towns or villages people prefer to use fabric towels that can be washed and reused. Also, it's based on economical income. Some people prefer fabric towels to save some money. For toilet paper, whether it's of high-quality or whether it's economical can change, but toilet paper is always used by Turkish people. The same can be said for napkins."

TWM/6: What have you noticed about tissue product availability and quality when you've travelled abroad?

"In general, what I faced is the quality of these products is higher in Turkey than in other countries. Due to my job I travel abroad a lot, and what I see in hotels or restaurants (same level hotels or restaurants) show that the quality is lower abroad. Of course, I also find very high-quality products, even higher than in Turkey, but generally we have very good quality products in Turkey."

Converting Technical Theme 2018: Process optimisation – customer loyalty – intelligent factories – worldwide interconnection – the non-stop line – intrinsically designed machinery – faster troubleshooting – trust – smart data analytics.

Leading converters outline their priorities in business strategy towards producing a better roll more efficiently. A TWM report.

TWM/1: What events in 2017 have had the biggest impact on your business and how are you dealing with them?

Oswaldo Cruz, chief executive, Fabio Perini: "There were two events that had the biggest impact for us. The first was the beginning of Digital Tissue, our digital strategy started in response to the Industry 4.0 concept and digital transformation. The fourth industrial revolution is now expected in the tissue industry; concepts like Smart manufacturing systems, Big Data analytics, product smartification are very central in the debate.

"We are taking advantage of this opportunity in terms of our R&D. New processes and new technology have to be considered. Transforming Industry 4.0 into a real revolution will only be possible if the change starts with the basics: machines need to be intrinsically designed so that they're capable of providing the necessary information. The second event was the acquisition by our group of MTC, Porcari, Italy, which established the Körber Tissue Business Area.

"With the addition of "folding" technology, we have now reinforced our position as a producer of complete converting and packaging lines due to Digital Tissue, and are now offering our customers the possibility of making intelligent factories that are interconnected worldwide."

Giovacchino Giurlani, business technical director, Futura: "In mature markets tissue producers are looking closely at process optimisation and cost savings to be more effective and increase their competitiveness. At Futura, we see our relationship with tissue producers as "Partners in Performance" which is about supporting them in the daily challenges they face. The development of new solutions which we undertake at FuturaLab remains a core activity as it provides appropriate and cutting-edge technologies in terms of efficiency, safety and process control. But at the same time, we are working hard to provide the best technical support through our new Customer Care division which is taking a more proactive approach than ever."

Devrim Deniz, director, ICM Makina: "The biggest impact on our business during the last year was a substantial increase in orders due to high demand as well as our expansion into new markets. As a result, we are doubling our factory space and have hired new assembly workers and installation workers. We are also forming new agency contracts in the Far East and planning to open an office in Latin America for sales and service."

Simone Torrini, area sales manager for Latin America and the Iberian Peninsula, Maflex: "The trust confirmed by our customers has been one of the most important inputs. 2017 ended with a solid confirmation of our constant growth.

"Customers who already own our machines have come back for further investments; outstanding results have also been achieved with new clients, who have chosen our lines for the first time.

"The quality and number of our references have been growing steadily over the years, so we think we can attribute our growth to the totality of the work done in 20 years of Maflex history, rather than focusing on some key events of last year.

"In some countries characterised by political instability, it is clear and understandable that projects are progressing slowly, but despite the most complex situations, several companies are still investing to be ready when the socio-economic situation will improve. Many countries in Latin America are in this situation, yet still we're witnessing a growing interest from these markets. These signals make us feel the situation is undergoing a change and we are expecting a trend reversal in many nations as early as 2018."

Pablo de La Fuente, commercial director, MTorres: "2017 showed really good signs of economic recovery almost worldwide. We have been involved in several new concrete projects and, luckily, in several cases, we got the trust of our customer to respond to their growing necessities in terms of additional finished product."

Marco Calcagni, sales and marketing manager, Omet: "Tissue World Milan, which was the biggest event last year for the industry. Also Miac 2017 was a good show for us."

TWM/2: What technical advancements are you focusing on in 2018 and 2019?

Cruz: "We will concentrate on developing digital technologies to help our customers increase production efficiencies and enable them to vertically integrate with their processes and their own value chain. The challenge our group faces is to complete its existing portfolio of offers with digital elements, integrating them into the new Industry 4.0 environment with the aim of increasing customers' performance. Performance improvements will create benefits directly for the companies, and indirectly for the entire environment, which will benefit from the competitiveness of its players. In order to do so, integration between data analysis and production systems is fundamental to build an efficient organisation.

"Efficiency and performance of the entire production line are also obtained due to our smart services that are tools used to implement a new and more effective and efficient approach towards machine maintenance and process improvement; our newer conception of service consists of a bigger involvement of customers, who we provide the best solution for. Services such as our customer portal, weareable and expert online are just three examples today used by our customers to maintain the highest efficiency of their assets."

Giurlani: "Futura sees its role in the market as pushing the technological boundaries for all applications and markets.

"A snapshot of innovations to be presented at It's Tissue in June this year includes: a unique automatic jumbo reel handling system which is safer, more effective and less dependent on manpower; a new embossing configuration for extreme definition to preserve and emphasise bulk; dust control which minimises downtime and therefore maximises overall equipment effectiveness (OEE); rewinding which breaks new ground; and leadership in Industry 4.0 integration."

Deniz: "We will be designing and building custom-made machines according to customer requests. We will be focusing on designing machines with a single or no-operator, and applying Industry 4.0 concepts to our machines and business model."

Torrini: "The new hybrid Hermes line can produce both domestic and AfH rolls, allowing to use cores with a diameter from 22 up to 90mm and logs with external diameters from 90 up to 350mm. The universal electronic clamp of our log saws, due to which we can change products by simply pressing a button, is one of the elements that characterises us most in the market: in addition to the Ladon (industrial log saw) and the Hesperia 4C (4-channel domestic log saw), which already feature this device, from this year also the Hesperia 2C (2-channel domestic log saw) will include the universal electronic clamp, allowing in this case a cutting range from 90 up to 200mm. Starting from 2018 we will also provide our customers with the new embosser Heracle featuring automatic fast change of the steel embossing rolls. This applied solution allows having an infinite number of available embossing roll patterns. These are our main innovations for 2018."

De La Fuente: "Our aim is to keep on developing our two main concepts: high productivity and high flexibility. Both challenges have to be developed always keeping in mind that line's management has to be as easy as possible. Easy solutions for complex problems."

Calcagni: "Several innovations and developments on folding machines both for napkins and interfolded products will be introduced as a preview at the next It's Tissue event in 2018."

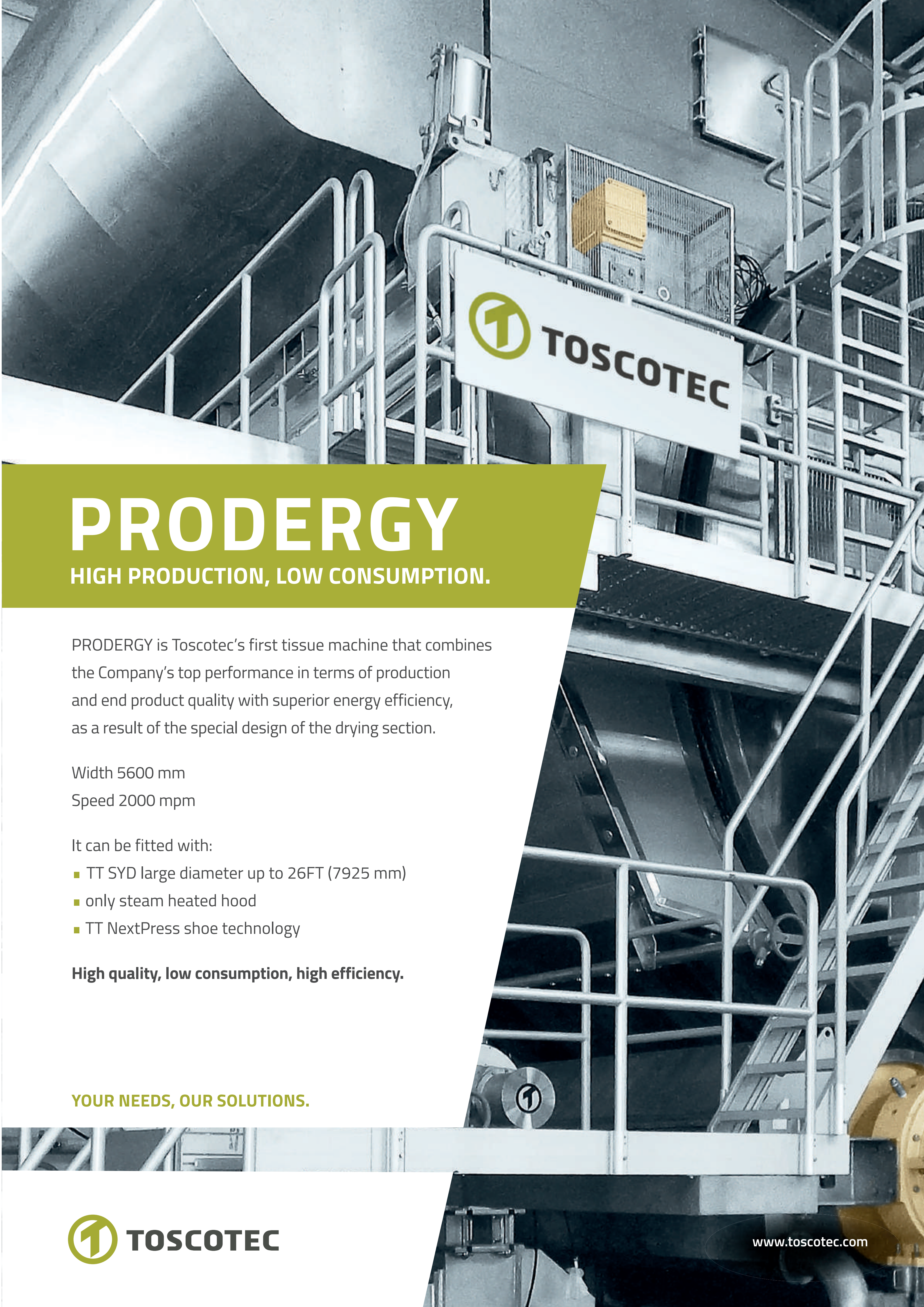
TWM/3: What geographical areas are seeing an increase in demand for tissue products and so converting lines?

Cruz: "There are possibilities for development in many emerging countries, both in Latin America, Africa, and the Middle East. But there are also opportunities in mature markets where per capita tissue consumption has seen a flat growth for years.

"We see opportunities for growth in terms of upgrading production performance, in the adoption of solutions and processes that go towards digitisation, and therefore the analysis of data of individual machines, lines and factories to increase efficiencies and therefore competitiveness in the market."

Giurlani: "After the crisis things are getting better and better almost worldwide. North, Central and South American markets are growing (both consumer and AfH), with the start-up of big, challenging projects. In Europe, both mature and emerging markets are showing good results and new projects are arising. China is still growing in terms of volume and new product development.

"Oceania is restarting its investment programme for production capacity improvement. The Middle and Far East are changing their approach in terms of technology - they are favouring middle/high-end machines."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Deniz: "We have seen an increase in demand for tissue products in Latin America as well as Russia."

Torrini: "Currently, the US and Europe are the biggest tissue consumers, so they're definitely the continents where our business is growing more. At the same time, Latin American consumers are looking more and more for products of ever-increasing quality, therefore across this region an interest is being renewed towards new converting lines allowing greater flexibility."

De La Fuente: "The growth of tissue demand, with the due differences, is touching almost every geographical area and in the case of mature markets (such as Europe) new products require a continuous re-modernisation of existing converting lines."

Calcagni: "We are present in all markets worldwide and every market has its peculiarities and growing areas. For what we have detected Europe and South America are the best areas for our business."

TWM/4: What latest automation features are improving production efficiency?

Cruz: "We have always offered our customers innovative technologies to improve production efficiency: for example, Sincro and Constellation. We launch at least one new technology every year due to the daily exchanges with our customers, and our interpretation of the dynamics of the market and its evolution.

"Following our research last year, in October we launched an upgraded log saw that allows customers to change the blade without an operator. This offers two unprecedented benefits: safety in the shop floor, and a 90% reduction in changeover time, thus increasing the production efficiency of the whole line. We also launched a packaging solution for pack format change, which is also completely automatic and reduces changeover time by 80%. The Smart Application All In One was also recently launched and is part of our Digital Tissue, and results in an increased production efficiency of complete converting and packaging lines by automatically managing the parent reel and polyethylene roll changeovers without any production downtime."

Giurlani: "An important part of Futura's innovation activity is the development of converting solutions which are part of an integrated, Industry 4.0 tissue production process. The ambition remains to produce a better roll more efficiently. What is changing is that to achieve this depends not only on all the adjustments and refinements possible on a converting line, but on gathering data and using that in a smart way to optimise the line."

Deniz: "New models of Servo motors and drives, as well as faster E-Cam applications are improving production efficiency. Remote control systems increase efficiency of the lines by faster troubleshooting solutions for customers."

Torrini: "We have been designing increased finished product specification ranges with our push-button/tool-less change overs. This allows our customers to save time when making large scale changeovers. It also permits the operators to change the machines over quickly, without the need for maintenance and changeover crews. The close relationship and the continuous exchange of views on production efficiency we have with our customers is our number one playing card."

De La Fuente: "To mention a couple of key points that are becoming increasingly critical in term of production efficiency, it's the necessity of not stopping the line as a parent reel change occurs (flying splice solutions) and the need of an extremely flexible and automated embosser that has to face the challenge of providing different embossing patterns, and embossing configurations all to be done within the same line."

Calcagni: "Our new No Stop Unwinder, which allows napkins production 24/7. One of our customers, Le Nappage in France, after installating a first No Stop Unwinder is considering investing in more. Another example of automation features is inkjet digital printing on our Chameleon printing unit. A case history is CGMP in France, which installed the unit on a TV503 Line in 2017."

TWM/5: Identify one or two areas of technology in which your converting systems really stand out?

Cruz: "Our Constellation line has changed the way to rewind tissue, offering new opportunities for our customers, and is also one of the main technological areas that best represents our nature as a trendsetter.

"This has been confirmed by the success that Constellation has had with our customers, which has led to over 80 lines sold in less than two years since its launch in the market in June 2015. Now our goal is to help our customers increase production efficiencies and accompany them in the adoption of digital technologies that will be the basis of their intelligent factory and that will make them even stronger thanks to digital tissue."

Giurlani: "We could identify many areas of technology, but recent innovations would include our jumbo reel management system and rewinder developments which have a positive impact on the overall production process. Important overall themes for our technology which stand out include waste minimisation, Automation/Integration (according to Industry 4.0 pillars) and outstanding safety standards."

Deniz: "We have the technology and ability to produce complete towel roll production lines, complete folded towel production lines and napkin production lines. Our towel folding lines can run over 200m per minute with auto transfer systems, and up to 12 logs per minute. Our roll rewinder lines can transfer up to 25 logs per minute."

Torrini: "Easy and fast product-change, reliability of production at all working speeds: these two characteristics distinguish our machinery without any doubt."

De La Fuente: "Looking to a full converting line as a matter of fact, we stand out in terms of increased productivity, flexibility with no compromises, and easiness of use. Any single unit composing an MTorres Tissue line is thought and engineered keeping in mind three key factors."

Calcagni: "Efficiency in the production of napkins and digital printing for napkins."

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DISCOVER MORE

Is distribution the main challenge for tissue e-commerce?

The tissue online business is rather limited for the consumer segment and follows the on-line business of groceries. Relatively taken e-commerce is much more common for the AfH sector. Due to the important role of retailers and distributors, distribution in e-commerce is much less of a challenge for the tissue producers than one would think. How is the tissue online business developing and what are the drivers?

General e-commerce is growing globally

The e-commerce, i.e. the on-line shopping value in B2C business in general was expected to reach globally USD 1,8 trillion in 2017. The e-commerce accounts for varying share of the total retail value in different regions. It is expected to reach some 10 % in the US, and it is on11-12% level in China. Online shopping growth rate runs from 40 % in Australia to 9% in North America, in Europe the growth rate is at the 15-14% level and slightly slowing down.

Online sales of groceries are relatively limited; tissue products are purchased together with the groceries

Online tissue sales for consumers are likely to follow similar development as e-commerce of groceries, as these are normally purchased together. Only a small share of the total on-line shopping is groceries. For instance, in Europe from the different categories 34% of clothes and sport sales are made online, 29% of travel and 28% of media and software sales. On line groceries sales share of the total category sales is only some 12 %. In the US, according to some studies 3% of households purchase groceries only online and some 11% sometimes.

Building a grocery business on wheels is very expensive, as food delivery services are logistically very complex. Many are asking, if the Amazon.com's purchase of Whole Foods Market Inc. will turn grocery delivery business from a niche to the mainstream. The business holds a great potential, as grocery purchases are weekly, therefore this has been pursued by suppliers though many people do not even wish to buy their groceries online.

Among the chief barriers for success is warehousing and distribution. Food needs to be replenished regularly and delivered quickly. Amazon started with Amazon Fresh and further solved these problems with the acquisition of Whole Foods that augments Amazon's vast network of fulfilment centres with Whole Foods warehouses and 460 stores worldwide.

Whole Foods offers the biggest name in Yuppie groceries and a fleet of urban locations, which can almost double Amazon warehouses. Amazon did not just buy Whole Foods grocery stores. It bought over 400 upper incomes, prime location distribution nodes for everything it does.

The online grocery business is actually very much in the hands or related to existing retail chains. Walmart has booming online sales, Instacart and Shipt act as third party delivery service for food from Publix and Costco.

In Europe, online grocery shopping is also emerging. The UK is the largest market, accounting for 33% of total European e-commerce value while Germany and France are at the 14% level each. Assumingly also the grocery shopping online is biggest in the UK markets. Amazon Fresh, Amazon's US grocery delivery service, is making entry to the London markets; Prime Now is a smaller scale version of Amazon Fresh. The top online supermarket brand in the UK is Ocado. Also, the large European brick and mortar retailer chains have started their on-line business; Lidl has started on-line grocery delivery and Aldi has an online grocery business, as do most of the others to various extents in various countries.

S Pirkko Petäjä

Principal,
Pöyry Management Consulting

Many consider the mass home delivery market difficult and are much more positive towards the service that meets consumer in the middle like drive–through, where you can pick up your pre-ordered bag of groceries. The sellers can save the enormous cost and complication of doorstep deliveries. The free pick-up model requires of course a very large store footprint from the retailers.

Tissue e-commerce follows the on-line grocery sales

Though e-commerce is growing, it is not especially fast on groceries. The consumer tissue sales share on-line is expected to be on a similar level or typically on somewhat lower level than that of the on-line groceries. In addition, impact on the tissue producer's requirements is minor, as the delivery is taken care of by the retailers and the same factors, such as importance of pricing apply. Amazon, Costco etc. offer large size packs, but otherwise similarly brands and private label products as the brick and mortar businesses. From the tissue producer's and from the delivery perspective, it is not utmost important whether the final consumer buys it from a store or if it's ordered from the net and delivered from a store.

On-line grocery retailing may be exciting for those who develop it, but it

By **Pirkko Petäjä**

continues to grow at only half the rate of discounters; Aldi and Lidl grow much faster than the top on-line supermarket brand Ocado. On-line business is premium service for those who can afford it. The on-line grocery market grows at only half the rate of number of discounter stores and at a quarter of the rate in cash terms. Consumers still value lower prices over the easiness of home delivery.

Tissue producers' role

There are very limited direct online sales from a tissue company to consumers. Some specialties like Renova coloured tissues or many napkin providers sell online, but the question is of well-priced niche business that covers also the delivery costs. By no means does this concern the bulk volumes. Typically, the consumer side of e-commerce is performed by the retailers; either the ones that are focused on e-commerce or the normal chains. The distribution is taken care of by them.

Kimberly-Clark (K-C) has been involved with online marketing for a number of years. Consumers are buying from the retailers, but for instance mobile marketing has a significant role in influencing purchases. K-C is seeing a high level of engagement on mobile devices when people are shopping and using their devices to view reviews and ratings, check prices, etc.

The company is beginning to do more on mobile with regards to partnering with retailers, and they are seeing some nice results in that respect. K-C has launched the Huggies mobile site and continues to evolve the features and functionality. It has experienced that baby products work well on-line. When it comes to the distribution of the products K-C co-operates with Amazon, Walmart, Target etc. K-C's web site has a link to these retailers' sites and the purchase happens through these channels. However, tissue paper is much less commonly purchased this way than e.g. diapers. Consumer-side online sales are supported by the brand owner in the on-line marketing and direct connection to the retailer's site to order. This connection can be very valuable for the tissue producer in terms of information flow from the markets.

Online business in tissue AfH segment

Opportunities in e-commerce are much closer to tissue producers in the AfH side. However, also in AfH the tissue producer sells to the distribution companies and the final sale happens through distributors, janitorial companies, etc. From them the final clients often buy on-line.

The leading AfH suppliers like Essity have established websites to support their AfH marketing. Its global Tork.com website supports the on-line shopping of the final customers from the distributors. Tork has a vast network of distributors and the website supports the clients to understand the full offering of the brand, what is available for different fields of users etc.

In some countries, you can also find on Tork.com distributor lists where you can search which distributors are the nearest, and there is often a link to their sites. From the distributor, online purchases are very common.

Additionally, other suppliers have understood the importance of web marketing in the AfH segment. Sofidel's Papernet has a great web site explaining their AfH offering. However, the direct relation to product purchasing and the distributors is further away. Sofidel's AfH business is also much smaller and less global than Tork, but it is also in an emerging stage and Sofidel's aspiration is to reach similar position with AfH as it has in consumer tissue.

WEPA's AfH took a quantum leap when the company acquired Van Houtum, the Dutch AfH specialist. WEPA Netherlands has an important AfH brand, Satino Black. Its site supports the distributors with product information and advertising like those of the other leading producers.

In any case, online purchases are closer to tissue producers in the AfH segment. The brand websites increase brand awareness and provide product information. The producer's online sales support has an important role though the actual online purchase is from the distributors.

How big are the online sales in the AfH side? Assumingly a sizable figure of distributor companies will foster that sales channel option for their clients.

In the AfH side a further digitalisation, a service that connects a user's consumption point directly to the distributor calling automatically for re-fill, is already near.

For instance, Tork Easy Cube is a service where as an example hand towel or toilet-paper dispensers are followed in real time. The cleaning companies and cleaning managers know where a refill is needed, instead of always going through every point and dispenser.

This is not very far from having the system order refill from the distributor to the client's warehouse when needed. In AfH, the developments towards sophisticated online solutions are quite likely.

Important also is the information flow the tissue producer has from the new systems. This improves their forecasting and production planning and improves the efficiency of the operations. The forerunners in digitalisation, who get their systems ready first, will have a competitive advantage until everybody else is on the same level.

Is distribution the main challenge for tissue e-commerce?

From the tissue producer's perspective, distribution is not necessarily very much impacted by e-commerce. Consumer tissue is sold by the retailers that are more or less e-commerce oriented and AfH is sold by the distributor companies.

The actual online purchase and the distribution issues concern only the final seller. In the case of Amazon and other web-retailers and on AfH side of the distributors, a chain of warehouses, stores and fulfilment centres are necessary and from the tissue producers' perspective is the same how the product is finally sold. Only from the retailer's perspective is there a difference.

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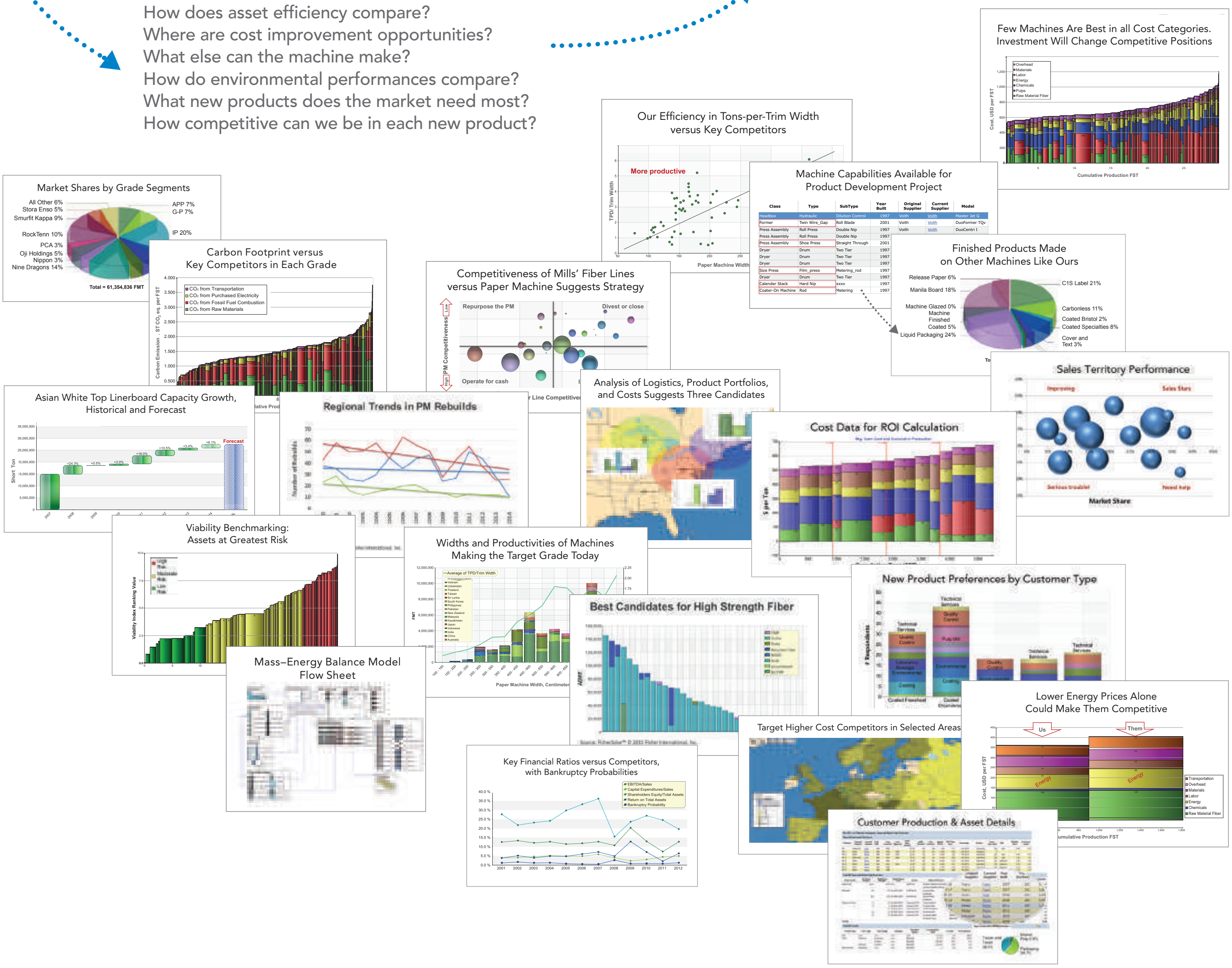

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Market pulp capacity review: investment cycle to peak in 2018

Pierre Bach

Research analyst, Hawkins Wright

Global bleached chemical market pulp capacity reached 64Mt/y in 2017, comprising 35.3Mt/y of hardwood market pulp, 28.3Mt/y of softwood, and just 0.4Mt/y of sulphite pulp. Capacity expanded by 3.7% last year, equivalent to +2.3Mt; a rather strong expansion when compared to the 2.5% (+1.3Mt) average growth rate of the previous decade.

- BSKP capacity increased by almost 1.1Mt, driven mainly by the continued ramp-up at Södra's Värö mill, the start of the new line at Metsä Fibre Aänekoski, and the first full-year of operations at Domtar's Ashdown and IP's Riegelwood SBSK/fluff mills as well as at Klabin's PUMA mill in Brazil.

- The latter also contributed to BHKP capacity growth of around 1.2 Mt during 2017. In addition, the gradual ramp-up at APP OKI, and the start of Fibria's second line at Tres Lagoas helped to offset the cuts resulting from conversions at APRIL Rizhao & Kerinci.

As the chart shows, BCP capacity has now enjoyed three years of above trend growth; with a further 4Mt added through 2015 and 2016.

Nevertheless, it is 2018 which will see the peak of the current investment cycle, with an estimated 3Mt of new capacity scheduled to come online over the next twelve months.

This represents the strongest rate of expansion since 2008, after which capacity contracted quite sharply as a result of the global financial crisis, which obliged many high cost facilities to shut down due to the collapse in demand. Whilst few are predicting such macro-economic shocks through 2018-19, capacity growth still appears likely to decelerate sharply through 2019 and 2020 with only incremental growth resulting from debottlenecking projects or "creep", combining with a number of planned conversions to dissolving pulp production which would cause a reduction in paper grade pulp supply if they proceed as currently planned.

These projections are constantly revised as events unfold and plans change, and capacity rarely corresponds to actual supply. We note that whilst capacity increased by 6.2Mt in the three years 2015-2017, shipments grew by just less than 5Mt. As such, there remains a great deal of latent supply which could become visible over the months to come, thereby exaggerating what is already a strong year of growth. Equally, we are very well aware of the challenges and uncertainties which might very well continue to suppress production, even as capacity rises. Our main assumptions are summarised in the paragraphs which follow.

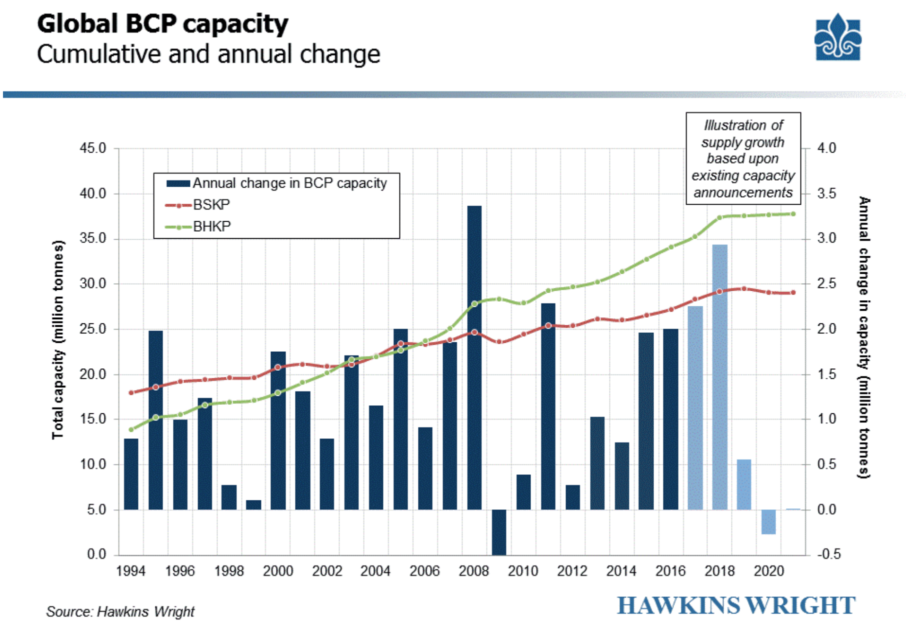
Softwood

Softwood market pulp capacity is expected to grow by 0.74Mt during the period 2018-2021; NBSK supply will expand by 1.4Mt while that for both southern softwood and other softwoods will decline by 0.14Mt and 0.52Mt respectively.

This year, BSKP capacity will rise by 0.9Mt and reach 29.2Mt/y.

- The single-biggest addition to supply will come from Metsä Fibre's Aänekoski line, which started in Q3 this year and is already close to its full design potential of 1.3Mt/y. Because the previous line has been retired, in reality the net addition is 0.7Mt, of which we apportion 0.5Mt in 2018.

- The second biggest contributor will be the Svetlogorsk mill in Belarus, and here we must acknowledge a greater degree of risk. The mill has

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only recently begun trials after two years of delays, and we assume a gradual ramp-up over 2018 and 2019 resulting in an additional 0.25Mt of softwood capacity this year.

- A newly expanded pulp line is scheduled to start at SCA's Ostrand mill in June 2018, which will increase capacity at the mill by an estimated 0.1Mt this year and 0.5Mt next year.

There are no other softwood projects in the pipeline, implying capacity growth will slow to just 0.3Mt in 2019, and could even contract in 2020 and 2021 (-0.5Mt altogether) as certain companies convert capacity to dissolving pulp. The main protagonists are Arauco (Valdivia, from mid-2019) and Stora Enso (Enocell, also in late 2019) which might reduce BSKP capacity by 0.4Mt and 0.3Mt respectively. Smaller reductions may result from the gradual conversion of APRIL's Rizhao mill in China (on the smaller line), and Rayonier's Jesup mill in the US which is gradually phasing out fluff production.

Hardwood

Hardwood market pulp capacity is expected to grow by 2.5Mt during the period 2018-2021; BEKP supply will expand by 1.94Mt while Asian hardwood (eucalyptus and acacia) supply will grow by 0.52Mt. Minor gains in birch supply in Finland, and reductions in mixed hardwood supply in the US will cancel each other out.

This year will see the biggest rise in BHKP capacity in a decade, with global capacity expanding by just over 2Mt and reaching 37.4Mt/y. The growth will mostly come from the first full year of operations at both Fibria's Tres Lagoas (+1.38Mt) II and at APP OKI (+1Mt).

- As ever, there remain some doubts about the actual market supply from APP Indonesia, which are partly the result of mechanical issues and partly the fact that the amount of BHKP absorbed by the group's numerous paper, board, and tissue mills in both China and Indonesia may be subject to change depending on market conditions. The ongoing acquisition of Eldorado by Paper Excellence adds another dimension to the uncertainty.

- Although we anticipate the continued smooth ramp up at Tres Lagoas, overall net growth from Fibria will be reduced by around 0.25Mt/y owing to fibre constraints affecting the Aracruz mill, which are likely to persist beyond 2018.

- Similar reductions in supply are expected from the APRIL Group mills, both in Indonesia and China. Sister company Sateri is adding around 1Mt/y viscose capacity in Jiangxi (China) and Kernici (Indonesia), and uses mostly affiliated dissolving pulp supply from recently converted lines in Rizhao and Kerinci. APRIL Fine Paper has also installed around 750,000t/y of uncoated paper capacity in Xinhui and Kerinci over the past eighteen months, which has absorbed over 0.5 million tonnes of the group's BHKP output.

- Finnish birch capacity is also expected to rise this year, largely as a result of Metsä Fibre Äänekoski, but also elsewhere.

Beyond 2018, BHKP capacity growth is set to slow dramatically, with less than 0.5Mt net growth over the three years 2019-2021. Most of this growth will take place in Brazil, resulting from the ramp-up at Fibria Tres Lagoas, and some debottlenecking investments by Suzano at Mucuri and Maranhao. ENCE also plans incremental expansions at Navia and Pontevedra in Spain.

Note that we have also recently included the Vietracimex project in central Vietnam, which we assume will contribute 0.4Mt/y growth in 2019-2020. Although there is little information in the public domain, we are aware that equipment from Sodra's Tofte mill in Norway has been relocated and is now being re-assembled in Quang Ngai, south-central Vietnam. Progress has been fairly slow to date, and any further delays could reduce the net capacity growth even further.

Conclusion

These assumptions will almost certainly revised once more over the next twelve months. We rarely adjust capacity for temporary events which disrupt supply (e.g. mechanical failure, weather, industrial action. etc), however, where issues recur or persist we may review our assumptions. For example, one area of major uncertainty concerns access to peatland plantations in Indonesia following revisions to previously approved plans (RKU's) by the Indonesian authorities. In a press release dated 21 December APRIL has pledged to work within the new directives, whilst warning that business activities will be significantly impacted.

At the same time, market conditions inevitably dictate supply in the medium term, and the increasing influence of the viscose sector is particularly relevant here, as the volume of "swing" capacity rises. At present for example, the narrow differential between paper grade and dissolving pulp in China encourage production of the former.

It will also be interesting to see how the industry reacts to the apparent lack of new supply on the horizon. There is already a discernible change in rhetoric over the past twelve months, particularly as pulp prices have increased. Most of the leading Latin American companies have hinted that major projects could be announced in the months to come, and as earnings and valuations rise, the opportunities for consolidation appear to diminish.

However, given the capital intensive nature of pulp production, and the long lead times to construct new lines, it seems there are only one or two brownfield projects which could conceivably be realised by 2021. As such it appears that the long-term and short-term cycles which so characterise our industry remain well entrenched.

This article was also published in Pulpwatch, Hawkins Wright's monthly analytical newsletter focusing on developments from across global pulp markets. The data references the Outlook for Market Pulp report, a multi-client service comprised of in-depth analysis of demand and supply fundamentals as well as production costs of the global pulp industry, and five-year price forecasts for North America, Europe and China.

Events Calendar

Event	Date	Location	Website
RISI European Conference	March 5 - 7, 2018	Barcelona, Spain	www.risiinfo.com/events/
PAPER2018	March 11 - 13, 2018	New York, USA	www.paper2018.com/
P&P Reliability & Maintenance 2018	March 19 - 22, 2018	North Carolina, USA	www.idconevents.com/
Tissue World Miami	March 21 - 23, 2018	Miami Beach, FL, USA	www.tissueworld.com/miami
PaperCon 2018	April 15- 18, 2018	North Carolina, USA	www.papercon.org/
CIDPEX 2018	April 18 - 20, 2018	Shenzhen, China	www.cnhpia.org/
Specialty Papers Europe 2018	April 23 - 25, 2018	Cologne, Germany	www.specialtypaperconference.com/
International Pulp Week	May 6 - 9, 2018	Vancouver, Canada	www.internationalpulpweek.com/
ISSA/INTERCLEAN Amsterdam	May 15 - 18, 2018	Amsterdam	www.intercleanshow.com/en/amsterdam
15th Int. P&P Industry Expo	May 25 - 27, 2018	Guangzhou, China	www.paperexpo.com.cn/
4th Int. Paper Chemicals Technology Expo	May 25 - 27, 2018	Guangzhou, China	www.paperexpo.com.cn/
PulPaper 2018	May 29- 31, 2018	Helsinki	www.pulpaper.messukeskus.com/
Asian Paper/Tissue World Bangkok	June 6 - 8, 2018	Bangkok, Thailand	www.asianpapershow.com
iT's Tissue 2018	June 25 - 29, 2018	Lucca, Italy	www.itstissue.com/
ZELLCHEMING-Expo	June 26 - 28, 2018	Frankfurt, Germany	www.mesago.de/en/ZEX/home.htm
Tissue World Istanbul	Sept. 4 - 6, 2018	Istanbul, Turkey	www.tissueworld.com/istanbul
CCE Southeast Asia	Sept. 5 - 7, 2018	Bangkok, Thailand	www.cce-southeastasia.com/english/
Labelexpo Americas 2018	Sept. 25-27, 2018	Chicago, USA	www.labelexpo-americas.com/welcome-labelexpo-americas
MIAC 2018	Oct. 10 - 12, 2018	Lucca, Italy	www.miac.info/
Tecnicelpa	Oct. 10 - 12, 2018	Castelo Branco, Portugal	www.tecnicelpa.com/
ABTCP EXPO 2018	Oct. 23 - 25, 2018	São Paulo, Brazil	www.abtcp2018.org.br/en/
ISSA/INTERCLEAN North America	Oct. 29- Nov. 1, 2018	Dallas, TX, USA	www.issa.com/trade-shows/issainterclean-dallas-2018.html
PAP-FOR	Nov. 13 -16, 2018	St. Petersburg, Russia	www.papfor.com/
Paperex South India 2018	Nov. 15-18, 2018	Chennai	www.southindia.paperex.in/
Labelexpo India 2018	Nov. 22 - 25, 2018	Greater Noida, India	www.labelexpo-india.com/

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