The independent news provider for the global tissue business

TISSUE WORLD

MARCH / APRIL 2014

MEXICO
On a hot streak

PLUS
TW's new SPECIAL REPORTS
Key manufacturers in south east USA
Converting manufacturers' latest R&D
Aligning warehouse and distribution logistics

MCI (P) 171/12/2013

UBM

Abstract explosion of red light patterns against a black background.

TISSUE WORLD

March/April 2014

In this issue

By HELEN MORRIS
Tissue World, Editor

MEXICO: "THE OPPORTUNITY TO GROW IS HUGE"

When TW visited Mexico for this issue's Country Report it was easy to see why it has made it into the MINTs (Mexico, Indonesia, Nigeria and Turkey) list of countries to watch. There were people on the move in all walks of life in Mexico City and the surrounding areas where new buildings were being constructed on every other corner and tourists were flocking to the city's modern art museums.

Mexico's middle class is growing; according to the Estadística, Geografía e Informática (National Institute of Statistic, Geography and Informatics), the percentage of middle-class households grew by four percentage points between 2000 and 2010, to account for 42.4% of all households.

All the indications are that these consumers like and want more of the tissue products they buy.

Our two operation reports reinforce the point that Mexico is very much on the move. Fabrica de Papel San Francisco claim a world first after it started up the first ever NTT line in July 2013, a PM that is now boosting the company's premium export drive into the US.

And SCA talks about establishing its new Sahagún plant through growth and innovation in a country full of the world's largest global tissue producers. As plant director Roberto Deleón tells TW: "The class C and D, Mexico's middle classes, have more and more disposable income. They have a lot more money now and our products are becoming a habit. Income per capita is higher here than in other Latin American countries and this makes consumption here higher."

Between 2002 to 2010, production capacity in Mexico increased by 30% while the country's population continues to grow at a steady 1.2% per year. Mill production in Mexico averages about 81,000 MT/Yr, ahead of Canada but behind the US. With the close proximity and influence of America (trade with the US represents about 78% of Mexico's exports) and the Latin American powerhouse of Brazil, the Mexican tissue market is increasingly striking its own cord.

Special report: south eastern USA

For our special report on south eastern USA, TW visited Atlas Paper, Cascades Rockingham, Roses Southwest Paper and Von Drehle. Here, we bring you the latest developments from an area of America that represents 40% of the country's total T&T production and in which three companies account for three quarters of production.

Tissue World Americas in Miami!

TW would look to offer a warm welcome to all those at Tissue World Americas in Miami! TW will be doing daily bulletins at the show and for those unfortunate enough not to be able to attend, we will publish a summary of the key highlights of the show and conference in the May/June issue of the magazine and website.

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By ***ESKO UUTELA***
PRINCIPAL, TISSUE, RISI

Growth in the European tissue business moving from West to East

Russian tissue market alone expected to grow more than German and UK markets combined.

We do not yet have statistics for the whole of last year but based on data for the first 9-11 months it can be concluded that 2013 did not show any significant break in the recent slow growth trend in Western European tissue consumption (1.3% in 2010, 1.4% in 2011, 0.0% in 2012). Currently we do not expect more than about 0.9-1.0% growth for 2013, although there are some indications from the marketplace that the last quarter recorded slightly more positive developments and so the final growth rate could climb to the same level as in 2010-2011.

Southern European problems continue to have a negative effect on consumer spending, including tissue consumption. High unemployment has reduced AfH tissue consumption radically, and the lower-than-before purchasing power of people has limited consumer tissue purchases to the necessities such as toilet paper while other grades, napkins and kitchen rolls in particular, suffer from squeezed household budgets. Tissue consumption in Spain and Greece has been most strongly influenced by the miserable economic situation, followed by Portugal and Italy, while France shows growth for 2013. In Spain, statistics for the first nine months suggest a decline of even 3-4% in tissue consumption last year (but we hope there was a small improvement in the last quarter). Southern Europe accounts

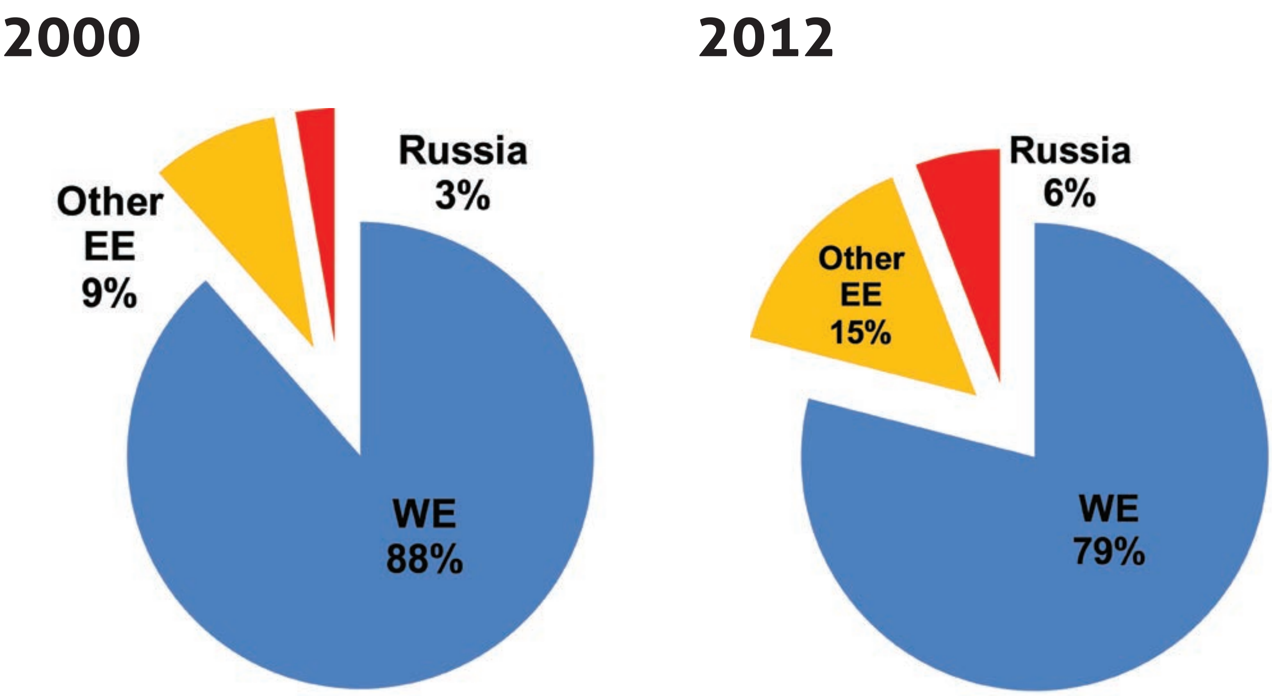

Figure 1: Eastern European importance increasing rapidly in the European tissue business

for more than 40% of Western European tissue volume, and the expected 1-2% decline in this sub-region pushes the Western European average growth down substantially despite relatively good developments is some other markets, such as Germany and the UK.

In Eastern Europe, tissue consumption generally continued on its growth track, with a few exceptions. Russia has been the main growth driver recently, and its tissue consumption grew by approximately 8-9% last year, with slower economic growth pushing the growth down only slightly from the double-digit rate recorded in 2012. Of the other largest markets, Poland and the Ukraine showed good growth and Hungary some growth in 2013, while Romania and the Czech Republic disappointed, at least according to currently available information. On average, Eastern European tissue consumption grew by an estimated 5% in 2013.

'Southern Europe will continue to suffer the consequences of economic crisis for some years and growth potential has shrunk. The northern and central markets, while still growing, are maturing and growth rates are declining.'

The role of Eastern Europe in the European tissue business is increasing. In 2000, Western Europe accounted for 88% of Europe's total tissue consumption, Russia for only 3% and other Eastern European countries for 9%. By 2012, Russia had doubled its share to 6% and the share of other Eastern European countries had grown from 9% to 15% (Figure 1). One may say that the share of Eastern Europe is not yet more than 21% while Western Europe continues to dominate. However, this is changing quickly and by 2022, we expect Eastern Europe to account for about 30% of the total European tissue market.

When considering expansion potential in the European tissue business, Eastern Europe is attracting most of the new investments. Most announced new projects are in Eastern rather than Western Europe. This makes sense as our latest tissue consumption forecast predicts about 55% of the European volume growth in 2012-2022 will be in Eastern Europe and 45% in Western Europe. Russia's tissue market alone is expected to grow more than the German and UK markets together, and Poland's volume growth will be of the same magnitude as Germany's (Figure 2).

Ten years ago we used to conclude that the European tissue market growth would concentrate on Southern and Eastern Europe. Recently the situation has changed: Southern Europe will continue to suffer from the consequences of the economic crisis for some years and its growth potential in the long term has shrunk. The Northern and Central European tissue markets, although still growing, are maturing and growth rates are declining. The focus of the European tissue business expansion has irrevocably moved from Western to Eastern Europe.

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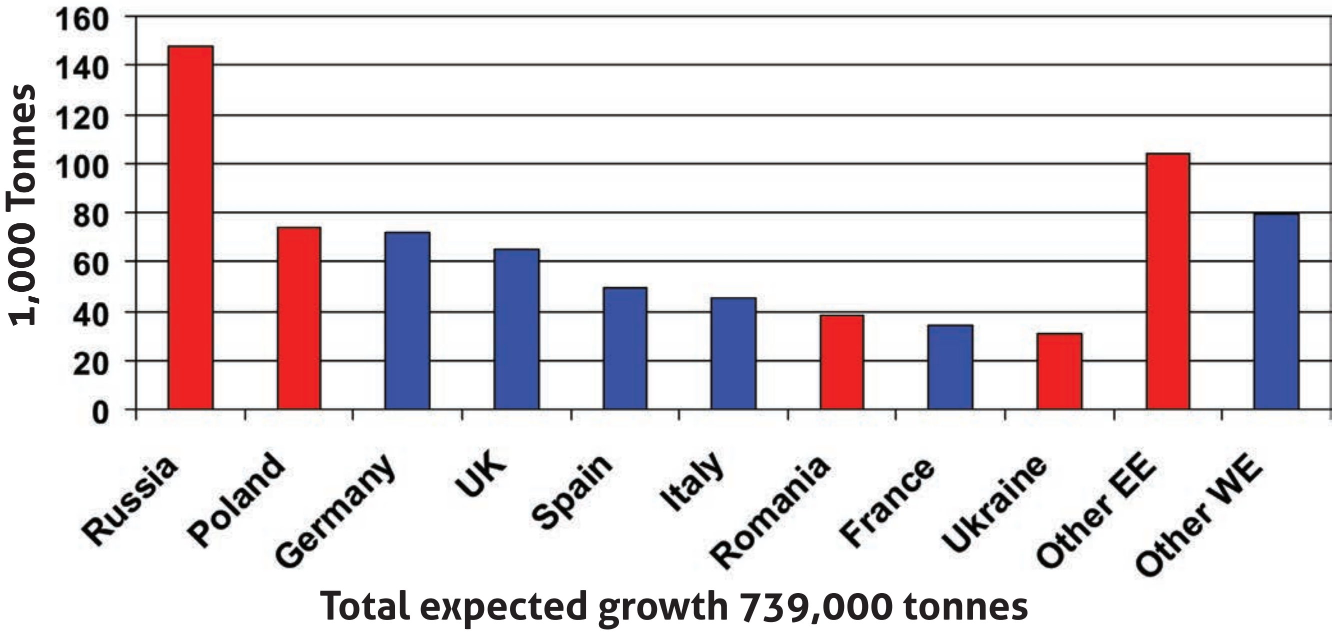


Figure 2: Expected European volume growth of tissue consumption 2012-2015

Global

RCI TECHNOLOGY AND CONSOS LAUNCH SOFTENER SC-Q LIQ

RCI Technology and partner company Consos have announced the availability of their newest offering, Softener SC-Q Liq.

The 100% active Softener SC-Q Liq "pushes the envelope" for molecular weight on their eco-friendly renewable resource technology while maintaining the eco-friendly properties.

General manager Phil Reitano said: "The higher molecular weight allows for a higher degree of tissue lubricity, abrasion resistance, and tensile strength while maintaining optimum hydrophilicity and all desirable environmentally acceptable properties.

"Of importance is the low product viscosity to allow for excellent flow.

Consos is a Charlotte, North Carolina-based manufacture of tissue towel and nonwoven softeners.

Guinness World Record: the world's largest collection of tissue packs goes to...

Italy's Silvio Fioravanti has been awarded a Guinness World Record for his collection of tissue packets. He started his collection at the age of 15 in 1996. Currently, the collection consists of 12,554 unique packs from 78 countries.

Global

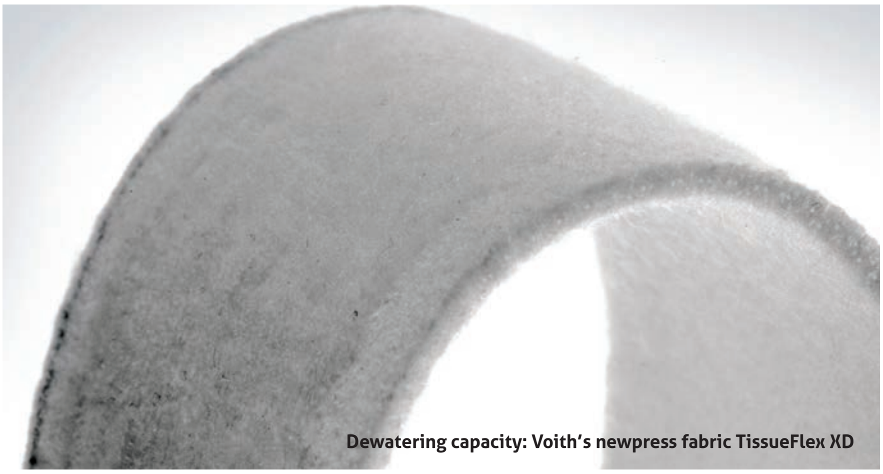
VOITH LAUNCHES TISSUEFLEX XD

Voith has launched the TissueFlex XD, which it said is a reliable press fabric for tissue manufacture that offers maximum dewatering capacity.

It is produced with a lower caliper offering faster break-in times which Voith said allows the machine to reach higher productivity sooner. TissueFlex XD has a resilient structure so the key properties of the fabric can be maintained over a long period.

The company added that as tissue machine operating speeds have increased substantially over time, press fabrics such as TissueFlex XD can now meet these more demanding requirements.

It said: "Despite its low thickness the structure of TissueFlex XD remains stable, even at high operating speeds. The tissue manufacturer can expect high runability and increased productivity.


Dewatering capacity: Voith's newpress fabric TissueFlex XD

"Thinner press fabrics often have the drawback that they quickly drop in performance due to wear, compaction and contamination. But this is not the case with TissueFlex XD: Voith has incorporated a unique non-woven layer that retains the properties of the fabric for a long time and delivers consistent performance."

The special needling of the base, batt and non-woven layers also reduces wear and achieves a smooth tissue surface.

The combined layers produce an even pressure for efficient drying.

Global

GARD CHEMICALS TARGETS TISSUE SECTOR WITH PRODUCT LAUNCH

Cutting downtime: Gard's cold glue remover and release agent

Gard Chemicals has increased its focus on the tissue industry after it developed its cold glue removers and release agent products.

The company started supplying into the tissue industry towards the end of last year after it was brought to its attention that machine downtime and loss of production were being highlighted due to adhesive build up on machinery.

In addition, it is now working within "core winders" again where adhesive problems are an issues.

The company said that the products introduced have reduced downtime significantly making them ideal within production environments.

The range is now supplied to manufacturers of diapers, sanitary towels as well as the tissue sector.

Poland

ICT GROUP INVESTS IN ICT POLAND MILL

ICT Group is to invest in a new 70,000tpy tissue machine at its ICT Poland mill located in the town of Kostrzyn.

The investment would also comprise of additional converting equipment and necessary logistic and civil infrastructure.

ICT Poland has 400 employees and produces 140,000tpy of finished products. The new machine would eventually be an addition to ICT Poland's first two tissue machines started in 2001 and 2008.

The future site would therefore need additional personnel to operate the three full width tissue machines and the fully integrated converting hall downstream.

ICT Group is presently evaluating several investment options in different countries.

However, should the decision for the investment finally fall on Poland, start-up date for the new machine is estimated to be in 3Q of 2015.

ICT Group is headquartered in Lucca, Italy, and has production companies in Italy, Spain, Poland and France.

BESKIDY ORDERS HERGEN SMART TISSUE LINE

Shake-on it: representatives from Beskidy and Hergen complete the deal.

Poland's Fabryka Papieru i Tektury Beskidy has boosted its production capacity after it invested in a Hergen-supplied HCF 920 SMART FIT.

The 2.8m machine has a 50tpd capacity and will work at 1,100m/min to produce light tissue from 13g/m2 up to 30g/m2 from virgin pulp. Its start up is scheduled for the beginning of 2015.

The scope of supply from Hergen includes: approach flow, HCF 920 Innova Flow headbox, Crescent Former unit, complete press section, Steel Ribbed Yankee dryer, Aerodry gas hood up to reel equipped with shaft puller and complete basic engineering since stock preparation till rewinder.

Beskidy is a European producer of high-quality hygienic paper and operates two paper machines and one tissue towel machine.

UK

KENNEDY HYGIENE PRODUCTS TARGETS PAPER CONVERTERS WITH PRODUCT LAUNCH

UK-based global washroom dispenser manufacturer Kennedy Hygiene Products has launched the POD – auto-cut paper roll dispenser.

The launch is targeted at paper converters and it incorporates the Reserve System, a feature aiming to reduce paper wastage at facility level.

The launch is in response to customer demands for more environmentally friendly solutions.

The POD with Reserve System has an integrated patented stub roll loading mechanism, where a new roll can be loaded into the dispenser before the previous roll has been fully used.

When the stub roll is fully depleted the mechanism transfers to the new full size roll.

The company said that as well as total use of the stub roll which eliminates paper wastage, "end-user satisfaction is enhanced by continuation of supply".

The POD is manufactured at Kennedy`s premises in east Sussex, southern England.

It has been designed to accommodate a large variety of paper roll types available on the market with diverse roll lengths, diameters, widths, and paper thickness. With its standard setting, the unit has been optimised for rolls with a core diameter of 38mm, a roll width of 250mm and roll diameters up to 200mm, but can be adapted to specific needs including requirements for proprietary systems.

Kennedy Hygiene Products manufactures and supplies integrated washroom hygiene systems.

It was established in 1961 and has since grown from its roots in hand drying to its current fully integrated range of washroom hygiene systems which encompasses hand drying, hand washing, air freshening, sanitizing, feminine hygiene, nappy and medical waste and toilet tissue families plus their associated consumables.

The company also produces bespoke dispenser designs and colours and works with clients to fulfil their specific requirements.

Kennedy operates under ISO 9001 and ISO 14001 quality and environmental accreditations.

POPPIES EUROPE INVESTS IN MAFLEX LINE

UK-based manufacturer of catering disposable products Poppies Europe has invested in a complete production line from Maflex.

The company said it made the investment on the back of customer demand to be a "one stop shop".

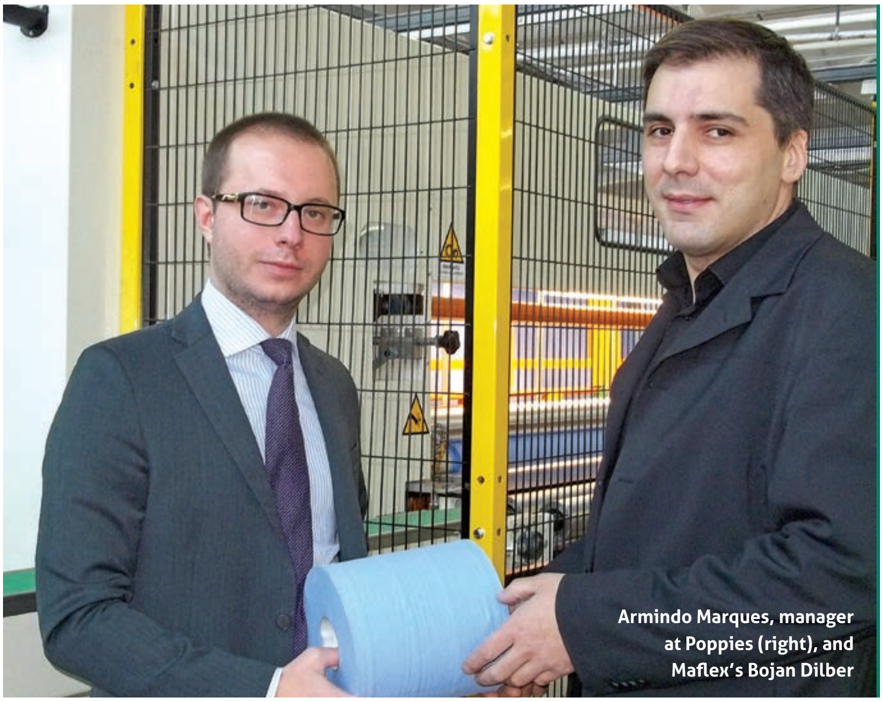
Armindo Marques, manager at Poppies, told TW: "We have naturally decided to expand our prominently catering range towards hygiene products by investing in a complete production line from Maflex.

"In the year planning to this project we have developed a new brand dedicated to the hygiene, Poppysoft."

He added that Maflex is a dynamic, fast growing company that has "already established a strong reputation for reliability and efficiency". He said: "The most interesting characteristic of the Maflex line is the flexibility, which suits perfectly our business.

"We consider this feature an opportunity to satisfy all the range of customer requests." Poppies Europe has 108 staff and it acquired McNulty Wray at the end of 2012. The move significantly boosted its position in the napkins sector. Poppies Europe was established in 1996 and produces catering disposable products such as napkins, tablecovers and placemats.

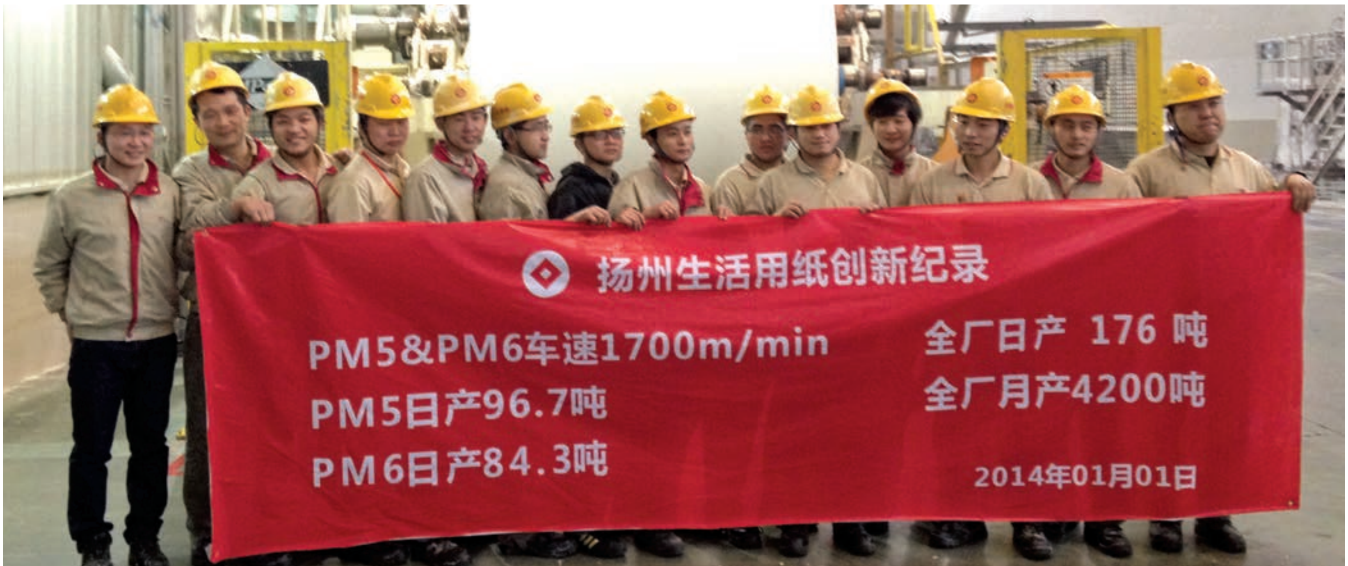
It has already put in an option for a second Maflex line.



Armindo Marques, manager at Poppies (right), and Maflex's Bojan Dilber

China

YUEN FOONG YU CORPORATION REACHES SPEED RECORD



Speed team: Yuen Foong Yu Corporation's record beating employees.

Yuen Foong Yu Corporation has significantly boosted its capacity on two PMP Intelli-Tissue® 1500 machines after it reached a speed record of 1,700mpm.

PM 5 and PM 6 are running in the YFY's Yangzhou, China-based facility and were designed to produce 75tpd each.

However, on 1 January, PM 5 increased its capacity to 96.7tpd on and 84.3tpd on PM 6.

The PMP Intelli-Tissue® 1500 machines have a maximum operating speed of 1,600mpm and were brought on stream in the summer of 2012.

Reaching the speed record of 1,700mpm has enhanced the daily capacity up to combined 17%, with basis weight at wire of 14.1gsm and 12.3gsm.

The two companies are currently in the middle of an execution phase for the following PMP 4 Intelli-Tissue® 1500 machines for the Yangzhou and Dingfung tissue mills.

FIRE HITS C&S JIANGMEN MILL IN CHINA; NEW PMS DELAYED

A fire has hit tissue maker C&S Paper's mill in Jiangmen city, Guangdong province, China, but was extinguished without casualties.

The blaze went through a tissue converting workshop on the morning of 18 January, and was soon put out.

The firm said that normal production has been resumed at the mill, besides in the workshop itself.

The cause of the accident is being investigated and damages are still being calculated.

The mill has a total tissue capacity of around 180,000tpy.

A major tissue producer, C&S currently runs five plants in China, and boasts a national tissue capacity of around 380,000tpy.

New PMs delayed: The firm is pressing ahead with the construction of a new site in Luoding city, Guangdong province.

Two 60,000tpy Andritz tissue units are planned to start up there this year.

Each PM will have a trim width of 5.56m and a design speed of 1,900m/min.

They were originally scheduled to come online by the end of 2013.

However, according to a source close to the project, civil engineering at the new facility hit a delay.

The first PM may kick off production in March, followed by the second in May or June.

Moreover, two new Toscotec PMs with a combined capacity of 59,000tpy which will run at the firm's site in Chengdu city, Sichuan province, have also been delayed.

One will have a trim width of 3.55m and a design speed of 1,650m/min. It will make tissue at a potential rate of 32,000tpy.

The other one will have a trim width of 2.85m and a design speed of 1,700m/min. Its capacity will be around 27,000tpy.

The two machines were originally planned to get fired up in 2013. Their new timeline has not been announced.

News from RISI (www.risiinfo.com)

China

CHINA CRACKS DOWN ON POLLUTION: ALL MILLS IN BAODING CITY HALT PRODUCTION TO UPGRADE BOILERS AS MILLS CLOSE IN ZHEJIANG

All of the paper mills in Baoding city in the northern Chinese province of Hebei have halted production to upgrade boilers in a bid to cut air pollution.

The move is due to a mandatory anti-pollution campaign launched by local authorities.

Local media reported that all tissue mills there were asked to stop production from 14 November to 14 December.

Coal boilers are to be upgraded to use natural gas.

Baoding is an important production base for tissue in north China. It is home to more than 100 small tissue mills with a combined capacity of around 1 million tpy.

These mills have caused many pollution complaints and the city is near Beijing, which has been troubled with serious smog.

The Baoding government has required all factories, including paper mills, to upgrade their boilers to reduce exhaust emissions.

National 6.2million tpy capacity to close

To curb pollution at a national level, China has launched a capacity closure campaign across the country. A lot of old and small machined are wiped out each year.

This year, the P&P industry is scheduled to wipe out 6.21 million tpy of old capacity.

In 2012, the closure goal for the industry was 9.95 million tpy, and the final results are still being checked by authorities.

In 2011, a total of 8.31 million tpy of outdated P&P capacity was retired.

Sources reported that some mills have already finished rebuilding their boilers, and have restarted production.

Fuyang shutdowns: In Fuyang city, a hub for low-quality cartonboard production in Zhejiang province, local authorities are also systematically shutting down small machines and mills.

According to Zheng Mengqiao, General Secretary of the Zhejiang Paper Association, the Zhejiang provincial government has released a specific document guiding the closures.

More than 100 mills were scheduled to be shut down. The deadline for the closures was the end of 2013.

In the future, he said, water consumption and Chemical Oxygen Demand (COD) emissions, a water emission factor describing the amount of oxygen consumed when dissolved matter in effluent water oxidizes, will be strictly limited. The introduction of a quota system is being discussed.

If a mill uses up its annual quota for water consumption or COD within 10 months, Zheng explained, it may have to halt production for the rest of the year.

News from RISI (www.risiinfo.com)

CHINA'S BAZHOU MINGXING PAPER STARTS UP 12,500TPY TISSUE MACHINE IN XINJIANG

China's Bazhou Mingxing Paper has started up a 12,500tpy tissue paper machine at its mill in Korla city in the Xinjiang autonomous region.

The 2.76m wide PM, which has a design speed of 770m/min, is one of a handful of machines capable of making virgin fibre-based tissue products in Xinjiang, using market pulp imported from Russian as furnish.

The autonomous region in China's northwest is large and sparsely populated, covering one sixth of the country's territory.

Demand for good quality tissue products is growing in the area in line with its rapid urbanisation and improving standards of living.

'Demand for good quality tissue products is growing in the area in line with its rapid urbanisation and improving standards of living.'

Korla is the second largest city in Xinjiang after Urumqi, with a population of nearly half a million.

Bazhou Mingxing's output on the new unit is destined mainly for the local market. The firm plans to build more machines at the plant in the next few years, eventually boosting its total tissue capacity to 60,000tpy.

But the timeline is still to be hammered out.

News from RISI (www.risiinfo.com)

WUHAN CHENMING HANYANG PAPER MOVES INTO TISSUE SECTOR

Wuhan Chenming Hanyang Paper has moved into the tissue sector after it started up its first tissue line, a Valmet-supplied 60,000tpy Advantage DCT 200HS.

The Advantage DCT 200HS tissue line is now producing high quality tissue at high speed.

It has a width of 5.6m and an operating speed of 1,900m/min and will produce 60,000tpy of high-quality facial, toilet and towel grades.

Delivery comprised a complete production line with stock preparation equipment and an Advantage DCT 200 HS tissue machine including an OptiFlo II TIS multi-layer headbox, a cast alloy Yankee cylinder, an Advantage AirCap hood, an Advantage WetDust dust management system and an Advantage SoftReel reel.

The delivery also featured Valmet's patented Advantage ViscoNip pressing technology.

Wuhan Chenming Hanyang Paper is part of the Shandong Chenming Paper Group, a Chinese paper manufacturing group.

Chenming Paper Group has more than 10 production sites located across China.

SHANGHAI WELFARE STARTS UP 12,000TPY TISSUE PM IN CHINA

The Shanghai Welfare Group has fired up a 12,000tpy tissue PM at its mill in Shaoxing city, Zhejiang province.

The Kawanoe Zoki machine has a width of 2.76m and a design speed of 770m/min.

The firm announced a plan to expand by installing four identical tissue PMs in 2009. This one is the last to come online.

The other three were fired up in 2010, 2011 and 2012 respectively.

Currently, the mill has a total tissue capacity of around 65,000tpy.

News from RISI (www.risiinfo.com)

Brazil

LEAL TO START UP 5,400TPY TISSUE SPECIALTY PM AT IBEMA PLANT IN BRAZIL

Brazilian paper producer Leal Indústria e Comércio de Papéis is installing a 5,400tpy tissue and low basis weight gloss paper machine PM 2 at its mill in Ibema, southern Brazil.

The result of a Real 4.5 million investment, the PM is expected to start up by the end of February.

Leal's industrial manager, Augusto Valenga Junior, told PPI Latin America: "The second-hand PM was acquired from a supplier called Trópico's.

"It is currently being revamped, with the mechanical work being handled by different suppliers, such as Incomesp and Decamp.

"The rollers' coating was carried out by ATB, while the electrical parts were acquired from Rioar, and for the civil engineering works we went with Consvale. The machine's assembly is being handled internally."

Leal also operates a 9,600tpy industrial paper machine (PM 1) at the same site, which was refurbished in July 2012 after a Real 3 million investment. The company reactivated the PM 1 after closing a leasing agreement with Brazilian boxboard producer Ibema.

"Leal is following the investment program approved by Ibema. We consider acquiring the mill in the future, although there is no date set for it and both parts are comfortable with the current process," Valenga added. The company currently supplies paper to the domestic market, and is developing other products for export.

"There's a demand increase for tissue paper and we are working with specialty papers to be produced on the PM 1, which are either experiencing a demand increase or lack of supply in the domestic market," Valenga said.

News from RISI (www.risiinfo.com)

Japan

EHIME PAPER STARTS UP REBUILD PROJECT

Japanese tissue manufacturer Ehime Paper has boosted its capacity and tissue production efficiency after starting up an Advantage DCT tissue line rebuild on PM8.

The rebuild was jointly supplied by Valmet and Kawanoe Zoki and has been redesigned with the Advantage DCT 135 technology. It includes press section, Advantage AirCap Yankee hood, and a Yankee dryer as well as an Advantage WetDust dust handling system.

It is now running at full speed at 1,900m/min and produces high quality facial tissue and low basis weight.

Ehime Paper is a member of Kami Shoji Group, the fourth biggest supplier of tissue paper in Japan.

Ehime Paper produces box tissue, toilet paper and corrugated board products for the Japanese market.

US

LINCOLN PAPER AND TISSUE TO FOCUS ON TISSUE PRODUCTION

Lincoln Paper and Tissue is to focus on tissue manufacturing following its announcement to "indefinitely idle" its pulp and paper production.

In a statement, the Maine, American-based company said: "Given the situation created with the November recovery boiler explosion and the costs associated with this, we have decided to indefinitely idle the pulp and paper mill portions of our facility.

"Our tissue mill business will continue to operate at full capacity. Consequently, we will be downsizing to accomplish this change in operations."

It added the move was necessary for "the long term survival and success of our business".

The company was unable to comment further at this time.

Spain

LC PAPER BOOSTS PRODUCTION WITH REBUILD

Spanish tissue manufacturer LC Paper has increased its competitiveness after it signed a contract with Toscotec and sister company Milltech to deliver a major dry-end rebuild of its PM2.

Based in Besalu, start-up of the rebuild is expected in the second quarter of 2014. The delivery includes a major rebuild of the PM2 dry end and press section, which will be replaced with a TT DOES (Drying Optimisation for Energy Saving) package.

This will feature a double presses solution with a rebuild of the felt run, a new TT SYD-15FT with doctoring system and a Duo-system Yankee hood, SMART eMT type from Milltech.

Maximum drying production with a machine trim width at reel of 3,050mm will be 130tpd.

LC Paper chief executive Joan Vila said: "After a detailed analysis of our project we decided to choose Milltech and Toscotec again for the innovative solution they are able to provide."

LC Paper was established in 1881 and produces niche tissue products on two

tissue machines, producing 45,000tpy of tissue for the AfH market.

In 1993, the company introduced a cogeneration plant. It was the first plant with a diesel engine of 6.5MW in Spain that was expanded in 1999 with a second 6 MW engine.

In 2009, LC Paper launched PM3 with a patented process that takes gases from the cogeneration plant to dry the paper by means of an innovative hood provided by Milltech.

In 2011 the first diesel engine was sold and in 2012 LC paper installed a new gas engine. Some 6 MW of this energy will be used to feed the new hood by Milltech on PM2, with a further decrease of energy consumption.

Turkey

TEZOL TÜTÜN KAGIT BOOSTS CAPACITY

Turkey's Tezol Tütün Kagit has increased its capacity after it signed for a Valmet-supplied tissue production line for an undisclosed sum.

The new tissue machine will be installed at the family-owned company's new mill site in the city of Mersin and start-up is scheduled for 2015.

Ersin Tezol, chief executive of Tezol Tütün ve Kagit San ve Tic A.S, said: "The new tissue line will fulfill Tezol's ambition to produce environmentally friendly products of highest quality in a cost-efficient way."

The delivery will comprise a complete high-speed tissue production line featuring an Advantage DCT 100+ tissue machine equipped with an OptiFlo headbox, a cast iron Yankee cylinder, an Advantage ViscoNip press and an Advantage AirCap Yankee hood.

The new line will have a width of 2.85m and will increase the company's existing production for the Turkish market by another 30,000tpy of bathroom tissue, towel grades and diaper tissue.

The raw material for the new production line will be virgin fibre and recycled fibre.

Tezol Tütün was established in 1932 and entered the tissue market in 2000.

Over the past nine years it has invested in a tissue machine in Torbali, 2004, a deinking line in 2007 and a second tissue mill in 2009.

The company is a major manufacturer in the Turkish tissue market, supplying towel, napkin and toilet paper products under the brands Softy, Mare and Ecco as well as private label products. It also exports recycled tissue and finished products to Europe, the Middle East, Russia and Central America.

SÃO PAULO
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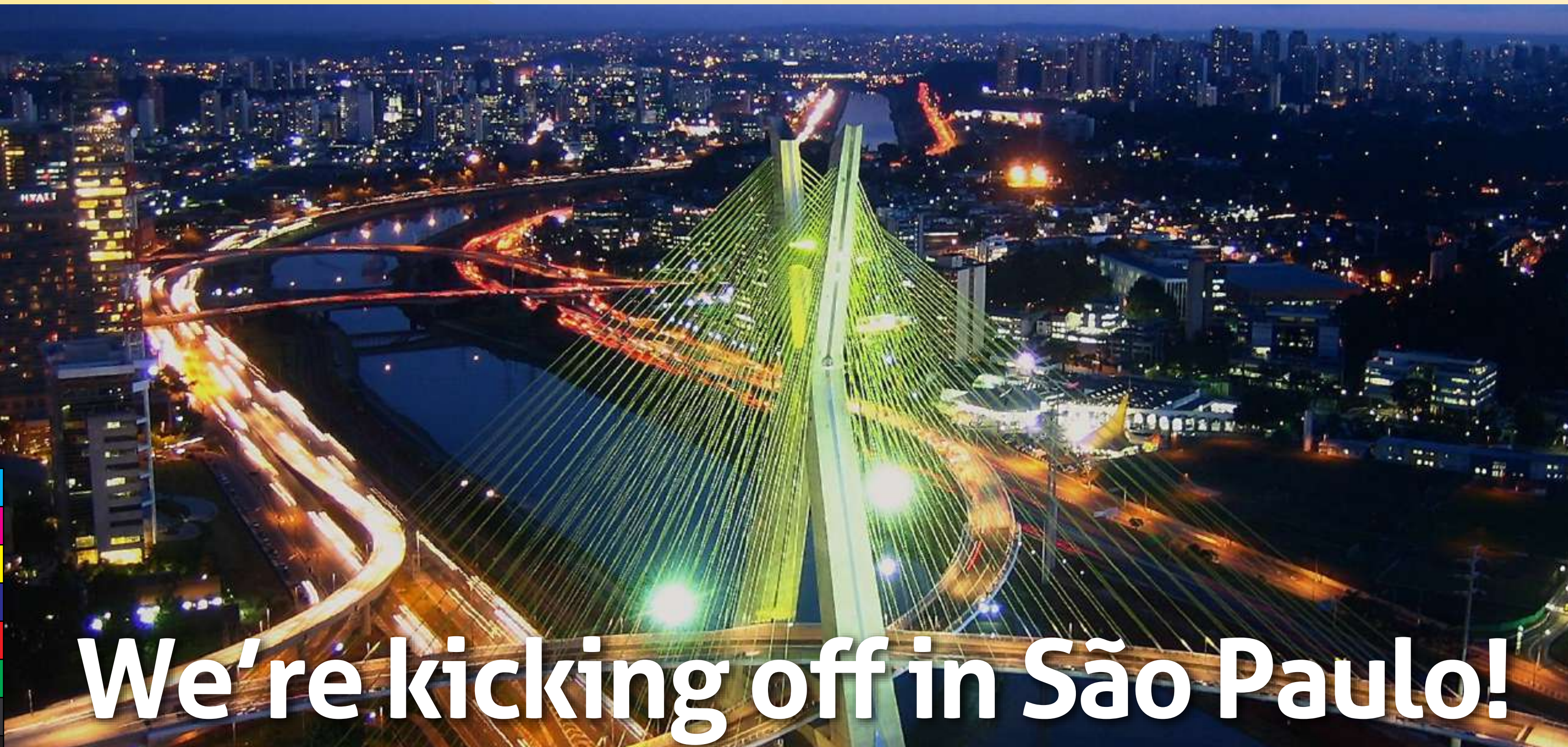

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SVECOM LAUNCHES PNEUMOMECHANICAL CHUCK MOD. 714 MZL

Svecom has launched the Pneumomechanical CHUCK MOD. 714 MZL, which it said is a revolutionary product to be used on tissue machine unwinders.

The company said it has an immediate payback and has been tested in several paper mills around the world.

The chucks increase the life of cardboard and plastic cores without damaging them during the unwinding of the reels.

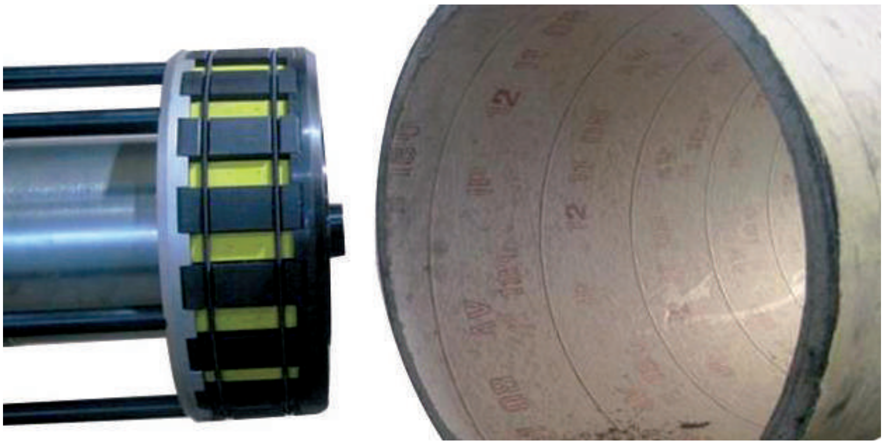
The average life of the cardboard cores usually varies from plant to plant, from one cycle to 10 cycles, and by the plastic cores from 50 to 100 cycles.

Svecom said it can now increase the average life of cardboard cores to 20-50 cycles and the plastic sleeve can reach 100/200 cycles.

It said: "The 714MZL avoids all injuries during the several inserting and the extraction operation.

"Thanks to our chucks you no longer need to use the tools that are normally used to help the paper core insertion of standard chucks."

The chuck also automatically block the



core to permit handling in total safety.

Svecom manufactures expanding devices (shafts and chucks), safety chucks, handling systems (shaft extractors, mechanical handling devices and lifting platforms).

UK

FIRE STRIKES KIMBERLY-CLARK'S NORTHFLEET TISSUE MILL

A small fire broke out at Kimberly-Clark's Northfleet tissue mill on 27 January in the morning.

The cause of the blaze remains unclear for the time being and an investigation is underway, said a spokesperson from the company.

There are no reports of injuries of major damages and operations were not affected, the spokesperson added.

The Northfleet mill produces 75,000tpy of tissue.

News from RISI (www.risiinfo.com)

Mexico

KIMBERLY-CLARK DE MÉXICO HAS STRONG 2013, POSITIVE PERSPECTIVES FOR 2014

Kimberly-Clark de México (KCM) had strong results in 2013, even though it faced a tough fourth quarter, according to the CEO Pablo Gonzalez. "Overall we had a strong year, but a difficult last quarter. The past year was difficult in many fronts and particularly in terms of consuming environment," the executive stated. "But we had our best year ever in terms of volumes, sales and profits," Gonzalez added.

KCM posted a 12% increase in net sales last year over 2012, reaching Peso 4.6 billion ($348.9 million). The company's net sales hit Peso 29.7 billion, an increase of 1% over the previous year. EBITDA increased by 7% to Peso 8.7 billion.

"The slow economy in the first part of the year and the slow year in public spending in Mexico – we had the slowest job creation in four years -, as well as high food related inflation and fiscal reform, led the Mexican economy to grow 1.2-1.3% while the market was expecting a growth of 3.5% in the start of the year," Gonzalez commented.

KCM projects to grow top line above the country's GDP – mostly due to higher volumes – with a soft start of the year and growth accelerating in the second half. "We are expecting moderating dollar increases for fiber for recycling, but slight increases in pulp. We are projecting higher energy prices," Gonzalez stated.

The executive also mentioned that the company estimates a capex of $150-200 million this year, including a tissue expansion project as well as renovations, new products, product improvements and cost saving plans. In 2013, KCM's capex totaled Peso $1.6 billion ($123.5 million).

"We continue to be optimistic about Mexican growth perspectives in spite of the weak 2013. The economic fundamentals remain solid, we are confident that consuming levels will be very strong in the coming years. The question for 2014 is when we will see the turning point for economic and consumption growth. Consumption hasn't picked up as the incremental taxes haven't been helping," the CEO concluded.

News from RISI (www.risiinfo.com)

Map 1 T&T operating mill locations in Mexico.

Mexico – free market economy with growing T&T capacity

By Bill Burns, senior consultant,
Fisher International

Mexico has a free market economy in the trillion dollar class. Since the implementation of the North American Free Trade Agreement (NAFTA) in 1994, Mexico has increased its share of US imports from 7% to 12% and Canadian imports to 5.5%. Trade with the United States represents about 78% of Mexico's exports. Mexico has free trade agreements with over 50 countries, resulting in more than 90% of trade under free trade agreements. Still, challenges remain. On the surface, unemployment at 5% is low. But underemployment is of concern, at as high as 25%. Pollution, particularly water pollution, and violence from feuding drug-trafficking organisations are also major obstacles to stability. Mexico's GDP plunged 6.2% in the 2009 global downturn. GDP posted positive growth of 5.6% in 2010 with exports to the United States leading the way, but slowed to 3.9- 4% in 2012.

Towel and Tissue (T&T) appears to have benefited from the NAFTA agreement. Production capacity from 2002 to 2010 increased by about 30%. During the same time period, NAFTA in total had capacity growth of about 11% (Figure 1). Both NAFTA and Mexican production capacity has flattened out considerably since the global economic downturn in 2009.

'Production capacity from 2002 to 2010 increased by about 30%. During the same time period NAFTA in total had capacity growth of about 11%'

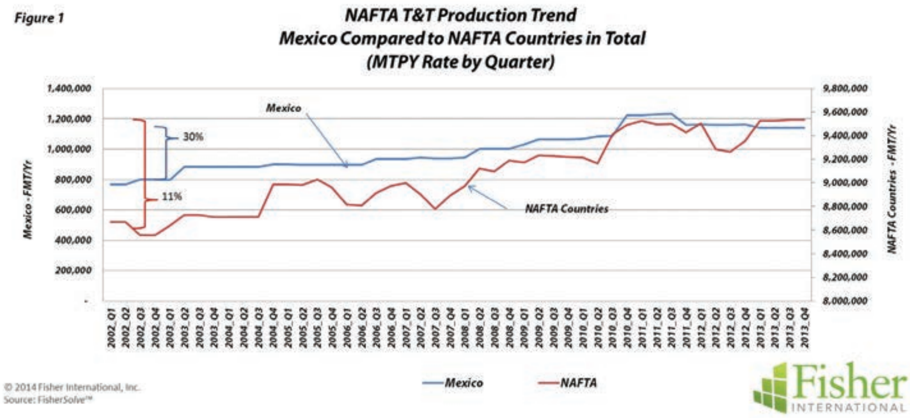


Figure 1 Trend plot for T&T production in NAFTA and Mexico from 2002 to 2013.

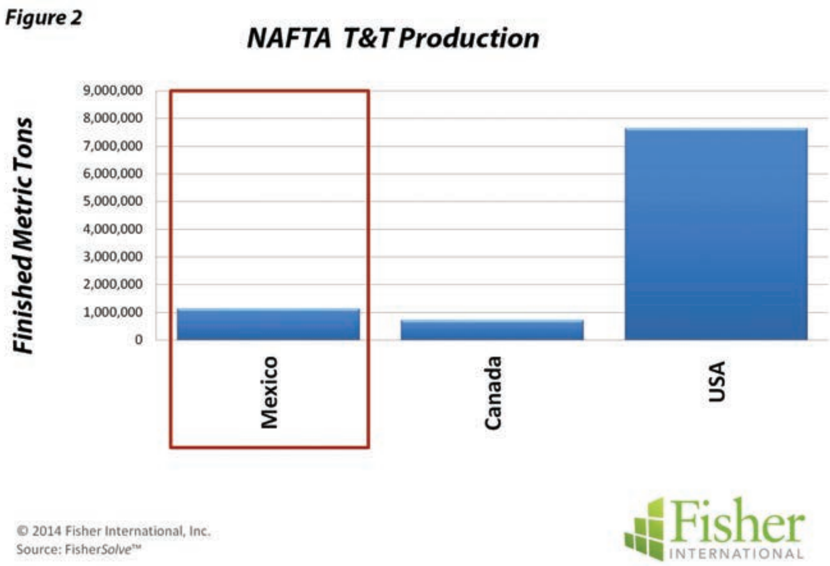


Figure 2 Distribution of T&T production in NAFTA.

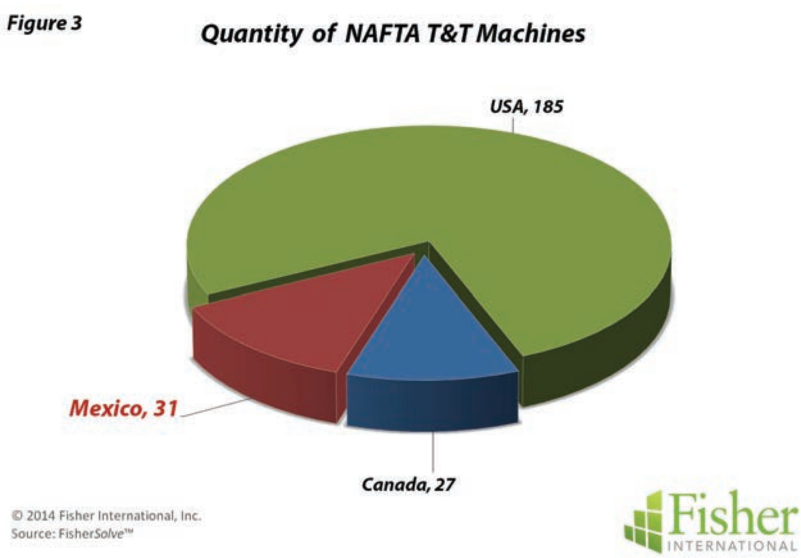


Figure 3 Distribution of T&T paper machines in NAFTA.

Mexican T&T mills are geographically dispersed in the non-mountainous and tropical regions (Map). With slightly higher production than Canada, Mexico ranks second in T&T production among NAFTA countries. The United States is the dominate partner in T&T production, out-producing Mexico 7 to 1 (Figure 2). The number of operating machines is also similar between Mexico and Canada, with the United States (US) operating 3 times as many as the other two countries combined (Figure 3). The average size of machines is more comparable among the three countries, but the US has more super-wide machines (Figure 4). Mill production in Mexico averages about 81,000 MT/Yr, ahead of Canada but behind the US. Plotting production against technical age shows Mexico has an advantage within NAFTA in Technical Age of T&T machines at about 22 years and a production advantage over Canada (Figure 5).

Mexico's T&T cost position is strongest among the NAFTA partners: low pulp costs and labour rates provide a clear advantage to Mexico. Energy is Mexico's only significant cost disadvantage before considering transportation and proximity to market (Figure 6). The fibre base within the NAFTA countries is primarily recycled

> *'Mexico's T&T cost position is strongest among the NAFTA partners. Low pulp costs and labour rates provide a clear advantage to Mexico.'*

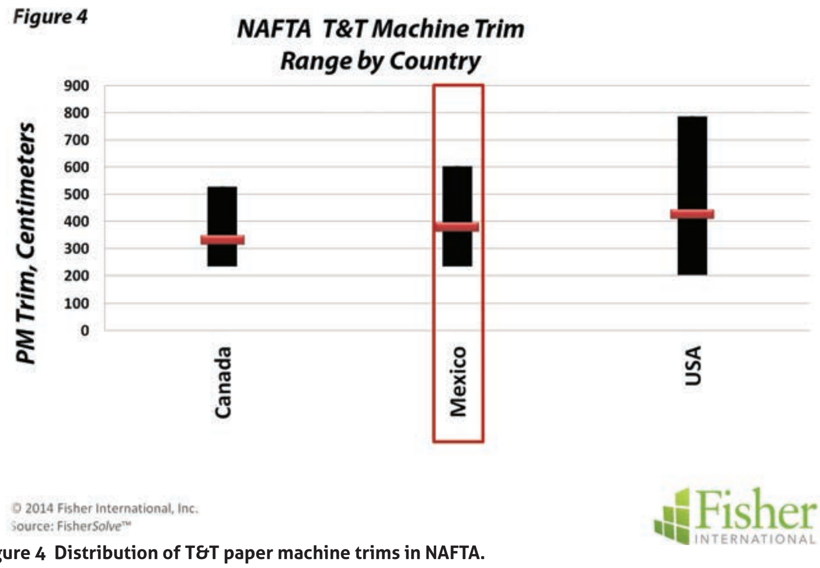


Figure 4 Distribution of T&T paper machine trims in NAFTA.

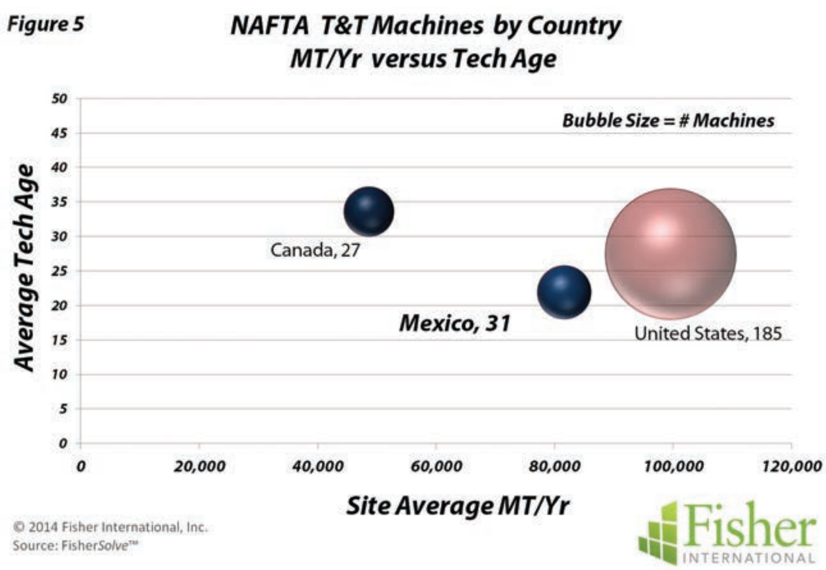


Figure 5 Technical age and production volume comparisons for the NAFTA T&T paper mills.

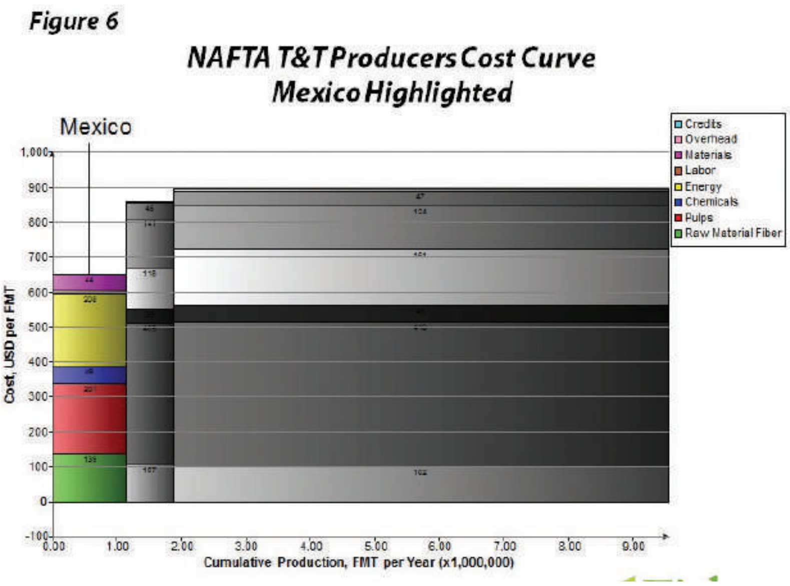


Figure 6 NAFTA country level cost curve for T&T production with Mexico highlighted.

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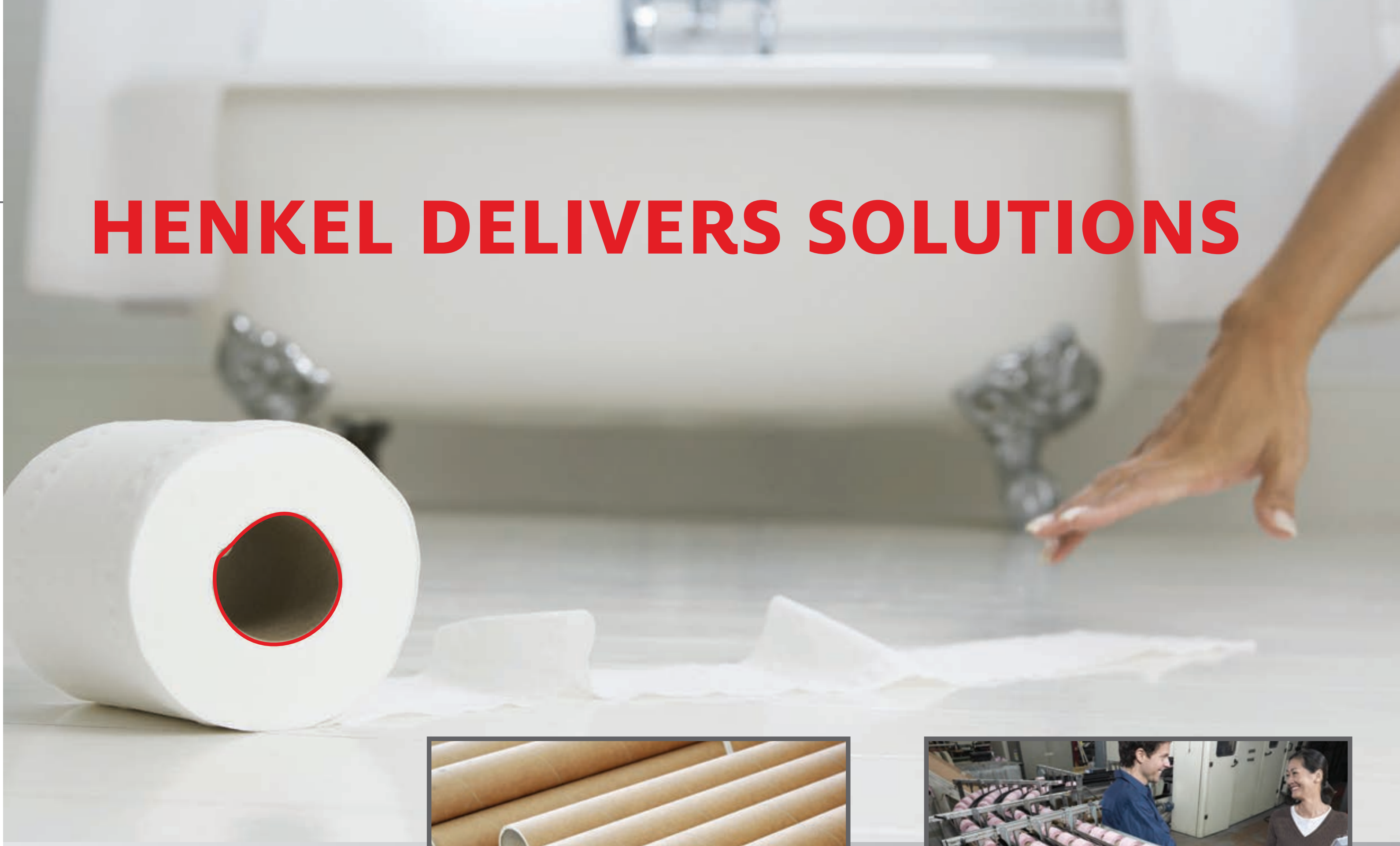

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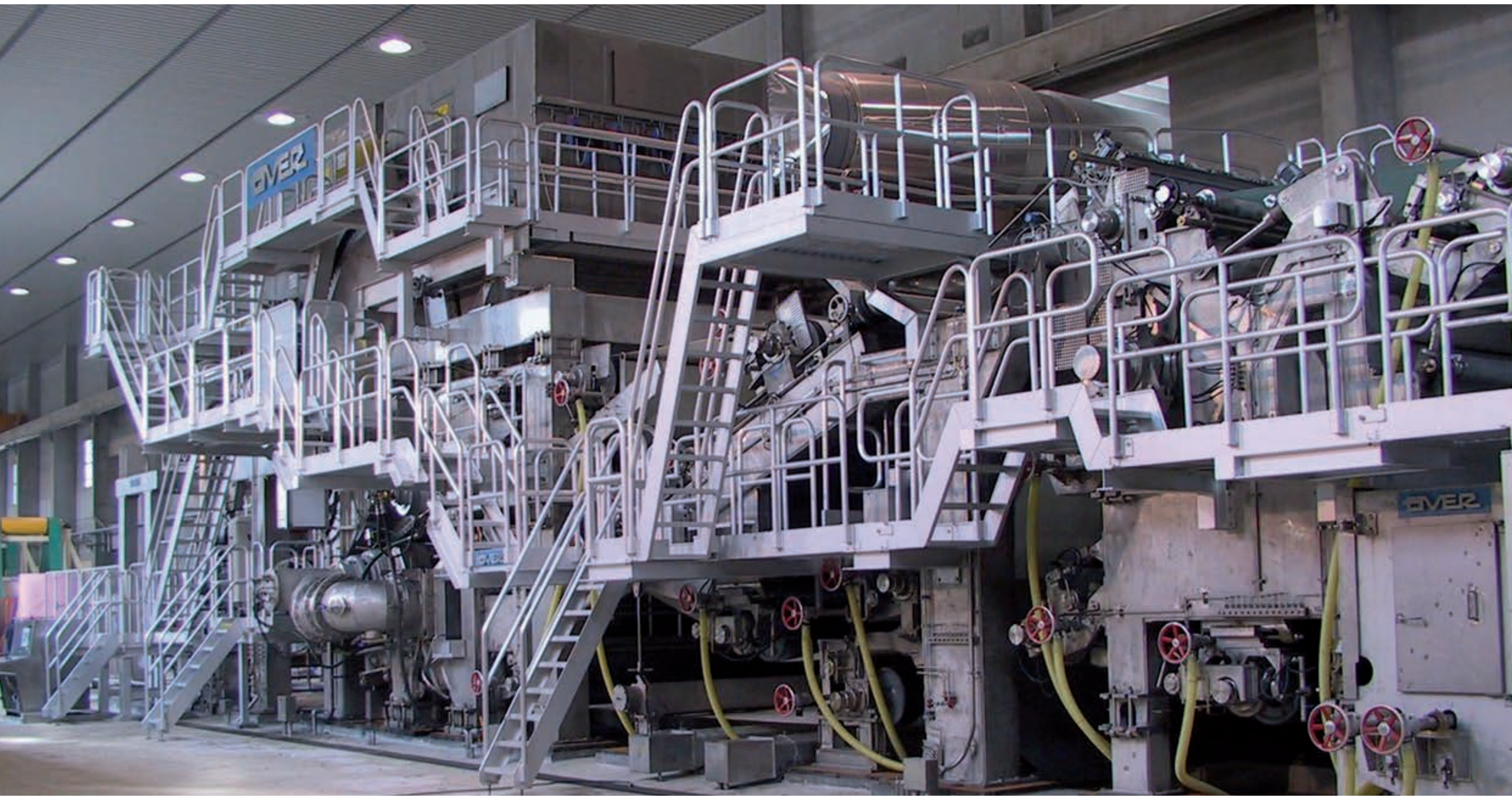

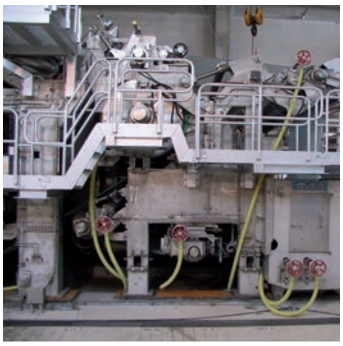

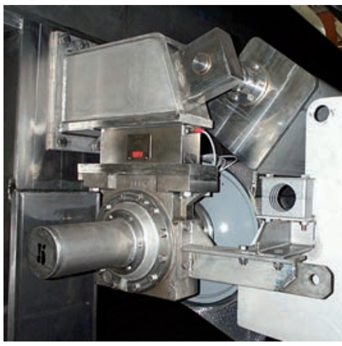

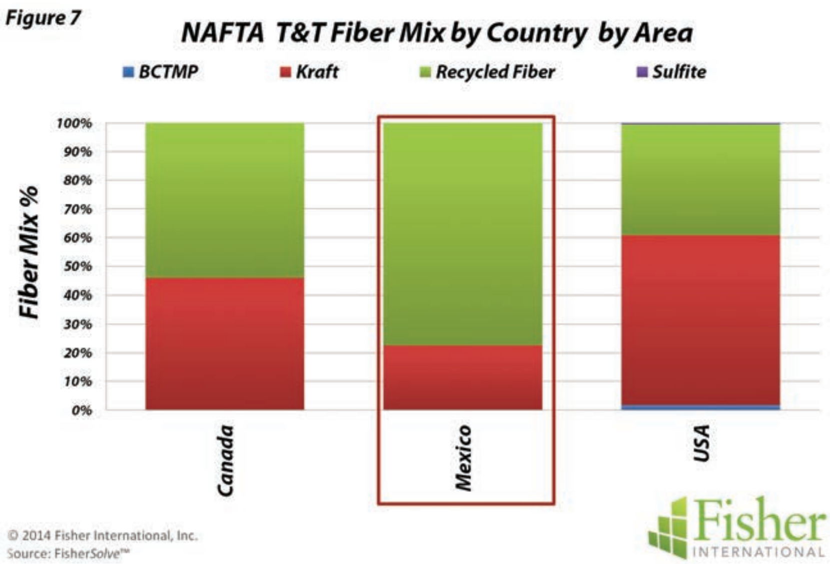

Figure 7 Fibre mix comparison for NAFTA T&T producing countries

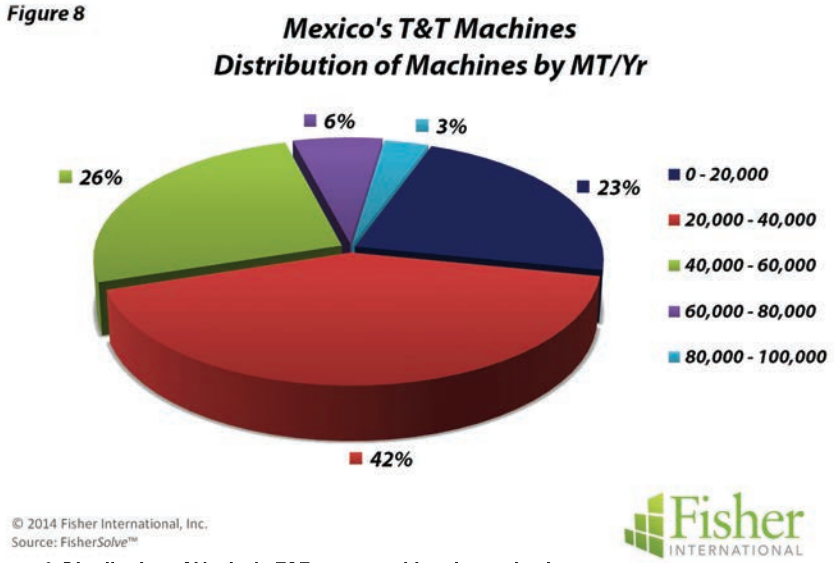

Figure 8 Distribution of Mexico's T&T paper machines by production rate.

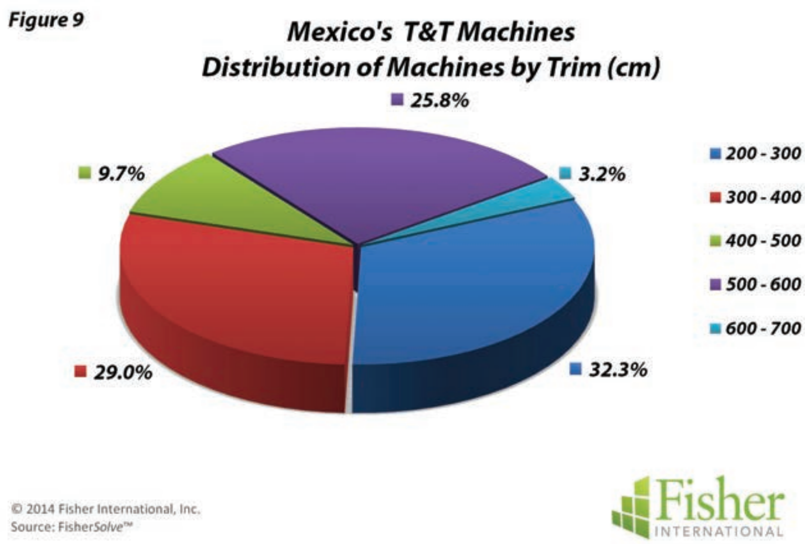

Figure 9 Distribution of Mexico's T&T paper machines by trim class.

Mexico in numbers

30%
Increase in T&T production capacity from 2002 to 2010

78%
Percentage of exports that represents trade with the USA

81,000
Average MT/Yr mill production

and Kraft pulps. Mexico is biased toward secondary fibre with 77% of total fibre consumption, whereas secondary fibre represents 54% and 39% of Canadian and US consumption respectively (Figure 7).

Production rates of Mexico's T&T machines tend to be on the smaller side with about 65% in the 40,000 and under size range (Figure 8). Mexican machine trims are likewise on the narrow side: more than 60% are less than 4 metres and only 3% fall into the 6-7 metre class (Figure 9). Machine speeds are more respectable with more than 60% greater than 1,500mpm and 23% greater than 2,000mpm (Figure 10). The age of Mexican machines is widely distributed from new to 70 years old. Dispersion of Mexican machines falls in the same quadrants as the other NAFTA machines when plotted against the average of all T&T machines worldwide, with a bias above average production and below average age (Figure 11).

Mexico's T&T business is international in trade and ownership, with 80% of the mills being foreign-owned. The US is the primary investor in Mexico with Argentina and Sweden also having a significant presence (Figure 12).

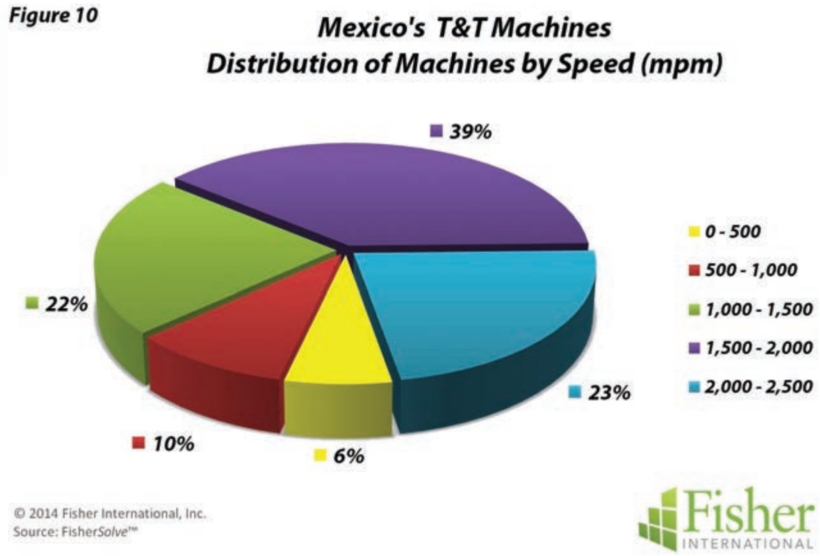

Figure 10 Distribution of Mexico's T&T paper machines by speed class.

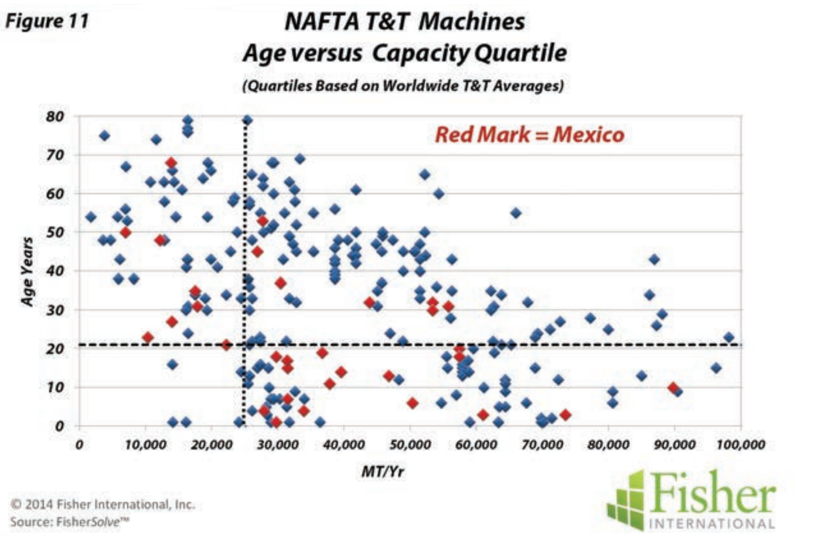

Figure 11 Dispersion of Mexico's T&T paper machines against worldwide average production and age.

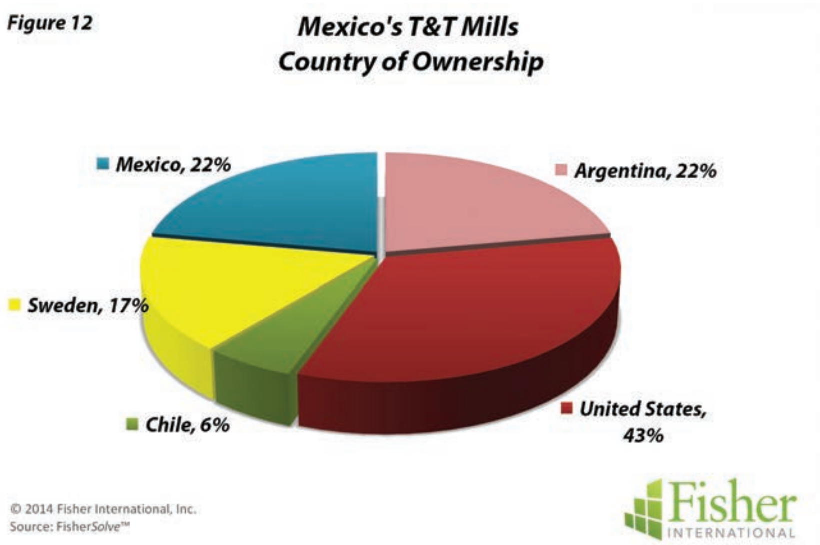

Figure 12 Distribution of Mexico's mills by country of corporation ownership.

The source for market data and analysis in this article is FisherSolve™. Data tables behind Figures 1 - 12 can be obtained from Fisher International. Email requests to info@fisheri.com.

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By IAN BELL
Euromonitor International's global head of tissue and hygiene research

The Mexican C class dilemma: Nice tissue or a Starbucks? Caffeine seems to be winning

Mexico is an interesting market for tissue products; on the one hand, it is a market which has a respectable household penetration rate when it comes to the key toilet paper category. Indeed, Euromonitor International's Mexican researchers regard tissue as quite a mature category within Mexican fmcg, but a look across the border into the US reveals what a really mature tissue market looks like. While it appears unlikely that any market will ever scale the heights of US tissue consumption, or even come close to the US's per capita tissue consumption of 13.6kg (2013), the US still stands as something of an optimistic guide to market potential. With Mexico's per capita tissue consumption rate standing at 4.5kg (2013), Mexico still represents a market full of potential, especially given the close proximity and influence of its northern neighbour, although this needs to be tempered, with Mexican consumers displaying somewhat lukewarm affinity with tissue products in general.

If US comparisons are 'pie in the sky', a more realistic benchmark would be the Brazilian market, and the good news is that Mexicans consume more tissue than Brazilians on a per capita basis, even though their income profiles are quite similar. This suggests that close proximity to the US market may well have its advantages. That said, per capita tissue consumption in Mexico has only shown slight growth, up by just 5%, over the past five years (2008-2013), whereas in Brazil, tissue per capita consumption has proved far more buoyant, showing 12% growth over the same period to reach 4.1kg.

THE ROLE OF ECONOMIC DEVELOPMENT

While economic development and income levels are not the 'be all and end all' when it comes to tissue drivers, there does exist an interesting correlation in Latin America between economic performances and growth in disposable income levels keenly matching expansion of the tissue market. While the value of this observation is limited, what is clear in both cases (Mexico and Brazil), and arguably across Latin America as a whole, is that per capita tissue consumption of up to 4kg has been rapidly and fairly easily attained. But Mexico exemplifies a group of countries that have found themselves in the 'doldrums' where tissue sales are concerned, with brand owners struggling to maintain consumer interest in spending more on tissue products in the same way hygiene manufacturers have been able to do.

'An understanding of the attitudes, preferences, buying behaviours and motivations of middle-class consumers is essential'

This has proved significant in terms of the Mexican market, and in others, where consumers, for the most part, once their basic tissue needs and requirements have been met, have shown only limited interest in premiumisation or broadening their portfolio of products. In general, brand owners have failed to engage or at least convince the growing middle classes of tissues' relevance beyond basic hygiene requirements; convincing them of this is important in terms of sales now, but also in terms of changing attitudes in the future. Within the tissue category, an understanding of the attitudes, preferences, buying behaviours and motivations of middle-class consumers is essential for any company hoping to attract this segment of the Mexican population.

MIDDLE-CLASS CONSUMERS AND TISSUE ADOPTION

According to the latest available information from INEGI (Instituto Nacional de Estadística, Geografía e Informática - National Institute of Statistic, Geography and Informatics), the percentage of middle-class households in Mexico grew by four percentage points between 2000 and 2010, to account for 42.4% of all households, and middle-class households will continue to be the driving force behind much of the 2% retail volume CAGR forecast for the tissue category through to 2020. This growth is however roughly in line with the population growth of 1% per annum and the household growth of 2% per annum expected over the same period. While value is likely to perform a little better, with a CAGR of 3% in constant terms likely, this is evidence of a lack of premiumisation and tissue format expansion, which assumes middle-class homes are not likely to expand their consumption with the same gusto they have shown to date.

Today's Mexican middle-class consumers can broadly be considered to be educated, and the head of the family is typically employed full-time, with enough income to spend on necessities and more left over to spend on indulgences. This group likes what it already has in terms of indulgences and wants to maintain or, better yet, enhance them. The groundwork for the future of Mexico's tissue market will most likely be laid down by the consumption trends adopted by this key demographic.

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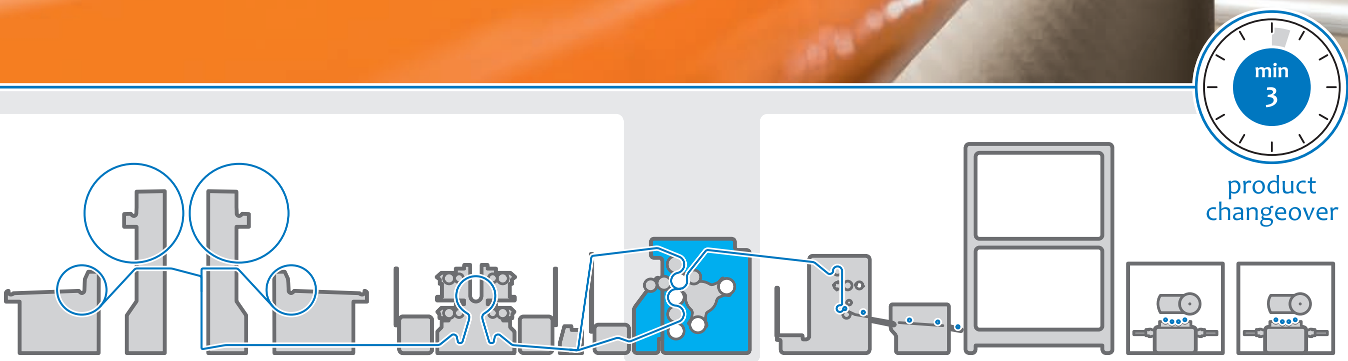

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The AMAI (Asociación Mexicana de Agencias de Inteligencia de Mercado y Opinión - Mexican Association of Market Intelligence and Opinion Agencies) classifies the middle classes into three sublevels: C-; C; and C+. The C and C+ groupings tend to be more economically established and demonstrate far more interest in everyday luxury products which are more visible socially, so their discretionary expenditure is expressed through the likes of Starbucks coffee consumed on the go, personal electronics such as iPhones and international apparel brands. Personal goods rather than home goods remain paramount amongst these groupings, and this will count against tissue while these trends continue. The C- consumers, who should arguably be some of the most enthusiastic consumers of more premium tissue products, exhibit less interest than might be expected. What is similar amongst these consumers is a broad acceptance that tissue products have a quality threshold and if this is met, then cutting expenditure in this area to fund expenditure in other areas is the stock and trade of the Mexican middle classes.

TISSUE ON A BUDGET

Purchasing budget tissue has been particularly evident in the Mexican market and has even reached the point where private label products, large pack sizes and discount stores have been strong performers amongst the Mexican middle classes who should be ordinarily pushing sales of mid-priced and even premium-priced products. In 2013, private label continued to develop in the Mexican tissue market, taking a 6% share of value sales. Indeed, Wal-Mart's Great Value brand was reported as the eighth bestselling brand on the Mexican market during the year. Although there has been evidence of increasing price stratification within private label, economy brands still dominate and this has helped the economy toilet tissue category remain buoyant, even in the face of some strong product innovation (quality improvements) made by standard and luxury formats.

A further trend which has somewhat undermined the true potential of Mexican marketing in terms of revenue has been the popularity of 'jumbo' pack sizes, with consumers quite happy to purchase in large volumes in order to secure low unit prices. To this end, Mexican consumers exhibit quite similar purchasing patterns to consumers north of the border, a trend which has been popularised by the growing modernisation found within Mexican grocery retailing. Jumbo packs used to only be available through warehouse clubs and hypermarkets, but they have now spread though to more modestly sized retail outlets.

'Although there has been evidence of increasing price stratification within private label, economy brands still dominate'

OPPORTUNITIES FOR GROWTH

While the popularity of private label products in Mexico is perhaps concerning, as chained retailers such as Wal-Mart are certainly appealing more directly to Mexico's growing middle classes, this does not have to be a negative in all cases. In Poland, for example, private label has been seen as a force for good, rather than stripping value from the market; retailers' private label products have been instrumental in developing the kitchen towel category, which was almost non-existent back in 2000, into one that sees household consumption levels that rival German household consumption levels in 2013. Opportunities in the Mexican market could be positive in a similar way if the middle classes can be convinced of the usefulness of the broader range of tissue products including kitchen towel; wipes, for example, took off in the wake of H1N1 as consumers understood the 'hygiene' advantages offered by these products, even at high prices compared to traditional alternatives.

A further positive for the tissue industry will likely come from consumer interest in convenience, which is clear in other industries such as personal care. A combination of urbanisation, a growing female labour force and social change, which is promoting growth in the number of DINK households, is a positive. Average commuting times in Mexican urban centres can range from 2-4 hours per day for example, and this erosion of time spent in the home bodes well for broader tissue usage, with portable packs and a shift from reusable kitchen cloths to paper towel options a real possibility. That said, given C class spending priorities, budget brands and private label offerings will be the key drivers as the tissue industry tries to make sense of a great latent opportunity and diverging middle-class consumption tendencies.

TISSUE IN MEXICO IN 2013

1%
Population growth per annum

6%
Private label market share of value sales

42.4%
Middle-class households

4.5kg
Per capita tissue consumption rate

Regio is the star brand of SCA tissue paper in Mexico.

'The opportunity for the tissue market to grow here in Mexico is huge'

In a market full of the largest global tissue players, SCA is keeping competitive by targeting growth, innovation and branded products. TW visits its Sahagún plant near Mexico City to get the latest.

By HELEN MORRIS, *Tissue World Editor*

SCA has invested 220 million dollars in the Sahagún Plant.

The approach to SCA's Sahagún plant is pretty magnificent. It's as if TW is in a Mexican outback movie: mile after mile of ginormous cactus line the gravely roadway and behind that stretches a seemingly endless view of trees, sandy plains and mountains.

Just before we arrive at the site, the driver indicates in Spanish and dramatic hand gestures towards a track that leads to the fabulous Teotihuacan pyramids. Located in the Basin of Mexico some 30 miles northeast of Mexico City, they were built around 300BC as the centerpiece of an enormous city that is still steeped in mystery as to why it was built and what it was built for.

This mystery doesn't apply to SCA's site, its purpose very much evident in a tissue market that increasingly punches above its weight on a global scale. The plant is impressive, sitting stretched over 1,003,000 m2 of land and comparable in size and structure to the modern facility of SCA Valls' site in Spain. Although located in a purposefully built industrial area, Sahagún is not surrounded by any neighbours and has "plenty of room to expand out further", as plant director Roberto Deleón says during our interview and tour of the facility.

He greats TW with a friendly smile and laughs readily throughout the meeting. The site is very new having started production three years ago as part of a 210m USD investment. More recently, 10m USD has been invested to create a new distribution centre that Deleón says enables it to be "more efficient in cost and prepare for market needs". It will have the capacity to deliver more than 1,500 shipments every month across Mexico and Latin America. Walking around the site, TW mentions that there is also plenty of room for a new tissue machine as well as the new distribution centre, and he grins back. For the time being, his lips are sealed.

'As a site and a company, we are quite pioneering.'

The plant produces 100% recycled toilet tissue and household towels products, and most raw materials are sourced from the local area. It follows much of SCA's global sustainability initiatives and as such is 100% free of landfill products; sludge deposits go to the cement industry where it is used for energy and raw material. It also recovers water from rainwater. The mill is located next to Mexico City's metropolitan area where water is scarce and expensive and so it has its own water treatment plant that uses a biological system to reduce the organic content in the effluent water and as such, by the end of 2012 it had reduced its water consumption by 15%.

"As a site and a company, we are quite pioneering," Deleón says. The 360-staffed mill was initially a greenfield site and there was nothing there. "We helped bring employment to the area and trained local people. We'll bring in an additional 50 people once the new distribution centre is up and running. With our efforts here, we are working to

The plant produces 100% recyclable tissue paper.

become a global benchmark in terms of efficiency with our paper machine and converting facilities," he says.

SCA started business in Mexico 35 years ago and now has five plants in the country, three tissue mills and two hygiene mills that employ 2,600 people. The business claims the number two consumer tissue spot in the Mexican market, which has almost all of the key players in competition; SCA and Kimberly-Clark claiming the first and second spot, Kruger is absent, Georgia-Pacific has a presence as does CMPC and a couple of feisty independents including Papel San Francisco (the other operation report article in this issue of Tissue World magazine).

"Competition here is tough," Deleón says. "And a lot of new capacity is being introduced. So we're building brands and innovating."

'Mexico's middle classes have a lot more money now and our products are becoming a habit.'

The Sahagún site has one PM, a Metso-supplied machine that produces 60,000tpy. There are four converting lines from Perini and KPL at the site. Some 85% is used in the domestic market while 15% is sent to Central America, all of which is finished product.

Mexico is seeing big growth in terms of tissue use: "It's growing faster than developed countries and it's very much keeping pace with the growing Mexican population, which is increasing 1.2% year on year" Deleón says. The Mexican tissue market is growing at 4% year on year and is very much correlated to how the country's economy is developing. "It's a very attractive market and the middle class is continuing to grow," he says. "It has a lot of potential.

Most raw material is sourced locally.

AfH, for example, is one of the most important sectors; we're seeing a big increase in tourism and more and more cinemas and development which is all boosting demand for tissue products."

The Sahagún site just makes 2ply products while the other two tissue mills produce AfH products and napkin. He adds the plant will be the point in Mexico where SCA looks to grow. "We have enough space here and we'll use it well."

Before visiting the site, TW met with SCA's Victor Hernández, who works for the company's Latin American supply chain division at its Mexico City headquarters. He says the local market doesn't have the same issue with private label as the market in Europe does. "Private label is no more than 6% of the market here in Mexico. It's more appealing for brands here and our main strategy is brands as well as innovation and consumer insight."

With the growth in Mexico's population, he adds that there is plenty of potential for the tissue market to grow and develop further. "When you look at per capital consumption in the US

Hight quality control in all the processes.

it's 25kgm and it's four times less here. So the opportunity for the tissue market to grow here in Mexico is huge."

What trends are they seeing in the American market now occurring in the Mexican market? He says there is an ever-increasing focus on emerging markets. "The class C and D, Mexico's middle classes, are having more and more disposable income. They have a lot more money now and our products are becoming a habit," he says. "Income per capita is higher here than in other Latin American countries and this makes consumption here higher."

There is also more demand for environmental products, albeit slower than seen in America, and SCA now has a sustainable product line in Mexico. "People here are becoming more aware and this will continue to increase." He says environmental products in Mexico are a niche at the moment, but will become more relevant as the country continues to develop.

One interesting point that does separate the Mexican

'The way we go to market is definitely unique: products are sold on small stalls.'

market from the American is their route to market. "Our reach is nationwide, but demand for tissue products is primarily focused on the centre of Mexico," says Hernández. "But our way to market is an unusual one; one way is through small, local stores such as Mom and Pop shops and others include cash and carry and convenience stores which have developed a lot. So the way we are reaching consumers is changing also."

Back at the site Deleón agrees saying the Mexican market is fairly similar to Argentinian's and the rest of Latin America. "We don't see many similarities with the American market. The way we go to market is definitely unique: products are sold from small stalls and so the route to market is not at all like that in the US and that considerably changes our strategy."

"Mexico is a very particular market because we have all of the big players here," Deleón says. "We are targeting growth and innovation and mainly branded products. It's a very interesting time to be here."

FACTFILE

Location - Sahagun City, Hidalgo, Mexico

Staff - 360

Plant director - Roberto Deleón

Capacity - 60,000tpy

Products - 100% recycled toilet tissue and household towels products

Startup day: (l-r) operations director Dario Palma y Meza, project director Fernando De La Torre and president Mario García

World's first NTT line boosts premium export drive to US

Located on the Mexican/US border, Fabrica de Papel San Francisco tells TW about expanding its export reach into the giant that lies at its shoulders and becoming the world's first purchaser of NTT technology.

By **HELEN MORRIS**, *Tissue World Editor*

The 2.6-m-wide machine adds another 30,000tpy of capacity to the company

Fabrica de Papel San Francisco (Fapsa) successfully started up the world's first Advantage NTT tissue line at its Mexicali plant in Mexico in July 2013. The 2.6-m-wide Metso-supplied machine adds another 30,000tpy of bathroom tissue, napkin and towel grades to the company's existing production.

Dario Palma y Meza Espinoza, director of operations at the family-owned business, tells TW the investment was to increase its production capacity and diversify its product range. "NTT technology was the only one that could give us more capacity in our 100% recycled products base for growth and to diversify into producing premium type products," he says.

"The economy brands still dominate but producers give the consumer added-value with fragrance, space saver rolls, best brightness and colour on embossing spots."

Significantly, he adds the company is now able to expand its export reach into the Southwestern US in both jumbo rolls and finished products. "We have no plans to export into Latin America; all export is from the Mexicali facility to America."

The company now produces 167,000tpy and the new tissue machine joins four others: PM1 (1968 Manchester), PM3 (1999 Voith), PM4 (2004 Metso) and PM5 (2009 Metso). It has 11 bath and towel converting lines, three from PCMC Italy and eight from Perini plus several napkin and folded towel machines, mostly from Bretting.

Fapsa has a market share of 11% in the Mexican tissue market and Palma y Meza says any further growth will be organic. Growth in the private label and retailer brand sectors will also be key drivers for the business.

GROWTH POTENTIAL AND PRODUCT DIVERSIFICATION: JUAN JOSE HELU, FAPSA'S DIRECTOR OF SALES AND MARKETING, TELLS TW ABOUT THE LATEST TRENDS IN THE MEXICAN TISSUE MARKET

TW 1: What growth are you seeing in the Mexican tissue market?

"The Mexican tissue market has grown at a rate of 3% over the last three years according to the CNICP (Mexican association of paper) while five years ago the growth rate was higher at 4%. The economy has affected consumer's income and producers have had to reduce the content of the products, which means fewer tonnes have been needed."

TW 2: Is the Mexican tissue market now a mature market within the FMCG category?

"In our company's context it is, we have plenty to offer every segment of the market and we are making a lot of efforts trying different products but at the end the price point is the key driver."

TW 3: Which tissue sectors are showing the most growth and why is this?

"In the consumer sectors bath tissue, napkins and kitchen towels are growing the most and are the products that are better priced in the market, but there are still opportunities in the premium market.

"The AfH market continues to respond to the global economy and grows at a rate of 2% every year in Mexico. Private label has been a key driver during the last couple of years but in 2013 their sales decreased by 5% in response to the several offers of public brands in every segment of the market. However, we still bet on the future sales of private label products.

"Consumer products in tissue are moving to a size impression focus and with less product. Obviously this affects the market in two different ways: quality and performance."

TW 4: Is there a lot of potential for further growth?

"We see a lot of potential on the premium market. In Mexico it is the segment that has the fewest offers and a lot of room for product innovations and real advantages for the consumer."

TW 5: How is the Mexican tissue market being impacted on by private label products?

"Private label products are another sector that has to develop, changing the consumer's view from cheap products to the best products in every segment that are available at a better price. The retailer has to treat this sector as the star products and showcase them with the most prominent and advantage shelf space."

TW 6: How is the Mexican tissue market influenced by the American tissue market? Which trends are you seeing in America in Mexico?

"The main producers in Mexico are transnational companies: Kimberly-Clark, SCA, Procter & Gamble. They have around 85% of the market and they try to sell what they produce in other markets."

TW 7: Are you seeing a lot of demand from customers for environmentally friendly tissue products in Mexico?

"In America we see a lot of offers on green products, but in Mexico that is not happening. The economy doesn't help as nobody wants to pay more to save the planet and the government regulations are not there yet."

TW 8: How are brand owners maintaining consumer interest? Do economy brands still dominate?

"The economy brands still dominate the market but the producers have to differentiate their products giving the consumer added-value to their products, fragrance, space saver rolls, best brightness and colour on the embossing spots."

FACTFILE

Location - Mexicali, Mexico

Products - bathroom tissue, napkin and towel

Tissue machines - PM1 (1968 Manchester), PM3 (1999 Voith), PM4 (2004 Metso) and PM5 (2009 Metso), PM6 (2013 Metso)

'Tissue use has been transformed in Algeria'

Originally from Algeria, 67-year-old Omar Chabane is a former senior paper industry officer who has served the sector for more than 35 years. He now shares his time with his spouse Bahia in Paris, where she lives, and lecturing at a business school in Algiers.

"In Algeria, tissue products have evolved quickly over the past few years. Not long ago, Algerians were prone to using water rather than hygienic paper grades. But things have been moving fast. My partner, Bahia, is well known for her strict sense of cleanliness and tidiness, which is sometimes close to obsession. We have lived separately for 12 years. There is no crack in our relationship, which has lasted for 35 years, but due to health reasons Bahia is following a strict treatment in France. When she visits her home country, I will have stored up on all the necessary tissue items for her. Despite my organisation, her first task is always to order the hygienic products.

"When we go out shopping, Bahia observes that the country has changed fast: there are more tissue products available everywhere. She is happy about this and the fact that tissue papers are more and more replacing the use of water, which was once the tradition in Muslim countries.

"We go to the local convenience stores to buy the tissue products we need. My wife doesn't compare the price of the tissue products to France, but rather the quality, referring to what she is used to buying in her usual Lidl supermarket in Paris. She is quite particular about her tissue products and finds that the comparable tissue grades available locally in Algeria are not top grade quality, particularly those that are imported.

"When we go to Algiers, Bahia is always stricken by the sight of youngsters, very often under fifteen years old, who sell napkins and tissue hankies along streets. She finds this unacceptable and refuses to buy tissue products in these places, whatever the price is. She believes in buying in big shops or supermarkets to be sure of quality.

"Imported miscellaneous brands are proposed to potential clients at petrol stations too. Most of the tissue items are coming from the Middle East or Asian countries.

"We both prefer white tissue articles and we avoid the coloured items, perhaps this taste is due to our age. We buy tissue products on a weekly basis to cover our requirements and then stay more at home together.

"Local converters supply their tissue products to big stores and supermarkets and their sale channels are well controlled. We prefer to buy local tissue products such as "Awane", which we like both for its quality and price as well as its white colour.

"When it is the summer season here, it is very hot. In our Ramadan month, I am also fasting. The Ramadan month is a good opportunity for us to receive visits from friends and family members as it is the tradition during this month to share a moment of happiness and treat our guests with mint tea. On the table the white tissue napkins are now replacing traditional table cloths."

PIX Pulp indices 14.1.14

Product
Pulp NBSK USD
Pulp NBSK EUR
Pulp BHKP EUR
Pulp BHKP USD
Paper LWC
Paper Ctd WF
Paper A4 B-copy
Paper Newsprint
Kraftliner
White-top Kraftliner
Testliner 2
Testliner 3
RB-Fluting
PIX OCC 1.04 dd
PIX ONP/OMG 1.11 dd

FOEX

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Providing PIX pulp price indices to the tissue industry gives the paper producer and buyer insight in the price trends with a weekly frequency. This way companies have better tools to budget their cost or income structure and profitability, and may concentrate on their core businesses with less time spent on price negotiations.

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Note

PIX values, $ or € / metric ton

NBSK pulp Europe

The softwood pulp market had a difficult start for the year but, all in all, this grade fared well through most of 2013. A growing part of the market BSKP pulp goes into tissue, packaging and specialities, but there is still a lot ending up in printing and writing papers. Taking into account the pressures of more hardwood in the furnish, a 1% decline in global graphic paper production with most in coated grades in which softwood pulp holds a relatively larger share of the furnish, the 2.7% increase in shipments is a positive surprise. At the end of the year, producer stocks were below average and producers had initiated further price increase attempts from 1 January, in most cases by about 20 USD/tonne. The jury is still out as to how successful those attempts may end up being but some increase has been seen in early January. The Euro weakened by 0.3% against the US dollar. Our PIX NBSK index showed a gain of 1.60 dollars, or by 0.18%, and closed at 909.96 USD/tonne. When converting this dollar-value into euro, the weakening of the currency against the USD sent the benchmark up by 3.48 euro, or by 0.52%, and the PIX NBSK index in Euro ended at 669.73 EUR/tonne.

BHK pulp Europe

During the first 11 months of 2013, market BHKP demand grew by 3.4% from the PPPC member countries and the demand growth has speeded up towards the end of the year. Obviously, this was partly due to the widening price gap between softwood and hardwood pulps and the ensued desire of paper producers to maximise the share of hardwood where technically possible. But part of the growth was "fully natural". Tissue paper production grew worldwide, in many regions in the vicinity of 5%. And, within the graphic paper sector, uncoated woodfrees, the other key end-use of hardwood market pulp, will probably end up showing modest (0.5%?) growth over the year. After the market BHKP prices declined by 0.5% in USD-terms and by about 4% in euro-terms in 2013, suppliers

By *LARS HALÉN*,
senior manager, FOEX Indexes

By *TIMO TERÄS*,
managing director, FOEX Indexes

PIX latest values	Change from previous week	%	Change from beg .of year	%
909.96 $	1.60 $	0.18	1.60 $	0.18
669.73 €	3.48 €	0.52	3.48 €	0.52
566.11 €	1.66 €	0.29	1.66 €	0.29
769.17 $	-0.40 $	-0.05	-0.40 $	-0.05
660.84 €	0.19 €	0.03	0.19 €	0.03
665.98 €	-1.46 €	-0.22	-1.46 €	-0.22
840.13 €	2.50 €	0.30	2.50 €	0.30
476.62 €	3.46 €	0.73	3.46 €	0.73
574.66 €	0.36 €	0.06	0.36 €	0.06
761.28 €	0.34 €	0.04	0.34 €	0.04
479.76 €	0.00 €	0.00	0.00 €	0.00
459.79 €	0.09 €	0.02	0.09 €	0.02
450.97 €	0.07 €	0.02	0.07 €	0.02
113.52 €	0.34 €	0.30	0.34 €	0.30
130.09 €	0.22 €	0.17	0.22 €	0.17

are trying to achieve some price increase in January 2014 before larger volumes of BHKP enter the market, in practice from March/April onwards. The Euro weakened by 0.3% against the dollar from the previous week. With the softening of the euro-currency, the PIX BHKP index value in Euros headed higher by 1.66 euro, or by 0.29%, and closed at 566.11 EUR/tonne. The PIX BHKP index value in dollars lost ground by 40 cents, or by 0.05%, and settled at 769.17 USD/tonne.

Paper industry

Based on the partially available 11 months' data, some preliminary conclusions can be drawn for the end of year 2013. As in the previous year, printing and writing paper consumption will end up showing a decline, not a very major one, but it will probably be about 1% lower than in 2012. Consumption decline in all major industrialised countries as well as in the Latin American region has been largely but not fully offset by about 3% growth in Asia, Eastern Europe and Africa combined. On the other hand, consumption of packaging products has grown everywhere in spite of a further slowing down of the global economic growth in 2013 (global real GDP growth slowed down from about 2.6% in 2012 to about 2.4% in 2013).

The modest rate of total volume growth may have been disappointing. A bigger disappointment has, however, been the financial end-result. The global paper industry has been, once again, plagued by overcapacity. In printing and writing papers, capacity has been closed but not fast enough to match the rate of decline in demand. In packaging, new capacity has been added faster than demand has grown. The clearest example is China, where overcapacity is now a problem in virtually every major grade of paper and board. Until 2007, China was a net importer of paper and board. Since then, exports have grown, even with production running well below capacity. Consequently prices have been depressed in China and the exports have created oversupply and downward price pressures around the world. There are, as always, individual exceptions but overall the average global paper industry profitability has been unsatisfactory in 2013.

Integration process continues: The latest major piece of news was the announcement from North America that Verso will be buying New Page Holdings making Verso clearly the largest coated paper producer in that market.

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Distribution Special: 10 strategies to optimise warehouse operations

When aligning warehouse and distribution centre logistics with business strategies, it pays to be as efficient as possible. US-based Dematic's Ken Ruehrdanz, manager, distribution systems market, talks to TW.

With an ever increasing demand for finished and jumbo roll tissue products, the global tissue industry is increasingly having to invest in more efficient ways of optimising its warehousing and distribution centres. To make this as efficient as possible, there are a core set of components that need to be taken into account when a company is aligning its warehouse and distribution centre logistics with business strategies.

These 10 strategies are created from proven conclusions that are aimed at eliminating non-value adding activities and which address the business drivers that are most important to a company. They can bring an organisation's logistics strategy into alignment with business strategy and help provide a competitive edge in your market sector.

1 Reduce time wasted travelling

Depending on the size of the operation, a significant portion of an order picker's time is spent traveling between picks. Deploy methods that reduce travel time, condense the pick face and allow staff to work smarter. Potential solutions include: flow rack, optimised flow paths, dynamic slotting.

2 Move orders to zones

Consider methods that manage the flow of materials for faster, more efficient order assembly and consolidation. Only send order containers to the zones where picking activity is required. Potential solutions include: zone route conveyor networks and pick carts.

3 Batch orders and sort

By grouping and concurrently picking SKUs (stock keeping units) for multiple orders, the order pickers become more productive. The order picker does not need to revisit the same location over and over. Pick multiples of each SKU in one pass and sort to orders. Potential solutions include: pick carts, pick to tote and sort.

4 Eliminate travel, split case selection and replenishment

Instead of the pickers going out into the warehouse to locate and pick split case items, consider systems that bring the inventory to the picker who remains in one location. Potential solutions include: goods to person pick stations supported with automated staging system for inventory.

5 Eliminating travel, full case selection and replenishment

As an alternate to pickers going out into the warehouse to locate and pick cases, consider systems that bring the cases directly to a palletiser. Release cases in the best sequence to build pallets. Potential solutions include: automated case buffer system with semi-automated palletising.

Main picture (opposite): Automated storage and retrieval system (ASRS) stages pallets automatically in a high density, compact footprint.
Above: Operator picks cases using voice directed wearable device with headset.

6 Buffering and sequencing

As portions of customer orders are picked, the items or cases could be consolidated into a buffer storage system as a method of optimising the process. Furthermore, there may be a need to organise the contents of each order into a sequence. Potential solution: automated staging system.

7 Free picking

By making the SKU that you don't pick become the SKU you pick, you essentially pick one and get one for free. Example, transfer five cases from on pallet to create an order thereby creating another order with the remaining cases. Potential solution: negative pick software.

8 Layer pick

Optimise picking activity with layer picking methods. Get more order assembly faster with less labour. Potential solution: layer picking robots.

Top: Pallet conveyor uses roller and chain surface to move pallets in production and warehousing environment.
Bottom: Rotating fork ASRS (automated storage and retrieval system) accommodates pallet loads in conventional rack.

9 Mixed case palletising

Determine if the case assembly process for mixed case palletising is efficient. This complex process can be streamlined with semi-automated or automated systems. Potential solutions: staging buffer system linked to ergonomic palletiser systems, case pick and sort.

10 Go real time

Make sure you get rid of the paper and operate with real time systems. Gain visibility, obtain real time operational status and monitor labour productivity. Potential solutions: warehouse control system software, dashboards, voice and light directed activities.

Ken Ruehrdanz is manager distribution systems market at Dematic, which designs, builds and supports logistics solutions that optimise material and information flow.

Focus on: south eastern USA

Atlas Paper, Cascades Rockingham, Roses Southwest Paper and Von Drehle: TW visited the southeast of America to get the latest developments from some of its key manufacturers.

Plus, Fisher International highlights T&T production in the region. A TW special report.

By HELEN MORRIS, *Tissue World Editor*

Atlas Paper Mills: Jim Brown, chief executive

Atlas Paper Mills processes over 50,000tpy of tissue paper using recycled fibre and its manufacturing process is free of chlorine and chlorine derivatives. It converts four million cases of Eco-friendly towels and tissue for use in the AfH and value retail markets and also converts kitchen roll towels, hard-wound roll towels and centre-pull towels.

The Miami-based site uses sorted office and coated book stock as well as white ledger SOP and CBS sourced from Florida. The business also has its own branded products, all of which are made from recycled fibre.

Atlas chief executive Jim Brown told TW: "Our high quality products are made from recycled fibre, yet they are quite soft and much less expensive than our competitors, not to mention that they are sustainable."

'These are exciting times for Atlas, as the company is well-positioned for significant growth and industry leadership.'

Growing Atlas Paper Mills:

The company was recently acquired by Peak Rock Capital, an Austin-based private equity company that invests in leading middle market companies. Brown says the move will mean the company "benefits greatly from Peak Rock's resources in growing the business organically and through acquisitions".

He adds: "We are uniquely positioned at Atlas Paper Mills to grow our business and gain share, in partnership with our customers, suppliers and employees. In fact we've seen company-wide revenues grow by 15% in the last two years alone, driven by demand for tissue products in both the commercial and residential marketplace."

The company's Miami-based site processes 50,000tpy of tissue paper using recycled fibre

Atlas Paper mills chief executive Jim Brown

AfH Tissue Industry:

The AfH tissue segment is growing by slightly more than 2% annually, while Atlas' business has been growing by double digits as it increases share, improves operations and expands product offerings. Brown says: "These are exciting times and we are well-positioned for significant growth and industry leadership. We will continue to improve our operational processes, expand our product offerings and build on our well regarded legacy for the benefit of the communities that we serve."

'We've seen company-wide revenues grow by 15% in the last two years alone.'

Local Tissue Industry:

Brown says that as the unemployment rate decreases and the economy gets better, more people will travel, so there will be an increase in demand for AfH tissue products. "There is growth here, we're seeing positive trends," he says.

He adds that AfH won't move to the ultra premium sector. "The 2009/2010 recession brought new parameters to the market here. It's not the same now, people are more cautious. Unemployment is still high but hospitals aren't shrinking, neither are schools. Hotels go up and down, and manufacturing generally continues to be a challenge."

Roses Southwest Paper: Enrique Todd, executive vice president

TW is greeted with a big smile from Enrique Todd, the executive vice president of Sanford, Florida-based Roses Southwest Papers. And as it turns out, there's plenty of reason for it.

The family-owned business was established in 1984 by Rose Marie Espat and Roberto Espat and now produces high quality paper products, toilet paper and napkins. The Sanford site was bought in 2005 and is now home to a Crescent Former paper machine that produces three grades, high end bath tissue, towel and napkins, both two and three ply. Since 2005 and due to equipment upgrades and training it has increased its capacity by 20%.

The business started with a converting site in Albuquerque, New Mexico, which houses eight Converting lines: six of them are Bretting machines, one is a traditional bath tissue line from PCMC and one is from Consani.

"When we moved here there were a lot of improvements needed to be made," Todd says. "So we invested a lot of money between 2005 and 2007 to improve the closed loop water system while experimenting with recycled fibres and ultimately cellulose. One substantial investment included a new Andritz-supplied hood and fibre dust recovery system which was finished in 2011."

The AfH market is the company's main sector and it services large growth areas in the South East area, including several large restaurants chains. One trend the business is repeatedly seeing here is demand for a better quality of product. "We've been successful with the national chain restaurants, by offering a quality product and responding quickly to their demands" Todd says. "And we are still seeing an increase in demand from them to the extent that we will need to invest in a new paper machine in the near future. The recession has slowed down our expansion plans but it's not stopped them and we want to continue to carefully expand."

The family-owned business was established in 1984 and now produces high quality paper products, toilet paper and napkin.

He adds that when there's a slowdown in the market generally, outfits such as McDonalds increase. "They are master marketers, they've tried and successfully changed their appearance. In a recession, the better restaurants also level out. We were growing 2% during the crisis and now we're growing 6%."

However, while the plant has seen growth, Todd adds that this hasn't been mirrored in the south west of America where there's "a lot of competition from Chinese producers that are able to ship and displace American-made products without difficulty".

Roses, hasn't yet expanded further into other product areas but that is one area where its future growth lies. "There is plenty of room to grow into the private label market and we already produce our own labels," he says. "We have the best technology so we can compete. We have small ideas that become big. As a family-owned business, there is a lot of discussion about this. Once tissue gets in your blood, you're done for."

'Once tissue gets in your blood, you're done for.'

As a small to medium-sized company, Roses has also been able to experiment significantly with many aspects of the production process. "We're a small company and a lot of experts like to come because they have a voice here. They can share their knowledge and see the outcome. That's been of great benefit for both." It has also looked into ply-plus technology, which Todd says has maximized its production and should boost its bottom line.

The consumer in the US is "very responsible with the environment but unfortunately very misinformed when it comes to the benefits of virgin fibre vs. recycled fibre; typically they don't take into account the amount of energy and chemicals used to clean and process recycled fibre and the yields when comparing it to virgin fibres", Todd adds. "Sustainability is key for us in both arenas. Recycled products are good to some extend but highly overrated by the consumer in this section of our industry and there are definitely political benefits: it sounds good for a city to have recycling high on its agenda. For us as long as fibre is grown as a crop, cellulose will probably be a better option. Our customers are also asking for FSC and PEFC, we're seeing an increase in demand for that."

However, he believes recycled products are not as environmentally friendly as they could be, that there is room for improvement. "We should still be producing virgin fibre not just for the home consumer but also in larger consumer base business such as restaurants, airports, sport arenas, etc. I do think recycled leaves a bigger footprint than virgin fibre. And we should always use both responsibly to better service and balance our environmental footprint."

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Trust at first sight!

Cascades: Eric Taylor, Rockingham plant

The Cascades Rockingham plant sits tucked away off a vast highway, almost completely hidden from view. The local area is known for NASCAR, golf and, of course, tissue. The site was created in 1983 and it marked Cascades' move into America when the company took it over 30 years ago.

Mill manager Eric Taylor greets TW from his office. "Our move into America years ago was a challenge," he says. "But we've met that opportunity head on."

A Crescent Former supplied by Voith was added in 2000 to the 130-staffed site's existing PM, designed and assembled by Cascades. The business now produces 160tpd on the two tissue machines and all the products are 100% recycled. "We have many environmental standards," Taylor says. "We're Processed Chlorine Free®, we have EcoLogo™ Green Seal™ and Green-e® certifications. Our markets require us to have these."

He adds the investments in environmental certification hasn't made the business necessarily any easier, "we were very green before our competitors," he says. "Now they have adapted to pursue green certifications too. But, one of our key strengths is that we're a small and compact facility. We're unique."

The business sells most of its production as parent rolls. Only 40% of the paper manufactured is converted on site and the rest is sold to its sister plants in North Carolina or elsewhere. Its largest volume products are towel and napkins, which it creates for major janitorial and food service customers.

Taylor adds that paradoxically, the crash in 2008 has meant that tissue products for outlets such as fast food and dollar stores increased. "Some people have moved away from premium products as the recovery staggers along. There are many who are not earning what they once did and look to save money where possible. Tissue products are seen

The plant's largest volume products are towel and napkins, which it creates for major janitorial and food service customers.

Cascades' plant in Rockingham, North Carolina.

culturally as a necessity similar in priority to food. Although we all have to eat, what we have for income will cause us to choose what we eat. With low or reduced income, more consumers seek out value or economy products."

He says that tissue parallels what's happening in society in that it's an indicator of wealth. "Increased demand for value and economy products away from premium is an indication of reduced disposable income," he says.

'Increased demand for value and economy products away from premium is an indication of reduced disposable income.'

For the local tissue market in the south east of America, there will be growth: "We're seeing more demand for private label and less demand for branded products. Tissue demand in the local area has been steady. There's a certain seasonality with the AfH market; we historically would see a decline in winter, but having said that in the last few years we've not seen it as severely. Also, the population here in the south east is growing and with that, this area will need more capacity." As for quality, he says although the economy is moving some consumers away from premium, they keep high expectations for the product.

Cost control is seen as one of the main challenges as well as energy use. "We need to do what we can to be more and more productive and efficient," he says. "We are making each plant more efficient and we operate here quite independently. Our location is good – we're located two hours away from many large cities. But finding the right quality of staff that have the right skill set can be a challenge. You need to have the right people to be a success."

Long term, the ability to remain competitive is key. "You have to continue to improve and invest," he says. "There's a lot of good equipment out there but we need to keep up with the people side. It's becoming more difficult to find the skill level needed."

Von Drehle: Jon Thomson, at the company's Maiden, North Carolina-based site

Von Drehle's largest converting facility is in Maiden, NC, and the plant has just added another high speed automated line and new robotics supplied by Schneider Equipment. Established in 1974 by Frank von Drehle, the company started paper converting in 1999 when it opened a new converting facility in Memphis, Tennessee. In 2002, the Maiden, NC, converting facility was first opened, and their Las Vegas, Nevada, converting facility was opened in 2005. In 2007, von Drehle purchased their Cordova, North Carolina paper mill and in 2013 it opened Blue Ridge Molding in Conover, NC, to manufacture a variety of its towel and tissue dispensers, and purchased Mississippi River Pulp in Natchez, MS, as the site of their new, additional paper mill.

The company's Cordova, North Carolina, paper mill houses two PMs supplied by Metso, which produce high quality towel and tissue products for the AfH market, and are made from 100% recycled fibre. It also produces many Green Seal Certified towel and tissue products.

Its converting facilities convert all of the paper produced in Cordova, with Bretting lines as well as Perini and PCMC. Distribution is "across the US," something the company plans to expand further.

"We doubled the size and capabilities of our facilities in 2007," corporate marketing manager Jon Thomson tells TW from his office at the family-owned site. "The company also purchased the Cordova mill which houses two new Metso machines." He says the business is seeing very strong demand for quality recycled towel and tissue products in the western U.S. "We've added new distributors and have experienced substantial organic growth. We are fairly new out West," he adds, "but we are growing rapidly and have added distribution in areas as far west as Seattle. We're

'We are growing rapidly and have added distribution in areas as far west as Seattle.'

everywhere now and we continue to grow every year. We also do some private label manufacturing."

He adds that towel and tissue for the AfH market in the U.S. is experiencing "fairly flat growth – around 2%," but adds that von Drehle's sales are outpacing the market growth. "We're moving into new territories and markets - going into different sectors, such as healthcare for example."

Investing in the future: Von Drehle has just added another high speed automated line and new robotics line to its facility in Maiden, NC

Quick Look

Southeast USA Towel and Tissue Production

By Bill Burns, senior consultant, Fisher International

The Southeastern United States represents about 40% of the total United States' towel and tissue production. There are three major producers that account for three quarters of the production (Figure 1). Within the Southeast, the production is concentrated across three states: Georgia, Alabama and South Carolina (Figure 2). Georgia is the largest producing state with 758 thousand metric tonnes per year.

This area is very diverse in machine configurations. There are mills with predominately Thru Air Dry (TAD) technology while others have Conventional Wet Press (CWP) technology in both wet and dry crepe configurations. There are locations with mid 1900's formers, presses and dryends as well as the latest TAD and TAD-like configurations. Predominately, the distribution of machines favours the 40k to 80k production capacity range (Figure 3).

Sizes vary from very narrow to the widest machines in the world. Likewise, there are slow machines as well as some of the fastest machines in the world (Figure 4).

The Southeast is also fibre diverse. There is a paper-only mill operating on all purchased fibre and integrated mills using internally produced pulp. There are also mills operating with all recycled fibre (Figure 5). Often the choice is driven by the end products made at these mills. The Southeast serves both consumer and commercial tissue markets with products positioned across the spectrum of performance levels.

Figure 1

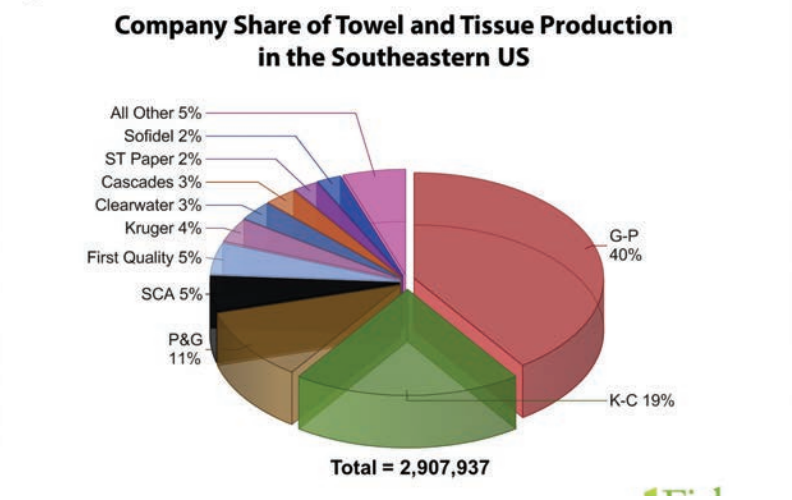


Figure 2

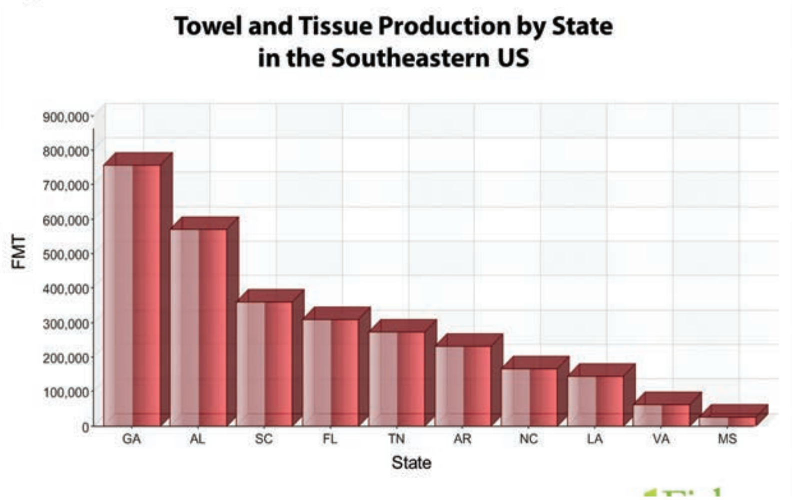
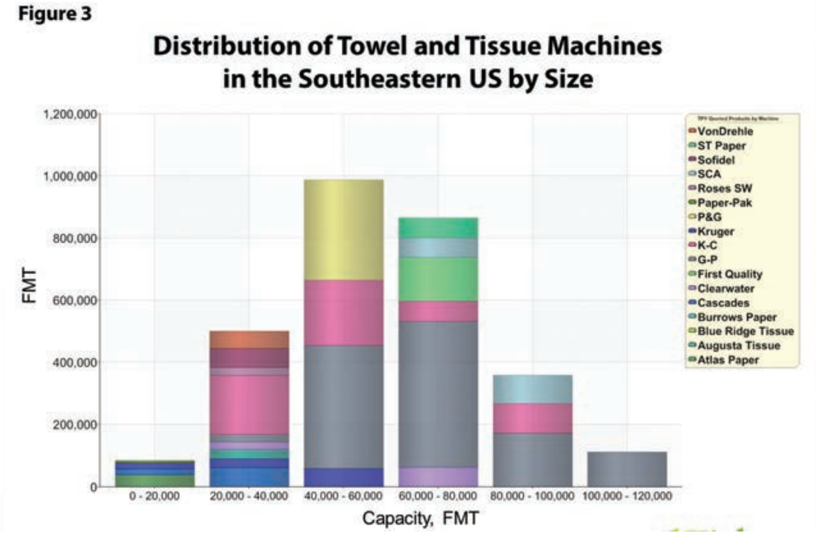


Figure 3



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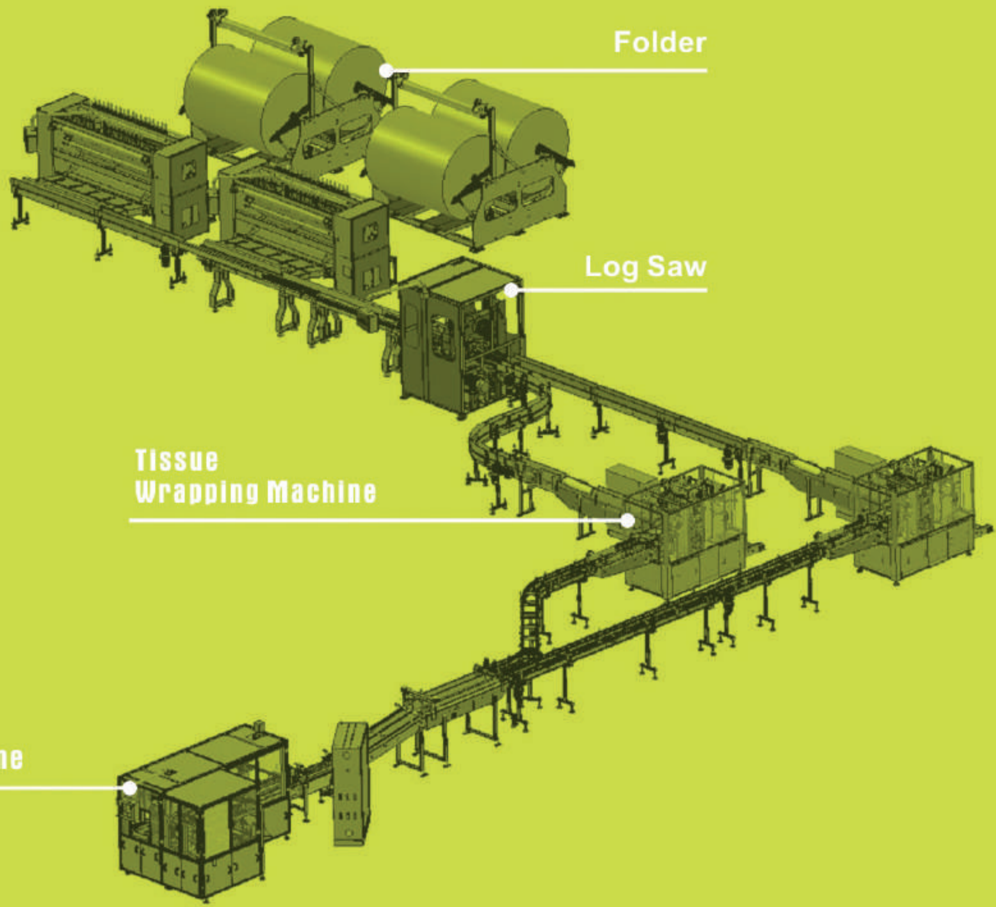

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Southeastern United States in numbers

40%
Amount of America's total towel and tissue production

3
Major producers that account for three quarters of production

758
Thousand metric tpy produced by Georgia

Figure 4

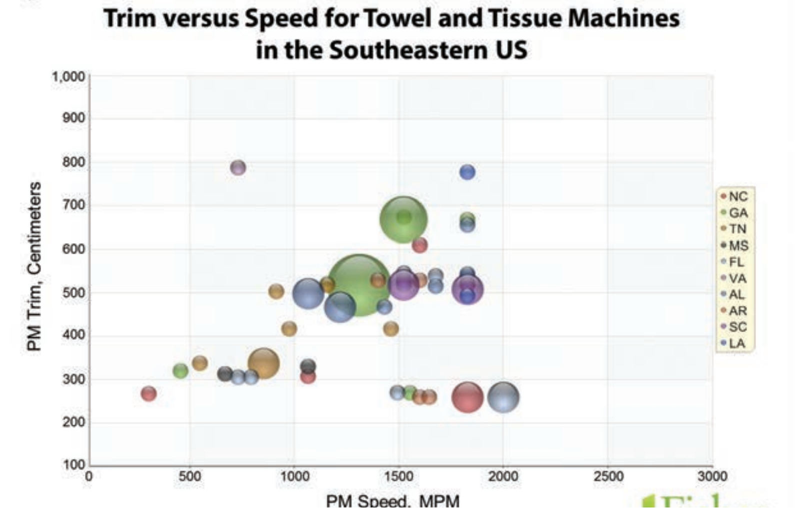
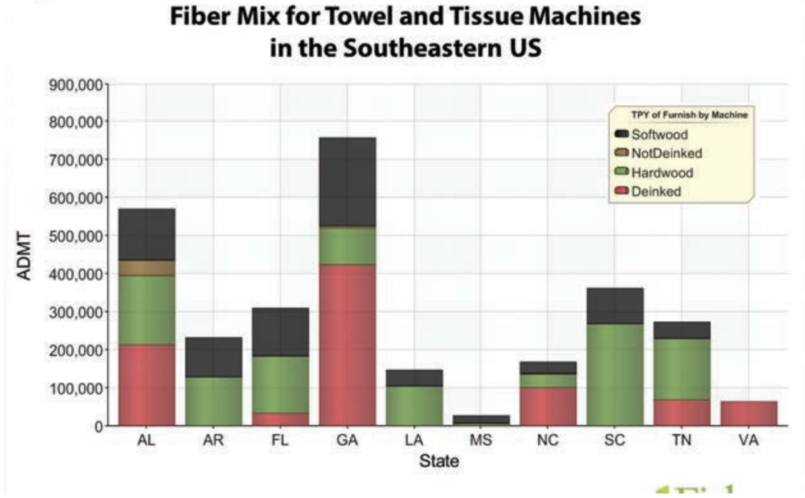


Figure 5



The source for market data and analysis in this article is FisherSolve™. Data tables behind Figures 1 - 12 can be obtained from Fisher International. Email requests to info@fisheri.com.

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Minimise downtime Reduce footprints Increase flexibility

Tissue World asked the world's leading converting machinery manufacturers to comment on where their R&D efforts are heading in our annual converting technical theme. MTorres and Maflex responded. A TW report

TW: ON WHAT AREAS ARE YOU FOCUSING YOUR R&D EFFORTS ON IN 2014?

Pablo de la Fuente, MTorres sales director: "We have begun to work on a solution to enable us to increase our presence in emerging markets. We will maintain our principal differences such as:

- Perfect web tension control.
- Centre driven chucks, beltless, good results with any type or quality of roll. This is the most important aspect of working with the latest tissue technologies of structured tissue.
- Automatic splice, increases productivity. No downtime between changes.

We will also look at reducing the overall footprint of our equipment, while offering many of the same advantages. When there are plant restrictions, we will maintain the most critical benefits of the MTorres system."

Francisco de Rita, Maflex, area sales manager for Iberian Peninsula and Latin America: "Our R&D department has always considered customer's needs as the starting point of its work with the concrete goal of resolving at its best any type of request presented. Our target customer is the small/medium converter. With some of our models already capable of reaching speeds of 550m/min, the requests that we receive are not so much aimed at obtaining greater performance, but rather other key attributes such as reliability, ease of use, safety and efficiency. Maflex has always worked successfully in this way, building complete converting lines manufactured according to the highest standards in every respect. In 2014, we intend to strengthen the concept of user friendly, the characteristic that best defines us, which we may call the cutting edge technology that stays friend to the operator. Specific areas to be developed during 2014 relate to safety, the minimisation of the interventions of high maintenance and after-sales service."

TW: WHAT IS THE KEY ISSUE YOUR CUSTOMERS ARE FACING IN 2014 AND HOW ARE YOU SUPPORTING THEM?

De la Fuente: "More and more, customers see the importance of a good harmonisation of their lines. We don't manufacture complete lines but our unwinds are greatly increasing customer's productivity, reducing downtime. Also, every time the customers are working with a structured tissue, the Centre Driven (beltless) technology is much more gentle with the substrate."

De Rita: "We believe that in 2014 the problems presented by the customers, in general, will not be different from those of the past. We have always had a variety of demands made to Maflex in various stages of development of the work. From the beginning, we decided to provide "tailor-made" solutions for each situation, making this one of our company's strengths and identity. Our overall goal is peace of mind for our customers and we achieve it through an individualisation of each project. Customisation is done by performing field analysis which allows us to formulate custom projects. After installations are complete, direct support continues through the Customer Care Department which provides specialised technicians for either remote (Teleservice) or on site assistance. This enables us to accompany the growth

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Maflex's continuos and fully automatic ARES line is able to produce both AfH and consumer rolls.

of a customer over time. Thus we help them improve the quality of work, performance, and productivity in a highly flexible way."

TW: HOW ARE YOUR PRODUCTS CONTINUING TO MINIMISE DOWNTIME BETWEEN CHANGES IN PRINT DESIGN, EMBOSSING DESIGN OR ROLL FORMAT?

De la Fuente: "We can only talk about the unwinder and the automatic roll change. Our products continue to improve thanks to our customers. They are the ones who help us continuously develop and improve our equipment with their suggestions. Our R&D department is continually working on new and improved solutions."

De Rita: "Minimising downtime has been a focal point in our R&D department for a long time. Since all of our customers are looking for the utmost in productivity in each stage of the converting process, all of our machines are designed to require shortest possible time between production changes. Changing the cliché in our printing unit IRIS is very simple and takes only five minutes thanks to the cantilevered sleeve device.

"Changing out the embosser rolls (different patterns) on our HELIO and HERACLE embossers can be carried out in 30 minutes. The same is true for changing the cliché roll to match the width of the paper being used. Thanks to the latest evolutions of the LADON log saw, format changes of the finished rolls can take place automatically, thus eliminating line stoppages."

TW: HOW ARE YOUR AUTOMATION FEATURES IMPROVING PRODUCTIVE EFFICIENCY? DO YOU HAVE ANY CASE STUDY EXAMPLES?

De la Fuente: "We don't only talk about minimised downtime, but completely eliminating it, increasing productivity of all the lines of our customers. Of course this is true with lines equipped with our unwinds, but also for the rest of the lines in the same facility.

"For instance, we have a customer who will put all of the "bad" or low quality rolls on the rewinder equipped with the MTorres unwind. By "bad rolls", this

"We don't only talk about minimised downtime, but completely eliminating it, increasing productivity of all our customers' lines"

Pablo de la Fuente, MTorres

The MTorres TSR-T model

"Our converting lines are designed to maximise production efficiency"

Francisco de Rita, Maflex

would be rolls that are severely out of round, rolls with multiple marked splices, or rolls with poor quality paper. They will save the "good" rolls for their other rewinders, the ones without the MTorres unwinds. They will take advantage of the fact that our unwinds are much more forgiving and don't require the lines to stop to make roll changes, or to avoid a marked splice, and have excellent tension control to run these rolls, while maintaining a good production rate. In this way the MTorres unwind improves productivity on the line where it is installed, as well as the overall plant's operating efficiency, since they can handle a wider range of product quality."

De Rita: "Our converting lines are designed to maximise production efficiency. This is achieved by the use of increasingly more powerful automations. All Maflex equipment allows you to appreciate the efficiency of production linked to automations in three main aspects: control, safety, and energy savings.

"The new Maflex lines allow the operator to control all parameters of production and all machine functions through a single interface (HMI). This is possible thanks to sophisticated software and all timing adjustments being controled by motors. Thus, in addition to increased speed, simplified setup and product changes, the operation becomes much safer because it is no longer necessary to physically adjust the machine while it is in motion.

The MERS (Maflex Energy Regenerative System) is a system successfully developed for several years that allows the recovery of energy dissipated during braking of the motors to be reintroduced on the power grid. In addition to energy savings for the customer, this also minimises environmental impact. Automating older equipment is another way we have been able improve production efficiency for our customer. We performed upgrades on manual machines to make them fully automatic. This allows them to reduce, if not eliminate, the need for operator intervention on the lines. In some cases productivity has increased so much, the customers needed to replace the downstream machinery with more efficient or faster models."

Gaining efficiency with smarter investment

A new Yankee hood and air system installed in August 2013 has resulted in substantial energy savings, according to Wepa mill director Maurizio Lattanzi. Here he discusses the potential that exists throughout the industry to increase efficiency with targeted investments in drying. A TW report.

Wepa Cassino's 60,000tpy mill based in Rome, Italy, has seen a significant impact in terms of its energy efficiencies following an investment in a Yankee hood and air system in August 2013. The site has one tissue machine and converting facilities, and mill director Maurizio Lattanzi says there has been a 10% drop in electrical energy for the hood fans, a 4% drop in steam consumption, but significantly, a 20% reduction in gas consumption by the hood.

The Milltech-supplied system has also increased the site's capacity and improved its paper quality, and all within the existing tissue machine.

The mill uses virgin pulp to produce branded and private label roll products, including toilet tissue and kitchen towel (some printed), and folded products, namely napkins. Its double-sided De Pretto Escher Weiss tissue machine started up in 1989 and has since been upgraded from twin-wire to crescent former format by Toscotec. Lattanzi says the tissue production line has evolved gradually over the years; stock preparation has benefited from the modification of the refiner

Moving the air system outside has reduced the fire risk installation to reduce energy and more efficient motors for the tank propellers. But he says the replacement of the 25-year-old hood is "a comparatively radical" step.

The key technologies responsible for the new hood's performance are the fans, burners (for which a custom solution was found) and control of the exhaust process. A key improvement was also a significant reduction in the distance between the Yankee and the hood. An increase in the dryable width of the web to 5.42m meant production increased by 4% across all product categories and the desired safety improvement was achieved by moving the air system from its cramped situation within the mill to outside, thereby reducing fire risk. The project also includes replacement of DC drives and motors with AC, bringing greater reliability and efficiency.

PREDICTING PARAMETERS

The Computational Fluid Dynamic Software (CFD) used to develop SMART-eMT has been tailored to predict process parameters such as heat transfer capacity and efficiency, airflow distribution through the nozzle boxes and the exhaust slots, as well as air flow through the supply ducts. Optimised layout of fans, burner and ductwork improves drying efficiency, prevents stratification and improves air distribution.

According to Lattanzi, the nozzle pattern ensures uniform air distribution over the paper sheet, and round-hole nozzle boxes allow maximum drying efficiency and provide energy savings. Appropriately dimensioned exhaust slots allow maximum removal of water and ensure uniform exhaust air flow with low pressure drop.

The Yankee Hood is supplied with a fully functional, pneumatically actuated retraction system with cross profile and edge control.

'The nozzle pattern ensures uniform air distribution over the paper sheet, and round-hole nozzle boxes allow maximum drying efficiency and provide energy savings.'

The hood's dimensions take into account the fact that space is often limited at the customer's premises, and each hood is manufactured in large segments in order to facilitate and reduce transport costs.

"All these factors contribute to the drying efficiency of the line, output, reduced environmental impact and the quality of the end product," says Lattanzi. "As such we have met our targets in every respect, which, in a competitive market makes this a timely and highly effective investment."

The new hood at Wepa has reduced gas consumption by more then 20%

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2014 Shandong (International) Technique and Equipment Exhibition on Pulp & Paper Industry	18 - 20 March 2014	Shandong, China	www.paper.expoline.cn/index.asp
MIAC Tissue Business Point	26 - 27 March 2014	Lucca, Italy	www.miactissue.com
China Clean Expo	31 March - 2 April 2014	Shanghai, China	www.chinacleanexpo.com
Asian Paper 2014	23-25 April 2014	Bangkok, Thailand	www.asianpapershow.com/
ISSA INTERCLEAN 2014	6 - 9 May 2014	Amsterdam, Netherlands	www.issainterclean.com
CIDPEX 2014	14 - 16 May 2014	Sichuan, China	www.cnhpia.org
PLMA 2014	20 - 21 May 2014	Amsterdam, Netherlands	www.plmainternational.com
China Paper 2014	15 - 17 September 2014	Beijing, China	www.chinapaperexpo.cn
PAP-FOR Russia 2014	28 - 31 October 2014	St. Petersburg, Russia	www.papfor.com
Tissue World Asia	11 - 13 November 2014	Shanghai, China	www.tissueworld.com
ISSA INTERCLEAN 2015	25 - 27 Feb 2015	Mexico City, Mexico	www.issainterclean.com
Tissue World	16 -19 March 2015	Barcelona, Spain	www.tissueworld.com
ISSA INTERCLEAN 2015	22 - 24 April 2015	Warsaw, Poland	www.issainterclean.com
SINCE/ANEX 2015	25-27 May 2015	Shanghai, China	www.anex2015.com www.sinceasia.com
Tissue World São Paulo	27 - 29 May 2015	São Paulo, Brazil	www.tissueworld.com
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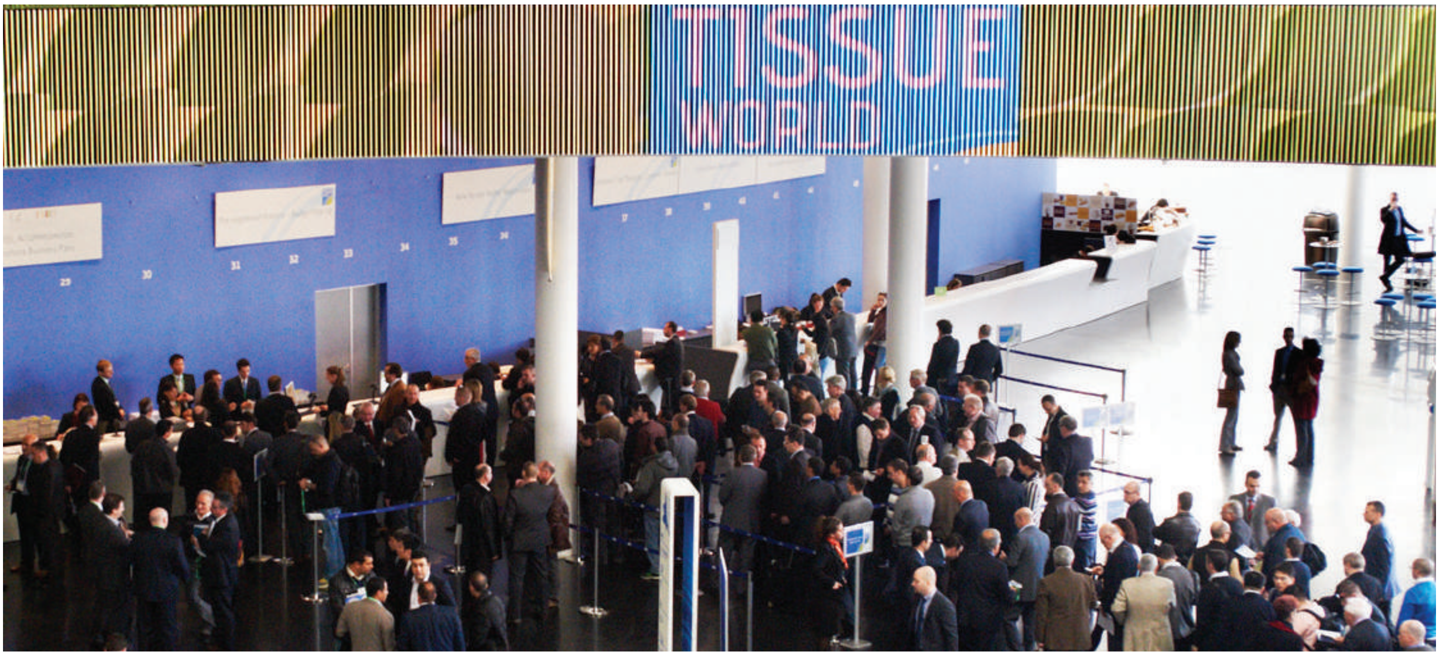

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